



## Cisco BTS 10200 Softswitch Command Line Interface Reference

Software Releases 4.1, 4.2, 4.4.0, 4.4.1, 4.5 and 4.5.1  
Updated July 24, 2009

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## Preface

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Revised: July 24, 2009, OL-3743-42

This document describes the command line interface commands used to provision and maintain the Cisco BTS 10200 Softswitch Call Agent (CA), Feature Server (FS), Element Management System (EMS), and Bulk Data Management System (BDMS) for Releases 4.1, 4.2, 4.4.0, 4.4.1 and 4.5.



### Note

The Cisco BTS 10200 Softswitch interworks with a wide range of network elements (NEs), but there are certain limitations. Some features involve using NEs deployed in the service provider network, for example, gateways, media servers, announcement servers, eMTAs, and SIP phones. See the “Component Interoperability” section of the Release Notes document for a complete list of the specific peripheral platforms, functions, and software loads used in system testing for interoperability with the Cisco BTS 10200 Softswitch Release 4.x software. Earlier or later releases of platform software may be interoperable and it may be possible to use other functions on these platforms. The list certifies only that the required interoperation of these platforms, along with the functions and the protocols listed, were successfully tested with the Cisco BTS 10200 Softswitch.

## Audience

This guide is designed for Cisco BTS 10200 Softswitch users and system administrators.

## Modification History

[Table 1](#) lists the modification history notations used in this document. Subsequent sections list the actual changes by release. Changes made for Releases 4.2, 4.4.0, 4.4.1 and 4.5 are also noted within the text of the document as given in the table.

**Table 1**      **Document Release Notation**

| Release | Information is Noted As:                                               |
|---------|------------------------------------------------------------------------|
| All     | Not noted.                                                             |
| 4.2     | Release 4.2 and all subsequent releases. Does not include Release 4.1. |

**Table 1 Document Release Notation (continued)**

| Release                     | Information is Noted As:                                                                                                                                                      |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4.4.0                       | Release 4.4.0 and all subsequent releases, unless otherwise stated. For example: “Release 4.4.0 and 4.5” means the item is included in Releases 4.4.0 and 4.5, but not 4.4.1. |
| 4.4.1                       | Release 4.4.1 and all subsequent releases. Does not include Releases 4.1, 4.2 or 4.4.0.                                                                                       |
| 4.5                         | Release 4.5 and all subsequent releases. Does not include Releases 4.1, 4.2, 4.4.0 or 4.4.1.                                                                                  |
| Not supported as of Release | Designates tokens that may list as the result of a CLI command, but are not used in the release.                                                                              |
| Obsolete in Release         | Designates tokens, values or rules that are no longer supported as of a particular release, but are supported in prior releases.                                              |

## Release 4.5.1

The following changes were made in Release 4.5.1. It is not an inclusive list.

- Added tokens CHARGE-TYPE and CHARGE-BAND-UNIT to the Destination table.
- New *Block Information* command added to the [Session Management Activity Commands](#).
- In the COS Restrict table, II-WB-LIST changed to II-RESTRICT.
- In the Media Gateway Profile table, for the CODEC-NEG-SUPP token, codec usage has changed when condec-negsupp=Y.
- For medium configurations, ISDN table database usage was increased to 2000 active D-channels.
- Added token FORCED to the Exchange Code table.
- Added list of supported call types to the Usage Guidelines of the National White Black list table. This applies to all releases.
- BPC-ID is obsolete in the Signal Connection Control Part Route table for Releases 4.5 and 4.5.1.
- Added token PADDED-CC to the International Dial Plan table.
- Added mtv.sh information to the Signaling System 7 Trace command. This applies to all 4.x releases.
- The following changes were made to the Office Code table:
  - Added token FORCED.
  - Added new rules.
- Added new rules to the National Destination Code table.
- Added new rules to the Exchange Code table.
- Changed the descriptions for Q761-ISUP-BASE and Q761-ISUP-CHINA values for the CAUSE-CODE-TYPE token.
- Added the value Q767-COLOMBIA to the User Part Variant table.
- Added Measurements for the Columbia ISUP to Appendix I.
- Modified the descriptions of the SEND-BDN-FOR-EMG and

- Added usage guideline for the SEND-GROUP-DN token in the ISDN Trunk Group Profile table. Applies to all releases.
- In the Billing Record Query table, more than one value cannot be specified for the ORDER token.
- Added Office Service id Precedence information to Appendix B, Office Table Features.
- For the END-TIME and START-TIME tokens in the Billing Record Query table, removed the sentence “Response is returned in GMT time.”
- Added bits 3, 5 and 6 to the PROPRIETARY-SUPP token in the ISDN Trunk Group Profile table.
- Added SIA-TG-VALIDATE-SOURCE-IP to the Call Agent Configuration table in Appendix A.
- Added ciscouser information to the Preface; as well as cautions to the delete transaction queue and download database commands. This change also applies to Release 4.5.
- MGCP-T-LONGTRAN value is in seconds, not milliseconds. Applies to all releases.
- Expanded definition of CLH for MLHG. Applies to all releases.
- For CFB (List of Features) in Appendix B, added TDPn=T\_EXCEPTION and TIDn=T\_NOT\_REACHABLE.
- The NANP-WB-LIST column in COS Restrict table was renamed to NATIONAL-WB-LIST (all releases).
- Added the token SPARE1-SUPP to the Media Gateway Profile table.
- Added the following France ISUP values for the DISPLAY token in the Measurement ISUP Summary table:
  - MEAS\_SGA\_TXA\_RX
  - MEAS\_SGA\_TXA\_TX
  - MEAS\_SGA\_ITX\_RX
  - MEAS\_SGA\_ITX\_TX
- Added ISUPs for France and Poland to Appendix I.
- Added section concerning Extended Read Access Commands to the Preface.
- Added the following values to the ID token of the User Part Variant table:
  - Q761-ETSIV3-FRENCH
  - Q761-ETSIV2-POLAND
- Added the token SEND-SIP-181-RESP to the Softswitch Trunk Group Profile table.
- The IPTOS-RTP-LOWDELAY token default is N. This applies to all releases.
- The MGCP-SIG-TOS-PRECEDENCE token default is 3. This applies to all releases.
- Mexico ISUP is supported.
- Changed ranges for the MGCP-MAX1-RETRIES and MGCP-MAX2-RETRIES tokens in the Media Gateway Profile table.
- Added the following tokens to the SS7 Q761 Trunk Group Profile table: AOC-ENABLED, CRG-ABILITY
- Added a note in the cause-code-type token of cause-code-map table to indicate the cause-code-type for ISDN trunk groups.

## Release 4.5

The following changes were made in Release 4.5. It is not an inclusive list.

- The following changes were made to the Office Code table:
  - Added token FORCED.
  - Added new rules.
- Added new rules to the National Destination Code table.
- Added new rules to the Exchange Code table.
- Added SIP-3XX-REROUTE-ON-LOCAL-DOMAIN to the Call Agent Configuration table in Appendix A.
- For the query call-trace command, MGW has been replaced with RGW.
- Length of the BILLING-FILE-PREFIX token changed to 64 characters.
- Subnet is no longer supported for the *query call-trace* command.
- Added EM-PRIVACY-IND-SUPP to Appendix A. Used by EM Billing.
- The token USE-GRP-DN in the ISDN Trunk Group Profile table moved to the Subscriber table.
- Added the EXCHANGE-TYPE token to the SS7 Q767 Trunk Group Profile table.
- Added CIDS, CIDSD and CIDSS to the Feature Profile Base table.
- Added complete command security level list by noun and verb.
- Added the following to the SIPT ISUP Version Base table:
  - Added the value GTD to the ID token.
  - Added the value SIPT-GTD to the BASE token.
- Added the following values to the ID token of the User Part Variant table:
  - Q761\_STANDARD97 (Q.761 base variant—97 version)
  - Q761\_ETSIv3 (Base ETSI v3 variant)
  - Q761\_ETSIv3\_HUNGARY (Hungarian variant)
- Added the THROTTLE token to the *status mgw*, *status trunk-grp*, *status trunk-termination* and *status subscriber-termination* commands.
- Added Hungary and France ISUP display values to Appendix G.
- The following measurement SIA display values are obsoleted. These values will still execute, but will always contain a value of zero:
  - SIA\_TOTAL\_SUCC
  - SIA\_TOTAL\_FAIL
  - SIA\_TOTAL\_OUTG\_MSG\_FAIL
  - SIA\_TOTAL\_INCOM\_MSG\_FAIL
- In the SCTP Association Profile table, the tokens HB-TIMEOUT and MAX-PATH-RETRANS cannot be changed.
- Added WAIT token to all status, control and equip commands in Chapter 17: ADM Commands.
- Added the following tokens to the Transaction Queue table: USER-ID, TERMINAL-ID and STATUS.

- Added the tokens AUTO-REFRESH, DISPLAY, LIMIT, ORDER and START-ROW to every show and report command where applicable.

**Note**

The tokens AUTO-REFRESH, DISPLAY, LIMIT, ORDER and START-ROW apply to all previous releases of this document.

- Added new command: Number Resource Utilization and Forecast for NANPA audit.
- The *change ems ntp-server* command is obsolete.
- Added new query command: query-call-trace.
- In the SCTP Association table, the tokens DSCP and IP-TOS-PRECEDENCE are obsolete.
- For the AOR To Subscriber table:
  - The add and delete commands are obsolete
  - Added the SEQUIRE-FQDN token
- In the Maintenance and Administration of System Component Commands chapter, replaced references to MySQL with Oracle.
- The status-ss7 is now obsolete.
- In the H.323 Gateway table, PASSWORD can be changed without taking the gateway out of service.
- In the Stream Control Transmission Protocol Association table, the maximum size of the HTTP-FEATURE-SERVER-ID is 8.
- In the Signaling System 7 Q761 Trunk Group Profile table, the default is 20 for the CHARGE-ORIG token.
- The following changes were made to the Routing Key table:
  - Subsystem-grp-id is required if si=SCCP.
  - Cross-check the opc-id and subsystem-grp-id across the Subsystem table when the routing-key is added with si=cccp.
  - The opc-id and subsystem-grp-id combine to make a unique key if si=cccp.
  - If a dpc-id is specified, the net-ap values for OPC and DPC must be the same.
- Added the tokens PASS-UNREC-PARAM-WITHOUT-PCI and T4 to the SS7 Q761 Trunk Group Profile table.
- Added the following values to the DISPLAY token in the AIN Services Feature Server table:
  - AINSVC\_LOC\_LNP\_QUERY
  - AINSVC\_LOC\_LNP\_QUERY\_SUCC
  - AINSVC\_LOC\_LNP\_FAIL\_APP
  - AINSVC\_LOC\_LNP\_QUERY\_RN\_FOUND
  - AINSVC\_LOC\_LNP\_QUERY\_NO\_RN
- Added notation “Not provisionable—provisioned in the User Part Variant Base table” to the following tokens in the User Part Variant table:
  - MAX-BLOCK-MASTER-RANGE
  - MAX-BLOCK-SLAVE-RANGE
  - MAX-PARALLEL-JOBS

- MAX-RESET-MASTER-RANGE
- MAX-RESET-SLAVE- RANGE
- PROTO-FAM
- RESET-SUPPORTED
- The following changes were made to the Feature table:
  - FNAME is now a foreign key to the Feature Profile Base table.
  - Added token FNAME5.
  - The value for the following tokens is now 32: VALUE1, VALUE2, VALUE3 and VALUE4.
- Added PS-TRIGGER to the Trigger Identification Descriptions table. Removed the following triggers:
  - ACCOUNT\_CODE
  - D\_OF\_TRIGGER
  - ENUM-TRIGGER
  - O\_ABANDON
  - O\_ANSWER
  - O\_CALLED\_PARTY\_BUSY
  - O\_DISCONNECT
  - O\_EXCEPTION
  - O\_NO\_ANSWER
  - O\_NOT\_REACHABLE
  - O\_REANSWER
  - O\_SUSPEND
  - ORIGINATION\_ATTEMPT
  - T\_ABANDON\_DP
  - T\_DISCONNECT
  - T\_EXCEPTION
  - T\_NOT\_REACHABLE
  - T\_REANSWER
  - T\_SUSPEND
- Added the following tokens to the Quality of Service table:
  - FAX-T38-ENABLED
  - FORCED
  - MAX-DQOS-AUTH-BANDWIDTH
  - CLIENT-TYPE
  - DOCSIS-DSCP-TOS
  - DOCSIS-DSCP-TOS-BITMASK
  - DQOS-DSCP-TOS-BITMASK
- Added the following tokens to the DN2subscriber table:

- END-TIME
  - LAST-CHANGED
  - START-TIME
  - PORTED-IN
  - VIRTUAL-DN
- Added the following tokens to the Class of Service Restriction table:
  - BLOCK-900
  - BLOCK-976
  - BLOCK-DA
  - BLOCK-INFO
  - BLOCK-INTL
  - BLOCK-INTL-OPER-ASSIST
  - BLOCK-NANP-OPER-ASSIST
  - BLOCK-TW
  - PROMPT-METHOD
  - ALLOW-CALLS-ON-IVR-FAILURE
- Added the following values to the Valid Nature of Dial Values table.
  - LNP
  - BLV
  - SPEED-CALL
- The valid return code combinations MDCX 3xx through 9xx when mgcp-msg=mdcx have changed to Valid Values of Call Action=None and Valid Values of Endpoint Action=EP\_ACTION\_NONE.
- Added the following tokens to the Carrier table:
  - LNP-QUERY
- In the Activity table, the ENABLED token default is now Y; the ID token is now 32 in length.
- Added the following MO and MT rules to the Trunk Group table:
  - When configuring a trunk group, set the direction token to OUT when the MGCP-PKG-TYPE is MO.
  - When configuring a trunk group, set the direction token to IN when the MGCP-PKG-TYPE is MT.
- Added Automatic Completion and Expansion of CLI commands.
- Added Context Sensitive Help section.
- In the Dial Plan table, the range for MIN-DIGITS is 1–64. Added the FORCED token.
- The following DISPLAY values were obsoleted in the Measurement SIA Summary table:
  - SIA\_ATTENDED\_TRANSFER
  - SIA\_MWI\_NOTIFY\_TX\_FAIL
  - SIA\_SIP\_INCOM\_FAIL
  - SIA\_SIP\_INCOM\_INIT

- SIA\_SIP\_INCOM\_SUCC
- SIA\_SIP\_OUTG\_FAIL
- SIA\_SIP\_OUTG\_INIT
- SIA\_SIP\_OUTG\_SUCC
- SIA\_UNATTENDED\_TRANSFER
- The following DISPLAY values were added to the Measurement SIA Summary table:
  - SIA\_AUDIT\_BCM\_CALL\_RELEASED
  - SIA\_AUDIT\_CALL\_RELEASED
  - SIA\_AUDIT\_CCB\_FREED
  - SIA\_AUDIT\_REGCONTACT\_FREED
  - SIA\_INCOM\_FAIL
  - SIA\_INCOM\_INIT
  - SIA\_INCOM\_SUCC
  - SIA\_OUTG\_FAIL
  - SIA\_OUTG\_INIT
  - SIA\_OUTG\_SUCC
  - SIA\_SECURE\_FQDN\_VIOLATION\_REQ
  - SIA\_SECURE\_FQDN\_VIOLATION\_RESP
- The following DISPLAY values were added to the Measurement ISUP Summary table:
  - ISUP\_ABNORMAL\_REL\_RX
  - ISUP\_ABNORMAL\_REL\_TX
  - ISUP\_ACM\_RX
  - ISUP\_ACM\_TX
  - ISUP\_ANM\_RX
  - ISUP\_ANM\_TX
  - ISUP\_ARR\_RX
  - ISUP\_ARR\_TX
  - ISUP\_BLA\_RX
  - ISUP\_BLA\_TX
  - ISUP\_BLO\_RX
  - ISUP\_BLO\_TX
  - ISUP\_CCL\_RX
  - ISUP\_CCL\_TX
  - ISUP\_CCR\_RX
  - ISUP\_CCR\_TX
  - ISUP\_CFN\_RX
  - ISUP\_CFN\_TX
  - ISUP\_CGB\_RX

- ISUP\_CGB\_TX
- ISUP\_CGBA\_RX
- ISUP\_CGBA\_TX
- ISUP\_CGU\_RX
- ISUP\_CGU\_TX
- ISUP\_CGUA\_RX
- ISUP\_CGUA\_TX
- ISUP\_CON\_RX
- ISUP\_CON\_TX
- ISUP\_COT\_RX
- ISUP\_COT\_TX
- ISUP\_CPG\_RX
- ISUP\_CPG\_TX
- ISUP\_CQM\_RX
- ISUP\_CQM\_TX
- ISUP\_CQR\_RX
- ISUP\_CQR\_TX
- ISUP\_CRA\_RX
- ISUP\_CRA\_TX
- ISUP\_CRG\_RX
- ISUP\_CRG\_TX
- ISUP\_CRM\_RX
- ISUP\_CRM\_TX
- ISUP\_CVR\_RX
- ISUP\_CVR\_TX
- ISUP\_CVT\_RX
- ISUP\_CVT\_TX
- ISUP\_EXM\_RX
- ISUP\_EXM\_TX
- ISUP\_FAA\_RX
- ISUP\_FAA\_TX
- ISUP\_FAC\_RX
- ISUP\_FAC\_TX
- ISUP\_FAR\_RX
- ISUP\_FAR\_TX
- ISUP\_FOT\_RX
- ISUP\_FOT\_TX
- ISUP\_FRJ\_RX

- ISUP\_FRJ\_TX
- ISUP\_FWT\_RX
- ISUP\_FWT\_TX
- ISUP\_GRA\_RX
- ISUP\_GRA\_TX
- ISUP\_GRS\_RX
- ISUP\_GRS\_TX
- ISUP\_IAM\_RX
- ISUP\_IAM\_TX
- ISUP\_IDR\_RX
- ISUP\_IDR\_TX
- ISUP\_INF\_RX
- ISUP\_INF\_TX
- ISUP\_INR\_RX
- ISUP\_INR\_TX
- ISUP\_IRS\_RX
- ISUP\_IRS\_TX
- ISUP\_LPA\_RX
- ISUP\_LPA\_TX
- ISUP\_LPM\_RX
- ISUP\_LPM\_TX
- ISUP\_MSG\_RX
- ISUP\_MSG\_TX
- ISUP\_NRM\_RX
- ISUP\_NRM\_TX
- ISUP\_OLM\_RX
- ISUP\_OLM\_TX
- ISUP\_OPR\_RX
- ISUP\_OPR\_TX
- ISUP\_PAM\_RX
- ISUP\_PAM\_TX
- ISUP\_PRI\_RX
- ISUP\_PRI\_TX
- ISUP\_REL\_RX
- ISUP\_REL\_TX
- ISUP\_RES\_RX
- ISUP\_RES\_TX
- ISUP\_RLC\_RX

- ISUP\_RLC\_TX
  - ISUP\_RSC\_RX
  - ISUP\_RSC\_TX
  - ISUP\_SAM\_RX
  - ISUP\_SAM\_TX
  - ISUP\_SGM\_RX
  - ISUP\_SGM\_TX
  - ISUP\_SUS\_RX
  - ISUP\_SUS\_TX
  - ISUP\_UBA\_RX
  - ISUP\_UBA\_TX
  - ISUP\_UBL\_RX
  - ISUP\_UBL\_TX
  - ISUP\_UCIC\_RX
  - ISUP\_UCIC\_TX
  - ISUP\_UNEXPECT\_MSG\_RX
  - ISUP\_UNRECOG\_MSG\_RX
  - ISUP\_UPA\_RX
  - ISUP\_UPA\_TX
  - ISUP\_UPT\_RX
  - ISUP\_UPT\_TX
  - ISUP\_USR\_RX
  - ISUP\_USR\_TX
- Added the following DISPLAY values to the Measurement TCAP Protocol Summary table:
    - TCAP\_OPERATION\_REQ\_RX
    - TCAP\_OPERATION\_CONFIRM\_RX
    - TCAP\_OPERATION\_IND\_RX
    - TCAP\_COMPONENT\_REQ\_RX
    - TCAP\_COMPONENT\_CONFIRM\_RX
    - TCAP\_COMPONENT\_IND\_RX
    - TCAP\_DATA\_IND\_RX
    - TCAP\_UDATA\_IND\_RX
    - TCAP\_DATA\_REQ\_RX
    - TCAP\_DELIMITER\_REQ\_RX
    - TCAP\_DELIMITER\_IND\_RX
    - TCAP\_OPEN\_IND\_RX
    - TCAP\_OPEN\_CONFIRM\_RX
    - TCAP\_STATUS\_IND\_RX

- TCAP\_DIALOG\_CONFIRM\_RX
- TCAP\_CLOSE\_IND\_RX
- TCAP\_ABORT\_IND\_RX
- TCAP\_BIND\_CONFIRM\_RX
- TCAP\_STAT\_CONFIRM\_RX
- TCAP\_NOTICE\_IND\_RX
- TCAP\_STAT\_IND\_RX
- Added the following DISPLAY values to the Measurement AIN Tools Summary table:
  - AINSVC\_LOC\_LNP\_FAIL\_APP
  - AINSVC\_LOC\_LNP\_QUERY
  - AINSVC\_LOC\_LNP\_QUERY\_NO\_RN
  - AINSVC\_LOC\_LNP\_QUERY\_RN\_FOUND
  - AINSVC\_LOC\_LNP\_QUERY\_SUCC
- Added the following DISPLAY values to the POTS Class of Service Feature Server table:
  - POTS\_COS\_TOLLFREE\_BLOCKED
  - POTS\_TDISC\_CALLS\_OUTG\_BLOCKED
  - POTS\_COS\_TOT\_AUTH\_IVR\_SESSION
  - POTS\_COS\_TOT\_ACCT\_IVR\_SESSION
  - POTS\_COS\_TOT\_IVR\_FAIL
- The following POTS Miscellaneous Feature Server table DISPLAY token values are obsoleted:
  - POTS\_LCD\_AUTH\_ATTEMPTS. Use POTS\_LCD\_AUTH\_ATTMP.
  - POTS\_LCD\_AUTH\_SUCCESS. Use POTS\_LCD\_AUTH\_SUCC.
  - POTS\_LCD\_FORCED\_DISCONNECT. Use POTS\_LCD\_FORCED\_DISC.
- Added the values SIM\_AUDIT\_CCB\_FREED and SIM\_AUDIT\_SIP\_CCB\_FREED to the DISPLAY token in the Measurement SIM Summary table.
- Added Session Initiation Protocol values to the DISPLAY token of the Measurement SIA Summary table, the Measurement SIM Summary table, the Measurement POTS Miscellaneous Feature Server Summary table and the Measurement AIN Tools Summary table.
- Added the following tokens to the Measurement Trunk Group Summary table:
  - TRKGRP-EXCHANGE
  - TRKGRP-NAME
  - CALL-AGENT-ID
- Added the following values to the DISPLAY token of the Measurement MGCP Signaling Adapter Summary table:
  - MGCP\_AUCX\_TX
  - MGCP\_AUCX\_ACK\_RX
  - MGCP\_AUCX\_NACK\_RX
- Added the following values to the DISPLAY token of the Measurement Billing Summary table:
  - BILLING\_TOTAL\_AIRLINES

- BILLING\_TOTAL\_CNA
- BILLING\_TOTAL\_DA\_INTER
- BILLING\_TOTAL\_DA\_INTL
- BILLING\_TOTAL\_INTL\_OPR
- BILLING\_TOTAL\_INTL\_WZ1
- BILLING\_TOTAL\_LB\_TEST
- BILLING\_TOTAL\_NAT\_OPR BILLING\_TOTAL\_RAILWAYS
- BILLING\_TOTAL\_SVC\_CODE
- BILLING\_TOTAL\_MOBILE
- BILLING\_TOTAL\_UAN
- Added value definitions to the PROTOCOL-VERSION token in the Electronic Surveillance Server table.
- The following tokens were added to the Media Gateway Profile table: MGCP-TO-SUPP, MGCP-QDISCARD-SUPP, MGCP-TEST-CONN-SUPP and SDP-CAP-ENCODE-TYPE.
- Db-license file provisioning is not required.
- The token MAX-INIT-RTO value in the Stream Control Transmission Protocol Association table is now SMALLINT:1000–3000 (Default = 1000).
- The token MAX-LINES in the MultiLine Hunt Group table is obsolete.
- The following changes were made to the Trunk Group table:
  - Added the tokens TG, SCRIPT-SUPP, VOICE-INFO-TRANSFER-CAP, VOICE-LAYER1-USERINFO and PERFORM-LNP-QUERY.
  - The TG token is a unique key.
  - Added two values, DYNAMIC and LINE, to the MGCP-PKG-TYPE token.
  - Added usage rule for MGCP-PKG-TYPE token.
  - The MD value for MGCP-PKG-TYPE is now supported.
  - The token PFX-DIGITS is 1-10 digits.
- The following changes were made to the Subscriber table:
  - Added the tokens ACCOUNT-ID, BILLING-TYPE, FORCED, LNP-TRIGGER, PORTED-IN, PRIVACY-MANAGER-ID, SECURE-FQDN, VMWI, SDT-MWI, VOICE-MAIL-ID and DN-STATUS.
  - The SECURE-FQDN token is a unique key.
  - The COUNTRY token has no default.
  - Added rule regarding use of FORCED in add commands.
  - The delete subscriber command now deletes all subscriber related records such as those in the Subscriber Feature Data table and the Subscriber Service Profile table.
- The following changes were made to the Destination table:
  - The CALL-TYPE token is a foreign key to the Call Subtype table.
  - Added the tokens ACQ-LNP-Query and CALL-SUBTYPE.
  - The RING-TYPE-DN1 token value is now a range from 1 to 7.
  - The test-line value for the CATEGORY token is obsolete.

- Added Database Usage Default sections for Small, Medium, Routeserver, Local Number Portability (LNP) and Cable8 configurations to Appendix D.
- The TCAP-VERSION token is obsoleted in the Subsystem table.
- The Subsystem Profile table is obsoleted.
- Added new tables AAA Server Group, Call Type Profile, Call Subtype, Subsystem Group, Region Code, Directory Number to Routing Number, Signal Connection Control Part Route and Directory Number to Gateway Number.
- For medium and large configurations, up to 30 OPCs can be provisioned per Cisco BTS 10200 Softswitch. For small configurations, up to 8 OPCs can be provisioned per Cisco BTS 10200 Softswitch.
- Added the subsystem-grp-id token to the following tables:
  - Service Logic Host Route
  - Signaling Connection Control Part Route
  - Routing Key
- Obsoleted the ssn-id token in the following tables
  - Service Logic Host Route
  - Signaling Connection Control Part Route
  - Routing Key
- Added new section on Subsystem Group control and status commands.
- The OPC-ID token is now required in the “control subsystem” command.
- The SDT and SDT-TYPE tokens in the Vertical Service Code table are obsoleted.
- Added new delete rule to the Service table.
- In the Digit Map table, the DIGIT-PATTERN token size is now 2048 ASCII characters.
- In the Changed Number table, made the following changes:
  - Added new tokens: END-TIME, LAST-CHANGED and START-TIME.
  - Added new delete and show command examples.
- In the Audio Segment and Audio Sequence tables, the description token is now 512 ASCII characters.
- In the Route table, added the following new tokens:
  - NEXT-ACTION
  - ANNC-ID
  - OVERFLOW-DN
- In the ISDN D-Channel table, added the following new tokens
  - DCHAN-FORMAT
  - DCHAN-SUBSLOT.
- The following changes were made to the Digit Manipulation table:
  - The token MATCH-NOA is 40 ASCII characters
  - The token REPLACE-NOA is 32 ASCII characters.

- Added the following values to the MATCH-NOA token: PORTED-NUMBER-WITHOUT-RN, PORTED-NUMBER-WITH-RN, NON-UNIQUE-INTL, NON-UNIQUE-NATIONAL and NON-UNIQUE-SUBSCRIBER.
- Added tokens OVERDECADIC-DIGITS-SUPP, NOA-BASED-ROUTING and NOA-ROUTE-PROFILE-ID to the Dial Plan Profile table.
- Added the following call types to the Call Type table:
  - ANA
  - MOBILE
- Added the following feature information to Appendix B:
  - CFC
  - CFC-DN-CHG-ACT
  - CFC-ACT
  - CFC-DEACT
  - CFCI
  - CFCI-NO-DN-VRFY
  - NSA
  - NSA-ACT
  - PS
  - PS-MANAGE
  - PS-O
  - SLE
  - VM
  - VM-ACCESS
  - VMA
  - VMA-ACT
  - VM-ACT
  - VMA-DEACT
  - VM-DEACT
  - Added column “VALUE 5.”
- Added the following rules to the Stream Control Transmission Protocol table:
  - The remote-port and remote-tsap-addr1 cannot be the same.
  - The remote-port and remote-tsap-addr2 cannot be the same.
- Added the following note to the Call Agent Configuration table: When the Cisco BTS 10200 Softswitch looks for provisioned values, Call Agent Configuration table is read first to provide a value. If the Call Agent Configuration table is not provisioned, the system then reads the Call Agent Configuration Base table and returns that default value.
- The IKE-KEY token description has changed in the Aggregation, Media Gateway Profile, Electronic Surveillance Server and Radius Profile tables.
- Modified the description of the IKE-KEY-ENCR token in the Aggregation, Media Gateway Profile, Electronic Surveillance Server and Radius Profile tables.

- Modified the description of the IPSEC-SA-ESP-CS token in the Aggregation, Media Gateway Profile, Electronic Surveillance Server and Radius Profile tables.
- Added the following types to the Check Possible Values Types and Values table (these types are not provisionable in this release):
  - MGCP-T38-FAX-MODE-PREF1
  - MGCP-T38-FAX-MODE-PREF1
  - MGCP-T38-FAX-MODE-PREF1
  - MGCP-T38-FAX-MODE-PREF2
  - MGCP-T38-FAX-MODE-PREF2
  - MGCP-T38-FAX-MODE-PREF2
  - MGCP-T38-FAX-MODE-PREF3
  - MGCP-T38-FAX-MODE-PREF3
  - MGCP-T38-FAX-MODE-PREF3
- Point of Presence (POP) table changes:
  - Added the following tokens: ENUM-PROFILE-ID, ENUM-SUPP, CLLI-CODE-ID, CUSTOMER-SUPPORT-DN, IVR-DN, OFFICE-SERVICE-ID, POLICY-SERVER, PRIVACY-MANAGER-ID, SENSOR-ID, TEMP-DISC-COS-RESTRICT-ID, TEMP-DISC-SERVICE-ALLOWED, VIRTUAL-NSA-SUBSCRIBER-ID, VOICE-MAIL-ID
  - Added information to the TIMEZONE token; TIMEZONE token is now optional, and is a foreign key to the Timezone table.
  - Added cos-restrict-id for temporarily disconnected subscribers.
  - LATA token range has changed from 100–65535 to 100–99999. Token defaults to 99999 if not provisioned.
  - The STATE token changed to VARCHAR(16) and is uppercase only. Use two uppercase characters for U.S. states. For example: TX, CA, and so forth.
  - JIP token value is now numeric.
- Added list of 4.5 timezone values to Appendix C.
- Channel Associated Signaling Trunk Group Profile table changes:
  - Added tokens: TEST-LINE-TYPE, PLAY-DIAL-TONE, PLAY-RINGBACK-TONE, SEND-ANI, INBAND-INFO, NO-ANSWER-TIMER and NO-ANSWER-ACTION.
  - Modified the values for SIG-TYPE.
  - The SIG-TYPE value MF-FGD has been obsoleted.
  - Added the SIG-TYPE value LINE.
  - The MGCP-PKG-TYPE token is obsoleted. Token moved to the Trunk Group table.
  - The OSS-SIG token is obsoleted. Use new token OSS-SIG-TYPE.
  - The tokens TEST-LINE and NO-TEST-TRUNK are now optional.
- Media Gateway table changes:
  - Added token: NODE.
- Media Gateway Profile table changes:

- Added tokens: FAX-FAILURE-HANDLING, FAX-INBAND-METHOD, T38-FXR-LOOSE-SUPP, T38-FXR-GW-SUPP, NLB-SUPP, MGCP-MSG-PIGGYBACK-SUPP, MGCP-MAX-KEEPALIVE-INTERVAL, MGCP-REQ-ID-SUPP, MGCP-PIGGYBACK-MSG-SUPP, and PARALLEL-NETWLOOP-SUPP.
- Marked obsoleted: “if fax-pref-mode=FAX-T38CAMODE, then fax-t38-camode-supp=Y” and “if fax-pref-mode=FAX-INBAND, then fax-inband-supp=Y” from the usage guidelines.
- Added rule for MGCP-MAX-KEEPALIVE-INTERVAL.
- Added rule for PARALLEL-NETWLOOP-SUPP.
- Added the value MD to the MGCP-DEFAULT-PKG token.
- Added BAU-URI token to the Announcement table.
- Call Park Subscriber Group table changes:
  - Added token: CPRK-DIGIT-MAP-STRING.
- Exchange Code table changes:
  - Added primary key token digit-string.
  - NDC token now optional.
  - Digit-string token is created by concatenating NDC + EC.
- Office Code table changes:
  - NDC token now optional.
  - Digit-string range changed to 1–14 ASCII characters.
- Subscriber table changes:
  - Added tokens: PORTED-IN, FORCED, BILLING-TYPE, ACCOUNT-ID, VOICE-MAIL-ID, VOICE MAIL ID, and PRIVACY-MANAGER-ID.
  - Added expanded description to the temp-unavailable value of the STATUS token.
  - Added forced rule.
  - The delete subscriber command deletes all subscriber related records such as subscriber-feature-data and subscriber-service-profile.
  - The token SEND-BILLING-DN is obsolete.
- Subscriber Profile table changes:
  - Added tokens: TEST-LINE-TYPE, VOICE-MAIL-ID, INTERLATA-PFX1-OPT and PRIVACY-MANAGER-ID.
- Subscriber Feature Data table changes:
  - Added values NSA, PM, VM, and VMU to the fname token.
  - Added new value “T” to the active token.
  - Added value FDN4 to the type token.
- The following changes were made to the Feature Server table:
  - Table containment area now includes FSAIN.
  - Added new 3PTY value to the type token.
  - Added new token EXTERNAL-FEATURE-SERVER.
- The following new tables were added:

- Script
- Trigger NOD Escape List
- Feature Profile Base
- Feature Configuration Base
- Feature Configuration Base Check Possible Values
- Feature Configuration Check Possible Values
- Subscriber Time of Day Schedule
- Common Language Location Identifier
- Emergency Number List
- Nature of Address Route Profile
- Nature of Address Route
- Added the token policy-server-id to the Aggregation table.
- The following changes were made to the Users table:
  - It is now possible to change user attributes DAYS-VALID and WARN using the “change user” command.
  - Added token PASSWORD.
  - Added note in the Examples section on using the PASSWORD token in the add command.
- Subscriber table: added new delete rule.
- Screen List Editing table: added new value, NSA, to the fname token.
- Added Application Server table to the Features chapter.
- Vertical Service Code table: added two Second Dial Tone Indicator tokens.
- Custom Dial Plan table: added sdt-type token.
- Softswitch Trunk Group Profile table changes:
  - The following tokens are obsoleted: ECHO-SUPP-REQUIRED, SATELLITE-CIRCUIT, SEND-CPN, SEND-OCN, SEND-REDIR-NUM, SEND-ATP, SEND-GAP, SEND-GN, SEND-JIP, CC-DIVERSION-SUPP AND SEND-CIP.
  - The following new tokens were added: SEND-FULL-E164, SCALE-FACTOR, MAX-FORWARDS, HOP-COUNTER-SUPP, HOP-COUNTER-MAX, USE-CMSS-RESRC-MGMT, USE-RESOURCE-MGMT, ES-SUPP, AUDIT-THRESHOLD, SIP-TIMER-PROFILE-ID, SEND-CIC-PARAM, USE-PAI-HDR-FOR-ANI, APPLY-USER-PRIVACY, and DNS-SRV-ADV-ON-RETRANS-TIMEOUT.
  - Added two rules for add.
- Display token values for ETSI are supported.
- Display token values for Chile, Israel and Australia ISUPs are not supported.
- Added new tokens SEND-FS-CALLP and REMOTE-FAX-PORT-RETRIEVAL-MSG to the H.323 Terminal Profile and H323 Trunk Group Profile tables.
- The following rules are no longer required for the H323 Trunk Group Profile table:
  - If fax-pref-mode=FAX-T38-CAMODE, then fax-t38-camode-supp=Y;
  - If transport-pref-mode=UDP-MODE, then annexe-supp=Y;
  - If h245-tunneling = AUTO or ENABLE, then facility-supp=Y;

- The following rules are no longer required for the H.323 Terminal Profile table:
  - If fax-pref-mode (in QOS table) = fax-t38-gwmode, then fax-t38-gwmode-supply=Y;
  - If fax-pref-mode (in QOS table) = fax-t38-camode, then fax-t38-camode-supply=Y;
  - If fax-pref-mode (in QOS table) = fax-inband, then fax-inband-supply=Y;
  - If dtmf-pref-mode (in QOS table) = dtmf-cisco-rtp, then dtmf-cisco-rtp-supply=Y;
  - If dtmf-pref-mode (in QOS table) = dtmf-h245-alpha, then dtmf-h245-alpha-supply=Y;
  - If dtmf-pref-mode (in QOS table) = dtmf-h245-signal, then dtmf-h245-signal-supply=Y;
  - If dtmf-pref-mode (in QOS table) = dtmf-rfc2833, then dtmf-rfc2833=Y;
- The H.323 Terminal Profile table tokens FAX-T38-CAMODE-SUPP and FAX-T38-GWMODE-SUPP are obsoleted.
- In the Call Detail Block table, 108 and NLB test calls are supported under the type token.
- The following values were added to the SERVICE-TYPE token for billing:
  - call-forward-combination
  - no-solicitation-announcement
  - privacy-screening
  - voice-mail
  - voice-mail-access
- The following values were added to the TYPE token for billing:
  - calling-number-announcement
  - interlata-da
  - international-da
  - universal-access-number
- The loopback-test (108 test calls) value of the TYPE token in the Call Detail Block table is obsoleted.
- Added Appendix F covering timezones and timezone localities for billing and call processing.
- The FREQ token in the Activity table is now mandatory.
- The following changes were made to the Activity Base table:
  - Added example for the *show activity-id* command.
  - Added four new activity ids: SIA-MEMORY-PERIODIC-AUDIT, SIA-MEMORY-SCHEDULED-AUDIT, SIM-MEMORY-PERIODIC-AUDIT and SIM-MEMORY-SCHEDULED-AUDIT.
  - The ID token is now 32 characters.
  - The VALID-FREQ token is now 64 characters.
  - Added the following tokens: AUDIT-COUNT-RANGE-FROM, AUDIT-COUNT-RANGE-TO, AUDIT-INTERVAL-RANGE-FROM, AUDIT-INTERVAL-RANGE-TO, and FIXED-TIME-INTERVAL
- The following changes were made to the Aggregation table:
  - Modified the description of the TSAP-ADDR token.
  - The IPSEC-SA-GRACE- PERIOD token range has changed; notes added.

- The IKE-GROUP token range has changed.
  - Added token: TYPE.
- Added Appendix H: Data Values for DiffServ Code Point and Type of Service Parameters.
- Added examples and made corrections to the PacketCable chapter.
- The Measurement TSA Summary table is obsoleted. Display values are now part of the Measurement TCAP Summary table.
- The Measurement INAP Summary table is obsoleted.
- Added example for the Measurement Trunk Group Usage Summary table showing how to use the reporting option to gather statistics on a per Pop basis.
- Added the following display values for the Measurement Call Processing Summary table:
  - CALLP\_LB\_TEST\_SUCC
  - CALLP\_NCT\_TEST\_SUCC
  - CALLP\_NCT\_TEST\_FAIL
  - CALLP\_NLB\_TEST\_SUCC
  - CALLP\_NLB\_TEST\_FAIL
  - CALLP\_TEST\_ROUTE\_SUCC
  - CALLP\_TOTAL\_TDISC\_ORIG\_ATTMP
  - CALLP\_T38\_FAX\_MEDIA\_SETUP\_SUCC
  - CALLP\_T38\_FAX\_MEDIA\_SETUP\_FAIL
- Added the following display values for the POTS Local Feature Server table:
  - POTS\_CFC\_ACT\_ATTMP
  - POTS\_CFC\_ACT\_FAIL
  - POTS\_CFC\_ACT\_SUCC
  - POTS\_CFC\_DEACT\_ATTMP
  - POTS\_CFC\_DEACT\_FAIL
  - POTS\_CFC\_DEACT\_SUCC
  - POTS\_CFC\_DN\_CHG\_ACT\_ATTMP
  - POTS\_CFC\_DN\_CHG\_ACT\_FAIL
  - POTS\_CFC\_DN\_CHG\_ACT\_SUCC
  - POTS\_CFC\_FORWARD\_ATTMP
  - POTS\_CFC\_FORWARD\_FAIL
  - POTS\_CFC\_FORWARD\_SUCC
  - POTS\_CFC\_INTERROG\_ATTMP
  - POTS\_CFC\_INTERROG\_FAIL
  - POTS\_CFC\_INTERROG\_SUCC
  - POTS\_NSA\_INVOKE\_ABANDON
  - POTS\_NSA\_INVOKE\_ATTMP
  - POTS\_NSA\_INVOKE\_FAIL

- POTS\_NSA\_INVOKE\_SUCC
- Added the following display values for the Measurement TCAP Protocol Summary table:
  - TCAP\_ABORT\_IND\_RX
  - TCAP\_BIND\_CONFIRM\_RX
  - TCAP\_CLOSE\_IND\_RX
  - TCAP\_COMPONENT\_CONFIRM\_RX
  - TCAP\_COMPONENT\_IND\_RX
  - TCAP\_COMPONENT\_REQ\_RX
  - TCAP\_DATA\_IND\_RX
  - TCAP\_DATA\_REQ\_RX
  - TCAP\_DELIMITER\_IND\_RX
  - TCAP\_DELIMITER\_REQ\_RX
  - TCAP\_DIALOG\_CONFIRM\_RX
  - TCAP\_NOTICE\_IND\_RX
  - TCAP\_OPEN\_CONFIRM\_RX
  - TCAP\_OPEN\_IND\_RX
  - TCAP\_OPERATION\_CONFIRM\_RX
  - TCAP\_OPERATION\_IND\_RX
  - TCAP\_OPERATION\_REQ\_RX
  - TCAP\_STAT\_CONFIRM\_RX
  - TCAP\_STAT\_IND\_RX
  - TCAP\_STATUS\_IND\_RX
  - TCAP\_UDATA\_IND\_RX
- Added the following display values to the Measurement ISUP Summary table. These counters replace the SGA counters in previous releases.
  - ISUP\_ABNORMAL\_REL\_RX
  - ISUP\_ABNORMAL\_REL\_TX
  - ISUP\_ACM\_RX
  - ISUP\_ACM\_TX
  - ISUP\_ANM\_RX
  - ISUP\_ANM\_TX
  - ISUP\_ARR\_RX
  - ISUP\_ARR\_TX
  - ISUP\_BLA\_RX
  - ISUP\_BLA\_TX
  - ISUP\_BLO\_RX
  - ISUP\_BLO\_TX
  - ISUP\_CCL\_RX

- ISUP\_CCL\_TX
- ISUP\_CCR\_RX
- ISUP\_CCR\_TX
- ISUP\_CFN\_RX
- ISUP\_CFN\_TX
- ISUP\_CGB\_RX
- ISUP\_CGB\_TX
- ISUP\_CGBA\_RX
- ISUP\_CGBA\_TX
- ISUP\_CGU\_RX
- ISUP\_CGU\_TX
- ISUP\_CGUA\_RX
- ISUP\_CGUA\_TX
- ISUP\_CON\_RX
- ISUP\_CON\_TX
- ISUP\_COT\_RX
- ISUP\_COT\_TX
- ISUP\_CPG\_RX
- ISUP\_CPG\_TX
- ISUP\_CQM\_RX
- ISUP\_CQM\_TX
- ISUP\_CQR\_RX
- ISUP\_CQR\_TX
- ISUP\_CRA\_RX
- ISUP\_CRA\_TX
- ISUP\_CRG\_RX
- ISUP\_CRG\_TX
- ISUP\_CRM\_RX
- ISUP\_CRM\_TX
- ISUP\_CVR\_RX
- ISUP\_CVR\_TX
- ISUP\_CVT\_RX
- ISUP\_CVT\_TX
- ISUP\_EXM\_RX
- ISUP\_EXM\_TX
- ISUP\_FAC\_RX
- ISUP\_FAC\_TX
- ISUP\_FAR\_RX

- ISUP\_FAR\_TX
- ISUP\_FOT\_RX
- ISUP\_FOT\_TX
- ISUP\_FRJ\_RX
- ISUP\_FRJ\_TX
- ISUP\_FWT\_RX
- ISUP\_FWT\_TX
- ISUP\_GRA\_RX
- ISUP\_GRA\_TX
- ISUP\_GRS\_RX
- ISUP\_GRS\_TX
- ISUP\_IAM\_RX
- ISUP\_IAM\_TX
- ISUP\_IDR\_RX
- ISUP\_IDR\_TX
- ISUP\_INF\_RX
- ISUP\_INF\_TX
- ISUP\_INR\_RX
- ISUP\_INR\_TX
- ISUP\_IRS\_RX
- ISUP\_IRS\_TX
- ISUP\_LPA\_RX
- ISUP\_LPA\_TX
- ISUP\_LPM\_RX
- ISUP\_LPM\_TX
- ISUP\_MSG\_RX
- ISUP\_MSG\_TX
- ISUP\_NRM\_RX
- ISUP\_NRM\_TX
- ISUP\_OPR\_RX
- ISUP\_OPR\_TX
- ISUP\_PAM\_RX
- ISUP\_PAM\_TX
- ISUP\_PRI\_RX
- ISUP\_PRI\_TX
- ISUP\_REL\_RX
- ISUP\_REL\_TX
- ISUP\_RES\_RX

- ISUP\_RES\_TX
  - ISUP\_RLC\_RX
  - ISUP\_RLC\_TX
  - ISUP\_RSC\_RX
  - ISUP\_RSC\_TX
  - ISUP\_SAM\_RX
  - ISUP\_SAM\_TX
  - ISUP\_SGM\_RX
  - ISUP\_SGM\_TX
  - ISUP\_SUS\_RX
  - ISUP\_SUS\_TX
  - ISUP\_UBA\_RX
  - ISUP\_UBA\_TX
  - ISUP\_UBL\_RX
  - ISUP\_UBL\_TX
  - ISUP\_UCIC\_RX
  - ISUP\_UCIC\_TX
  - ISUP\_UNEXPECT\_MSG\_RX
  - ISUP\_UNRECOG\_MSG\_RX
  - ISUP\_USR\_RX
  - ISUP\_USR\_TX
- In the Measurements chapter, INAP is obsoleted.
  - Added Appendix I: ISUP Measurement Counters.
  - In the Media Gateway Profile table, the token SPARE2-SUPP is used to specify network loopback test calls.
  - SS7 display values have been changed to AUDIT values in the Measurement Audit Summary table. The following display values have been added:
    - AUDIT\_SS7\_TRUNK\_STATE\_SYNCED
    - AUDIT\_SS7\_LONG\_DUR\_EXCEEDED
    - AUDIT\_FS\_TOTAL\_SIP\_RESP\_TMO
    - AUDIT\_FS\_TOTAL\_SIP\_NOACK\_TMO
    - AUDIT\_FS\_TOTAL\_CA\_SWITCHOVER
    - AUDIT\_SIP\_CCB\_FREED
    - AUDIT\_SIP\_CALL\_RELEASED
    - AUDIT\_SIP\_BCM\_CALL\_RELEASED
    - AUDIT\_SIP\_REGCONTACT\_FREED
  - Added the following display values to the Measurement Billing Summary table:
    - BILLING\_TOTAL\_LB\_TEST

- BILLING\_TOTAL\_INTL\_OPR
  - BILLING\_TOTAL\_NAT\_OPR
  - BILLING\_TOTAL\_AIRLINES
  - BILLING\_TOTAL\_RAILWAYS
  - BILLING\_TOTAL\_SVC\_CODE
  - BILLING\_TOTAL\_INTL\_WZ1
  - BILLING\_TOTAL\_CNA
  - BILLING\_TOTAL\_DA\_INTER
  - BILLING\_TOTAL\_DA\_INTL
  - BILLING\_TOTAL\_UAN
- Added the following display values to the Measurement Trunk Group Usage Summary table:
  - TRKGRP\_EXCHANGE
  - TRKGRP\_GLARE\_COUNT
  - TRKGRP\_LBLK\_TRK\_USAGE
  - TRKGRP\_MAINT\_TRK\_USAGE
  - TRKGRP\_NAME
  - TRKGRP\_OOS\_TRK\_USAGE
  - TRKGRP\_RBLK\_TRK\_USAGE
  - TRKGRP\_TOTAL\_INS\_TRK
  - TRKGRP\_UEQP\_TRK\_USAGE
- Added the display value ANM\_EMG\_CKT\_UNAVAIL to the Announcement Measurements Summary table.
- In the Screening List Editing table the following changes were made:
  - Added the value NSA to the fname token.
  - Added tokens FORCED and LAST-CHANGED.
  - Added delete command examples using the FORCED token.
- Added the following call types:
  - Automatic number announcement (ANA)
  - InterLATA DA call (DA-INTERLATA)
  - International DA Call (DA-INTL)
  - International call within World Zone 1 (INTL-WZ1)
  - Universal Access Number (UAN)
- VACANT call type: removed default call type.
- The following changes were made to the Call Agent Configuration table in Appendix A:
  - Added the following T38 values:
    - MGCP-T38-FAX-MODE-PREF1: Not provisionable.
    - MGCP-T38-FAX-MODE-PREF2: Not provisionable.
    - MGCP-T38-FAX-MODE-PREF3: Not provisionable.

- CODEC-T38-PTIME
- T38-MAX -BIT-RATE: Not provisionable.
- T38-MAX -BUFFER-SIZE: Not provisionable.
- T38-MAX -DATAGRAM-SIZE: Not provisionable.
- The following values are obsoleted:
  - MGCP-MIN-RETRANSMIT-COUNT
  - MGCP-MAX-RETRANSMIT-COUNT
  - MGCP-PING-ATTEMPTS
  - MGCP-PING-DURATION
  - MGCP-TIMER-VAL
  - MIN-SE
  - SESSION-EXPIRES
  - DEFAULT-IVR-SCRIPT-PKG-TYPE
  - FQDN-FOR-EXTERNAL-FS
  - SCTP-IP-TOS-PRECEDENCE
- The following values were added:
  - ACCT-CODE-PROMPT-DELAY
  - ACCT-CODE-PROMPT-TIMEOUT
  - ACCT-CODE-PROMPT-TONE
  - COT-ACTIVATION-LEVEL
  - FEATURE-RECONNECT-TMR
  - EMG-SUSPEND-TMR
  - ENUM-QUERY-RESPONSE-TIMER
  - ENUM-QUERY-RETRY-COUNT
  - INACTIVE-CONN-MODE-BEFORE-ANSWER
  - MGCP-MAX-KEEPALIVE-AUEP
  - MGCP-MAX-KEEPALIVE-ICMP
  - MGCP-RTO-MAX
  - NCT-TEST-SERVICE-AFFECTING
  - NLB-TEST-SERVICE-AFFECTING
  - TEST-TRUNK-GRP-DIGITS
  - TEST-TRUNK-MEMBER-DIGITS
  - BEST-EFFORT-ON-QOS-FAIL
  - DEFAULT-OCB-PROFILE-ID
  - DEFAULT-PRIVACY-MANAGER-ID
  - DEFAULT-VOICE-MAIL-ID
  - ENCRYPTION-KEY
  - RADIUS-AUTHORIZATION-ALLOWED

- RADIUS-SERVER-ADDRESS
- WHISPER-TONE-TIMER
- SCTP-DSCP
- SIP-TIMER-PROFILE-ID
- SUB-MAX-FORWARDS
- SUB-SESSION-TIMER-ALLOWED
- SIA-REG-MAX-EXPIRES-SECS
- SIA-REG-MIN-EXPIRES-SECS
- REFER-ACCEPT-TIMER-SECS
- SESSION-EXPIRES
- REFER-ABANDON-TIMER-SECS
- MAX-SESSION-EXPIRES
- MAX-SUBSCRIPTION-LEVEL
- MGCP-T-HIST.
- RELEASE-CALL-ON-LCD-TRIGGER-FAILURE.
- The default value for SIA-REG-MIN-EXPIRES-SECS changed to 1800.
- The following types have no default values: CODEC-G722-PTIME, CODEC-G723-1A-H-PTIME, CODEC-G723-1A-L-PTIME, CODEC-G723-1-H-PTIME, CODEC-G723-1-L-PTIME, CODEC-G726-16K-PTIME, CODEC-G726-24K-PTIME, CODEC-G726-32K-PTIME, CODEC-G726-40K-PTIME, CODEC-G728-PTIME, CODEC-G729AB-PTIME, CODEC-G729B-PTIME, CODEC-G729E-PTIME, CODEC-G729-PTIME, CODEC-PCMA-PTIME, CODEC-T38-PTIME and CODEC-PCMU-PTIME.

## Release 4.4.1

The following changes were made in Release 4.4.1. It is not an inclusive list.



### Note

The OCB Profile and OCB K Value tables are supported in this release.

- Added TGID value to the TRUNK-SUB-GRP-TYPE token of the Softswitch Trunk Group Profile table.
- Added the token AAA-SERVER-GRP-ID to the Point of Presence table.
- For the measurement provisioning command, the ALL value for the TYPE token is obsolete.
- In the User Part Variant table, added the Q761\_STANDARD value to the ID token.
- Added the tokens SEND-EARLY-BKWD-MSG and EARLY-BKWD-MSG-TMR to the Trunk Group table.
- In the H.323 Gateway to Gatekeeper table, the GK-IP-ADDR token must now be entered in dot notation: A.B.C.D.
- Added feature information for limited call duration (LCD) to Appendix B.

- Added new table Generic Transparency Descriptor (GTD) and table listing supported GTD parameters.
- Added the following new tables for IVR functionality:
  - Audio Segment
  - Audio Sequence
  - IVR Script Profile
  - Language
- The following rules were added to the Subscriber table:
  - if subscriber category=individual/pbx, mlhg-id and ctxg-id are not provisionable.
  - if subscriber category=mlhg/mlhg-individual/mlhg-pref-indiv, ctxg-id is not provisionable.
  - if subscriber category=ctxg/ctxg-individual/ctxg-tg, mlhg-id is not provisionable.
- Added the token ALARM-STATE to the Alarm Log/Event Log table.
- Added the following values for the Measurement POTS Miscellaneous Feature Server Summary table display token:
  - POTS\_LCD\_AUTH\_ATTEMPTS
  - POTS\_LCD\_AUTH\_SUCCESS
  - POTS\_LCD\_AUTH\_FAIL
  - POTS\_LCD\_REAUTH\_FAIL
  - POTS\_LCD\_FORCED\_DISCONNECT
- In the ADM chapter, Address of Record to Subscriber (aor2sub) table, the status and control commands are obsoleted. Use the change command to control an aor2sub ID, and the show command to check the status.
- Added the token USE-PACKETCABLE-IAP to the Electronic Surveillance Server table for CALEA SII support.
- Added the following values and note to the ID token of the Activity table:
  - MEDIA-ALIVE-EM
  - MGCP-TERM
  - SS7-CIC




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**Note** Note: Enter these values in upper case. These values are case-sensitive.

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- Added note to the id token of the Activity Base table that the values are case-sensitive.
- In the Call Agent table, the token tsap-addr-sidea is now tsap-addr.
- In the Call Agent Configuration table:
  - Added example of add command.
  - Delete command is now supported
  - The tokens batch-mode-supp and batch-latency are obsoleted.
- In the Local Access and Transport Area table, the LATA id range is increased to 99999.
- In the Call Agent Profile table:

- Removed the add and change rule “cms-id cannot equal the mgc-id.”
  - Cms-id is now mandatory. Default is 99999.
  - Default for the feid token is now 33333.
  - Mgc-id is now mandatory. Default is 99999.
  - The token cms-supp is obsolete.
  - Removed the token mgc-supp.
  - Removed the token gtd-supp.
  - Removed the token es-intercept-type.
  - Added the tokens FORCED and PCMM-SUPP.
- For the cdb-billing-supp token:
- Added the token ALARM-STATUS to the Alarm or Event Log command.
- In the Softswitch Trunk Group Profile table the value for the SIPT-ISUP-VER token is no longer restricted to GR317.
- Added the following values for the Measurement POTS Miscellaneous Feature Server Summary table display token:
  - POTS\_LCD\_AUTH\_ATTEMPTS
  - POTS\_LCD\_AUTH\_SUCCESS
  - POTS\_LCD\_AUTH\_FAIL
  - POTS\_LCD\_REAUTH\_FAIL
  - POTS\_LCD\_FORCED\_DISCONNECT
- In the ADM chapter, Address of Record to Subscriber (aor2sub) table, the status and control commands are no longer supported. Use the change command to control an aor2sub id, and the show command to check the status.
- Added the token use-packetcable-iap to the Electronic Surveillance Server table for CALEA SII support.
- Added the following values and note to the ID token of the Activity table:
  - MEDIA-ALIVE-EM
  - MGCP-TERM
  - SS7-CIC
  - Note: Enter these values in upper case. These values are case-sensitive.
- Added note to the ID token of the Activity Base table that the values are case-sensitive.
- In the Call Agent Configuration table:
  - Added example of add command.
  - Delete command is now supported
  - The tokens batch-mode-supp and batch-latency are no longer supported.
- In the Call Agent Profile table:
  - Removed the add and change rule “cms-id cannot equal the mgc-id.”
  - Cms-id is now mandatory. Default is 99999.
  - Default for the FEID token is now 33333.

- MGC-ID is now mandatory. Default is 99999.
- Removed the tokens CMS-SUPP, MGC-SUPP, GTD-SUPP and ES-INTERCEPT-TYPE.
- For the CDB-BILLING-SUPP token:
  - Added the caution: Cisco strongly recommends that you do not set both CDB-BILLING-SUPP and EM-BILLING-SUPP to Y. Attempting to generate both types of records simultaneously can significantly degrade system performance.
  - Added the note: To set both the cdb-billing-supp and em-billing-supp tokens to Y, include FORCED=Y in the command line.
- For the EM-BILLING-SUPP token:
  - Added the caution: Cisco strongly recommends that you do not set both CDB-BILLING-SUPP and EM-BILLING-SUPP to Y. Attempting to generate both types of records simultaneously can significantly degrade system performance.
  - Added the note: To set both the cdb-billing-supp and em-billing-supp tokens to Y, include FORCED=Y in the command line.
- For the FEID token:
  - Default is now 33333.
  - Amended note: This optional token becomes a mandatory token if the CMS-SUPP token, the MGC-SUPP token, or both are set to Y (yes) in Releases 4.1 and 4.2. This token is optional in Release 4.4.1 regardless of whether the CMS-SUPP token, the MGC-SUPP token, or both are set to Y (yes).
- Added new table Check Positive Values table. Moved the Check Positive Values Valid Types and Values table from Appendix A to Chapter 1.
- Added new token SEND-ALERT to the DB Usage table.
- Added the following tokens to the Trunk Group table: STATUS-MONITORING.
- Added the new token KEEPALIVE-METHOD to the Media Gateway Profile table. In Release 4.4.1, the Cisco BTS 10200 Softswitch uses the value NONE for this token to replace the mgw-monitoring flag in MGW table.
- Destination table:
  - Added new call type UAN.
  - Added new route type SCRIPT.
  - Added new token SCRIPT-ID.
- New tables:
  - Script
  - Network Element
  - GTD Parameter Values
- Cause Code Map Profile table: deleted tokens DEFAULT-STD-CAUSE-CODE and DEFAULT-ACTION.
- Measurements:
  - Added new report and clear commands for call-tools, ain-tools and pct-tools.
  - Added new types: call-tools, ain-tools, and pct-tools.
- Deleted the token MGW-MONITORING-ENABLED in the Media Gateway table.

- Added new tokens ES-SUPP and AUDIT-THRESHOLD to the Softswitch Trunk Group Profile table.
- Changed range to 0–30 seconds for the STATUS-ENQ-TIMER in the H323 Gateway table.
- TIME-TO-LIVE token moved from the H323 GW2GK table to the H323 Gateway table.
- Added the following types to the Call Agent Configuration table in Appendix A:
  - trunk-audit-interval
  - exchange-type
  - ar-announcement-response-timer-tanc
  - ar-invalid-digit-counter
  - ar-announcement-response-timeout-counter
  - ar-dn-voiceback-option
  - ar-name-voiceback-option
  - default-ivr-route-guide-id
- Added caution for no support of Telnet.
- The measurement DISPLAY tokens for ITU-Chile ISUP are not supported.
- DISPLAY token values for ETSI, Israel and Australia ISUPs are not supported.
- Added database usage tables for small, medium, large, routeserver and LNP configurations.
- Removed the delete rules for the IPSec Kerberos Old Service Keys table.
- Added expanded information for the ACC-REQ-RETRANSMIT and ACC-RSP-TIMER tokens in the Radius Profile table.
- Updated all information of all occurrences of the IKE-CS token.
- Values pertaining to the MGX8260 are no longer supported.
- Added new tokens GTD-MODE and GTD-PARMS to the Softswitch Trunk Group Profile table.

## Release 4.4.0

The following changes were made in Release 4.4.0. It is not an inclusive list.

- MGP command is obsolete.
- Added new query commands: query-lnp, query-lidb and query-toll-free.
- In the Call Agent table, the token TSAP-ADDR-SIDEA is now TSAP-ADDR.
- Added the AR-ACTIVATION-LEVEL token to the Point of Presence table.
- The following changes were made to the Billing Account Address table:
  - BILLING-FILE-PREFIX token now VARCHAR(20): 1–20 (Default = bil) characters.
  - Added new token SFTP-SUPP.
- The Hardware Monitoring “change node” and “show node” commands are no longer supported.
- Removed the Call Agent Configuration token h323-max-reattempt-count from Appendix A.
- Modified descriptions of the CODEC-NEG-SUPP, MGCP-HAIRPIN-SUPP, MGCP-HAIRPIN-Z2-SUPP, and the MGCP-CONN-ID-AT- GW-SUPP tokens in the Media Gateway Profile table.
- Added change command to the Measurement Provisioning table.

- Added the following expanded information to the MGCP-DEFAULT-PKG token of the Media Gateway Profile table: “If the mgcp-variant=TGCP, the mgcp-pkg-type must be set to IT (ISUP trunk).”
- In the Call Agent Configuration table in Appendix A:
  - Changed the default values for SIA-SIG-TOS-LOWDELAY and SIA-SIG-TOS-PRECEDENCE to Y and 3.
  - Added SIP-SUB-SEND-CPG-ON-HOLD-SIGNAL, ACCT-CODE-PROMPT-DELAY, AUTH-CODE-PROMPT-DELAY, DEFAULT-OCB-PROFILE-ID.
- Added ISUP values for Israel and Australia to the ID token in the User Part Variant Base table.
- Added the token EXCHANGE-TYPE to the Signaling System 7 Q761 Trunk Group Profile table for ETSI v2 ISUP.
- Added the token EXCHANGE-TYPE to the Call Agent Configuration table in Appendix A.
- Made the following changes to the ISDN Trunk Group Profile table:
  - added new tokens T-304, T037, GENDIGIT-IE-CODESET, GENDIGIT-IE-SUPP, MAX-RESTART-COUNT, MAX-SERVICE-COUNT, OVERLAP-SENDING-SUPP, OVERLAP-RECEIVING-SUPP and GENDIGIT-TOD-INFODIGIT.
  - For the interface-type token: USER value is now valid; added value SYMMETRIC (Not Used).
- Added values to the measurement DISPLAY tokens for ISDN, ETSI, Israel and Australia.
- In the ISDN D Channel table, changed DCHAN-PORT range from 0–255 to 0–32768. Added VSXM note.
- Added Outgoing Call Barring (OCB) Profile and OCB K Value tables.
- Added token OCB-PROFILE-ID to the Point of Presence (POP) table.
- Changed N value description of the BLOCK-EAWOPIC token in the POP table from “Route to LEC” to “Route to LECOSS.”
- Added new table: Local Number Portability Profile.
- Added new appendix: ISUP Message Counters.
- The following changes were made to the Users section of the Security chapter:
  - Removed note regarding the reset password command.
  - Rephrased note regarding user prompt for password. Users connecting by SSH are not prompted to change their password upon first logging in; since SSH is now the default, users will never be prompted to change their password.
  - Added the tokens FIRST and START-TIME.
- Added new Chapter for Interactive Voice Response.

## Release 4.2.1

The following changes were made in Release 4.2.1. It is not an inclusive list.

- The MGCP-CMD-SEQ-SUPP token in the MGW Profile table is not configurable.
- Added new table TIMEZONE.

## Release 4.2

The following changes were made in Release 4.2. It is not an inclusive list.

- Added the following information to the Usage Guidelines section for the Subscriber Feature Data table: use Table B-1 “List of Features” to determine the correct tokens to provision features. For example, when provisioning CFU to allow forwarding to international numbers, you must provision TYPE3 and VALUE3.
- Added Release 4.2 Database Usage default section to Appendix D.
- Updated configurable parameters in Appendix A.
- Added the following tokens to the Subscriber table: H323-TERM-ID, SEND-BDN-AS-CPN and SEND-BDN-FOR-EMG.
- The following Subscriber table token definitions were modified.
  - Term-type—added H323 Term Type
  - Privacy—added USER as a privacy type
- Added the token, VIDEO-CODEC-TYPE to the Quality of Service table.
- The following new tables were added:
  - ANI Screening
  - ANI Screening Profile
  - H.323 Terminal
  - H.323 Terminal Profile
  - SIP Timer Profile
  - SIPT ISUP Version Base
  - SIPT ISUP Version Alias
- The following tokens were added to the Trunk Group table: ANI-SCREENING, ANI-SCREENING-PROFILE-ID and SEND-RDN-AS-CPN.
- The token TRUNK-SUB-GRP is provisionable for H323.
- Added new point-code-type value THAILAND to the DPC table.
- Added new point-code-type value THAILAND to the OPC table.
- The tokens H245-TUNNELING and CALL-START-MODE were deleted from the H323 Gateway table and moved to the H323 Trunk Group Profile and H323 Termination Profile tables.
- The following new tokens were added to the H323 Gateway table: STATUS-ENQ-TIMER, CODEC-NEG-TIMER, CODEC-NEG-ATTEMPTS and SOURCE-BASED-ROUTING.
- Updated display values for the ISUP summary command in the Measurements chapter with values for Thailand and ITU-HongKong.
- Updated Measurement chapter command examples to include the output-type token.
- Updated the “change ems” command regarding the ntp-server token.
- Added DB-Usage tables for Routeserver and LNP configurations for 4.2, in addition to updating Small and Medium configuration tables.
- Made the following changes to the Call Agent Configuration table in Appendix A:
  - added type H323-MAX-LOOP-COUNT

- added type DEFAULT-LNP-PROFILE-ID
- added type SUB-SESSION-TIMER-ALLOWED
- changed the default to Y for the TYPE CODEC-MOD-DURING-CALL token
- changed to-value of the type MGCP-INIT-TERMS to 5000
- changed default value for SCP-RESPONSE-TMR to 3
- In the AOR2SUB table, noted that the default for the STATUS token is OOS.
- Corrected value of the announcement timer token in the Announcement table from VARCHAR to INTEGER.
- The MGCP-CMD-SEQ-SUPP token in the Media Gateway Profile table is configurable only as N.
- The following changes were made to the Softswitch Trunk Group table:
  - The following tokens were added: USE-SIPT-ISUP-BASE and SIPT-ISUP-BASE
  - PROTOCOL-TYPE: updated SIP\_T value definition.
  - Add rules no longer apply.

## Release 4.1

The following changes were made in Release 4.1. It is not an inclusive list.

- Added the System Health command.
- Added Audit Circuit Identification Code command.
- Added SS7-trace command.
- In the Dial Plan Profile table, the following information was added to the NANP-DIAL-PLAN token: if this token is set to N, then the NOA token in the Dial Plan table defaults to UNKNOWN.
- The following call-types were added to the Call Type table:
  - AIRLINE
  - INTL-WZ1
  - RAILWAYS
  - SVC-CODE
  - NAT-OPR
- Chapter 26 has been renamed to Maintenance and Administration of System Component Commands.
- Returnable Status States and Success and Failure Responses sections in Chapter 26 have moved to the *Cisco BTS 10200 Operations and Maintenance Manual*.
- The PROPRIETARY-SUPP token must be set to 8 when provisioning NI2 in the ISDN Trunk Group Profile table.
- All -unsupp tokens changed to -supp.
- Added new CAUSE-CODE-TYPE values.
- Updated Subscriber table with MAC-ID.
- Changed TCPRK in CPSG table to a VARCHAR.
- Defined rules for the MGCP Retcode Action table.

- Added a new token REFER-TRIGGER to the Trigger ID table.
- Set token mgcp-cmd-seq-supply=N in MGW Profile table.
- Changed range value for MGCP-T-TRAN to 8000.
- Set token FEATURE-SERVER-SO-ON-CA-CONN-LOSS=Y.
- Added a new term-type=NONE in the Subscriber table.
- Added new FEATURE-SERVER type (HTTP) in the Feature server table. The HTTP Server is used by the SIP Phone to activate/deactivate call forwarding features.
- Now allow up to 64 digits in the Dial Plan table.
- Now allow a minimum of 3 digits and a maximum of 64 digits in the International Dial Plan table.
- Added new value=BBG for type=CC in the Feature table. The new value is used for CFVABBG.
- Updated description in the Trunk Group table DPC field.
- Ext2subscriber table is now also provisioned in the Call Agent.
- Added new token tRUNK-SUB-GRP to the Trunk Group table, which is used for SIP to identify a unique TG between two Call Agents.
- Removed tokens IPSEC-CMS-CONTROL-PORT, and IPSEC-AGGR-CONTROL-PORT from the Radius Profile table.
- Added new value NA for freq, day-of-month, day-of-week to the Activity table.
- In the Trunk Group table, traffic-type=local is now the default.
- Added mgcp-pkg-type=NA for SIP and H323 trunk groups.
- In the POP table, cnam-option=none is now the default.
- In the Special Call Type table, call-type is now a required field.
- In the CAS Trunk Group Profile table, added mf-oss-type=na as the default. Rule was also modified.
- In the MGW Profile table, added new mgw-type=unspecified as the default.
- In the QOS table, codec-type default is now PCMU.
- In the QOS table, max-dqos-auth-bandwidth=high is now the default for the default-bc token.
- Added PacketCable chapter.
- New tables:
  - ACTIVITY
  - ACTIVITY-BASE
  - AOR2SUB
  - AUTH-REALM
  - CALL-CTRL-ROUTE
  - CIPHERSUITE
  - CIPHERSUITE-PROFILE
  - DPC
  - HTTP-FEATURE-SERVER
  - IPSEC-KERBEROS
  - IPSEC-KERBEROS-KEYS

- IPSEC-POLICY
- IPSEC-SA
- MAC2SUB
- MGCP-RETCODE-ACTION
- OPC
- ROUTING-KEY
- SCCP-NW
- SCCP-ROUTE
- SCTP-ASSOC
- SCTP-ASSOC-PROFILE
- SERVING-DOMAIN-NAME
- SG
- SG-GRP
- SGP
- SLHR
- SLHR-PROFILE
- SS7-Q761-TG-PROFILE
- STATIC-CONTACT
- SUBSYSTEM
- SUBSYSTEM-PROFILE
- SUP
- USER-AUTH
- USER-PART-VARIANT
- USER-PART-VARIANT-BASE
- Added SS7 CQM diagnostic command responses.
- Removed all references to the MAC tool.
- Added note to User section regarding necessity of provisioning new-password for new user.
- SP-ID in the Technical Prefix Group table changed from optional to mandatory.
- Added CHK-POS-VAL column to Appendix A.
- Added DB-Usage tables for Small and Medium configurations for 4.1.
- Events and Alarms:
  - In the subscribe/unsubscribe commands “level” is changed to “severity.”
  - “Number” can be any value from 1 through 200. It is no longer limited to 150.
  - “Threshold” and “throttle” cannot be used with the show command—returns the error message “invalid key(s) found.”
- The token MGCP-PKG-TYPE was moved from the Announcement Trunk Group Profile table to the Trunk Group table.

- In the Signaling System 7 ANSI Trunk Group Profile table, for the cot-tone token, added note stating: “The Cisco BTS 10200 Softswitch does not support 2 wire side emulation in transponder COT testing.” Marked “2W-TO-2W—Tx High (2010 Hz), Rx Low (1780 Hz),” and “2W-TO-4W—Tx High (2010 Hz), Rx Low (1780 Hz),” as obsolete.
- In the Signaling System 7 Q761 Trunk Group Profile table, for the cot-tone token, added note stating: “The Cisco BTS 10200 Softswitch does not support 2 wire side emulation in transponder COT testing.” Marked “2W-TO-2W—Tx High (2010 Hz), Rx Low (1780 Hz),” and “2W-TO-4W—Tx High (2010 Hz), Rx Low (1780 Hz),” as not supported.
- Added new values and changed VARCHAR for the CAUSE-CODE-TYPE token.
- Added values for the Measurement ISUP Summary DISPLAY tokens for China ISUP.
- Softswitch Trunk Group table: changed values for redirect-supported token.
- Added Batch Data Retrieval (Paging) information and examples.
- Removed tokens: NAT-800-MSGTYPE, CAR-800-TTYPE, CAR-800-MSGTYPE, LNP-TTYPE, and CNAM-TTYPE from Appendix A.
- In the Destination table, marked the CARRIER-OPERATOR call type as “not used.”
- Added note to the Multiline Hunt Group table ID token: “When you are provisioning a multiline hunt group, add the MLHG-ID to every subscriber in the group. While the MLHG will work when the mlhg-id is added to just the main subscriber; account codes will not work unless the MLHG-ID is added to all subscribers of the MLHG.”
- Added note to the Billing chapter to state that a hyphen is not allowed in the BILLING-FILE-PREFIX token. Also removed hyphen from the example.
- In the Appendix D, Database Usage, changed the following for all medium configurations:
  - NDC 800 N 800 800 Y N N Y
  - EXCHANGE-CODE 50000 N 50000 50000 Y N N Y
  - OFFICE-CODE 50000 Y 50000 50000 Y Y N Y
- The following parameters in Appendix A are obsolete:
  - MGA-SIG-TOS-LOWDELAY
  - MGA-SIG-TOS-PRECEDENCE
  - MGA-SIG-TOS-RELIABILITY
  - MGA-SIG-TOS-THROUGHPUT
- The following changes were made to the Stream Transmission Control Protocol table:
  - Added value definitions for the DSCP token.
  - Added new rule.

## Conventions

This section outlines the conventions used within this book and in the commands used to provision and maintain the Cisco BTS 10200 Softswitch.

## Document

This document uses the following conventions:

- If only a single option from a list is allowed, the choices are separated by a vertical bar ( | ).
- Table tokens are specified as table-name::token-name syntax.
- Token names in Syntax Descriptions are in uppercase for easy scanning of information.
- The following terms are used in the table descriptions:

- Table Containment Area

The hardware component a table resides in. For example, Call Processing tables reside within the Call Agent (CA). Operations, Administration, Maintenance, and Provisioning (OAMP) tables reside in the EMS. The casual-wb-list resides in the plain old telephone service (POTS) Feature Server.

- Primary Key Token(s)

A mandatory, unique key.



**Note**

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A primary key cannot be changed—it identifies the record.

Some primary key tokens are optional. In these cases, the token does not have to be entered from the CLI, but the default value for the token is always used by the system.

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- Unique Key Token(s)

Provides a unique index (secondary key).

- Foreign Key Token(s)

References tokens in foreign (other) tables. The table of the foreign key is listed in the table cell. When a token has a Foreign Key designation, validation is performed to ensure that the value of the token matches the value of that token in the referenced table.

- Mandatory tokens are preceded by an asterisk. If an asterisk is not present, the token is optional.

- Dependencies

In some cases, information must be entered into other tables before information can be entered into a given table. Tables with these requirements have *dependencies*.

For example, you cannot add a dial plan unless a dial plan ID exists.

- SideA/SideB

Each Cisco BTS 10200 Softswitch component (Call Agent, Feature Server, Element Management System, and Bulk Data Management System) operates in redundant mode. Each component has two sides, labeled A and B, loaded on different machines during installation. You cannot change these assignments during operation. Side A is designated as “primary” and Side B as “secondary.” During normal operations, Side A is active and Side B is standby.

## Notes, Cautions, Warnings, and Tips

Notes, cautions, warnings, and tips are used throughout the document where applicable.

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.

**Tip**

Means *the following information will help you solve a problem*. The tips information might not be troubleshooting or even an action, but could be useful information or information that might save time.

**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

**Warning****IMPORTANT SAFETY INSTRUCTIONS**

**This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, see the translated safety warnings that accompanied this device.**

**Note: SAVE THESE INSTRUCTIONS**

**Note: This documentation is to be used in conjunction with the specific product installation guide that shipped with the product. See the Installation Guide, Configuration Guide, or other enclosed additional documentation for further details.**

## Command Structure

The following conventions apply to the commands:

- All commands start with a verb.
- A noun immediately follows the verb if appropriate.
- All primary keys must be specified in add, change, or delete commands.
- A primary key cannot be changed—it identifies the record.
- All parameters must be specified in a “token-name=value” pair. However, when a parameter (token) is referenced by another table, a full table-name qualifier is required. For example, in the Local Service Area table, the token is ID; but, because the table is referenced by the LSA Profile table, the command is entered as lsa-id. Likewise, the token is also specified as lsa-id when used in the LSA Profile table.
- Each value is terminated by a semicolon.
- A token can contain several values separated by commas.
- All token names, command verbs, and command nouns are case insensitive.
- All values entered after the equal sign (=) in a command are case sensitive.

**Caution**

You must enter system component names in the case in which they were originally added to the system. For example, if a Call Agent ID was entered in lowercase (ca146), you must always enter it in lowercase. If it was entered in uppercase (CA146), you must always enter it in uppercase or you will get an error message.

Likewise, feature tokens are always entered in uppercase, or you will receive the message “*Reply: Database is void of entries.*” For example, enter AC\_ACT, not ac\_act.

- White space is allowed in a value field if the value type is an ASCII character string.
- Any alphanumeric character and spaces can be used in specified values.
  - All fields that are alphanumeric characters by definition are stored in string form in the database.
  - If a token has a default value, the value is considered optional when entering a command. However, the token itself can be required, but its default value is automatically entered into the system.
  - Optional fields can become *required* based on the provisioning of another token. For example, in the Destination table, carrier-id (optional) becomes required if route-type=Carrier.
  - All fields that represent digit strings are entered and displayed in the proper dial plan format with a dash (-) but only the numeric characters are stored in the database. The international dial-plan digits should not contain dashes.
  - All dashes (-) in the token fields are converted to underscores ( \_ ) when they are stored in the database.

**Caution**

Exception—you must type feature tokens with an underscore ( \_ ) or you will receive the message “*Reply: Database is void of entries.*” For example, enter AC\_ACT, not AC-ACT.

## Ciscouser

The “ciscouser” login is a high-level security login for TAC and other Cisco BTS 10200 Softswitch support personnel that restricts access to certain commands. Anyone else trying to execute such commands receives an error message.

## User and Command Privilege Levels

The system administrator assigns a User Privilege Level (UPL) to a user's login. There are 10 levels, 1 to 10, with 10 being the highest (system administrator level). Similarly, each command has a Command Privilege Level (CPL), 1 to 10, associated with it. A user must have a UPL equal to or higher than the command's CPL to use that command. The system will deny users with UPLs lower than the CPL. The system administrator can change a user's UPL as well as the CPL of any command. The default Security CPL values are:

**Table 2**     *Noun/Verb Command Default Security Privilege Levels*

| <b>Noun</b>      | <b>Verb</b> | <b>Default Security Level</b> |
|------------------|-------------|-------------------------------|
| aaa-server-grp   | add         | 8                             |
| aaa-server-grp   | audit       | 8                             |
| aaa-server-grp   | change      | 5                             |
| aaa-server-grp   | delete      | 8                             |
| aaa-server-grp   | help        | 1                             |
| aaa-server-grp   | show        | 2                             |
| activity         | add         | 8                             |
| activity         | audit       | 8                             |
| activity         | change      | 5                             |
| activity         | delete      | 8                             |
| activity         | help        | 1                             |
| activity         | show        | 2                             |
| activity-base    | help        | 1                             |
| activity-base    | show        | 2                             |
| activity-summary | report      | 3                             |
| aggr             | add         | 8                             |
| aggr             | audit       | 8                             |
| aggr             | change      | 8                             |
| aggr             | delete      | 8                             |
| aggr             | help        | 1                             |
| aggr             | show        | 2                             |
| aggr             | status      | 8                             |
| alarm            | ack         | 7                             |
| alarm            | clear       | 7                             |
| alarm            | help        | 1                             |
| alarm            | show        | 2                             |
| alarm-log        | help        | 1                             |
| alarm-log        | show        | 3                             |
| alarm-report     | help        | 1                             |
| alarm-report     | subscribe   | 3                             |
| alarm-report     | unsubscribe | 3                             |
| all-ss7-cics     | audit       | 2                             |
| all-ss7-cics     | help        | 1                             |
| ancement         | add         | 8                             |
| ancement         | audit       | 8                             |
| ancement         | change      | 5                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>           | <b>Verb</b> | <b>Default Security Level</b> |
|-----------------------|-------------|-------------------------------|
| ancement              | delete      | 8                             |
| ancement              | help        | 1                             |
| ancement              | show        | 2                             |
| ani                   | add         | 8                             |
| ani                   | audit       | 8                             |
| ani                   | change      | 5                             |
| ani                   | delete      | 8                             |
| ani                   | help        | 1                             |
| ani                   | show        | 2                             |
| ani-screening         | add         | 8                             |
| ani-screening         | audit       | 8                             |
| ani-screening         | change      | 5                             |
| ani-screening         | delete      | 8                             |
| ani-screening         | help        | 1                             |
| ani-screening         | show        | 2                             |
| ani-screening-profile | add         | 8                             |
| ani-screening-profile | audit       | 8                             |
| ani-screening-profile | change      | 5                             |
| ani-screening-profile | delete      | 8                             |
| ani-screening-profile | help        | 1                             |
| ani-screening-profile | show        | 2                             |
| ani-wb-list           | add         | 8                             |
| ani-wb-list           | audit       | 8                             |
| ani-wb-list           | delete      | 8                             |
| ani-wb-list           | help        | 1                             |
| ani-wb-list           | show        | 2                             |
| annc                  | add         | 8                             |
| annc                  | audit       | 8                             |
| annc                  | change      | 5                             |
| annc                  | delete      | 8                             |
| annc                  | help        | 1                             |
| annc                  | show        | 2                             |
| annc-tg-profile       | add         | 8                             |
| annc-tg-profile       | audit       | 8                             |
| annc-tg-profile       | change      | 8                             |
| annc-tg-profile       | delete      | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>            | <b>Verb</b> | <b>Default Security Level</b> |
|------------------------|-------------|-------------------------------|
| annc-tg-profile        | help        | 1                             |
| annc-tg-profile        | show        | 2                             |
| annc-trunk             | add         | 6                             |
| annc-trunk             | audit       | 6                             |
| annc-trunk             | change      | 6                             |
| annc-trunk             | delete      | 6                             |
| annc-trunk             | help        | 1                             |
| annc-trunk             | show        | 2                             |
| annc-trunk-termination | diag        | 2                             |
| annc-trunk-termination | help        | 1                             |
| aor2sub                | audit       | 8                             |
| aor2sub                | change      | 8                             |
| aor2sub                | help        | 1                             |
| aor2sub                | show        | 2                             |
| application            | change      | 1                             |
| application            | control     | 1                             |
| application            | help        | 1                             |
| application            | show        | 1                             |
| application            | status      | 1                             |
| app-server             | add         | 8                             |
| app-server             | audit       | 8                             |
| app-server             | change      | 5                             |
| app-server             | delete      | 8                             |
| app-server             | help        | 1                             |
| app-server             | show        | 2                             |
| audio-segment          | add         | 8                             |
| audio-segment          | audit       | 8                             |
| audio-segment          | change      | 5                             |
| audio-segment          | delete      | 8                             |
| audio-segment          | help        | 1                             |
| audio-segment          | show        | 2                             |
| audio-seq              | add         | 8                             |
| audio-seq              | audit       | 8                             |
| audio-seq              | change      | 5                             |
| audio-seq              | delete      | 8                             |
| audio-seq              | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>       | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------|-------------|-------------------------------|
| audio-seq         | show        | 2                             |
| auth-code         | add         | 8                             |
| auth-code         | audit       | 8                             |
| auth-code         | change      | 5                             |
| auth-code         | delete      | 8                             |
| auth-code         | help        | 1                             |
| auth-code         | show        | 2                             |
| auth-code-grp     | add         | 8                             |
| auth-code-grp     | audit       | 8                             |
| auth-code-grp     | change      | 5                             |
| auth-code-grp     | delete      | 8                             |
| auth-code-grp     | help        | 1                             |
| auth-code-grp     | show        | 2                             |
| auth-realm        | add         | 8                             |
| auth-realm        | audit       | 8                             |
| auth-realm        | change      | 5                             |
| auth-realm        | delete      | 8                             |
| auth-realm        | help        | 1                             |
| auth-realm        | show        | 2                             |
| backhaul-set      | add         | 8                             |
| backhaul-set      | audit       | 8                             |
| backhaul-set      | change      | 5                             |
| backhaul-set      | delete      | 8                             |
| backhaul-set      | help        | 1                             |
| backhaul-set      | show        | 2                             |
| bdms              | control     | 1                             |
| bdms              | help        | 1                             |
| bdms              | status      | 1                             |
| billing-acct-addr | change      | 9                             |
| billing-acct-addr | help        | 1                             |
| billing-acct-addr | show        | 2                             |
| billing-alarm     | change      | 5                             |
| billing-alarm     | help        | 1                             |
| billing-alarm     | show        | 2                             |
| billing-cdb       | change      | 5                             |
| billing-cdb       | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>            | <b>Verb</b> | <b>Default Security Level</b> |
|------------------------|-------------|-------------------------------|
| billing-cdb            | show        | 2                             |
| billing-file           | help        | 1                             |
| billing-file           | report      | 6                             |
| billing-record         | help        | 1                             |
| billing-record         | report      | 6                             |
| ca-config              | add         | 8                             |
| ca-config              | audit       | 8                             |
| ca-config              | change      | 8                             |
| ca-config              | delete      | 8                             |
| ca-config              | help        | 1                             |
| ca-config              | show        | 2                             |
| ca-config-base         | help        | 1                             |
| ca-config-base         | show        | 2                             |
| ca-config-base-pos-val | help        | 1                             |
| ca-config-base-pos-val | show        | 2                             |
| call-agent             | add         | 8                             |
| call-agent             | audit       | 6                             |
| call-agent             | change      | 5                             |
| call-agent             | control     | 6                             |
| call-agent             | delete      | 8                             |
| call-agent             | get-trace   | 2                             |
| call-agent             | help        | 1                             |
| call-agent             | set-trace   | 6                             |
| call-agent             | show        | 2                             |
| call-agent             | status      | 2                             |
| call-agent-profile     | add         | 8                             |
| call-agent-profile     | audit       | 8                             |
| call-agent-profile     | change      | 5                             |
| call-agent-profile     | delete      | 8                             |
| call-agent-profile     | help        | 1                             |
| call-agent-profile     | show        | 2                             |
| call-ctrl-route        | add         | 6                             |
| call-ctrl-route        | audit       | 6                             |
| call-ctrl-route        | change      | 6                             |
| call-ctrl-route        | delete      | 6                             |
| call-ctrl-route        | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>           | <b>Verb</b> | <b>Default Security Level</b> |
|-----------------------|-------------|-------------------------------|
| call-ctrl-route       | show        | 3                             |
| call-subtype          | help        | 1                             |
| call-subtype          | show        | 2                             |
| call-trace            | help        | 1                             |
| call-trace            | query       | 2                             |
| call-trace-summary    | help        | 1                             |
| call-trace-summary    | report      | 3                             |
| call-type             | help        | 1                             |
| call-type             | show        | 2                             |
| call-type-profile     | add         | 8                             |
| call-type-profile     | audit       | 8                             |
| call-type-profile     | change      | 8                             |
| call-type-profile     | delete      | 8                             |
| call-type-profile     | help        | 1                             |
| call-type-profile     | show        | 2                             |
| carrier               | add         | 8                             |
| carrier               | audit       | 8                             |
| carrier               | change      | 5                             |
| carrier               | delete      | 8                             |
| carrier               | help        | 1                             |
| carrier               | show        | 2                             |
| cas-tg-profile        | add         | 8                             |
| cas-tg-profile        | audit       | 8                             |
| cas-tg-profile        | change      | 5                             |
| cas-tg-profile        | delete      | 8                             |
| cas-tg-profile        | help        | 1                             |
| cas-tg-profile        | show        | 2                             |
| cas-trunk-termination | diag        | 2                             |
| cas-trunk-termination | help        | 1                             |
| casual-wb-list        | add         | 8                             |
| casual-wb-list        | audit       | 8                             |
| casual-wb-list        | delete      | 8                             |
| casual-wb-list        | help        | 1                             |
| casual-wb-list        | show        | 2                             |
| cause-code-map        | add         | 8                             |
| cause-code-map        | audit       | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>            | <b>Verb</b> | <b>Default Security Level</b> |
|------------------------|-------------|-------------------------------|
| cause-code-map         | change      | 5                             |
| cause-code-map         | delete      | 8                             |
| cause-code-map         | help        | 1                             |
| cause-code-map         | show        | 2                             |
| cause-code-map-profile | add         | 8                             |
| cause-code-map-profile | audit       | 8                             |
| cause-code-map-profile | change      | 5                             |
| cause-code-map-profile | delete      | 8                             |
| cause-code-map-profile | help        | 1                             |
| cause-code-map-profile | show        | 2                             |
| centrex-grp            | add         | 8                             |
| centrex-grp            | audit       | 8                             |
| centrex-grp            | change      | 5                             |
| centrex-grp            | delete      | 8                             |
| centrex-grp            | help        | 1                             |
| centrex-grp            | show        | 2                             |
| changed-number         | add         | 8                             |
| changed-number         | audit       | 8                             |
| changed-number         | change      | 8                             |
| changed-number         | delete      | 8                             |
| changed-number         | help        | 1                             |
| changed-number         | show        | 2                             |
| ciphersuite            | add         | 8                             |
| ciphersuite            | audit       | 8                             |
| ciphersuite            | change      | 8                             |
| ciphersuite            | delete      | 8                             |
| ciphersuite            | help        | 1                             |
| ciphersuite            | show        | 2                             |
| ciphersuite-profile    | add         | 8                             |
| ciphersuite-profile    | audit       | 8                             |
| ciphersuite-profile    | change      | 8                             |
| ciphersuite-profile    | delete      | 8                             |
| ciphersuite-profile    | help        | 1                             |
| ciphersuite-profile    | show        | 2                             |
| circuit-code           | add         | 8                             |
| circuit-code           | audit       | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>   | <b>Verb</b> | <b>Default Security Level</b> |
|---------------|-------------|-------------------------------|
| circuit-code  | change      | 8                             |
| circuit-code  | delete      | 8                             |
| circuit-code  | help        | 1                             |
| circuit-code  | show        | 2                             |
| cli-code      | add         | 8                             |
| cli-code      | change      | 5                             |
| cli-code      | delete      | 8                             |
| cli-code      | help        | 1                             |
| cli-code      | show        | 2                             |
| cmdpar        | add         | 10                            |
| cmdpar        | change      | 10                            |
| cmdpar        | delete      | 10                            |
| cmdpar        | show        | 10                            |
| cmdtab        | add         | 10                            |
| cmdtab        | change      | 10                            |
| cmdtab        | delete      | 10                            |
| cmdtab        | show        | 10                            |
| command-alias | add         | 10                            |
| command-alias | delete      | 10                            |
| command-alias | show        | 10                            |
| command-level | change      | 8                             |
| command-level | help        | 1                             |
| command-level | show        | 2                             |
| command-table | change      | 10                            |
| command-table | help        | 3                             |
| command-table | reset       | 10                            |
| command-table | show        | 3                             |
| cos-restrict  | add         | 8                             |
| cos-restrict  | audit       | 8                             |
| cos-restrict  | change      | 5                             |
| cos-restrict  | delete      | 8                             |
| cos-restrict  | help        | 1                             |
| cos-restrict  | show        | 2                             |
| cpsg          | add         | 8                             |
| cpsg          | audit       | 8                             |
| cpsg          | change      | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>              | <b>Verb</b> | <b>Default Security Level</b> |
|--------------------------|-------------|-------------------------------|
| cpsg                     | delete      | 8                             |
| cpsg                     | help        | 1                             |
| cpsg                     | show        | 2                             |
| ctxg                     | add         | 8                             |
| ctxg                     | audit       | 8                             |
| ctxg                     | change      | 5                             |
| ctxg                     | delete      | 8                             |
| ctxg                     | help        | 1                             |
| ctxg                     | show        | 2                             |
| cust-grp                 | add         | 8                             |
| cust-grp                 | audit       | 8                             |
| cust-grp                 | change      | 5                             |
| cust-grp                 | delete      | 8                             |
| cust-grp                 | help        | 1                             |
| cust-grp                 | show        | 2                             |
| custom-dial-plan         | add         | 8                             |
| custom-dial-plan         | audit       | 8                             |
| custom-dial-plan         | change      | 5                             |
| custom-dial-plan         | delete      | 8                             |
| custom-dial-plan         | help        | 1                             |
| custom-dial-plan         | show        | 2                             |
| custom-dial-plan-profile | add         | 8                             |
| custom-dial-plan-profile | change      | 5                             |
| custom-dial-plan-profile | delete      | 8                             |
| custom-dial-plan-profile | help        | 1                             |
| custom-dial-plan-profile | show        | 2                             |
| database                 | audit       | 10                            |
| database                 | download    | 10                            |
| database                 | help        | 1                             |
| db-license               | add         | 10                            |
| db-license               | change      | 10                            |
| db-license               | delete      | 10                            |
| db-license               | show        | 10                            |
| db-route                 | show        | 10                            |
| db-size                  | add         | 10                            |
| db-size                  | change      | 10                            |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>       | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------|-------------|-------------------------------|
| db-size           | delete      | 10                            |
| db-size           | show        | 10                            |
| db-usage          | change      | 6                             |
| db-usage          | help        | 1                             |
| db-usage          | show        | 2                             |
| debug-report      | help        | 1                             |
| debug-report      | subscribe   | 3                             |
| debug-report      | unsubscribe | 3                             |
| destination       | add         | 6                             |
| destination       | audit       | 6                             |
| destination       | change      | 6                             |
| destination       | delete      | 6                             |
| destination       | help        | 1                             |
| destination       | show        | 3                             |
| dial-plan         | add         | 8                             |
| dial-plan         | audit       | 8                             |
| dial-plan         | change      | 5                             |
| dial-plan         | delete      | 8                             |
| dial-plan         | help        | 1                             |
| dial-plan         | show        | 2                             |
| dial-plan-profile | add         | 8                             |
| dial-plan-profile | audit       | 8                             |
| dial-plan-profile | change      | 5                             |
| dial-plan-profile | delete      | 8                             |
| dial-plan-profile | help        | 1                             |
| dial-plan-profile | show        | 2                             |
| digit-map         | add         | 8                             |
| digit-map         | audit       | 8                             |
| digit-map         | change      | 5                             |
| digit-map         | delete      | 8                             |
| digit-map         | help        | 1                             |
| digit-map         | show        | 2                             |
| digman            | add         | 8                             |
| digman            | audit       | 8                             |
| digman            | change      | 8                             |
| digman            | delete      | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>    | <b>Verb</b> | <b>Default Security Level</b> |
|----------------|-------------|-------------------------------|
| digman         | help        | 1                             |
| digman         | show        | 2                             |
| digman-profile | add         | 8                             |
| digman-profile | audit       | 8                             |
| digman-profile | change      | 8                             |
| digman-profile | delete      | 8                             |
| digman-profile | help        | 1                             |
| digman-profile | show        | 2                             |
| dn2cust-grp    | add         | 8                             |
| dn2cust-grp    | audit       | 8                             |
| dn2cust-grp    | change      | 5                             |
| dn2cust-grp    | delete      | 8                             |
| dn2cust-grp    | help        | 1                             |
| dn2cust-grp    | show        | 2                             |
| dn2gn          | add         | 8                             |
| dn2gn          | audit       | 8                             |
| dn2gn          | change      | 8                             |
| dn2gn          | delete      | 8                             |
| dn2gn          | help        | 1                             |
| dn2gn          | show        | 2                             |
| dn2rn          | add         | 8                             |
| dn2rn          | audit       | 8                             |
| dn2rn          | change      | 8                             |
| dn2rn          | delete      | 8                             |
| dn2rn          | help        | 1                             |
| dn2rn          | show        | 2                             |
| dn2subscriber  | add         | 5                             |
| dn2subscriber  | audit       | 5                             |
| dn2subscriber  | change      | 5                             |
| dn2subscriber  | delete      | 5                             |
| dn2subscriber  | help        | 1                             |
| dn2subscriber  | show        | 2                             |
| dn-feat-list   | help        | 1                             |
| dn-feat-list   | show        | 2                             |
| dn-line-feat   | show        | 2                             |
| dn-sd-list     | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>           | <b>Verb</b> | <b>Default Security Level</b> |
|-----------------------|-------------|-------------------------------|
| dn-sd-list            | show        | 2                             |
| dn-summary            | help        | 1                             |
| dn-summary            | report      | 6                             |
| dpc                   | add         | 6                             |
| dpc                   | audit       | 6                             |
| dpc                   | change      | 6                             |
| dpc                   | delete      | 6                             |
| dpc                   | help        | 1                             |
| dpc                   | show        | 3                             |
| dpc                   | status      | 2                             |
| ds1                   | add         | 8                             |
| ds1                   | audit       | 8                             |
| ds1                   | delete      | 8                             |
| ds1                   | help        | 1                             |
| ds1                   | show        | 2                             |
| element-manager       | control     | 1                             |
| element-manager       | help        | 1                             |
| element-manager       | status      | 1                             |
| emergency-number-list | add         | 8                             |
| emergency-number-list | audit       | 8                             |
| emergency-number-list | change      | 5                             |
| emergency-number-list | delete      | 8                             |
| emergency-number-list | help        | 1                             |
| emergency-number-list | show        | 2                             |
| ems                   | add         | 1                             |
| ems                   | change      | 1                             |
| ems                   | help        | 1                             |
| ems                   | show        | 1                             |
| ess                   | add         | 10                            |
| ess                   | audit       | 10                            |
| ess                   | change      | 10                            |
| ess                   | delete      | 10                            |
| ess                   | help        | 1                             |
| ess                   | show        | 10                            |
| event-log             | help        | 1                             |
| event-log             | show        | 3                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                 | <b>Verb</b> | <b>Default Security Level</b> |
|-----------------------------|-------------|-------------------------------|
| event-prov                  | change      | 5                             |
| event-prov                  | help        | 1                             |
| event-prov                  | show        | 2                             |
| event-queue                 | add         | 1                             |
| event-queue                 | delete      | 1                             |
| event-queue                 | help        | 1                             |
| event-queue                 | show        | 1                             |
| event-report                | help        | 1                             |
| event-report                | subscribe   | 3                             |
| event-report                | unsubscribe | 3                             |
| exchange-code               | add         | 8                             |
| exchange-code               | audit       | 8                             |
| exchange-code               | delete      | 8                             |
| exchange-code               | help        | 1                             |
| exchange-code               | show        | 2                             |
| ext2subscriber              | add         | 8                             |
| ext2subscriber              | audit       | 8                             |
| ext2subscriber              | change      | 5                             |
| ext2subscriber              | delete      | 8                             |
| ext2subscriber              | help        | 1                             |
| ext2subscriber              | show        | 2                             |
| feature                     | add         | 6                             |
| feature                     | audit       | 8                             |
| feature                     | change      | 6                             |
| feature                     | delete      | 6                             |
| feature                     | help        | 1                             |
| feature                     | show        | 3                             |
| feature-config              | add         | 8                             |
| feature-config              | audit       | 8                             |
| feature-config              | change      | 8                             |
| feature-config              | delete      | 8                             |
| feature-config              | help        | 1                             |
| feature-config              | show        | 2                             |
| feature-config-base         | help        | 1                             |
| feature-config-base         | show        | 2                             |
| feature-config-base-pos-val | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                 | <b>Verb</b> | <b>Default Security Level</b> |
|-----------------------------|-------------|-------------------------------|
| feature-config-base-pos-val | show        | 2                             |
| feature-profile-base        | help        | 1                             |
| feature-profile-base        | show        | 2                             |
| feature-server              | add         | 8                             |
| feature-server              | audit       | 8                             |
| feature-server              | change      | 5                             |
| feature-server              | control     | 6                             |
| feature-server              | delete      | 8                             |
| feature-server              | get-trace   | 2                             |
| feature-server              | help        | 1                             |
| feature-server              | set-trace   | 6                             |
| feature-server              | show        | 2                             |
| feature-server              | status      | 2                             |
| fs-audit-profile            | add         | 8                             |
| fs-audit-profile            | audit       | 8                             |
| fs-audit-profile            | change      | 5                             |
| fs-audit-profile            | delete      | 8                             |
| fs-audit-profile            | help        | 1                             |
| fs-audit-profile            | show        | 2                             |
| gtd-parm-values             | help        | 1                             |
| gtd-parm-values             | show        | 3                             |
| h323-gw                     | add         | 8                             |
| h323-gw                     | audit       | 8                             |
| h323-gw                     | change      | 5                             |
| h323-gw                     | control     | 6                             |
| h323-gw                     | delete      | 8                             |
| h323-gw                     | help        | 1                             |
| h323-gw                     | reset       | 2                             |
| h323-gw                     | show        | 2                             |
| h323-gw                     | status      | 2                             |
| h323-gw2gk                  | add         | 8                             |
| h323-gw2gk                  | audit       | 8                             |
| h323-gw2gk                  | change      | 5                             |
| h323-gw2gk                  | delete      | 8                             |
| h323-gw2gk                  | help        | 1                             |
| h323-gw2gk                  | show        | 2                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>         | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------|-------------|-------------------------------|
| h323-term           | add         | 8                             |
| h323-term           | audit       | 8                             |
| h323-term           | change      | 5                             |
| h323-term           | delete      | 8                             |
| h323-term           | help        | 1                             |
| h323-term           | show        | 2                             |
| h323-term-profile   | add         | 8                             |
| h323-term-profile   | audit       | 8                             |
| h323-term-profile   | change      | 5                             |
| h323-term-profile   | delete      | 8                             |
| h323-term-profile   | help        | 1                             |
| h323-term-profile   | show        | 2                             |
| h323-tg-profile     | add         | 8                             |
| h323-tg-profile     | audit       | 8                             |
| h323-tg-profile     | change      | 5                             |
| h323-tg-profile     | delete      | 8                             |
| h323-tg-profile     | help        | 1                             |
| h323-tg-profile     | show        | 2                             |
| help                | help        | 3                             |
| hg-dn-find          | help        | 1                             |
| hg-dn-find          | show        | 2                             |
| hg-dn-list          | help        | 1                             |
| hg-dn-list          | show        | 2                             |
| hg-sequence         | help        | 1                             |
| hg-sequence         | show        | 2                             |
| history             | help        | 3                             |
| history             | report      | 3                             |
| history             | show        | 3                             |
| http-feature-server | add         | 8                             |
| http-feature-server | audit       | 8                             |
| http-feature-server | change      | 5                             |
| http-feature-server | delete      | 8                             |
| http-feature-server | help        | 1                             |
| http-feature-server | show        | 2                             |
| ii-restrict-list    | add         | 8                             |
| ii-restrict-list    | audit       | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>            | <b>Verb</b> | <b>Default Security Level</b> |
|------------------------|-------------|-------------------------------|
| ii-restrict-list       | delete      | 8                             |
| ii-restrict-list       | help        | 1                             |
| ii-restrict-list       | show        | 2                             |
| ii-wb-list             | add         | 8                             |
| ii-wb-list             | audit       | 8                             |
| ii-wb-list             | change      | 8                             |
| ii-wb-list             | delete      | 8                             |
| ii-wb-list             | help        | 1                             |
| ii-wb-list             | show        | 6                             |
| intl-dial-plan         | add         | 6                             |
| intl-dial-plan         | audit       | 6                             |
| intl-dial-plan         | change      | 6                             |
| intl-dial-plan         | delete      | 6                             |
| intl-dial-plan         | help        | 6                             |
| intl-dial-plan         | show        | 6                             |
| intl-dial-plan-profile | add         | 8                             |
| intl-dial-plan-profile | audit       | 8                             |
| intl-dial-plan-profile | change      | 5                             |
| intl-dial-plan-profile | delete      | 8                             |
| intl-dial-plan-profile | help        | 1                             |
| intl-dial-plan-profile | show        | 2                             |
| intl-wb-list           | add         | 8                             |
| intl-wb-list           | audit       | 8                             |
| intl-wb-list           | delete      | 8                             |
| intl-wb-list           | help        | 1                             |
| intl-wb-list           | show        | 2                             |
| ipsec-kerberos         | add         | 8                             |
| ipsec-kerberos         | audit       | 8                             |
| ipsec-kerberos         | change      | 8                             |
| ipsec-kerberos         | delete      | 8                             |
| ipsec-kerberos         | help        | 1                             |
| ipsec-kerberos         | show        | 2                             |
| ipsec-kerberos-keys    | audit       | 8                             |
| ipsec-kerberos-keys    | delete      | 8                             |
| ipsec-kerberos-keys    | help        | 1                             |
| ipsec-kerberos-keys    | show        | 2                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>            | <b>Verb</b> | <b>Default Security Level</b> |
|------------------------|-------------|-------------------------------|
| ipsec-policy           | add         | 8                             |
| ipsec-policy           | audit       | 8                             |
| ipsec-policy           | delete      | 8                             |
| ipsec-policy           | help        | 1                             |
| ipsec-policy           | show        | 2                             |
| ipsec-sa               | add         | 8                             |
| ipsec-sa               | audit       | 8                             |
| ipsec-sa               | change      | 8                             |
| ipsec-sa               | delete      | 8                             |
| ipsec-sa               | help        | 1                             |
| ipsec-sa               | show        | 2                             |
| isdn-bchan             | audit       | 8                             |
| isdn-bchan             | help        | 1                             |
| isdn-bchan             | show        | 2                             |
| isdn-dchan             | add         | 8                             |
| isdn-dchan             | audit       | 8                             |
| isdn-dchan             | change      | 5                             |
| isdn-dchan             | control     | 2                             |
| isdn-dchan             | delete      | 8                             |
| isdn-dchan             | help        | 1                             |
| isdn-dchan             | show        | 2                             |
| isdn-intf              | add         | 8                             |
| isdn-intf              | audit       | 8                             |
| isdn-intf              | delete      | 8                             |
| isdn-intf              | help        | 1                             |
| isdn-intf              | show        | 2                             |
| isdn-tg-profile        | add         | 8                             |
| isdn-tg-profile        | audit       | 8                             |
| isdn-tg-profile        | change      | 5                             |
| isdn-tg-profile        | delete      | 8                             |
| isdn-tg-profile        | help        | 1                             |
| isdn-tg-profile        | show        | 2                             |
| isdn-trunk-termination | diag        | 2                             |
| isdn-trunk-termination | help        | 1                             |
| ivr-script-profile     | add         | 8                             |
| ivr-script-profile     | audit       | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>        | <b>Verb</b> | <b>Default Security Level</b> |
|--------------------|-------------|-------------------------------|
| ivr-script-profile | change      | 5                             |
| ivr-script-profile | delete      | 8                             |
| ivr-script-profile | help        | 1                             |
| ivr-script-profile | show        | 2                             |
| language           | add         | 8                             |
| language           | change      | 5                             |
| language           | delete      | 8                             |
| language           | help        | 1                             |
| language           | show        | 2                             |
| lata               | add         | 8                             |
| lata               | audit       | 8                             |
| lata               | change      | 5                             |
| lata               | delete      | 8                             |
| lata               | help        | 1                             |
| lata               | show        | 2                             |
| lata-map           | add         | 8                             |
| lata-map           | audit       | 8                             |
| lata-map           | delete      | 8                             |
| lata-map           | help        | 1                             |
| lata-map           | show        | 2                             |
| lids               | help        | 1                             |
| lids               | query       | 2                             |
| line               | help        | 1                             |
| line               | translate   | 2                             |
| lnp                | help        | 1                             |
| lnp                | query       | 2                             |
| lnp-profile        | add         | 8                             |
| lnp-profile        | audit       | 8                             |
| lnp-profile        | change      | 8                             |
| lnp-profile        | delete      | 8                             |
| lnp-profile        | help        | 1                             |
| lnp-profile        | show        | 2                             |
| lsa                | add         | 6                             |
| lsa                | audit       | 6                             |
| lsa                | delete      | 6                             |
| lsa                | help        | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                   | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------------------|-------------|-------------------------------|
| lsa                           | show        | 6                             |
| lsa-profile                   | add         | 6                             |
| lsa-profile                   | change      | 6                             |
| lsa-profile                   | delete      | 6                             |
| lsa-profile                   | help        | 1                             |
| lsa-profile                   | show        | 2                             |
| mac2sub                       | add         | 8                             |
| mac2sub                       | audit       | 8                             |
| mac2sub                       | change      | 5                             |
| mac2sub                       | delete      | 8                             |
| mac2sub                       | help        | 1                             |
| mac2sub                       | show        | 2                             |
| macro                         | add         | 6                             |
| macro                         | change      | 6                             |
| macro                         | delete      | 6                             |
| macro                         | help        | 1                             |
| macro                         | macro       | 6                             |
| macro                         | show        | 6                             |
| measurement-ainsvc-summary    | clear       | 9                             |
| measurement-ainsvc-summary    | help        | 1                             |
| measurement-ainsvc-summary    | report      | 2                             |
| measurement-ainsvc-summary    | show        | 2                             |
| measurement-ain-tools-summary | clear       | 9                             |
| measurement-ain-tools-summary | help        | 1                             |
| measurement-ain-tools-summary | report      | 2                             |
| measurement-ain-tools-summary | show        | 2                             |
| measurement-anm-summary       | clear       | 9                             |
| measurement-anm-summary       | help        | 1                             |
| measurement-anm-summary       | report      | 6                             |
| measurement-anm-summary       | show        | 2                             |
| measurement-audit-summary     | clear       | 9                             |
| measurement-audit-summary     | help        | 1                             |
| measurement-audit-summary     | report      | 2                             |
| measurement-audit-summary     | show        | 2                             |
| measurement-billing-summary   | clear       | 9                             |
| measurement-billing-summary   | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                     | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------------------|-------------|-------------------------------|
| measurement-billing-summary     | report      | 6                             |
| measurement-billing-summary     | show        | 6                             |
| measurement-callp-summary       | clear       | 9                             |
| measurement-callp-summary       | help        | 1                             |
| measurement-callp-summary       | report      | 2                             |
| measurement-callp-summary       | show        | 2                             |
| measurement-call-tools-summary1 | help        |                               |
| measurement-call-tools-summary2 | report      |                               |
| measurement-call-tools-summary2 | show        |                               |
| measurement-call-tools-summary9 | clear       |                               |
| measurement-dqos-summary        | help        | 1                             |
| measurement-dqos-summary        | report      | 2                             |
| measurement-dqos-summary        | show        | 2                             |
| measurement-em-summary          | clear       | 9                             |
| measurement-em-summary          | help        | 1                             |
| measurement-em-summary          | report      | 2                             |
| measurement-em-summary          | show        | 2                             |
| measurement-h323-summary        | clear       | 9                             |
| measurement-h323-summary        | help        | 1                             |
| measurement-h323-summary        | report      | 6                             |
| measurement-h323-summary        | show        | 6                             |
| measurement-isdn-summary        | clear       | 9                             |
| measurement-isdn-summary        | help        | 1                             |
| measurement-isdn-summary        | report      | 2                             |
| measurement-isdn-summary        | show        | 2                             |
| measurement-isup-summary        | help        | 1                             |
| measurement-isup-summary        | report      | 2                             |
| measurement-isup-summary        | show        | 2                             |
| measurement-m3ua-summary        | help        | 1                             |
| measurement-m3ua-summary        | report      | 2                             |
| measurement-m3ua-summary        | show        | 2                             |
| measurement-mgcp-summary        | clear       | 9                             |
| measurement-mgcp-summary        | help        | 1                             |
| measurement-mgcp-summary        | report      | 6                             |
| measurement-mgcp-summary        | show        | 2                             |
| measurement-pct-tools-summary   | clear       | 9                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                     | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------------------|-------------|-------------------------------|
| measurement-pct-tools-summary   | help        | 1                             |
| measurement-pct-tools-summary   | report      | 2                             |
| measurement-pct-tools-summary   | show        | 2                             |
| measurement-pots-acar-summary   | clear       | 9                             |
| measurement-pots-acar-summary   | help        | 1                             |
| measurement-pots-acar-summary   | report      | 2                             |
| measurement-pots-acar-summary   | show        | 2                             |
| measurement-pots-cos-summary    | clear       | 9                             |
| measurement-pots-cos-summary    | help        | 1                             |
| measurement-pots-cos-summary    | report      | 2                             |
| measurement-pots-cos-summary    | show        | 2                             |
| measurement-pots-cot-summary    | clear       | 9                             |
| measurement-pots-cot-summary    | help        | 1                             |
| measurement-pots-cot-summary    | report      | 2                             |
| measurement-pots-cot-summary    | show        | 2                             |
| measurement-pots-local-summary1 | help        | 1                             |
| measurement-pots-local-summary2 | report      | 2                             |
| measurement-pots-local-summary2 | show        | 2                             |
| measurement-pots-local-summary9 | clear       | 9                             |
| measurement-pots-misc-summary   | clear       | 9                             |
| measurement-pots-misc-summary   | help        | 1                             |
| measurement-pots-misc-summary   | report      | 2                             |
| measurement-pots-misc-summary   | show        | 2                             |
| measurement-pots-sle-summary    | clear       | 9                             |
| measurement-pots-sle-summary    | help        | 1                             |
| measurement-pots-sle-summary    | report      | 2                             |
| measurement-pots-sle-summary    | show        | 2                             |
| measurement-prov                | change      | 5                             |
| measurement-prov                | help        | 1                             |
| measurement-prov                | show        | 2                             |
| measurement-sctp-summary        | help        | 1                             |
| measurement-sctp-summary        | report      | 2                             |
| measurement-sctp-summary        | show        | 2                             |
| measurement-sia-summary         | clear       | 9                             |
| measurement-sia-summary         | help        | 1                             |
| measurement-sia-summary         | report      | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                  | <b>Verb</b> | <b>Default Security Level</b> |
|------------------------------|-------------|-------------------------------|
| measurement-sia-summary      | show        | 2                             |
| measurement-sim-summary      | clear       | 9                             |
| measurement-sim-summary      | help        | 1                             |
| measurement-sim-summary      | report      | 1                             |
| measurement-sim-summary      | show        | 2                             |
| measurement-snmp-summary     | clear       | 9                             |
| measurement-snmp-summary     | help        | 1                             |
| measurement-snmp-summary     | report      | 6                             |
| measurement-snmp-summary     | show        | 2                             |
| measurement-sua-summary      | help        | 1                             |
| measurement-sua-summary      | report      | 2                             |
| measurement-sua-summary      | show        | 2                             |
| measurement-tcap-summary     | clear       | 9                             |
| measurement-tcap-summary     | help        | 1                             |
| measurement-tcap-summary     | report      | 2                             |
| measurement-tcap-summary     | show        | 2                             |
| measurement-tg-usage-summary | help        | 1                             |
| measurement-tg-usage-summary | report      | 6                             |
| measurement-tg-usage-summary | show        | 2                             |
| mgcp-retcode-action          | add         | 8                             |
| mgcp-retcode-action          | audit       | 8                             |
| mgcp-retcode-action          | change      | 8                             |
| mgcp-retcode-action          | delete      | 8                             |
| mgcp-retcode-action          | help        | 1                             |
| mgcp-retcode-action          | show        | 2                             |
| mgw                          | add         | 8                             |
| mgw                          | audit       | 8                             |
| mgw                          | change      | 5                             |
| mgw                          | control     | 6                             |
| mgw                          | delete      | 8                             |
| mgw                          | diag        | 2                             |
| mgw                          | help        | 1                             |
| mgw                          | show        | 2                             |
| mgw                          | status      | 2                             |
| mgw-profile                  | add         | 8                             |
| mgw-profile                  | audit       | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>      | <b>Verb</b> | <b>Default Security Level</b> |
|------------------|-------------|-------------------------------|
| mgw-profile      | change      | 5                             |
| mgw-profile      | delete      | 8                             |
| mgw-profile      | help        | 1                             |
| mgw-profile      | show        | 2                             |
| mlhg             | add         | 6                             |
| mlhg             | audit       | 6                             |
| mlhg             | change      | 6                             |
| mlhg             | delete      | 6                             |
| mlhg             | help        | 1                             |
| mlhg             | show        | 3                             |
| mlhg-pref-list   | add         | 6                             |
| mlhg-pref-list   | audit       | 6                             |
| mlhg-pref-list   | change      | 6                             |
| mlhg-pref-list   | delete      | 6                             |
| mlhg-pref-list   | help        | 1                             |
| mlhg-pref-list   | show        | 3                             |
| mlhg-terminal    | add         | 8                             |
| mlhg-terminal    | audit       | 8                             |
| mlhg-terminal    | change      | 8                             |
| mlhg-terminal    | delete      | 8                             |
| mlhg-terminal    | help        | 1                             |
| mlhg-terminal    | show        | 2                             |
| national-wb-list | add         | 8                             |
| national-wb-list | audit       | 8                             |
| national-wb-list | delete      | 8                             |
| national-wb-list | help        | 1                             |
| national-wb-list | show        | 2                             |
| ndc              | add         | 8                             |
| ndc              | audit       | 8                             |
| ndc              | change      | 5                             |
| ndc              | delete      | 8                             |
| ndc              | help        | 1                             |
| ndc              | show        | 2                             |
| network-element  | help        | 1                             |
| network-element  | show        | 2                             |
| noa-route        | add         | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>       | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------|-------------|-------------------------------|
| noa-route         | audit       | 8                             |
| noa-route         | change      | 8                             |
| noa-route         | delete      | 8                             |
| noa-route         | help        | 1                             |
| noa-route         | show        | 2                             |
| noa-route-profile | add         | 8                             |
| noa-route-profile | audit       | 8                             |
| noa-route-profile | change      | 8                             |
| noa-route-profile | delete      | 8                             |
| noa-route-profile | help        | 1                             |
| noa-route-profile | show        | 2                             |
| nod               | help        | 1                             |
| nod               | show        | 2                             |
| node              | change      | 9                             |
| node              | control     | 9                             |
| node              | help        | 1                             |
| node              | report      | 9                             |
| node              | status      | 9                             |
| nod-restrict-list | add         | 8                             |
| nod-restrict-list | audit       | 8                             |
| nod-restrict-list | delete      | 8                             |
| nod-restrict-list | help        | 1                             |
| nod-restrict-list | show        | 2                             |
| nod-wb-list       | add         | 8                             |
| nod-wb-list       | audit       | 8                             |
| nod-wb-list       | delete      | 8                             |
| nod-wb-list       | help        | 1                             |
| nod-wb-list       | show        | 2                             |
| ocb-k-value       | add         | 6                             |
| ocb-k-value       | audit       | 6                             |
| ocb-k-value       | delete      | 6                             |
| ocb-k-value       | help        | 1                             |
| ocb-k-value       | show        | 3                             |
| ocb-profile       | add         | 6                             |
| ocb-profile       | audit       | 6                             |
| ocb-profile       | change      | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>    | <b>Verb</b> | <b>Default Security Level</b> |
|----------------|-------------|-------------------------------|
| ocb-profile    | delete      | 6                             |
| ocb-profile    | help        | 1                             |
| ocb-profile    | show        | 3                             |
| office-code    | add         | 6                             |
| office-code    | audit       | 6                             |
| office-code    | change      | 6                             |
| office-code    | delete      | 6                             |
| office-code    | help        | 6                             |
| office-code    | show        | 6                             |
| opc            | add         | 6                             |
| opc            | audit       | 6                             |
| opc            | change      | 6                             |
| opc            | delete      | 6                             |
| opc            | help        | 1                             |
| opc            | show        | 3                             |
| password       | help        | 1                             |
| password       | reset       | 1                             |
| policy-nxx     | add         | 8                             |
| policy-nxx     | audit       | 8                             |
| policy-nxx     | change      | 5                             |
| policy-nxx     | delete      | 8                             |
| policy-nxx     | help        | 1                             |
| policy-nxx     | show        | 2                             |
| policy-odr     | add         | 6                             |
| policy-odr     | audit       | 6                             |
| policy-odr     | change      | 6                             |
| policy-odr     | delete      | 6                             |
| policy-odr     | help        | 1                             |
| policy-odr     | show        | 6                             |
| policy-oli     | add         | 6                             |
| policy-oli     | audit       | 6                             |
| policy-oli     | change      | 6                             |
| policy-oli     | delete      | 6                             |
| policy-oli     | help        | 1                             |
| policy-oli     | show        | 3                             |
| policy-percent | add         | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>        | <b>Verb</b> | <b>Default Security Level</b> |
|--------------------|-------------|-------------------------------|
| policy-percent     | audit       | 8                             |
| policy-percent     | change      | 5                             |
| policy-percent     | delete      | 8                             |
| policy-percent     | help        | 1                             |
| policy-percent     | show        | 2                             |
| policy-pop         | add         | 8                             |
| policy-pop         | audit       | 8                             |
| policy-pop         | change      | 5                             |
| policy-pop         | delete      | 8                             |
| policy-pop         | help        | 1                             |
| policy-pop         | show        | 2                             |
| policy-prefix      | add         | 8                             |
| policy-prefix      | audit       | 8                             |
| policy-prefix      | change      | 5                             |
| policy-prefix      | delete      | 8                             |
| policy-prefix      | help        | 1                             |
| policy-prefix      | show        | 2                             |
| policy-region      | add         | 8                             |
| policy-region      | audit       | 8                             |
| policy-region      | change      | 8                             |
| policy-region      | delete      | 8                             |
| policy-region      | help        | 1                             |
| policy-region      | show        | 2                             |
| policy-tod         | add         | 8                             |
| policy-tod         | audit       | 8                             |
| policy-tod         | change      | 5                             |
| policy-tod         | delete      | 8                             |
| policy-tod         | help        | 1                             |
| policy-tod         | show        | 2                             |
| pop                | add         | 8                             |
| pop                | audit       | 8                             |
| pop                | change      | 5                             |
| pop                | delete      | 8                             |
| pop                | help        | 1                             |
| pop                | show        | 2                             |
| ported-office-code | add         | 8                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>        | <b>Verb</b> | <b>Default Security Level</b> |
|--------------------|-------------|-------------------------------|
| ported-office-code | audit       | 8                             |
| ported-office-code | change      | 5                             |
| ported-office-code | delete      | 8                             |
| ported-office-code | help        | 1                             |
| ported-office-code | show        | 2                             |
| qos                | add         | 8                             |
| qos                | audit       | 8                             |
| qos                | change      | 8                             |
| qos                | delete      | 8                             |
| qos                | help        | 1                             |
| qos                | show        | 2                             |
| queue-throttle     | change      | 6                             |
| queue-throttle     | help        | 1                             |
| queue-throttle     | show        | 6                             |
| radius-profile     | add         | 8                             |
| radius-profile     | audit       | 8                             |
| radius-profile     | change      | 5                             |
| radius-profile     | delete      | 8                             |
| radius-profile     | help        | 1                             |
| radius-profile     | show        | 2                             |
| region-code        | add         | 8                             |
| region-code        | audit       | 8                             |
| region-code        | change      | 5                             |
| region-code        | delete      | 8                             |
| region-code        | help        | 1                             |
| region-code        | show        | 2                             |
| region-profile     | add         | 6                             |
| region-profile     | audit       | 6                             |
| region-profile     | change      | 6                             |
| region-profile     | delete      | 6                             |
| region-profile     | help        | 6                             |
| region-profile     | show        | 6                             |
| release-cause      | add         | 6                             |
| release-cause      | audit       | 6                             |
| release-cause      | change      | 6                             |
| release-cause      | delete      | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>          | <b>Verb</b> | <b>Default Security Level</b> |
|----------------------|-------------|-------------------------------|
| release-cause        | help        | 1                             |
| release-cause        | show        | 3                             |
| report-properties    | change      | 5                             |
| report-properties    | help        | 1                             |
| report-properties    | show        | 7                             |
| rgw                  | add         | 8                             |
| rgw                  | change      | 5                             |
| rgw                  | control     | 6                             |
| rgw                  | delete      | 8                             |
| rgw                  | diag        | 2                             |
| rgw                  | help        | 1                             |
| rgw                  | show        | 2                             |
| rgw                  | status      | 2                             |
| route                | add         | 8                             |
| route                | audit       | 8                             |
| route                | change      | 5                             |
| route                | delete      | 8                             |
| route                | help        | 1                             |
| route                | show        | 2                             |
| route-guide          | add         | 8                             |
| route-guide          | audit       | 8                             |
| route-guide          | change      | 8                             |
| route-guide          | delete      | 8                             |
| route-guide          | help        | 1                             |
| route-guide          | show        | 2                             |
| routing-key          | add         | 6                             |
| routing-key          | audit       | 6                             |
| routing-key          | change      | 6                             |
| routing-key          | delete      | 6                             |
| routing-key          | help        | 1                             |
| routing-key          | show        | 3                             |
| rdp-backhaul-session | add         | 8                             |
| rdp-backhaul-session | audit       | 8                             |
| rdp-backhaul-session | change      | 5                             |
| rdp-backhaul-session | delete      | 8                             |
| rdp-backhaul-session | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>          | <b>Verb</b> | <b>Default Security Level</b> |
|----------------------|-------------|-------------------------------|
| rdp-backhaul-session | show        | 2                             |
| sc1d                 | add         | 8                             |
| sc1d                 | audit       | 8                             |
| sc1d                 | change      | 8                             |
| sc1d                 | delete      | 8                             |
| sc1d                 | help        | 1                             |
| sc1d                 | show        | 2                             |
| sc2d                 | add         | 8                             |
| sc2d                 | audit       | 8                             |
| sc2d                 | change      | 8                             |
| sc2d                 | delete      | 8                             |
| sc2d                 | help        | 1                             |
| sc2d                 | show        | 2                             |
| sccp-nw              | add         | 6                             |
| sccp-nw              | audit       | 6                             |
| sccp-nw              | change      | 6                             |
| sccp-nw              | delete      | 6                             |
| sccp-nw              | help        | 1                             |
| sccp-nw              | show        | 3                             |
| sccp-route           | add         | 6                             |
| sccp-route           | audit       | 6                             |
| sccp-route           | change      | 6                             |
| sccp-route           | delete      | 6                             |
| sccp-route           | help        | 1                             |
| sccp-route           | show        | 3                             |
| scheduled-command    | add         | 6                             |
| scheduled-command    | change      | 6                             |
| scheduled-command    | delete      | 6                             |
| scheduled-command    | help        | 1                             |
| scheduled-command    | show        | 6                             |
| sctp-assoc           | add         | 6                             |
| sctp-assoc           | audit       | 6                             |
| sctp-assoc           | change      | 6                             |
| sctp-assoc           | control     | 6                             |
| sctp-assoc           | delete      | 6                             |
| sctp-assoc           | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>         | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------|-------------|-------------------------------|
| sctp-assoc          | show        | 3                             |
| sctp-assoc          | status      | 2                             |
| sctp-assoc-profile  | add         | 8                             |
| sctp-assoc-profile  | audit       | 8                             |
| sctp-assoc-profile  | change      | 5                             |
| sctp-assoc-profile  | delete      | 8                             |
| sctp-assoc-profile  | help        | 1                             |
| sctp-assoc-profile  | show        | 2                             |
| security-summary    | help        | 1                             |
| security-summary    | report      | 8                             |
| service             | add         | 8                             |
| service             | audit       | 8                             |
| service             | change      | 8                             |
| service             | delete      | 8                             |
| service             | help        | 1                             |
| service             | show        | 2                             |
| service-provider    | add         | 8                             |
| service-provider    | audit       | 8                             |
| service-provider    | change      | 5                             |
| service-provider    | delete      | 8                             |
| service-provider    | help        | 1                             |
| service-provider    | show        | 2                             |
| service-trigger     | audit       | 8                             |
| service-trigger     | help        | 1                             |
| service-trigger     | show        | 2                             |
| serving-domain-name | add         | 8                             |
| serving-domain-name | audit       | 8                             |
| serving-domain-name | change      | 5                             |
| serving-domain-name | delete      | 8                             |
| serving-domain-name | help        | 1                             |
| serving-domain-name | show        | 2                             |
| session             | block       | 9                             |
| session             | block       | 10 (Release 4.5)              |
| session             | change      | 2                             |
| session             | help        | 9                             |
| session             | show        | 2                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>         | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------|-------------|-------------------------------|
| session             | stop        | 9                             |
| session             | unblock     | 9                             |
| sg                  | add         | 6                             |
| sg                  | audit       | 6                             |
| sg                  | change      | 6                             |
| sg                  | delete      | 6                             |
| sg                  | get-trace   | 3                             |
| sg                  | help        | 1                             |
| sg                  | set-trace   | 6                             |
| sg                  | show        | 3                             |
| sg-grp              | add         | 6                             |
| sg-grp              | audit       | 6                             |
| sg-grp              | change      | 6                             |
| sg-grp              | delete      | 6                             |
| sg-grp              | help        | 1                             |
| sg-grp              | show        | 3                             |
| sgp                 | add         | 6                             |
| sgp                 | audit       | 6                             |
| sgp                 | change      | 6                             |
| sgp                 | delete      | 6                             |
| sgp                 | get-trace   | 2                             |
| sgp                 | help        | 1                             |
| sgp                 | set-trace   | 6                             |
| sgp                 | show        | 3                             |
| sgp                 | status      | 2                             |
| sip-reg-contact     | help        | 1                             |
| sip-reg-contact     | status      | 2                             |
| sip-timer-profile   | add         | 8                             |
| sip-timer-profile   | audit       | 8                             |
| sip-timer-profile   | change      | 5                             |
| sip-timer-profile   | delete      | 8                             |
| sip-timer-profile   | help        | 1                             |
| sip-timer-profile   | show        | 2                             |
| sipt-isup-ver-alias | add         | 6                             |
| sipt-isup-ver-alias | audit       | 6                             |
| sipt-isup-ver-alias | change      | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>         | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------|-------------|-------------------------------|
| sipt-isup-ver-alias | delete      | 6                             |
| sipt-isup-ver-alias | help        | 1                             |
| sipt-isup-ver-alias | show        | 3                             |
| sipt-isup-ver-base  | help        | 1                             |
| sipt-isup-ver-base  | show        | 3                             |
| sle                 | add         | 8                             |
| sle                 | audit       | 8                             |
| sle                 | change      | 8                             |
| sle                 | delete      | 8                             |
| sle                 | help        | 1                             |
| sle                 | show        | 2                             |
| slhr                | add         | 6                             |
| slhr                | audit       | 6                             |
| slhr                | change      | 6                             |
| slhr                | delete      | 6                             |
| slhr                | help        | 1                             |
| slhr                | show        | 3                             |
| slhr-profile        | add         | 6                             |
| slhr-profile        | audit       | 6                             |
| slhr-profile        | change      | 6                             |
| slhr-profile        | delete      | 6                             |
| slhr-profile        | help        | 1                             |
| slhr-profile        | show        | 3                             |
| snmpconfig          | add         | 9                             |
| snmpconfig          | change      | 9                             |
| snmpconfig          | delete      | 9                             |
| snmpconfig          | help        | 1                             |
| snmpconfig          | show        | 9                             |
| snmptrapdest        | add         | 2                             |
| snmptrapdest        | change      | 2                             |
| snmptrapdest        | delete      | 2                             |
| snmptrapdest        | help        | 1                             |
| snmptrapdest        | show        | 2                             |
| softsw-tg-profile   | add         | 6                             |
| softsw-tg-profile   | audit       | 6                             |
| softsw-tg-profile   | change      | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>         | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------|-------------|-------------------------------|
| softsw-tg-profile   | delete      | 6                             |
| softsw-tg-profile   | help        | 1                             |
| softsw-tg-profile   | show        | 3                             |
| special-call-type   | add         | 8                             |
| special-call-type   | audit       | 8                             |
| special-call-type   | change      | 8                             |
| special-call-type   | delete      | 1                             |
| special-call-type   | help        | 1                             |
| special-call-type   | show        | 2                             |
| split-npa           | add         | 6                             |
| split-npa           | audit       | 6                             |
| split-npa           | change      | 6                             |
| split-npa           | delete      | 6                             |
| split-npa           | help        | 1                             |
| split-npa           | show        | 3                             |
| ss7-ansi-tg-profile | add         | 8                             |
| ss7-ansi-tg-profile | audit       | 8                             |
| ss7-ansi-tg-profile | change      | 5                             |
| ss7-ansi-tg-profile | delete      | 8                             |
| ss7-ansi-tg-profile | help        | 1                             |
| ss7-ansi-tg-profile | show        | 2                             |
| ss7-cic             | audit       | 8                             |
| ss7-cic             | help        | 1                             |
| ss7-cic             | show        | 2                             |
| ss7-q761-tg-profile | add         | 8                             |
| ss7-q761-tg-profile | audit       | 8                             |
| ss7-q761-tg-profile | change      | 5                             |
| ss7-q761-tg-profile | delete      | 8                             |
| ss7-q761-tg-profile | help        | 1                             |
| ss7-q761-tg-profile | show        | 2                             |
| ss7-q767-tg-profile | add         | 8                             |
| ss7-q767-tg-profile | audit       | 8                             |
| ss7-q767-tg-profile | change      | 5                             |
| ss7-q767-tg-profile | delete      | 8                             |
| ss7-q767-tg-profile | help        | 1                             |
| ss7-q767-tg-profile | show        | 2                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>             | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------------|-------------|-------------------------------|
| ss7-trace               | help        | 1                             |
| ss7-trace               | start       | 2                             |
| ss7-trace               | stop        | 2                             |
| ss7-trunk-termination   | diag        | 2                             |
| ss7-trunk-termination   | help        | 1                             |
| static-contact          | add         | 8                             |
| static-contact          | audit       | 8                             |
| static-contact          | change      | 5                             |
| static-contact          | delete      | 8                             |
| static-contact          | help        | 1                             |
| static-contact          | show        | 2                             |
| sub-cid                 | show        | 2                             |
| sub-da-block            | help        | 1                             |
| sub-da-block            | show        | 2                             |
| sub-dn-find             | help        | 1                             |
| sub-dn-list             | help        | 1                             |
| sub-dn-list             | show        | 2                             |
| sub-intl-block          | help        | 1                             |
| sub-intl-block          | show        | 2                             |
| sub-ld-block            | help        | 1                             |
| sub-ld-block            | show        | 2                             |
| sub-oper-block          | help        | 1                             |
| sub-oper-block          | show        | 2                             |
| subscriber              | add         | 8                             |
| subscriber              | audit       | 8                             |
| subscriber              | change      | 5                             |
| subscriber              | delete      | 8                             |
| subscriber              | help        | 1                             |
| subscriber              | show        | 2                             |
| subscriber-feature-data | add         | 8                             |
| subscriber-feature-data | audit       | 8                             |
| subscriber-feature-data | change      | 5                             |
| subscriber-feature-data | delete      | 8                             |
| subscriber-feature-data | help        | 1                             |
| subscriber-feature-data | show        | 2                             |
| subscriber-profile      | add         | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>                | <b>Verb</b> | <b>Default Security Level</b> |
|----------------------------|-------------|-------------------------------|
| subscriber-profile         | audit       | 6                             |
| subscriber-profile         | change      | 6                             |
| subscriber-profile         | delete      | 6                             |
| subscriber-profile         | help        | 6                             |
| subscriber-profile         | show        | 6                             |
| subscriber-service-profile | add         | 8                             |
| subscriber-service-profile | audit       | 8                             |
| subscriber-service-profile | change      | 5                             |
| subscriber-service-profile | delete      | 8                             |
| subscriber-service-profile | help        | 1                             |
| subscriber-service-profile | show        | 2                             |
| subscriber-termination     | control     | 6                             |
| subscriber-termination     | diag        | 2                             |
| subscriber-termination     | equip       | 6                             |
| subscriber-termination     | help        | 1                             |
| subscriber-termination     | reset       | 2                             |
| subscriber-termination     | status      | 2                             |
| subscriber-termination     | unequip     | 6                             |
| subscriber-tod-schedule    | add         | 8                             |
| subscriber-tod-schedule    | audit       | 8                             |
| subscriber-tod-schedule    | change      | 5                             |
| subscriber-tod-schedule    | delete      | 8                             |
| subscriber-tod-schedule    | help        | 1                             |
| subscriber-tod-schedule    | show        | 2                             |
| subsystem                  | add         | 6                             |
| subsystem                  | audit       | 6                             |
| subsystem                  | change      | 6                             |
| subsystem                  | control     | 6                             |
| subsystem                  | delete      | 6                             |
| subsystem                  | help        | 1                             |
| subsystem                  | show        | 3                             |
| subsystem                  | status      | 2                             |
| subsystem-grp              | add         | 6                             |
| subsystem-grp              | audit       | 6                             |
| subsystem-grp              | change      | 6                             |
| subsystem-grp              | control     | 6                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>             | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------------|-------------|-------------------------------|
| subsystem-grp           | delete      | 6                             |
| subsystem-grp           | help        | 1                             |
| subsystem-grp           | show        | 3                             |
| subsystem-grp           | status      | 2                             |
| sup-config              | change      | 9                             |
| sup-config              | help        | 1                             |
| sup-config              | show        | 9                             |
| system                  | control     | 6                             |
| system                  | help        | 1                             |
| system                  | status      | 2                             |
| system-health           | help        | 1                             |
| system-health           | report      | 9                             |
| tech-prefix-grp         | add         | 8                             |
| tech-prefix-grp         | audit       | 8                             |
| tech-prefix-grp         | change      | 5                             |
| tech-prefix-grp         | delete      | 8                             |
| tech-prefix-grp         | help        | 1                             |
| tech-prefix-grp         | show        | 2                             |
| tech-prefix-grp-profile | add         | 8                             |
| tech-prefix-grp-profile | audit       | 8                             |
| tech-prefix-grp-profile | change      | 5                             |
| tech-prefix-grp-profile | delete      | 8                             |
| tech-prefix-grp-profile | help        | 1                             |
| tech-prefix-grp-profile | show        | 2                             |
| termination             | add         | 8                             |
| termination             | audit       | 8                             |
| termination             | change      | 5                             |
| termination             | delete      | 8                             |
| termination             | help        | 1                             |
| termination             | show        | 2                             |
| tgw                     | add         | 8                             |
| tgw                     | change      | 5                             |
| tgw                     | control     | 6                             |
| tgw                     | delete      | 8                             |
| tgw                     | diag        | 2                             |
| tgw                     | help        | 1                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>             | <b>Verb</b> | <b>Default Security Level</b> |
|-------------------------|-------------|-------------------------------|
| tgw                     | show        | 2                             |
| tgw                     | status      | 2                             |
| timezone                | help        | 1                             |
| timezone                | show        | 2                             |
| toll-free               | help        | 1                             |
| toll-free               | query       | 2                             |
| toll-free-msg-type      | help        | 1                             |
| toll-free-msg-type      | query       | 2                             |
| transaction-queue       | delete      | 6                             |
| transaction-queue       | help        | 1                             |
| transaction-queue       | show        | 2                             |
| trigger-detection-point | help        | 1                             |
| trigger-detection-point | show        | 2                             |
| trigger-id              | help        | 1                             |
| trigger-id              | show        | 2                             |
| trigger-nod-escape-list | add         | 6                             |
| trigger-nod-escape-list | audit       | 8                             |
| trigger-nod-escape-list | change      | 6                             |
| trigger-nod-escape-list | delete      | 6                             |
| trigger-nod-escape-list | help        | 1                             |
| trigger-nod-escape-list | show        | 3                             |
| trunk                   | add         | 8                             |
| trunk                   | audit       | 8                             |
| trunk                   | change      | 5                             |
| trunk                   | delete      | 8                             |
| trunk                   | help        | 1                             |
| trunk                   | show        | 2                             |
| trunk                   | translate   | 2                             |
| trunk-grp               | add         | 6                             |
| trunk-grp               | audit       | 6                             |
| trunk-grp               | change      | 6                             |
| trunk-grp               | control     | 6                             |
| trunk-grp               | delete      | 6                             |
| trunk-grp               | help        | 1                             |
| trunk-grp               | show        | 3                             |
| trunk-grp               | status      | 2                             |

**Table 2**     *Noun/Verb Command Default Security Privilege Levels (continued)*

| <b>Noun</b>               | <b>Verb</b> | <b>Default Security Level</b> |
|---------------------------|-------------|-------------------------------|
| trunk-grp-feature-data    | add         | 6                             |
| trunk-grp-feature-data    | audit       | 6                             |
| trunk-grp-feature-data    | change      | 6                             |
| trunk-grp-feature-data    | delete      | 6                             |
| trunk-grp-feature-data    | help        | 6                             |
| trunk-grp-feature-data    | show        | 6                             |
| trunk-grp-service-profile | add         | 8                             |
| trunk-grp-service-profile | audit       | 8                             |
| trunk-grp-service-profile | change      | 5                             |
| trunk-grp-service-profile | delete      | 8                             |
| trunk-grp-service-profile | help        | 1                             |
| trunk-grp-service-profile | show        | 2                             |
| trunk-termination         | control     | 6                             |
| trunk-termination         | equip       | 2                             |
| trunk-termination         | help        | 1                             |
| trunk-termination         | reset       | 2                             |
| trunk-termination         | status      | 2                             |
| trunk-termination         | unequip     | 2                             |
| tt                        | control     | 6                             |
| tt                        | help        | 1                             |
| tt                        | reset       | 2                             |
| tt                        | status      | 2                             |
| user                      | add         | 9                             |
| user                      | change      | 9                             |
| user                      | delete      | 9                             |
| user                      | help        | 1                             |
| user                      | show        | 9                             |
| user-auth                 | add         | 8                             |
| user-auth                 | audit       | 8                             |
| user-auth                 | change      | 5                             |
| user-auth                 | delete      | 8                             |
| user-auth                 | help        | 1                             |
| user-auth                 | show        | 2                             |
| user-part-variant         | add         | 3                             |
| user-part-variant         | audit       | 6                             |
| user-part-variant         | delete      | 3                             |

**Table 2** Noun/Verb Command Default Security Privilege Levels (continued)

| Noun                   | Verb   | Default Security Level |
|------------------------|--------|------------------------|
| user-part-variant      | help   | 1                      |
| user-part-variant      | show   | 3                      |
| user-part-variant-base | help   | 1                      |
| user-part-variant-base | show   | 3                      |
| var-alias              | add    | 10                     |
| var-alias              | change | 10                     |
| var-alias              | delete | 10                     |
| var-alias              | show   | 10                     |
| var-default            | add    | 10                     |
| var-default            | change | 10                     |
| var-default            | delete | 10                     |
| var-default            | help   | 10                     |
| var-default            | show   | 10                     |
| v-commandparameter     | show   | 10                     |
| v-commandtable         | show   | 10                     |
| vsc                    | add    | 8                      |
| vsc                    | audit  | 8                      |
| vsc                    | change | 8                      |
| vsc                    | delete | 8                      |
| vsc                    | help   | 1                      |
| vsc                    | show   | 2                      |

## Login—Logoff/Exit

Logging in to a CLI session is a Telnet or Secure Shell (SSH) function, not a UNIX function. **Login** is not a supported CLI command. Users must use Telnet or SSH to connect to the EMS using their user name and password, which invokes a CLI shell. SSH is the default method of access to the Cisco BTS 10200 Softswitch CLI. The maximum number of CLI sessions allowed is 50.



### Note

A user must be added as a new user before logging in.

Quitting a session is an OAMP function. Type **quit** or **exit** at the CLI prompt to end both the CLI and Telnet sessions.



### Caution

For security purposes, Telnet is obsoleted as of Release 4.4.

# Shell

You can enter commands using the command line interface (CLI). The CLI allows you to enter an entire command and its parameters from the command line.

The shell parameter is specified when a user is added to the system. If a shell is not specified when a user is added, the default is the CLI. All command defaults, parameters, and rules are the same regardless of which method you use to enter them.

## Command Line Interface

After you use SSH to access the server and log in, if the shell is CLI, only the command prompt appears on the screen. To enter commands using the CLI, enter the entire command with all its required parameters (tokens).

## Commands

All commands consist of a valid noun-verb pair. Each table has its own valid commands and each type can have specific applicable rules. The show command allows a wildcard. Commands can also be either graceful or forced. Multiple tokens must be separated by a semicolon (;).

Available verbs are defined in the CommandTable for each user table (noun-verb pair). Verb-driven required fields are defined in the CommandParameter table.

The following are valid command verbs:

- Add—Insert records.
- Ack—Acknowledge alarms.
- Audit—Examine entries.
- Change—Modify records.
- Clear—Clear records.
- Control—Change the operational state of devices.
- Delete—Delete records.
- Download—Download the database.
- Equip—Equip terminations.
- Help—Find help on a particular table, table-name, or command.
- Report—Show history of a subsystem event, alarm, traffic.
- Reset—Reset a default.
- Show—Display records with qualifier.
- Status—Show operational status of devices.
- Unequip—Unequip terminations.

## Automatic Completion (Release 4.5)

This section describes the automatic completion of CLI commands. Automatic completion means the system automatically completes a command based on user input.

### Automatic Completion of Verbs

A CLI command verb is automatically completed after a user enters a substring of the verb and presses the Tab key.

#### Examples

If a user types “ad” and presses the Tab key, the command is completed to “add.” In order for a verb to complete successfully, a user must enter the minimum number of characters that uniquely identify the verb from all other verbs.

If a user enters the characters “su” and presses the Tab key, the command is resolved to a single command “subscribe.” Since the entered command can be resolved, the word “su” is erased and then replaced with “subscribe” on the same line as follows:

```
su <Tab>
```

```
Reply :
```

```
CLI>subscribe
```

### Automatic Completion of Nouns

A CLI command noun is automatically completed after a user enters a valid verb, followed by a substring of the noun, and presses the Tab key.

#### Examples

If a user types “add ac” and presses the Tab key, the command is completed to “add activity.” In order for a noun to be completed successfully, a user must enter the minimum number of characters that uniquely identify the noun from all other nouns.

If a user types “subscribe a” and presses the Tab key, the system attempts to complete the noun. As the noun “a” is resolved to “alarm-report” the command is erased and the command is completed on the same line as follows:

```
subscribe a <Tab>
```

```
Reply :
```

```
CLI>subscribe alarm_report
```

### Automatic Completion of Parameters

A CLI command parameter is automatically completed after a user enters a valid verb::noun pair, followed by a substring of the parameter, and presses the Tab key.

## Examples

If a user types “add activity ena” and presses the Tab key, the command is completed to “add activity enabled=.” In order for a parameter to be completed successfully, a user must enter the minimum number of characters to uniquely identify the parameter from the possible list of parameters.

If a user types “subscribe alarm-report o” and presses the Tab key, the “o” parameter is resolved. Since it matches a single parameter “origin,” the entered command is erased and the command is completed as “subscribe alarm\_report origin=” on the same line follows:

```
subscribe alarm-report o <Tab>
```

Reply :

```
CLI>subscribe alarm_report origin=
```

## Automatic Completion of Commands with a Single Verb, Noun and Parameter

There are a few CLI commands that have a single verb, noun and parameter. For these commands, when a user enters the verb and presses the Tab key, the entire command is completed.

## Examples

If a user enters “ac” and enters the Tab key, the command is completed as “ack alarm id=” as the verb works with a single noun and single parameter.

```
ac <Tab>
```

Reply :

```
CLI>ack alarm id=
```

## Automatic Completion of Default Parameter Values

Some CLI command parameters have default values. Default values are used during automatic completion of a command.

## Examples

If a user types “add user shell=” and presses the Tab key, the value part of the parameter is automatically completed because the parameter has a default value.

```
add user shell=<Tab>
```

Reply :

```
CLI>add user shell=CLI;
```

## Automatic Validation of CLI Command Syntax

If a user types an invalid combination of verb, noun and parameters and presses the Tab key, the entire command is validated as part of automatic completion (that is, the verb, noun and parameters are checked as to whether they form a true command). After validation, the automatic completion feature displays only the part of the command that is valid. The following error conditions are handled during automatic validation:

- Invalid verbs

- Invalid nouns
- Invalid parameters

## Invalid Verbs

If a user enters an invalid verb followed by valid or invalid noun, parameters and presses the Tab key, the entire list of verbs is displayed. The command is completed to “nothing”—that is, the command prompt has no characters following it.

### Examples

If a user enters “xxx user name=john;” and presses the Tab key, the verb is determined to be invalid. The command is not completed, a complete list of possible verbs displays as help and the command prompt displays with the entire command removed.

```
xxx user name=john; <Tab>
Reply :
```

```
ack
add
audit
block
change
clear
control
delete
diag
download
equip
force_delete
get_trace
help
macro
query
report
reset
set_trace
show
start
status
stop
subscribe
sync
translate
unblock
unequip
unsubscribe
CLI>
```

## Invalid Nouns

If a user enters a valid verb with an invalid noun, valid or invalid parameters and presses the Tab key, the entire list of nouns that work with that verb is displayed. For example, a complete list of nouns that work with that verb is displayed and the entered command is completed only to the verb.

## Examples

If a user enters “show xxx id=10;” and presses the Tab key, the noun is determined to be invalid. The system completes the command by removing everything from the invalid noun to the end of the command: the command completes to “stop” and displays a list of all possible nouns that work with the verb.

```
stop xxx terminal
```

```
Reply :
```

```
session
ss7_trace
CLI>stop
```

## Invalid Parameters

If a user enters a valid verb and noun with invalid parameters and presses the Tab key, the command is completed up to the first invalid parameter encountered. If a user enters a valid verb and noun with multiple valid parameters but does not enter a value for one or more parameters and presses the Tab key, the command is completed. However, during the validation process, any valid parameters that do not have a value are given a question mark (?) value.



### Note

This replacement does not work for the last parameter. For example, if a user enters “add user name=;password=;” and presses the Tab key, the command is completed to “add user name=?;password=.”

## Examples

If a user enters “add user xxx=10;” and presses the Tab key, the parameter is determined to be invalid. The system completes the command by stripping the parameter and displays a list of possible parameters.

```
add user xxx=10;
```

```
Reply :
```

```
command_level*
days_valid
name*
password*
shell*
warn
work_groups
CLI>add user
```

If a user enters “add user name=;password=;command-level=” and presses the Tab key, the system determines that the entered parameters are valid but no value was entered. The system completes the command by entering the question mark (?) character for the missing values.

```
add user name=;password=;command-level <Tab>
```

```
Reply:
```

```
CLI>add user name=?;password=?;command_level=<Tab>
```

## Automatic Expansion of Verbs, Nouns and Parameters

During automatic completion of an entered command, the verb, noun and parameters names are expanded to their full name. This expansion clearly shows that the expanded command is executed and there is no additional expansion of the command internally.

### Examples

If a user enters “ad user n=john;c=10;wo=” and presses the Tab key, the system completes the command by expanding the verb, noun and parameter names. The command completes to “add user name=john; command\_level=10; work\_groups=.”

```
ad user n=john;c=10;wo= <Tab>
```

Reply :

```
CLI>add user name=john;command_level=10;work_groups=
```

## Invalid Characters

This section describes the invalid characters in ASCII and subscriber commands. Usage applies to token values, such as subscriber names, trunk group names, and so forth.

### ASCII Characters

The following characters are invalid in all ASCII character commands:

- Double quotation marks (“ ”).
- Single quotation marks (‘ ’).
- Semicolon (;)—A semicolon can only be used as a delimiter between tokens. It cannot be used within a token value (for example, within a subscriber name).

Using any of these characters returns an error message. This applies whether a command is entered from the CLI or by bulk provisioning.

### Subscriber

The following characters are invalid or not recommended for using in Subscriber commands:

- Single quotation marks (‘ ’)—The single-quote is a reserved character for delimiting strings.
- Double quotation marks (“ ”)—The double-quote is also a reserved character for delimiting strings.
- Semicolon (;)—A semicolon can only be used as a delimiter between tokens. It cannot be used within a token value (for example, within a subscriber name).
- Percent sign (%)—The percent sign is a wild-card, for example: show subscriber id=x1-6-00% shows all subscribers whose ID begins with x1-6-00. So the percent sign is a valid character for the show command, but is invalid when used with the add or change commands.
- Hyphen (—)—This is a valid character but impacts the way caller-ids are displayed. Cisco does not recommend using this character.
- Underscore (\_)—This is a valid character but impacts the way caller-ids are displayed. Cisco does not recommend using this character.

- Ampersand (&)—The ampersand is a reserved character in XML.

## Batch Data Retrieval (Paging) Using the Show Command

You can use the show command for batch data retrieval (paging). This command uses tokens that do not match command-to-field in the database. The tokens are generated as needed by the system. These tokens are available for all show commands in the system that have a database table as the backing store. A show of configuration data does not support these tokens because configuration data is not stored in a database table. This command also works in the CORBA interface.

Batch data retrieval (paging) examples:

```
show subscriber limit=1000; start-row=<next page value>;
show subscriber limit=1000; start-row=<next page value>; display=id,sub-service-profile;
order=id;
>
```

The following tokens are available for batch data retrieval (paging) to order and display desired data:

**LIMIT**—Specifies the page size for the maximum amount of data returned in any single show.

**START-ROW**—Specifies the page to start the display. You can start in the middle if so desired. Usually the first page is specified to see the total size of the display to determine how many pages are required.

**DISPLAY**—Only return the columns of data requested. This is a comma-separated list of the desired columns to be returned in the show. All other data is truncated.

**ORDER**—Specifies a key by which the data is sorted or ordered.



### Note

More than one item can be specified for a sort. This is a comma-separated list of columns for the noun being displayed.

## Rules

Rules applying to commands are given with each section described in this document. These rules describe behavior exclusive of Primary Key or Foreign Key constraints. Primary Key and Foreign Key constraints are listed as applicable by token.

### Add Rules

The following add rules are commonly used:

- What is being added cannot already exist.
- If a key in another table is referenced, that key must exist in the other table.

### Delete Rules

The following delete rules are commonly used:

- The ID, or record, must already exist.
- If a key in another table is referenced, that key must be deleted first.

## Change Rules

The following change rules are commonly used:

- The ID, or record, must already exist.
- If a key in another table is referenced, that key must exist in the other table.



**Note**

---

All primary keys must be specified in a change command.

---

## Show Rule

The *ID/Record must exist* is a commonly used show rule.

## Wildcard

This section describes how to use the available wildcard in commands and tokens.

### In Commands

The percent sign (%) is the only valid wildcard for show, report, and display commands. The asterisk (\*) is the only valid wildcard for status and control commands. Using other commands returns the error message: “*invalid parameter.*”

The following example returns a list of all Call Agents:

```
show call-agent id=;
```

The following example shows only those Call Agents whose IDs begin with *ca*:

```
show call-agent id=ca%;
```

The following example is not a valid command. You must specify a value.

```
show %;
```

The following example controls all subscribers into service for a media gateway:

```
control subscriber-termination id=*@c2421.192;mode=forced;target-state=INS;
```

### In Tokens

You can use a wildcard with tokens as long as the token is distinctive enough for the wildcard to distinguish it. Only one wildcard is allowed per token. The wildcard does not work with required tokens.

Examples:

Add a policy-prefix where prefix1 is the token for which we are using the wildcard. If the token is not distinctive enough, all possible tokens the token can represent are displayed:

```
add policy-prefix id=Test;pre%=toll-free;policy-id1=somepolicy;policy-type1=TOD;
```

Command parameter 'pre%' is too ambiguous. Possible parameters are:

```
prefix10
prefix1
prefix2
prefix3
```

```

prefix4
prefix5
prefix6
prefix7
prefix8
prefix9

```

```
add policy-prefix id=Test;p%1=toll-free;policy-id1=somepolicy;policy-type1=TOD;
```

Command parameter 'p%1' is too ambiguous. Possible parameters are:

```

policy_type1
prefix1
policy_id1

```

```
add policy-prefix id=Test;pr%1=toll-free;policy-id1=somepolicy;policy-type1=TOD;
```

Reply: Transaction 1481 was processed.

uca12 update successful



**Tip**

Once the command is executed, performing a control-p (^p), causes the verbose form of the command to appear. In the above example, *add policy-prefix id=Test;prefix1=toll-free;policy-id1=somepolicy;policy-type1=TOD;* appears when a ^p is performed.

## Graceful and Forced Commands

Most commands are considered graceful unless “mode=forced” is specified. Graceful commands allow applicable processes and components to complete all activity before shutting down. This allows calls to complete and users to go on-hook. When a command is forced, all applicable processes and components terminate immediately, including calls.

## Tables

The Cisco BTS 10200 Softswitch uses a replicated master-master database that is partitioned into a set of tables according to function. These tables are user provisionable and provide the user with a clear view of system status and functions.

Tables are provisioned using token IDs. Tokens equate to database field names in a structured query language (SQL) database, similar to the cell names in a spreadsheet. Tokens allow individual fields to be provisioned in any order (within the rules of a command).

## Cursor Controls

The following control characters are available:

| Control Character | Action                                     |
|-------------------|--------------------------------------------|
| ^A                | Moves the cursor to beginning of the line. |
| ^B                | Moves the cursor back one space.           |
| ^C                | Interrupts a command during typing.        |

| Control Character | Action                                                                                                                         |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------|
| ^D                | Deletes a character at the cursor position.                                                                                    |
| ^E                | Moves the cursor to the end of a line.                                                                                         |
| ^F                | Moves the cursor forward one character.                                                                                        |
| ^I                | Allows toggling between insert and overwrite (default is overwrite).                                                           |
| ^K                | Deletes all characters from the cursor position to the end of a line.                                                          |
| ^L                | Redisplays the current line.                                                                                                   |
| ^N                | Scrolls forward through commands that have been entered (you must scroll backward through the commands before this will work). |
| ^P                | Scrolls backward through commands starting with the most recent.                                                               |
| ^T                | Transposes a character at cursor position with a previous character.                                                           |
| Backspace         | Deletes the character to the left of the cursor.                                                                               |
| Return            | Executes a command.                                                                                                            |
| Down arrow key    | Pages down.                                                                                                                    |
| Up arrow key      | Pages up.                                                                                                                      |

## Secure Shell

Secure shell (SSH) is the default method of access to the Cisco BTS 10200 Softswitch. SSH provides encrypted communication between a remote machine and the EMS or Call Agent for executing CLI commands. The SSH server runs on the EMSs and CAs of the Cisco BTS 10200. To connect, the client and server sides must run the secure shell daemon (SSHD).

The SSH daemon is available 24 hours a day, 7 days a week. It runs as a Solaris daemon process. It is automatically started when the Solaris is brought up, but if it dies, it must be manually restarted. A single unique instance of the SSHD runs on every component of the Cisco BTS 10200 Softswitch.

SSH is an optional login choice. Using the Cisco BTS 10200 Softswitch default application installation option, SSH is enabled; RSH, REMSH, RLOGIN, Telnet, or REXEC are disabled; but, FTP is not affected. If SSH is not selected, then RSH, REMSH, RLOGIN, Telnet, or REXEC are enabled and FTP is still not affected.



### Caution

For security purposes, Telnet is obsoleted as of Release 4.4.

If SSH is enabled, new users are prompted to enter a new password and reenter that password during their first login. From that point, they are prompted once for a password only.

To log in from the client-side, enter the following:

```
ssh -l username IPaddress
```

On the first SSH login from the client-side, expect a message similar to this:

```
The authenticity of host [hostname] can't be established.
Key fingerprint is 1024 5f:a0:0b:65:d3:82:df:ab:42:62:6d:98:9c:fe:e9:52.
Are you sure you want to continue connecting (yes/no)?
```

Enter yes.

The password prompt appears. From this point on, all communications are encrypted. Subsequent SSH logins will prompt only for a password.

## Help

This section details the help available for the Cisco BTS 10200 Softswitch.

## Basic Usage

This section details the help available. The Cisco BTS 10200 generates help information when a question mark (?) character is entered as part of a command. The following list provides a brief summary of the functionality provided.

The following command lists all the commands for the route table that have a verb starting with s:

```
s? route
```

The following command lists all the commands that have a noun starting with rou:

```
show rou?
```

The following command lists all the commands that have a noun starting with rou and a verb starting with s:

```
s? rou?
```

The following command lists all the tokens for the show route command:

```
show route ?
```

The following command lists all the tokens for the add route command:

```
add route ?
```

The following command lists all the parameters that start with i for the show route command:

```
show route i?
```

The following command lists all the parameters that end with id= for the show route command:

```
show route ?id
```

The following command lists all the valid commands on the Cisco BTS 10200:

```
? ?
```

A ? substituted for a token value can be entered for multiple tokens if the full token name is entered. For example, enter the following command to get help on the id and tgn8-id tokens for the show route command:

```
show route id=?;tgn8-id=?
```

Possible matches:

```
id; Enter at least 0 characters, but not more than 16 characters.
tgn8-id; Enter a number from 0 to 2147483647.
```

For help on tokens, a token name followed by an equal sign (=) is required. A list of tokens can be determined using the percent character (%) wildcard. For example, enter the following command to get help on one of the tgn-id tokens:

```
show route tgn%=?
```

```
Command parameter 'tgn%' too ambiguous. Possible parameters:
```

```
tgn10-id
tgn3-id
tgn9-id
tgn1-id
tgn8-id
tgn7-id
tgn6-id
tgn2-id
tgn5-id
tgn4-id
```

```
show route tgn3-id=?
```

```
Matches found:
```

```
tgn3-id; Enter a number from 0 to 2147483647.
```

```
show route tgn3-id=0;
```

```
Reply : Success: Database is void of entries.
```

System-generated help is available for all command nouns and verbs. For help on a specific command noun/verb pair, help provides:

1. A list of all parameters:
  - Sorted into groups of *Required* or *Optional/Conditional*.
  - With their data format described, or, for those parameters that require a value from a pick-list, a list of permitted values.
  - With their default value (if any).
  - With any FK dependency.
2. All related commands for each help request.
3. The URL to the HTML version of the CLI guide for each help request.

One parameter is supported:

- VERB = a valid verb or %.

Support for this verb is hard-coded in ManagedObject.java to avoid significant changes to the CommandParameter table.

## Examples

```
***** example 1 *****
help help
Reply : Success:
Description of the BTS CLI 'help subscriber' command for release 900-03.02.00.I03
=====
For a given command noun, Help provides a list of all command noun-verb pairs
associated with the given noun.
For Help on a specific command noun-verb pair, a description of all associated tokens,
related commands, and a reference to the CLI Users Guide is provided. The required
tokens are listed first, and the optional/conditional tokens are listed next.
The following information is provided for each token:
- a brief description
- the expected data format or list of values
- the default value (if any),
- prevalidation formatting instructions
- the dependency chain (if the value for the token must be pre-provisioned).
```

The dependency chain is depicted in the by showing the relationship of the token to another BTS command token. The format is noun.token->noun.token->noun.token and so on until a token is reached that has no dependencies. The rightmost noun.token pair references the value that must be provisioned first. Moving to the left, you can follow the provisioning dependency chain back up to the token described in the help command.

For example, execution of 'show noun token=%', where noun and token are derived from one of the dependency chain pairs, yields a list of possible values for the token described in the help text.

Example for getting this description on the BTS help command:

help help

Example for getting help for a command noun:

help the\_target\_noun

Example for getting help for a specific command noun-verb pair:

help the\_target\_noun verb=the\_target\_verb

Where 'verb' represents the command verb for which help information is requested.

\*\*\*\*\* example 2 \*\*\*\*\*

help subscriber

Reply : Success:

Description of the BTS CLI 'help subscriber' command for release 900-03.02.00.I03

=====

Related Commands:

```
add subscriber
audit subscriber
change subscriber
delete subscriber
sync subscriber
show subscriber
```

The BTS 10200 Users Guide is available at <http://kyle-btc.cisco.com:10200>

\*\*\*\*\* example 3 \*\*\*\*\*

help subscriber verb=change;

Reply : Success:

Description of the BTS CLI 'change subscriber' command for release 900-03.02.00.I03

=====

-----

Required Parameters:

-----

id (ID)

Enter at least 1 character, but not more than 30 characters.  
There is no default value.

-----

Optional/Conditional Parameters:

-----

address1 (Address1)

Enter at least 1 character, but not more than 32 characters.  
There is no default value.

address2 (Address2)

Enter at least 1 character, but not more than 32 characters.  
There is no default value.

billing\_dn (Billing Dn)

Enter at least 1, but not more than 14 characters from the following set:  
{0123456789-}.  
There is no default value.

category (Category)

Enter one of the following values: [INDIVIDUAL, MLHG, MLHG\_INDIVIDUAL, MLHG\_PREF\_INDIV, CTXG, CTXG\_INDIVIDUAL, PBX, CTXG\_TG, CTXG\_MLHG, RACF, IVR]  
The default value is INDIVIDUAL.

city (City)

Enter at least 1 character, but not more than 16 characters.  
There is no default value.

```

cos_restrict_id (COS Restrict ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: cos_restrict.id
country (Country)
    Enter at least 1 character, but not more than 16 characters.
    The default value is USA.
ctxg_id (Ctxg Id)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: centrex_grp.id
dn1 (Dn1)
    Enter at least 1, but not more than 14 characters from the following set:
    {0123456789-}.
    There is no default value.
email (Email)
    Enter an email address in the form text@text where text is a set of characters
    with no spaces.
    There is no default value.
grp (Grp)
    Enter a boolean value of Y for yes or N for no.
    The default value is N.
immediate_release (Immediate Release)
    Enter a boolean value of Y for yes or N for no.
    The default value is N.
language (Language)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
mgw_id (Media Gateway ID)
    Enter at least 0 character, but not more than 32 characters.
    There is no default value.
    Dependency chain: termination.mgw_id -> mgw.id
mlhg_id (MLHG ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: mlhg_pref_list.mlhg_id -> mlhg.id
mlhg_pref_list_id (Mlhg Pref List Id)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: mlhg_pref_list.id
name (Name)
    Enter at least 1 character, but not more than 32 characters.
    There is no default value.
pic1 (Pic1)
    Enter a PIC value as four numeric characters: NPIC, or NONE.
    There is no default value.
pic2 (Pic2)
    Enter a PIC value as four numeric characters: NPIC, or NONE.
    There is no default value.
pic3 (Pic3)
    Enter a PIC value as four numeric characters: NPIC, or NONE.
    There is no default value.
policy_id (POLICY_ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
privacy (Privacy)
    Enter one of the following values: [FULL, NAME, NONE]
    The default value is NONE.
qos_id (QOS ID)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: qos.id
ring_type_dn1 (Ring Type Dn1)
    Enter a number from 1 to 3.

```

```

    The default value is 1.
sip_url (Sip Url)
    Enter at least 1 character, but not more than 32 characters.
    There is no default value.
ss_number (Ss Number)
    Enter a Social Security Number in the form ###-##-#### where # are digits from
    0-9.
    There is no default value.
state (State)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
status (Status)
    Enter one of the following values: [ACTIVE, TEMP_OOS, TEMP_DISCONNECTED,
    TEMP_UNAVAILABLE]
    The default value is ACTIVE.
sub_profile_id (Sub Profile Id)
    Enter at least 1 character, but not more than 16 characters.
    There is no default value.
    Dependency chain: subscriber_profile.id
term_id (Termination ID)
    Enter at least 1 character, but not more than 32 characters.
    There is no default value.
    Dependency chain: termination.id
term_type (TERM TYPE)
    Enter one of the following values: [TERM, TG, ROUTE, RG]
    The default value is TERM.
terminating_immediate_rel (Terminating Immediate Release)
    Enter a boolean value of Y for yes or N for no.
    The default value is N.
tgn_id (Trunk Group Number ID)
    Enter a number from 0 to 99999999.
    There is no default value.
    Dependency chain: trunk_grp.id
usage_sens (Usage Sens)
    Enter a boolean value of Y for yes or N for no.
    The default value is Y.
zipcode (Zipcode)
    Enter at least 1 character, but not more than 10 characters.
    There is no default value.
-----
See Also:
-----
Related Commands:
    add subscriber
    audit subscriber
    delete subscriber
    help subscriber
    sync subscriber
    show subscriber

```

## Context Sensitive (Release 4.5)

Context sensitive help is available based on the following categories:

- Context sensitive help for verbs
- Context sensitive help for nouns
- Context sensitive help for parameters
- Context sensitive help for parameter values

## Context Sensitive Help for Verbs

Context sensitive help for verbs is provided under the following conditions:

- A user does not enter any characters at the CLI prompt and enters the Tab key
- A user enters a substring of the verb at the CLI prompt and enters the Tab key

If a user does not enter any characters at the CLI prompt and just presses the Tab key, a list of possible verbs is displayed.

If a user enters a substring of a verb at the CLI prompt and presses the Tab key, a list of all possible verbs, starting with the substring, is displayed.

### Examples

If a user presses the Tab key at the CLI command prompt, a list of all possible verbs is displayed as follows:

<Tab>

```
Reply :
ack
add
audit
block
change
clear
control
delete
diag
download
equip
force_delete
get_trace
help
macro
query
report
reset
set_trace
show
start
status
stop
subscribe
sync
translate
unblock
unequip
unsubscribe
```

If a user types the character “s” and presses the Tab key, the command is ambiguous and cannot be resolved. All possible commands that begin with the character “s” are listed as follows:

s <Tab>  
Reply :

```
set_trace
show
start
status
stop
subscribe
```

sync

## Context Sensitive Help for nouns

Context sensitive help for nouns is provided for the following conditions:

- If a user enters a valid verb and presses the Tab key.
- If a user enters a valid verb, followed by a substring of the noun, and presses the Tab key

If a user enters a valid verb and presses the Tab key, a list of all possible nouns is displayed.

If a user enters a valid verb, followed by a substring of the noun, then enters the Tab key, a list of all possible nouns, starting with the substring, displays.

### Examples

If a user enters the word “subscribe” and presses the Tab key, all possible nouns are listed for the verb as follows:

```
subscribe <Tab>
```

Reply :

```
alarm_report
debug_report
event_report
CLI>subscribe
```

## Context Sensitive Help for Parameters

Context sensitive help for parameters is provided under the following conditions:

- A user enters a valid verb::noun pair and presses the Tab key.
- When the user enters a valid verb::noun pair and presses the Tab key a list of all possible parameters is displayed. Any parameters with an asterisks (\*) are required parameters.
- A user enters a valid verb::noun pair with an invalid parameter and presses a invalid parameter.
- When the user enters a valid verb::noun pair with an invalid parameter and presses the Tab key, a list of all possible parameters is displayed. The parameters with asterisks (\*) indicate a required parameter.

### Examples

If user types “subscribe alarm-report” and presses the Tab key, the system attempts to complete the parameter part of the command. Since there is more than one match in this case, the entire list of possible parameters is listed as follows:

```
subscribe alarm-report <Tab>
```

Reply :

```
origin*
severity*
type*
```

## Context Sensitive Help for Parameter Values

Context sensitive help for parameter values is provided when the a user types a valid verb, noun, parameter and the equal (=) sign.

### Examples

If a user types “show user name=” and presses the Tab key, help is displayed for the parameter value.

```
show user name= <Tab>
```

Reply :

Enter at least 1 character, but not more than 16 characters. If you want to clear the value, please enter NULL.

## Command Line Interface Extended Read Access Commands

The following Extended Read Access Commands (ERAC) are documented in the *Cisco BTS 10200 Softswitch Extended Read Access Commands* document.

- hg-dn-find
- hg-dn-list
- hg-sequence
- sub-cid
- sub-da-block
- sub-ld-block
- sub-oper-block

## Related Documentation

Related documentation includes the following:

- *Cisco BTS 10200 Softswitch System Description Manual*
- *Cisco BTS 10200 Softswitch Operations, Maintenance and Troubleshooting Manual*
- *Release 4.1, 4.2, 4.4, or 4.5 Release Notes*

## Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>

- <http://www-europe.cisco.com>

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Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

### Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<http://www.cisco.com/tac>

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

<http://www.cisco.com/register/>

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

<http://www.cisco.com/tac/caseopen>

### Contacting TAC by Telephone

If you have a priority level 1(P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.



# CHAPTER 1

## Administration, Diagnostic, and Maintenance Commands

---

Revised: July 24, 2009, OL-3743-42

This chapter describes the Administration, Diagnostic, and Maintenance (ADM) commands. With the exception of the Status Update Processor command, status and control commands do not have their own tables. They use the tokens in the applicable tables from the Call Processing chapters in this document. Tokens used in addition to the tokens from the tables in the Call Processing chapters are noted where applicable in this document.



### Note

---

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Command Responses

See the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide* and the *Cisco BTS 10200 Softswitch Troubleshooting Guide* for command response information,

## Generic Status and Control Commands

Generic status and control commands apply to all media gateways, subscribers, trunks, trunk groups and in one specific case, system. Some sample responses, replies, and failure reasons are also listed in this section. For a complete list, see the *Cisco BTS 10200 Softswitch Operations Manual*.

## Administration and Maintenance

Administration and Maintenance commands consist of commands that control or show the status of a component. The following commands are specific to, and listed under, the applicable type. Sample responses, replies, and failure reasons are also listed in this section. For a complete list, see the *Cisco BTS 10200 Softswitch Operations Manual*.

## Address of Record to Subscriber Status and Control Commands

This section describes the status and control commands for the Address of Record (AOR) to Subscriber (aor2sub) table.

**Caution**

These commands are no longer supported in Release 4.4.1. Use the `change aor2sub` command to control an aor2sub id, and the `show aor2sub` to check the status.

### Control Command

An aor2sub id must be put in service to terminate a call to a Session Initiation Protocol (SIP) subscriber.

---

**Command Types**

Control

---

**Examples**

```
control aor2sub aor-id=4692551114@prica45.ipclab.cisco.com; target-state=oos
control aor2sub aor-id=4692551114@prica45.ipclab.cisco.com; target-state=ins
```

### Status Command

The status command determines the status of the dynamic contact for the particular AOR. This shows if the AOR (SIP phone subscriber) has a registered contact or not. Calls cannot be terminated to SIP subscribers if the AOR does not have a registered contact (such as an expired or freed contact).

---

**Command Types**

Status

---

**Examples**

```
status sip-reg-contact AOR-ID=4692552222@prica45.ipclab.cisco.com
```

Reply example:

```
AOR ID ->
USER ->
HOST ->
PORT -> 0
USER TYPE ->
EXPIRES ->
EXPIRETIME ->
STATUS -> FREED CONTACT

Reply : Success:
AOR ID -> 4692552222@prica45.ipclab.cisco.com
USER -> 4692552222
HOST -> 64.101.150.141
PORT -> 5062
USER TYPE -> USER_IP_TYPE
EXPIRES -> 1800
EXPIRETIME -> Wed Jun 4 11:08:33 2003

STATUS -> EXPIRED CONTACT
```

```
Reply : Success:

status sip-reg-contact AOR_ID=4692552222@prica45.ipclab.cisco.com

AOR ID -> 4692552222@prica45.ipclab.cisco.com
USER -> 4692552222
HOST -> 64.101.150.141
PORT -> 5060
USER TYPE -> USER_IP_TYPE
EXPIRES -> 3600
EXPIRETIME -> Wed Jun 4 11:37:44 2003

STATUS -> REGISTERED CONTACT

Reply : Success:
```

## Aggregation Status Command

This section describes the status command for an aggregation (aggr) router. Aggregation routers are used in cable and network-based call signaling (NCS) markets. In cable markets, they are used as cable modem termination systems (CMTs). In NCS markets, they are used as edge routers.

### Command Types

Status

### Examples

```
status aggr id=CMTS1
```

Reply Example:

```
Reply: Success:

AGGR ID -> CMTS1
OPER STATE -> AGGR IN Service
RESULT -> ADM configure result in success
REASON -> ADM executed successful
```

### Usage Guidelines

The following list provides the AGGR operational-state values and possible responses for the command:

1. IN SERVICE
  - a. Means the TCP connection to the AGGR is up.
  - b. CLI output: AGGR IN SERVICE.
2. CONNECTING
  - a. Means the TCP connection to the AGGR is being set up.
  - b. CLI output: AGGR CONNECTING.
3. INITIALIZING
  - a. Identifies the initial state of the AGGR before a Call Agent (CA) attempts to connect to it.
  - b. CLI output: AGGR INITIALIZING (this is a transitional state, which a user may rarely see).
4. OUT OF SERVICE

- a. Means the AGGR is out of service.
- b. CLI output: AGGR OUT OF SERVICE.

**Syntax Description**

The following token may be used with the status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Destination Point Code Status Command

This section describes the status command for destination point codes (DPCs).

**Command Types**

Status

**Examples**

```
status dpc id=dpc1;
```

**Syntax Description**

The following token may be used with the destination point code status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## H.323 Gateway Status and Control Command

This section describes the status and control commands for H.323 gateways.

**Command Types**

Status and control

**Examples**

```
status h323-gw id=CHINA-1;
```

Reply Example:

Reply : Success:

```
ADMIN_STATE -> ADMIN_INS
H3A PROCESS NUMBER -> 30
H3A PROCESS NAME -> H3A1
ENDPOINT ID ->
ACTIVE CALLS -> 0
RAS STATE -> CCH323_RAS_STATE_GRQ
RAS PORT -> 35881
IP ADDRESS -> 10.89.224.125
REGISTERED GATEKEEPER ID ->
PRIMARY GATEKEEPER ID ->
PRIMARY GATEKEEPER PORT -> 0
PRIMARY GATEKEEPER IP ->
H323 VERSION -> 4
TIME TO LIVE -> 0
NUM ALT GATEKEEPERS -> 0
ALT GATEKEEPER PERMANENT -> TRUE
THRESHOLD_ENABLED -> FALSE
OUT_OF_RESOURCES -> FALSE
ALT GATEKEEPER LIST ->
```

```
control h323-gw id=CHINA_1; target-state=INS;
```

Reply Example:

Reply : Failure:

```
INITIAL STATE -> ADMIN_INS
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM entity in desired state
REASON -> ADM is in request state
RESULT -> ADM configure result in warning
H323GW ID -> CHINA_1
```

**Syntax Description**

The following token may be used with the H.323 status and control commands:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. **CHAR(1):** Y/N (Default = N).
  - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Media Gateway Status and Control Commands

This section describes the status and control commands for media gateways.

**Command Types**

Status and control

**Examples**

```
status mgw id=c5400_197;
```

Reply Example:

Reply : Success:

```
MGW ID -> c5400_197
RESULT -> ADM configure result in success
REASON -> ADM executed successful
ADMIN STATE -> ADMIN_INS
OPER STATE -> Media gateway in working status
```

Table 1-1 lists the administrative states the system can return.

**Table 1-1 Returnable Administrative States**

| State               | Definition                         |
|---------------------|------------------------------------|
| ADMIN-INS           | In Service.                        |
| ADMIN-OOS           | Out of Service.                    |
| ADMIN-MAINT         | Maintenance Mode.                  |
| ADMIN-OOS-PENDING   | Transitioning to Out of Service.   |
| ADMIN-MAINT-PENDING | Transitioning to Maintenance Mode. |

The following command shows how to control a media gateway in service. Modes can be either forced or graceful. Forced tears down all calls immediately; graceful allows calls in progress to complete before teardown.

```
control mgw id=c5400_162; mode=forced; target-state=INS;
```

Reply Example:

Reply : Success: CLI change successful

```
MGW ID -> c5400_162
INITIAL STATE -> ADMIN_OOS
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
```

**Syntax Description**

The following token may be used with the media gateway status command:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).

**Caution**

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.

The following token may be used with the media gateway status and control commands:

- **WAIT (Release 4.5)**—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Signaling Gateway Get and Set Trace Commands

This section details the set-trace and get-trace commands for the Signaling Gateway table. The get-trace command retrieves trace information for the Signaling Gateway table. The set-trace command sets what trace information to log for the Signaling Gateway table.

### Command Types

get-trace and set-trace

### Examples

```
get-trace sg id=sg1;
set-trace sg id=sg1;
```

### Syntax Description

The following tokens are used with the get-trace and set-trace commands:

- **ID**—The Signaling Gateway id. VARCHAR(16): 1-16 ASCII characters. Mandatory.
- **PLATFORM ID**—Platform ID (must be a valid Call Agent or Feature Server ID). VARCHAR(16): 1–16 ASCII characters. Optional.

The following tokens may be used with the set-trace command:

- **TRACE-DPC-STATE**—DBM only. The DPC trace state. CHAR(1): Y/N (Default = N). Optional.
- **TRACE-ERR**—DBM only. The trace error. CHAR(1): Y/N (Default = N). Optional.
- **TRACE-ERRIND**—DBM only. The trace error indicator. CHAR(1): Y/N (Default = N). Optional.
- **TRACE-SG-STATE**—DBM only. The signaling gateway trace state. CHAR(1): Y/N (Default = N). Optional.

## Signaling Gateway Process Status, Get-Trace and Set Trace Commands

This section details the status, set-trace, and get-trace commands for the Signaling Gateway Process table.

### Status Command

The SGP status command returns the state of the SGP.

**Command Types**

Status

**Examples**

```
status sgp id=sgp1;
```

**Syntax Description**

The following token may be used with the status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

**Get Trace and Set Trace Commands**

The get-trace command retrieves trace information for the Signaling Gateway Process table. The set-trace command sets what trace information to log for the Signaling Gateway Process table.

**Command Types**

Get-trace and set-trace

**Examples**

```
get-trace sgp id=sgp1;
set-trace sgp id=sgp1; trace-err=Y;
```

**Syntax Description**

The following tokens may be used with the get-trace and set-trace commands:

- ID—Unique signaling gateway process identifier. VARCHAR(16): 1–16 ASCII characters. Mandatory.
- SG-ID—Unique signaling gateway identifier. VARCHAR(16): Y/N (Default = N). Mandatory.
- TRACE-SCTP—CHAR(1): Y/N (Default = N).
- TRACE-PAK—CHAR(1): Y/N (Default = N).
- TRACE-HB—CHAR(1): Y/N (Default = N).
- TRACE-ERR—The SGP trace error. CHAR(1): Y/N (Default = N).
- TRACE-ERRIND—The SGP trace error indicator. CHAR(1): Y/N (Default = N).

**Session Initiation Protocol Registration Status**

The Session Initiation Protocol Registration Check command checks the AOR status of a SIP subscriber.

---

**Command Types**      Status

---

**Examples**      `status sip-reg-contact;`

## Signaling System 7 Trace Command

The Signaling System 7 (SS7) trace command performs a trace of a CIC for a specific trunk.

---

**Command Types**      Start and Stop

---

**Examples**      `start ss7-trace cic=1-2; tgn-id=1; file-prefix=tgn-1;`  
`stop ss7-trace tgn-id=1; file-name=tgn-1_20030826110057;`

Upon successful completion of this command a trace file name is returned. Trace file name has the format <file-prefix>-<time stamp>. Traces files are stored in /opt/OptiCall/CA146/mdltrace directory.

Traces can be started by specifying the time duration for which they can be active. By default all traces are active for 10 minutes.

Upon successful completion of this command a trace file name is returned. The trace file name format is <file-prefix>\_<time stamp>. Trace report files are stored in /opt/OptiCall/CA146/mdltrace directory. Trace files must be converted using the mtv.sh script:

```
cd /opt/OptiCall/CA146/bin ./mtv.sh <trace-file-name>_<timestamp>.btr
```

See the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide* for more information on using the mtv.sh script.

## Status Update Processor Command

The Status Update Processor (SUP) Configuration (sup-config) table stores configurable values used by the SUP process to poll various components on the CA/FS. Each value is used to modify the SUP so that the collection of statuses is least intrusive depending on the size of the Softswitch (number of media gateways, trunk groups, and terminations). Most of the values are used for performance tuning.


**Note**


---

This table is initially provisioned with default values at installation. During upgrades the values in these tables are not maintained.

---

Table Name: SUP-CONFIG

Table Containment Area: OAMP

---

**Command Types**      Show and change

**Examples**

```
show sup-config
change sup-config type= refresh-rate; value=600
```

**Usage Guidelines**

Primary Key Token(s): type  
Change Rules: None

**Syntax Description**

The following tokens may be used for the status update processor command:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- **TYPE**—Identifies the configurable property of the SUP process to change or show. VARCHAR: 1–64 ASCII characters. Mandatory. Permitted values are:
  - **REFRESH-RATE**—Specifies the interval in seconds between each collection period in seconds. The value must be greater than 30 seconds.
  - **PRIORITY**—Specifies the inner priority of the Collection Thread. The value can range from 1 to 10 and the default value is 5. Modifying this value has a minor effect in changing the CPU utilization of the SUP.
  - **SUBTERM-MGW-BLOCK**—Specifies the block of subterms within a gateway to retrieve and update at a time. Default value is 5 subterm blocks at a time.
  - **SUBTERM-BLOCK-PAUSE**—Specifies the time in milliseconds to pause between each subterm block from each subterm-mgw-block retrieved. The default value is 9000 milliseconds (9 seconds).
  - **SUBTERM-STATUS-PAUSE**—Specifies the time in milliseconds to pause between each bulk subterm status command. The default value is 0 milliseconds.
  - **TRUNKTERM-TG-BLOCK**—Specifies the block of trunk terms within a trunk group to retrieve and update at a time. Default value is 5 trunk term blocks at a time.
  - **TRUNKTERM-BLOCK-PAUSE**—Specifies the time in milliseconds to pause between each trunk term block for each trunkterm-tg-block retrieved. The default value is 9000 milliseconds (9 seconds).
  - **TRUNKTERM-STATUS-PAUSE**—Specifies the time in milliseconds to pause between each bulk trunk term status command. The default value is 0 milliseconds.
  - **TRUNKTERM-RANGE-BLOCK**—Specifies the range of CICs to retrieve on each bulk trunk term status. The default value is 1000 CICs per query.
  - **TRUNKTERM-RANGE-PAUSE**—Specifies the time in milliseconds to pause between each block of the trunkterm-range-block retrieved. The default value is 20000 milliseconds (20 seconds).

- **VALUE**—Identifies the values of the configurable property specified in the **TYPE** token.  
VARCHAR: 1–64 ASCII characters. Optional.

## Stream Control Transmission Protocol Association Control and Status Commands

This section details the status and control commands for the Stream Control Transmission Protocol (SCTP) Association table. Use the control command to control an SCTP out of service. The status command checks the status of an SCTP association.

---

### Command Types

Control and status

---

### Examples

```
control sctp-assoc id=sctpassoc1; target-state=OOS
status sctp-assoc id=sctpassoc1;
```

---

### Syntax Description

The following tokens may be used with the SCTP status and control commands:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes.  
CHAR(1): Y/N (Default = N).
  - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- **MODE**—Specifies the control mode. VARCHAR(6): 1–6 ASCII characters. The only permitted value is **FORCED**.
  - **Forced**—immediately tears down all calls.

## Trunk Group Status and Control Commands

This section describes the status and control commands for trunk groups.

---

### Command Types

Status and control

---

### Examples

The following command shows how to display the status of one trunk group id:

```
status trunk-grp id=2;
```

Reply Example:

```

RESULT -> ADM configure result in success
REASON -> ADM executed successful
ADMIN STATE -> ADMIN_INS
OPER STATE -> Trunk group in-service
TGN ID -> 2

```

Table 1-2 lists the administrative states the system can return.

**Table 1-2 Returnable Administrative States**

| State               | Definition                         |
|---------------------|------------------------------------|
| ADMIN-INS           | In Service.                        |
| ADMIN-OOS           | Out of Service.                    |
| ADMIN-MAINT         | Maintenance Mode.                  |
| ADMIN-OOS-Pending   | Transitioning to Out of Service.   |
| ADMIN-MAINT-Pending | Transitioning to Maintenance Mode. |
| ACL                 | Congestion is at level 1.          |
| ACL                 | Congestion is at level 2.          |
| ACL                 | Congestion is at level 3.          |
| TFC                 | Congestion is at level 1.          |
| TFC                 | Congestion is at level 2.          |
| TFC                 | Congestion is at level 3.          |

See the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide* for returnable operating states.

## Examples

The following command shows how to control one trunk group id:

```
control trunk-grp tgn-id=2; mode=forced; target-state=INS;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```

INITIAL STATE -> ADMIN_OOS
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
TGN ID -> 2

```



## Caution

To control an ISDN trunk in-service, the media gateway must be in-service.

## Usage Guidelines

The administrative target-state MAINT is for ISDN trunk groups only.

## Syntax Description

The following token may be used with the trunk group commands:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).

**Caution**

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.

The following tokens may be used with the trunk group status and control commands:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- MODE—Valid for the control command. Specifies whether shutdown is graceful or forced. VARCHAR(8): 1–8 ASCII characters. Permitted values are:
  - GRACEFUL—Allow applicable processes and components to complete all activity before shutting down.
  - FORCED—All applicable processes and components terminate immediately, including calls.

## Subscriber Termination Commands

This section describes the status and control commands for subscriber terminations. Either a range of subscribers can be specified (using \*@mgw-id for the ID parameter), or a single subscriber can be specified (for example: sub-ctx1@Cisco.com).

### Status Command

This section describes the subscriber termination status command.

#### Command Types

Status

#### Examples

The following command shows how to display the status for one subscriber termination:

```
status subscriber-termination id=ubr204_1;
```

Reply Example:

```
RESULT -> ADM configure result in success
REASON -> ADM executed successful
ADMIN STATE -> ADMIN_INS
OPER STATE -> Termination is idle
SUBSCRIBER ID -> ubr204_1
FAULT REASON -> No fault reason available
```

Table 1-3 lists the administrative states the system can return.

**Table 1-3 Returnable Administrative States**

| State               | Definition                         |
|---------------------|------------------------------------|
| ADMIN-UEQP          | Unequipped.                        |
| ADMIN-INS           | In Service.                        |
| ADMIN-OOS           | Out of Service.                    |
| ADMIN-MAINT         | Maintenance Mode.                  |
| ADMIN-OOS-Pending   | Transitioning to Out of Service.   |
| ADMIN-MAINT-Pending | Transitioning to Maintenance Mode. |

Show the status for all subscriber terminations on a particular gateway using the following command:

```
status subscriber-termination id=@ubr235;
```

Reply Example:

```
SUBSCRIBER DN -> ubr235_1
ADMIN STATE -> ADMIN_UEQP
OPER STATE -> Termination is unequipped
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAULT REASON -> No fault reason available
```

```
SUBSCRIBER DN -> ubr235_2
ADMIN STATE -> ADMIN_UEQP
OPER STATE -> Termination is unequipped
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAULT REASON -> No fault reason available
```

Reply : Success:

### Syntax Description

The following token may be used with the subscriber termination status command:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).



### Caution

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.

The following tokens may be used with the subscriber termination status command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.

- N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.
- OPER-STATE—Operating state. Expands the range of useful information returned by the status subscriber-termination command. Permitted values are:
  - FA—Faulty
  - NF—Not faulty
  - IDLE—Termination idle
  - LBLK—Trunk local blocked
  - RBLK—Trunk remote blocked
  - ACTIVE—Termination active
  - DOWN—Termination down
  - TERM-FA—Termination fault
  - TEMP-DOWN—Termination temporarily down
  - UNREACH—Termination unreachable
  - INT-MAINT—Termination internal maintenance
  - UEQP—Termination unequipped
  - ALL—All states, same as executing command without oper-state token



**Note** The values for the oper-state token are not the same as the operational status responses returned for the command.

The following command example returns only those subscriber terminations that are FA (if any):

```
status subscriber-termination id=*@ubr235; oper-state=FA;
```

- SOURCE—Source. The source token specifies whether to query the Call Agent or the EMS for status information. It is an optional token. Permitted values are:
  - EMS (Default)—Query the local EMS database for most current status.
  - AGENT—Query the remote Call Agent database for most current status.

The following command example returns the current status of the Call Agent:

```
status subscriber-termination id=*@ubr235; source=AGENT;
```

## Control Command

This section describes how to control subscriber-terminations on a particular gateway. To control a subscriber termination to the unequipped or equipped state, use the equip or unequip commands.

### Command Types

Control

### Examples

```
control subscriber-termination id=*@c3810_167; mode=forced; target-state=INS;
```

**Reply Example:**

```
Reply : Success: CLI change successful

ID -> c3810_167
REQUEST STATE -> ADMIN_INS
RESULT STATE -> ADMIN_INS
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
```

Control all subscriber-terminations on a particular gateway using the following command:

```
control subscriber-termination id=*ubr235; mode=forced; target-state=MAINT
```

**Reply Example:**

```
Reply : Success: CLI change successful

ID -> ubr235
REASON -> ADM executed successful
RESULT -> ADM configure result in success
REQUEST STATE -> ADMIN_MAINT
RESULT STATE -> ADMIN_MAINT
FAIL REASON -> ADM found no failure
```

**Syntax Description**

The following tokens may be used with the subscriber termination control command:

- **WAIT (Release 4.5)**—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. **CHAR(1): Y/N (Default = N).**
  - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

**Equip Command**

The equip command changes the administrative state of terminations that are in the UEQP state to OOS state. It ignores the terminations in the states INS, MAINT, or OOS.

Use the equip command or the control trunk-grp command to change the termination state for a subscriber to an ISDN trunk. The control trunk-grp command changes all trunks in the specified trunk group to the specified state. For trunk types other than ISDN, use the equip command to set the subscriber termination state. Thereafter, to change the termination state, use the control command.

A subscriber termination state must set to unequipped before it can be deleted.

You cannot use the control command to change a termination state to UEQP. Furthermore, you cannot use the control command to change the state of any subscriber termination that is already in the UEQP state.

For example, consider a case in which 24 CICs in a trunk group are in the following initial states:

- CICs 1–10 in OOS state

- CICs 11–15 in UEQP state
- CICs 16–24 in MAINT state

For this case, issuing the control, equip, or unequip commands would affect the initial state of the CICs as follows:

- If a control command is used with target-state = ins, the final states of all the CICs are:
  - CICs 1–10 in INS state
  - CICs 11–15 in UEQP state
  - CICs 16–24 in INS state
- If an equip command is applied to the CICs in the initial states, the final states of all the CICs are:
  - CICs 1–10 in OOS state
  - CICs 11–15 in OOS state
  - CICs 16–24 in MAINT state
- If an unequip command is applied to the CICs in the initial states, the final states of the CICs are:
  - CICs 1–10 in UEQP state
  - CICs 11–15 in UEQP state
  - CICs 16–24 in MAINT state

### Command Types

Equip

### Examples

```
equip subscriber-termination id=97_8@ipclab.cisco.com;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```
ID -> Subscriber ID -> 97_8@ipclab.cisco.com
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAIL REASON -> ADM found no failure
```

### Syntax Description

The following token may be used with the equip command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Unequip Command

The `unequip` command changes the administrative state of subscriber terminations that are in OOS state into UEQP state. It ignores the terminations in the states: INS, MAINT, or UEQP.

---

### Command Types

Unequip

---

### Examples

```
unequip subscriber-termination id=97_8@ipclab.cisco.com;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```
ID -> Subscriber ID -> 97_8@ipclab.cisco.com
REASON -> ADM executed successful
RESULT -> ADM configure result in success
FAIL REASON -> ADM found no failure
FAIL REASON -> ADM found no failure
```

## Subsystem Status and Control Commands

This section describes the status and control commands for the Subsystem table. Use the status command to display the state of a subsystem. Use the control command to control a subsystem out of service in forced mode.

---

### Command Types

Status and control

---

### Examples

```
status subsystem id=SSN1;
control subsystem id=SSN1; OPC-ID=dallas-pc; target-state=OOS; mode=FORCED;
```

---

### Syntax Description

The following token may be used with the subsystem status and control commands:

- **WAIT** (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. **CHAR(1): Y/N** (Default = N).
  - **Y**—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - **N**—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Subsystem Group Status and Control Commands (Release 4.5)

This section describes the status and control commands for the Subsystem Group table. Use the status command to display the state of a subsystem group. Use the control command to control a subsystem out of service in forced mode.

### Command Types

Status and control

### Examples

```
status subsystem-grp id=CNAM
```

The following command controls one system-OPC combination out of service:

```
control subsystem-grp id=SSN1; OPC-ID=dallas-pc; target-state=OOS; mode=FORCED;
```



#### Note

If you have controlled one system in a group OOS, and the group is controlled OOS then back to INS, all subsystems (including the one system originally controlled OOS) are returned to INS.

The following command controls all subsystem-OPC combinations out-of-service. If a subsystem-OPC combination is taken out-of-service individually, the state of the subsystem group is in-service while individual members of the group are out-of-service.

```
control subsystem-grp id=CNAM; mode=forced; target_state=UOS;
```

### Syntax Description

The following token may be used with the subsystem group status and control commands:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Trunk Termination Status and Control Commands

This section describes the status and control commands for trunk terminations. Either a range (for example, cic=1–24;) or a single value (for example, cic=1;) for the CIC parameter can be specified for the status and control of trunk terminations.

### Status Command

This command can be executed for one CIC (for example, cic=1;), a range of CICs (for example, cic=1–12;) or for all CICs (cic=all;).

**Command Types**

Status

**Examples**

```
status trunk-termination tgn-id=2; cic=8;
```

Reply Example:

Reply : Success:

```
RESULT -> ADM configure result in success
REASON -> ADM executed successful
TGN ID -> 2
CIC -> 8
TERM ADMIN STATE -> ADMIN_INS
TERM OPER STATE -> Termination is idle
TERM REASON -> No fault reason available
TRUNK STATIC STATE -> ACTV
TRUNK DYNAMIC STATE -> TRNS
TRUNK REASON -> NON_FAULTY
```

The following command returns only those trunk terminations that are in administrative state OOS (if any), and operating state IDLE (if any):

```
status trunk-termination tgn-id=12; cic=1-1000; admin-state=OOS; oper-state=idle
```

[Table 1-4](#) lists the administrative states the system can return for the *term admin state* response.

**Table 1-4 Returnable Administrative States**

| State               | Definition                         |
|---------------------|------------------------------------|
| ADMIN-UNEQP         | Unequipped.                        |
| ADMIN-INS           | In Service.                        |
| ADMIN-OOS           | Out of Service.                    |
| ADMIN-MAINT         | Maintenance Mode.                  |
| ADMIN-OOS-Pending   | Transitioning to Out of Service.   |
| ADMIN-MAINT-Pending | Transitioning to Maintenance Mode. |
| ADMIN-NUL           | Resource does not exist.           |

**Syntax Description**

The following tokens may be used with the trunk termination status command:

- Administrative State (admin-state). Permitted values are:
  - UEQP: Unequipped; resource is not commissioned. Resource not registered.
  - OOS: Termination was manually controlled out of service.
  - INS: Termination was manually controlled in service, but operationally may be available or unavailable.
  - OOS-PENDING: Termination was manually controlled out of service with mode graceful, termination is still involved in a call.
  - MAINT: Termination in maintenance mode, can run diagnostic commands.
  - MAINT-PENDING: Termination was manually controlled to MAINT state, but termination is still involved in call.

- ALL: Return all possible states.
- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. Permitted values are:
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N (Default)—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

The following token may be used with the trunk termination status command:

- THROTTLE—Internal token used only by programs. CHAR(1): Y / N (Default = N).



#### Caution

---

Setting this token to Y results in “Reply : Success” as the output. All other output is suppressed.

---

- Y—Throttle output and suppress the results for internal programs to use.
- N—Do not throttle output and display results as normal.
- Operating State (oper-state). Valid values are:
  - FA—Includes FAULTY, UNREACH, TEMP-DOWN, and DOWN.
  - FAULTY—The MGCP endpoint returned a permanent error code.
  - UNREACH—The MGCP endpoint was declared as not reachable. This indicates gateway connectivity problems.
  - TEMP-DOWN—The MGCP endpoint is temporarily down.
  - DOWN—MGCP endpoint is down because GW termination has sent RSIP-down message.
  - NF—Includes INT-MAINT, IDLE, BUSY, and ACTIVE.
  - INT-MAINT—Internal error recovery is in progress.
  - IDLE—Termination is not involved in a call, but is available.
  - BUSY—Termination is involved in transient call.
  - ACTIVE—Termination is involved in stable call.
  - UEQP—Termination is not equipped.
  - ALL—Returns all possible operational states.

The following command example returns only those trunk terminations that are FA (if any):

```
status trunk-termination tgn-id=12; cic=ALL; oper-state=FA;
```

- Static State (static-state). Valid values are:
  - UEQP—Unequipped resource is not commissioned. Resource is not registered.
  - LBLK—Termination is locally blocked: either manually taken OOS/MAINT (block reason can be MANUAL-OOS, MAINT-OOS), or automatically went out of service (see block-reason: TERM-FAULT, SIG-FAULT).
  - RBLK—Termination is remotely blocked (blocked by remote side).
  - ACTV—Available.

- All—Returns all possible static states.

The following command example returns only those terminations that are locally blocked (if any):

```
status trunk-termination tgn-id=101; cic=1-24; static-state=lblk;l
```

- Dynamic State (dynamic-state). Valid values are:
  - IBSY—Trunk-termination is involved in an incoming active call.
  - OBSY—Trunk-termination is involved in an outgoing active call.
  - TRNS—Transient maintenance state (sent maintenance signaling message and waiting for response).
  - IDLE—Termination is not involved in a call.
  - IBSY-TRNS—Termination is involved in a transient call (for example, waiting to send first backward signaling message, such as ACM/ALERTING).
  - OBSY-TRNS—Termination is involved in a transient call (for example, waiting to receive first backward signaling message, such as ACM/ALERTING).
  - ALL—All possible dynamic states.

The following command example returns only those terminations that are idle (if any):

```
status trunk-termination tgn-id=101; cic=1-24; dynamic-state=idle;
```

- Off-normal State (off-normal). Valid values are:
  - Yes—Return all terminations in off-normal state.
  - No—Return all terminations in normal state.

The following command example returns only those terminations in an off-normal state (if any):

```
status trunk-termination tgn-id=101; cic=1-24; off-normal=yes;
```

A termination is in an off-normal state when it is *not* in one of the state combinations shown in [Table 1-5](#).

- Source (source)—specifies whether to query the Call Agent or the EMS, for status information. It is an optional token. Valid values are:
  - EMS (Default)—Query the local EMS database for the most current status.
  - AGENT—Query the remote Call Agent database for the most current status.

The following command example returns the current status of the Call Agent:

```
status trunk-termination tgn-id=101; cic=1-24; source=AGENT;
```

**Table 1-5** Valid Normal Trunk Termination States

| State/Token     | ADMIN-STATE | OPER-STATE | STATIC-STATE | DYNAMIC-STATE |
|-----------------|-------------|------------|--------------|---------------|
| UNEQP           | UNEQP       | ANY        | UEQP         | IDLE          |
| MANUALLY OOS    | OOS         | ANY        | LBLK         | IDLE          |
| MANUALLY MAIN   | MAINT       | IDLE       | LBLK         | IDLE          |
| IDLE            | INS         | IDLE       | ACTV         | IDLE          |
| ACTIVE INCOMING | INS         | IDLE       | ACTV         | IDLE          |
| ACTIVE OUTGOING | INS         | ACTIVE     | ACTV         | OBSY          |

**Table 1-5** Valid Normal Trunk Termination States (continued)

| State/Token           | ADMIN-STATE | OPER-STATE | STATIC-STATE | DYNAMIC-STATE |
|-----------------------|-------------|------------|--------------|---------------|
| TRANSIENT<br>INCOMING | INS         | ACTIVE     | ACTV         | IBY-TRNS      |
| TRANSIENT<br>OUTGOING | INS         | BUSY       | ACTV         | OBSY-TRNS     |

The following command example (**status tt**) returns current status in a tabular format.

```
status tt tgn-id=994; cic=all
```

Reply Example (column headings will not appear on screen):

| TGN<br>ID | CIC | ADMIN<br>STATE | OPER STATE       | STATIC<br>STATE | DYNAMIC<br>STATE | REASON     |
|-----------|-----|----------------|------------------|-----------------|------------------|------------|
| 994       | 1   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 2   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 3   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 4   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 5   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 6   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 7   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 8   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 9   | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 10  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 11  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 12  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 13  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 14  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 15  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 16  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 17  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 18  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 19  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 20  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 21  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 22  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 23  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |
| 994       | 24  | ADMIN_INS      | TERM_ACTIVE_IDLE | ACTV            | IDLE             | NON_FAULTY |

Reply : Success:

## Control Command

This section describes how to control a trunk termination.

### Command Types

Control

---

**Examples**

The following command controls one trunk termination into OOS.

```
control trunk-termination tgn-id=22; cic=1; target-state=OOS; mode=forced;
```

**Reply Example:**

Reply : Success: CLI change successful

```
TGN ID -> 22
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 1
FAIL REASON -> ADM found no failure
REQUEST STATE -> ADMIN_OOS
RESULT STATE -> ADMIN_OOS
```

The following command controls all trunk terminations for a particular CIC or group of CICs to OOS:

```
control trunk-termination tgn-id=17; cic=1-23; target-state=oos; mode=forced;
```

**Reply Example:**

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED ISDN-TRUNK-GROUP -> 17
INIT STATE -> ADMIN-OOS
FINAL STATE -> ADMIN-OOS
```

---

**Syntax Description**

The following token may be used with the trunk termination control command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

## Reset Command

This command clears all manual and blocked states as well as any active/transient calls on a trunk termination, with the exception of SS7 trunk terminations. It brings a trunk into INS mode.

Required Parameters:

- tgn-id: The trunk group ID to be reset (a number).
- CIC: Circuit Identification Code (CIC) to be reset. All, a range, or only one CIC can be reset.

---

**Examples**

The following command resets a single CIC:

```
reset trunk-termination tgn-id=22; cic=1
```

**Reply Example:**

Reply : Success:

```
TGN ID -> 13
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 24
FAIL REASON -> ADM found no failure
```

The following command resets a range of CICs:

```
reset trunk-termination tgn-id=13; cic=1-6;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED -> reset trunk-termination
```

The following command resets all CICs:

```
reset trunk-termination tgn-id=13; cic=all;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED -> reset trunk-termination
```

## Equip Command

The equip command changes the administrative state of terminations that are in the UEQP state to OOS state. It ignores the terminations in the states: INS, MAINT, or OOS.

Use the equip command or the control trunk-grp command to change the termination state for a subscriber to an ISDN trunk. The control trunk-grp command changes all trunks in the specified trunk group to the specified state. For trunk types other than ISDN, use the equip command to set the subscriber termination state. Thereafter, to change the termination state, use the control command.

A subscriber termination state must set to unequipped before it can be deleted.

You cannot use the control command to change a termination state to UEQP. Furthermore, you cannot use the control command to change the state of any subscriber termination that is already in the UEQP state.

For example, consider a case in which 24 CICs in a trunk group are in the following initial states:

- CICs 1–10 in OOS state
- CICs 11–15 in UEQP state
- CICs 16–24 in MAINT state

For this case, issuing the control, equip, or unequip commands would affect the initial state of the CICs as follows:

- If a control command is used with target-state = ins, the final states of all the CICs are:
  - CICs 1–10 in INS state
  - CICs 11–15 in UEQP state
  - CICs 16–24 in INS state
- If an equip command is applied to the CICs in the initial states, the final states of all the CICs are:
  - CICs 1–10 in OOS state

- CICs 11–15 in OOS state
- CICs 16–24 in MAINT state
- If an unequip command is applied to the CICs in the initial states, the final states of the CICs are:
  - CICs 1–10 in UEQP state
  - CICs 11–15 in UEQP state
  - CICs 16–24 in MAINT state

**Command Types**

Equip

**Examples**

Use the following command to change the termination administrative state to EQP:

```
equip trunk-termination tgn-id=13; cic=all;
```

Reply Example:

```
Reply : Success: CLI change successful
```

```
TGN ID -> 13
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 24
FAIL REASON -> ADM found no failure
```

**Syntax Description**

The following token may be used with the trunk termination equip command:

- WAIT (Release 4.5)—Specifies a waiting period so that previously issued provisioning commands (for example, an add command) can complete before a status, control, or equip command executes. CHAR(1): Y/N (Default = N).
  - Y—System checks whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. The provisioning commands are allowed to execute before the status, control, or equip command is executed.
  - N—System does not check whether there are any pending provisioning requests in the transaction queue issued before the status, control or equip command. All commands execute according to their order in the transaction queue.

**Unequip Command**

The unequip command changes the administrative state of terminations that are in OOS state into UEQP state. It ignores the terminations in the states: INS, MAINT, or UEQP.

**Command Types**

Unequip

**Examples**

```
unequip trunk-termination tgn-id=13; cic=all;
```

Reply Example:

```
Reply : Success: CLI change successful

TGN ID -> 13
REASON -> ADM executed successful
RESULT -> ADM configure result in success
CIC START -> 1
CIC END -> 24
```

## Diagnostic Tests

This section describes diagnostic tests that can be performed on media gateways, subscriber terminations, and trunk terminations. SS7 COT, CVM, and CQM tests must be performed while in service. All other tests require the MAINT state for testing.

Use the following command example to force a media gateway into the MAINT state:

```
control mgw id=c2421.65; mode=forced; target-state=maint;
```

Reply Example:

```
Reply : Success: CLI change successful

MGW ID -> c2421.65
INITIAL STATE -> ADMIN_INS
REQUEST STATE -> ADMIN_MAINT
RESULT STATE -> ADMIN_MAINT
FAIL REASON -> ADM found no failure
REASON -> ADM executed successful
RESULT -> ADM configure result in success
```

## Media Gateway Tests

This section describes the tests that can be performed on media gateways. The gateway must be in the MAINT state.

### Test Menu

This section describes how to display the Test Menu.

---

#### Command Types

diag

---

#### Examples

```
diag mgw;
```

Reply Example:

```
Reply: Diagnostic MGW Menu.
===
(1) MGW Network Connectivity Test
(2) MGW MGCP Connectivity Test
(3) ALL
```

**Note**

Test #1 tests if there is a path to the device (ping).  
 Test #2 tests if MGCP has access to the device.  
 Test #3 performs tests 1 and 2.

## Tests

This section describes how to perform a specific test.

### Command Types

diag

### Examples

```
diag mgw id=ubr-03; test=1;
```

**Reply Example:**

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-NETW-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

```
diag mgw id=ubr-03; test=2;
```

**Reply Example:**

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

```
diag mgw id=ubr-03; test=3;
```

**Reply Example:**

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-NETW-CONNECTIVITY-TEST
TEST-DURATION -> 11
RESULT -> TEST-SUCCESS
REASON -> PASSED
```

```
MEDIA GATEWAY LINE DIAGNOSTIC TEST EXECUTED -> diag mgw
ID -> ubr-03
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

## Subscriber Termination Tests

This section describes the tests that can be performed on subscriber terminations. All terminations must be in the MAINT state.

### Test Menu

This section describes how to display the Test Menu.

---

**Command Types**

diag

---

**Examples**

```
diag subscriber-termination;
```

Reply Example:

```
Reply: Diagnostic Subscriber Menu.
===
(1) Subscriber MGCP Connectivity Test
(2) Subscriber Termination Connection Test
(3) Subscriber Termination Ring Test
(4) ALL
```

**Note**

---

Test #1 tests if MGCP has access to the termination.  
Test #2 tests if there is a path to the device (ping).  
Test #3 tests if the Subscriber can be rung. The Ring parameter must be specified in seconds for this test. The default is 5 seconds.  
Test #4 performs tests 1 through 3.

---

### Tests

This section describes how to perform a specific test.

---

**Command Types**

diag

---

**Examples**

```
diag subscriber-termination id=sub2-ctx2; test=1;
```

Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub2-ctx2
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 10
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag subscriber-termination id=sub-ubr3-1@cisco.com; test=2;
```

Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub-ubr3-1@Cisco.com
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 55
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag subscriber-termination id=sub-ubr3-1@cisco.com; test=3; ring-duration=10;
```

#### Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub-ubr3-1@Cisco.com
TEST-TYPE -> ADM-TERM-RING-TEST
TEST-DURATION -> 9989
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

```
diag subscriber-termination id=sub-ubr3-1@cisco.com; test=3; ring-duration=10;
```

•



#### Note

RING-DURATION—Specifies the ring duration in seconds. INTEGER(2): 1–40 (Default = 10). (Release 4.5.1)

Ring-duration values are 0–999 (Default = 5). Maximum ring time is 30 seconds regardless of whether the duration is set higher than or equal to 31 .

#### Reply Example:

```
SUBSCRIBER LINE DIAGNOSTIC TEST EXECUTED -> diag subscriber-termination
ID -> sub-ubr3-1@Cisco.com
TEST-TYPE -> ADM-TERM-RING-TEST
TEST-DURATION -> 9896
RESULT -> TEST-SUCCESS
REASON -> PASSED
Reply: Diagnostic command executed.
```

## Trunk Termination Tests

This section describes diagnostic tests that can be performed on trunk terminations. All must be in the MAINT state for testing. Trunk termination tests are done by trunk type.

### SS7 Trunk Termination Tests

This section describes the tests that can be performed on SS7 trunk terminations.

#### Test Menu

This section describes how to display the Test Menu.

**Note**

Set COT, CVM, and CQM on the terminating gateway or switch to perform these tests. The terminating gateway or switch must be INS. Otherwise, the test or tests will fail. COT must also be set in the SS7 trunk-grp-profile to run COT test.

**Examples**

```
diag ss7-trunk-termination tgn-ID=50079; cic=1
```

Reply Example:

Reply: Diagnostic SS7 Trunk Group Menu.

===

- (1) SS7 MGCP Connectivity Test
- (2) SS7 Termination Connection Test
- (3) SS7 COT Test
- (4) SS7 CQM Test
- (5) SS7 CVT Test
- (6) SS7 CIC Audit
- (7) ALL

**Note**

Test #1 tests if MGCP has access to the SS7 trunk termination.

Test #2 tests if there is a path to the device (ping).

Test #3 tests the integrity of the SS7 Bearer Path.

Test #4 queries the SS7 circuit (or group of circuits) status. A range of CICs can be specified (to a maximum of twenty four). Both remote and local trunk states are displayed in the results.

Test #5 tests to ensure that each end of the circuit has sufficient and consistent information for using the circuit in call connections. CLLI names are included.

Test #6 performs CIC audit.

Test #6 performs tests 1 through 6.

**CQM Responses**

Table 1-6 lists the responses that can be returned for the CQM test.

**Table 1-6 CQM Responses**

| Response             | Description                                                |
|----------------------|------------------------------------------------------------|
| CS_TRANSIENT         | Transient                                                  |
| CS_UNEQUIPPED        | Unequipped                                                 |
| CS_IC_BUSY           | Incoming Busy                                              |
| CS_IC_BUSY_LOCBLOC   | Incoming Busy and Locally Maintenance Blocked              |
| CS_IC_BUSY_REMBLOC   | Incoming Busy and Remotely Maintenance Blocked             |
| CS_IC_BUSY_BOTH_BLOC | Incoming Busy and Remotely and Locally Maintenance Blocked |
| CS_OG_BUSY           | Outgoing Busy                                              |
| CS_OG_BUSY_LOCBLOC   | Outgoing Busy and Locally Maintenance Blocked              |
| CS_OG_BUSY_REMBLOC   | Outgoing Busy and Remotely Maintenance Blocked             |

**Table 1-6 CQM Responses (continued)**

| Response                | Description                                                                |
|-------------------------|----------------------------------------------------------------------------|
| CS_OG_BUSY_BOTH_BLOC    | Outgoing Busy and Remotely and Locally Maintenance Blocked                 |
| CS_IDLE                 | Idle                                                                       |
| CS_IDLE_LOCBLOC         | Idle and Locally Maintenance Blocked                                       |
| CS_IDLE_REMBLOC         | Idle and Remotely maintenance blocked                                      |
| CS_IDLE_BOTH_BLOC       | Idle and Remotely and Locally Maintenance Blocked                          |
| CS_HW_LOCBLOC           | Locally Hardware Blocked                                                   |
| CS_HW_LOCBLOC_LOCBLOC   | Locally Hardware and Locally Maintenance Blocked                           |
| CS_HW_LOCBLOC_REMBLOC   | Locally Hardware and Remotely Maintenance Blocked                          |
| CS_HW_LOCBLOC_BOTHBLOC  | Locally Hardware and Remotely and Locally Maintenance Blocked              |
| CS_HW_REMBLOC           | Remotely Hardware Blocked                                                  |
| CS_HW_REMBLOC_LOCBLOC   | Remotely Hardware and Locally Maintenance Blocked                          |
| CS_HW_REMBLOC_REMBLOC   | Remotely Hardware and Remotely Maintenance Blocked                         |
| CS_HW_REMBLOC_BOTHBLOC  | Remotely Hardware and Remotely and Locally Maintenance Blocked             |
| CS_HW_BOTHBLOC          | Remotely and Locally Hardware Blocked                                      |
| CS_HW_BOTHBLOC_LOCBLOC  | Remotely and Locally Hardware and Locally Maintenance Blocked              |
| CS_HW_BOTHBLOC_REMBLOC  | Remotely and Locally Hardware and Remotely Maintenance Blocked             |
| CS_HW_BOTHBLOC_BOTHBLOC | Remotely and Locally Hardware and Remotely and Locally Maintenance Blocked |

## Tests

This section describes how to perform specific tests.

### Command Types

Diag

### Examples

```
diag ss7-trunk-termination tgn-id=103; cic=13; test=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 103
CIC -> 13
```

```
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag ss7-trunk-termination tgn-id=103; cic=13; test=2;
```

#### Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 103
CIC -> 13
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 33
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag ss7-trunk-termination tgn-id=103; cic=14; test=3;
```

#### Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 103
CIC -> 14
TEST-TYPE -> ADM-SS7-COT-TEST
TEST-DURATION -> 0
RESULT -> TEST-FAILURE
REASON -> ADM-MAINT-STATE-REQUIRED
Reply: Diagnostic command executed.
```

```
diag ss7-trunk-termination tgn-id=2;cic=1-24;test=4
```

#### Reply Example:

Reply : Success:

```
TGN ID -> 2
START CIC -> 1
END CIC -> 24
TEST TYPE -> ADM running SS7 circuit query message test
TEST DURATION -> 0
RESULT -> ADM ran test successsfully
REASON -> CQM test pass
CIC COUNT -> 24
CIC STATES ->
```

| Remote State      | Local State |
|-------------------|-------------|
| CIC 1 -> CS_IDLE  | ACTV IDLE   |
| CIC 2 -> CS_IDLE  | ACTV IDLE   |
| CIC 3 -> CS_IDLE  | ACTV IDLE   |
| CIC 4 -> CS_IDLE  | ACTV IDLE   |
| CIC 5 -> CS_IDLE  | ACTV IDLE   |
| CIC 6 -> CS_IDLE  | ACTV IDLE   |
| CIC 7 -> CS_IDLE  | ACTV IDLE   |
| CIC 8 -> CS_IDLE  | ACTV IDLE   |
| CIC 9 -> CS_IDLE  | ACTV IDLE   |
| CIC 10 -> CS_IDLE | ACTV IDLE   |
| CIC 11 -> CS_IDLE | ACTV IDLE   |

```

CIC 12 -> CS_IDLE   ACTV   IDLE
CIC 13 -> CS_IDLE   ACTV   IDLE
CIC 14 -> CS_IDLE   ACTV   IDLE
CIC 15 -> CS_IDLE   ACTV   IDLE
CIC 16 -> CS_IDLE   ACTV   IDLE
CIC 17 -> CS_IDLE   ACTV   IDLE
CIC 18 -> CS_IDLE   ACTV   IDLE
CIC 19 -> CS_IDLE   ACTV   IDLE
CIC 20 -> CS_IDLE   ACTV   IDLE
CIC 21 -> CS_IDLE   ACTV   IDLE
CIC 22 -> CS_IDLE   ACTV   IDLE
CIC 23 -> CS_IDLE   ACTV   IDLE
CIC 24 -> CS_IDLE   ACTV   IDLE

```

```
diag ss7-trunk-termination tgn-id=2;cic=1;test=5;
```

#### Reply Example:

Reply : Success:

```

TGN ID -> 2
START CIC -> 1
END CIC -> 1
TEST TYPE -> ADM running SS7 circuit validation test
TEST DURATION -> 0
RESULT -> ADM ran test successfully
REASON -> CVT test pass
CLLI -> DALLTXRCDN5

```

## ISDN Trunk Termination Tests

This section describes the tests that can be performed on ISDN trunk terminations.

### Test Menu

This section describes how to display the Test Menu.

#### Examples

```
diag isdn-trunk-termination tgn-id=17; cic=1;
```

#### Reply Example:

```

Reply: Diagnostic ISDN Trunk Group Menu.
===
(1) ISDN MGCP Connectivity Test
(2) ISDN Termination Connection Test
(3) ALL

```



#### Note

Test #1 tests if MGCP has access to the ISDN termination.  
 Test #2 tests if there is a path to the device (ping).  
 Test #3 performs tests 1 and 2.

## Tests

This section describes how to perform a specific test.

### Command Types

Diag

### Examples

```
diag isdn-trunk-termination test=1; tgn-id=17; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 17
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag isdn-trunk-termination test=2; tgn-id=17; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 17
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

## CAS Trunk Termination Tests

This section describes the tests that can be performed on CAS trunk terminations.

### Test Menu

This section describes how to display the Test Menu.

### Examples

```
diag cas-trunk-termination; tgn-id=64; cic=1;
```

Reply Example:

```
Reply: Diagnostic CAS Trunk Group Menu.
===
(1) CAS MGCP Connectivity Test
(2) CAS Termination Connection Test
(3) ALL
```



#### Note

Test #1 tests if MGCP has access to the CAS termination.  
 Test #2 tests if there is a path to the device (ping).  
 Test #3 performs tests 1 and 2.

## Tests

This section describes how to perform a specific test.

### Command Types

Diag

### Examples

```
diag cas-trunk-termination tgn-id=64;cic=1;test=1;
```

#### Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag cas-trunk-termination tgn-id=64;cic=1;test=2;
```

#### Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 32
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag cas-trunk-termination tgn-id=64;cic=1;test=3;
```

#### Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 11
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
```

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 64
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 32
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

## Announcement Trunk Termination Tests

This section describes the tests that can be performed on Announcement trunk terminations.

## Test Menu

This section describes how to display the Test Menu.

### Examples

```
diag annc-trunk-termination; tgn-id=13; cic=1
```

Reply Example:

```
Reply: Diagnostic ANC Trunk Group Menu.
===
(1) ANC MGCP Connectivity Test
(2) ANC Termination Connection Test
(3) ALL
```



#### Note

Test #1 tests if MGCP has access to the ANC termination.  
 Test #2 tests if there is a path to the device (ping).  
 Test #3 performs tests 1 and 2.

## Tests

This section describes how to perform a specific test.

### Command Types

Diag

### Examples

```
diag annc-trunk-termination; test=1; tgn-id=13; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 0
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
Reply: Diagnostic command executed.
```

```
diag annc-trunk-termination; test=2; tgn-id=13; cic=1
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 33
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

```
diag annc-trunk-termination; test=3; tgn-id=13; cic=1;
```

Reply Example:

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-MGW-MGCP-CONNECTIVITY-TEST
TEST-DURATION -> 11
RESULT -> TEST-SUCCESS
REASON -> PASSED: Reason: AUEP-NACK received with RespCode = 510
```

```
TRUNK DIAGNOSTIC TEST EXECUTED -> diag trunk
TG-NUM -> 13
CIC -> 1
TEST-TYPE -> ADM-TERM-CONNECTION-TEST
TEST-DURATION -> 33
RESULT -> TEST-SUCCESS
REASON -> PASS successfully.
Reply: Diagnostic command executed.
```

## Hardware Monitoring

The Hardware Monitor (HMN) subsystem monitors the CPUs, memory consumption, disk, and disk control utilization and returns information and alarms as appropriate.

### Command Types

Show, change, control, report, and status



#### Caution

Show and change and control are obsolete as of Release 4.4.0.

### Examples

```
show node node=CA146; service=ssh (Obsoleted as of Release 4.4.0)
change node node=CA146; service=ftp; enable=Y (Obsoleted as of Release 4.4.0)_
```



#### Caution

Altering node settings after the delivery of a Cisco BTS 10200 Softswitch can create security issues in your network.



#### Caution

```
control node node=CA146; action=HALT; (Obsoleted as of Release 4.4.0)
```

Modifying nodes are low-level maintenance activities.



#### Note

After halting a Cisco BTS 10200 Softswitch node, local console access or a power cycle may be required to restart the node.

```
report node node=CA146
status node node=CA146;cpu=y;memory=y;
```

### Examples

```
report node node=priems123;
report node;
status node node=priems123;cpu=y;memory=y;
status node;
```

**Note**

The hostname is the only permitted value for the node token.

**Usage Guidelines**

Primary Key Token(s): None

If the report and status commands are entered with no tokens then the commands are executed on the active EMS.

**Note**

In the Syntax Description, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

**Syntax Description**

|                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * NODE                                                                                                                                                                                                                                                                                | The logical host name of the target node in the Cisco BTS 10200 Softswitch. This replaces manually telneting to the box. Use only the hostname (priemsxxx) not the application name (for example, CA146).                 |
| <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <b>Caution</b> For security purposes, Telnet is no longer supported as of Release 4.4.0/1.         </div> </div> |                                                                                                                                                                                                                           |
| STRING: Hostname in the format: priemsxxx.                                                                                                                                                                                                                                            |                                                                                                                                                                                                                           |
| ACTION                                                                                                                                                                                                                                                                                | Valid only for the control command. The <i>action</i> indicates the type of activity to perform. Both parameters are required.<br><br>STRING: <i>REBOOT</i> , or <i>HALT</i> , are the only valid actions for this token. |
| CPU                                                                                                                                                                                                                                                                                   | Valid only for the status and report commands. Specifies whether to generate a report of CPU utilization.<br><br>STRING: Y/N (Default = Y).                                                                               |
| ENABLE (Obsolete as of Release 4.4.0)                                                                                                                                                                                                                                                 | Valid only for the change command. Specifies whether to turn a service on (Y), or off (N).<br><br>STRING: Y/N (Default = Y).                                                                                              |
| MEMORY                                                                                                                                                                                                                                                                                | Valid only for the status and report commands. Specifies whether to generate a report of memory utilization.<br><br>STRING: Y/N (Default = Y).                                                                            |
| NETWORK                                                                                                                                                                                                                                                                               | Valid only for the status and report commands. Specifies whether to generate a report of network utilization.<br><br>STRING: Y/N (Default = Y).                                                                           |

|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PROCESS                                                                           | Valid only for the status and report commands. Specifies whether to generate a report of process utilization.<br>STRING: Y/N (Default = Y).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| SERVICE (Obsolete as of Release 4.4.0)                                            | Valid only for the show and change commands. Specifies the standard UNIX service.<br>STRING: any valid UNIX service. Permitted values are:<br>ftp—File Transfer Protocol<br>telnet—Text-based terminal service                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Caution</b>                                                                    | For security purposes, Telnet is no longer supported as of Release 4.4.0/1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                   | echo—Application space service to verify a remote host<br>discard—Solaris testing facility<br>day—Solaris testing facility<br>time—Solaris testing facility<br>chargen—Solaris testing facility<br>smtp—Solaris mail service<br>finger—UNIX user ID service<br>sunrpc—Solaris Remote Procedure Call service<br>exec—Remote execution service<br>login—BSD remote login service<br>shell—BSD remote shell service<br>printer—Solaris printer services<br>uucp—UNIX-to-UNIX copy service<br>nfs—Network File System service<br>lockd—Remote file locking facility<br>x11—X Window graphical services<br>dtscp—Solaris management services<br>font_service—Solaris character set service<br>http—Hyper-Text Transfer Protocol service |
| <b>Note</b>                                                                       | These values must be entered in lowercase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## System Health

The System Health Report (system-health) (SHR) allows a service provider to retrieve the status of various processes within the Cisco BTS 10200 Softswitch.

**Command Types** Report

**Examples**

Use the following command example to run a SHR immediately.

```
report system-health period=720;
```

**Syntax Description**

|        |                                                                                   |
|--------|-----------------------------------------------------------------------------------|
| PERIOD | The amount of time to collect back to in hours.<br>INTEGER: 1–720 (Default = 24). |
|--------|-----------------------------------------------------------------------------------|

The SHR command can be used in conjunction with the command scheduler. Using the command scheduler, the SHR runs at periodic intervals collecting the last 24 hours (configurable) worth of data. Upon initial installation and startup, there is an SHR command already scheduled to execute at midnight every 24 hours.

To schedule multiple SHR command(s) at different times, the command scheduler add command can be issued multiple times:

```
add scheduled-command verb=report; noun=system-health; <recurrence=DAILY>; <start-time=...>;  
<keys=period>; <values=...>
```

Use the following command to remove any scheduled SHR command(s):

```
delete scheduled-command id=NNN
```

To obtain an id, view the list of scheduled commands using the show scheduled command:

```
show scheduled-command verb=report; noun=system-health
```

To reschedule an SHR command at another time, change the recurrence, or change the collection period, use the change command:

```
change scheduled-command id=NNN; <recurrence=DAILY>; <start-time=...>; <keys=period>;  
<values=...>
```





## CHAPTER 2

# Alarms and Events

---

Revised: July 24, 2009, OL-3743-42

This chapter describes Cisco BTS 10200 Softswitch alarms and events. This chapter is divided into three parts:

- Alarm or Event Log Command—The Log command is valid for both alarms and events.
- Alarms—Valid alarm commands.
- Events—Valid event commands.



### Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Alarm or Event Log Command

This command is valid for both alarms and events. The Alarm Log command requests a summary report of alarms by severity, type, and start/stop times from the Alarm Log (alarm-log) table. Alarms are events with severities of minor, major, or critical. Substituting Event for Alarm returns a summary report of events by severity, type, and start/stop times from the Event Log (event-log) table.

Table Name: ALARM-LOG or EVENT-LOG

Table Containment Area: OAMP

---

### Command Types

Show

---

### Examples

```
show alarm-log
show event-log
```

---

### Usage Guidelines

Primary Key Token(s): id

Change Rules: None.

**Syntax Description**

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ID (System generated) | <p>Primary key. A unique integer value that identifies the specific event or alarm in the log.</p> <p>INTEGER: 12-digit number.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| TYPE                  | <p>Type of event to show in the alarm summary. Only one type is selectable at a time.</p> <p>VARCHAR(12): 1–12 ASCII characters. Permitted values are:</p> <p>AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined.</p> <p>BILLING (Billing data alarms)—This includes the generation, collection, and retrieval of billing call events.</p> <p>CALLP (Call processing alarms)—Alarm types dealing with the processing of actual call data.</p> <p>CONFIG (Configuration alarms)—Alarm types dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management.</p> <p>DATABASE (Database alarms)—Alarm types dealing with database activity. Includes table download, reading, and writing.</p> <p>MAINTENANCE (Maintenance alarms)—Alarm types dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components.</p> <p>OSS (Operating system services)—Alarm types dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system.</p> <p>SECURITY (Security alarms)—Alarm types dealing with access to the system through both human interfaces and machine interfaces.</p> <p>SIGNALING (Signaling alarms)—Alarm types dealing with protocol stacks such as MGCP and TDM interfaces like SS7.</p> <p>STATISTICS (Statistical alarms)—Alarm types dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data.</p> <p>SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging.</p> |
| ALARM-STATUS          | <p>Status of an alarm.</p> <p>VARCHAR(12): 1–12 ASCII characters. Permitted values are:</p> <p>ON</p> <p>OFF</p> <p>ACKNOWLEDGED</p> <p>IGNORED</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|              |                                                                                                                                                                                                                                                                                                                   |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AUTO-REFRESH | <p>Specifies whether to display cached data on the screen. Valid only for the show command.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p>                       |
| DISPLAY      | <p>Specifies what token information to display on the screen. Valid only for the show command.</p> <p>VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p>       |
| END-TIME     | <p>Ending time for alarm summary. Enter all 19 ASCII characters as shown.</p> <p>DATE: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                   |
| LIMIT        | <p>Specifies the number of rows to display on the screen. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 100000000).</p> <p><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.</p>                                   |
| NUMBER       | <p>Numerical identifier of the event to clear or query.</p> <p>NUMERIC: 1–150.</p> <p>NUMERIC: 1–500 (Release 4.5).</p>                                                                                                                                                                                           |
| ORDER        | <p>Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> |
| ORIGIN       | <p>Process that originated the alarm, for example: pmg, mga, and so forth.</p> <p>VARCHAR(12): 1–12 ASCII characters.</p>                                                                                                                                                                                         |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SEVERITY   | <p>Level of alarm or event to show in the summary.</p> <p>VARCHAR(8): 1–8 ASCII characters. Permitted values are:</p> <p>INFO (Information level)—Provides only added data to the general processing of an event report. Selecting Info turns on Info and all the levels above it (Warn, Minor, Major, and Critical).</p> <p>WARNING (Warning level)—Indicates that some potential service degradation is occurring as a result of internal or external processing. At this level, processing is able to continue. Turns on Warn and all the levels above it (Minor, Major, and Critical).</p> <p>MINOR (Minor level)—Indicates that some loss of capacity or availability has occurred. An example is the loss of an Ethernet link or a software outage. Selecting Minor turns on Minor and all the levels above it (Minor, Major, and Critical).</p> <p>MAJOR (Major level)—Indicates a loss of capacity or availability. It refers to a larger loss than Minor or an escalation of some earlier alarm. Selecting Major turns on Major and Critical.</p> <p>CRITICAL (Critical level)—Indicates a catastrophic condition in the system that requires operator attention and potential supervision over the situation. This can be an outage or complete loss of service somewhere in the system. Selecting Critical turns on Critical only.</p> |
| START-ROW  | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| START-TIME | <p>Starting time for alarm summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Alarm events are available for the current and previous calendar days only. Level indicates the minimum level to show in the report summary.</p> <p>DATE: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Alarm or Event Report Properties

The Report Properties (report-properties) command (formerly Alarm-logsize or Event-logsize) specifies the maximum number of alarm or event entries permitted (up to 30,000) in the Report Properties (report-properties) table. It also specifies the minimum event severity level to be stored in the Event Log.

Table Name: REPORT-PROPERTIES

Table Containment Area: OAMP

### Command Types

Show and change

**Examples**

```
show report-properties;
```

**Note**

The show command, without any tokens, returns all alarm-logsize, event-logsize, and event-level data.

```
change report-properties type=alarm-logsize; value=1234
```

```
change report-properties type=event-logsize; value=5000
```

**Usage Guidelines**

Primary Key Token(s): None.

Change Rules: None.

**Syntax Description**

|              |                                                                                                                                                                                                                                                                                                                          |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE         | Optional for show; mandatory for change. Primary key. Type of alarm or event.<br>VARCHAR(12): 1–12 ASCII characters. Permitted values are:<br>ALARM-LOGSIZE<br>EVENT-LOGSIZE<br>EVENT-LEVEL                                                                                                                              |
| VALUE        | Optional for show; mandatory for change. Property value. Do not enter commas.<br>VARCHAR(12): 1–12 ASCII characters. For type=alarm-logsize or event-logsize, valid values are 1–30000. For type=event-level, valid values are INFO, WARNING, MINOR, MAJOR, CRITICAL (or the minimum level of events stored in the log). |
| AUTO-REFRESH | Specifies whether to display cached data on the screen. Valid only for the show command.<br>CHAR(1): Y/N (Default = Y).<br>Y—Queries the database for the most current data.<br>N—Queries the database for the most current data only if the cached data is unavailable.                                                 |
| DISPLAY      | Specifies what token information to display on the screen. Valid only for the show command.<br>VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                         |
| LIMIT        | Specifies the number of rows to display on the screen. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 100000000).<br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                                         |
| ORDER        | Specifies whether to display data on the screen in a sorted order. Valid only for the show command.<br>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                   |
| START-ROW    | Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 1).                                                                                                                                                                              |

# Alarms

Alarms are a subset of events and indicate a problem with the system.

## Alarm

The Alarm (alarm) command shows, clears, and acknowledges specific alarms on specific nodes.

Table Name: ALARM

Table Containment Area: OAMP

### Command Types

Show, ack, and clear

### Examples

```
show alarm;
clear alarm id=123;
ack alarm id=123;
```

### Usage Guidelines

Primary Key Token(s): id

Change Rules: None.

### Syntax Description

|                       |                                                                                                                                                                                                                                                                                                      |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ID (System generated) | Primary key. A unique integer value that identifies the specific alarm in the log.<br>INTEGER: 12-digit number.                                                                                                                                                                                      |
| AUTO-REFRESH          | Specifies whether to display cached data on the screen. Valid only for the show command.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Queries the database for the most current data.<br><br>N—Queries the database for the most current data only if the cached data is unavailable.                 |
| DISPLAY               | Specifies what token information to display on the screen. Valid only for the show command.<br><br>VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| END-TIME              | Ending time for alarm summary. Enter all 19 ASCII characters as shown.<br>DATE: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                 |
| LIMIT                 | Specifies the number of rows to display on the screen. Valid only for the show command.<br><br>INTEGER: 1–100000000 (Default = 100000000).<br><br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                             |

|            |                                                                                                                                                                                                                                                                                                            |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER     | Numerical identifier of the alarm to clear or query.<br>INTEGER: 1–200.                                                                                                                                                                                                                                    |
| ORDER      | Specifies whether to display data on the screen in a sorted order. Valid only for the show command.<br><br>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| START-ROW  | Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.<br><br>INTEGER: 1–100000000 (Default = 1).                                                                                                                                                            |
| START-TIME | Starting time for alarm summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Alarm events are available for the current and previous calendar days only. Level indicates the minimum level to show in the report summary.<br><br>DATE: YYYY-MM-DD HH:MM:SS.             |

## Alarm Report

The Alarm Report (alarm-report) command provides the ability to subscribe or unsubscribe to each level and type of alarm report.

Table Containment Area: OAMP

### Command Types

Subscribe and unsubscribe



#### Note

When you subscribe to alarms or events, they take over the screen as they happen, which can interrupt other commands.

### Examples

```
subscribe alarm-report severity=major; type=callp,config;
unsubscribe alarm-report severity=major,critical; type=all;
```

### Usage Guidelines

Primary Key Token(s): None.

**Syntax Description**

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SEVERITY | <p>Specifies the minimum severity of an alarm report to subscribe to or unsubscribe from.</p> <p>VARCHAR(8): 1–8 ASCII characters. Permitted values are:</p> <p>MINOR (Minor severity)—Indicates that some loss of capacity or availability occurred. An example is the loss of an Ethernet link or a software outage. Selecting Minor turns on Minor and all the levels above it (Minor, Major, and Critical).</p> <p>MAJOR (Major severity)—Indicates a loss of capacity or availability. This is a larger loss than Minor or an escalation of an earlier alarm. Selecting Major turns on Major and Critical.</p> <p>CRITICAL (Critical severity)—Indicates a catastrophic condition in the system that requires operator attention and potential supervision over the situation. This can be an outage or a complete loss of service somewhere in the system. Selecting Critical only turns on Critical.</p> <p>ALL—Turns on all severities.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| TYPE     | <p>Type of alarm report to subscribe to or unsubscribe from.</p> <p>VARCHAR(12): 1–12 ASCII characters. Permitted values are:</p> <p>AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined.</p> <p>BILLING (Billing alarms)—Alarms dealing with bill data. This includes the generation, collection, and retrieval of billing call events.</p> <p>CALLP (Call processing alarms)—Alarm types dealing with the processing of actual call data.</p> <p>CONFIG (Configuration alarms)—Alarm types dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management.</p> <p>DATABASE (Database alarms)—Alarm types dealing with database activity. Includes table download, reading, and writing.</p> <p>MAINTENANCE (Maintenance alarms)—Alarm types dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components.</p> <p>OSS (Operating System Services)—Alarm types dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system.</p> <p>SECURITY (Security alarms)—Alarm types dealing with access to the system through both human interfaces and machine interfaces.</p> <p>SIGNALING (Signaling alarms)—Alarm types dealing with protocol stacks such as MGCP and TDM interfaces such as SS7.</p> <p>STATISTICS (Statistical alarms)—Alarm types dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data.</p> <p>SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging.</p> <p>ALL—Turns on all of the above.</p> |

# Events

Cisco BTS 10200 Softswitch events are indications that something has happened with the system.

## Event Provisioning

The Event Provisioning (event-prov) command uses the Report Parameters (reportparameters) table to provision threshold and throttling values for any event that can be issued by the system.

Table Name: REPORTPARAMETERS

Table Containment Area: OAMP

---

### Command Types

Show and change

---

### Examples

```
show event-prov type=callp; number=20;
```



**Note** The show command also displays the descriptive string and the data labels for the specified data words.

```
change event-prov type=callp; number=20; threshold=95; throttle=1;
```

---

### Usage Guidelines

Primary Key Token(s): type, number

Change Rules: None.

Other Rules: Type and number are the only valid tokens for this command. The limit, start-row, display, order, threshold and throttle tokens cannot be used with the show event-prov command—returns the error message “invalid key(s) found.”

**Syntax Description**

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NUMBER       | Primary key. Unique instance within the event category.<br>NUMERIC: 1–200.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| TYPE         | Primary key. Event category.<br>VARCHAR(12): 1–12 ASCII characters. Permitted values are:<br><br>CALLP (Call processing events)—Events dealing with the processing of actual call data.<br><br>CONFIG (Configuration events)—Events dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management.<br><br>DATABASE (Database events)—Events dealing with database activity. Includes table download, reading, and writing.<br><br>MAINTENANCE (Maintenance events)—Events dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components.<br><br>OSS (Operating System Services events)—Events dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system.<br><br>SECURITY (Security events)—Events dealing with access to the system through both human interfaces and machine interfaces.<br><br>SIGNALING (Signaling events)—Events dealing with protocol stacks such as MGCP and TDM interfaces like SS7.<br><br>STATISTICS (Statistical events)—Events dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data.<br><br>BILLING (Billing events)—Events dealing with billing data. This includes the generation, collection, and retrieval of billing call events.<br><br>AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined.<br><br>SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging. |
| AUTO-REFRESH | Specifies whether to display cached data on the screen. Valid only for the show command.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Queries the database for the most current data.<br><br>N—Queries the database for the most current data only if the cached data is unavailable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| DISPLAY      | Specifies what token information to display on the screen. Valid only for the show command.<br><br>VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LIMIT     | <p>Specifies the number of rows to display on the screen. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 100000000).</p> <p><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ORDER     | <p>Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p>                                                                                                                                                                                                                                                                                                                                                                                                                         |
| START-ROW | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| THRESHOLD | <p>Mandatory for change. Specifies the maximum number of events, (as identified by its type and number) to be reported for a 30-minute interval. Specifying the value zero establishes no threshold; therefore, every event of the specified type and number would be reported during the 30-minute interval. Specifying the default value of 100 would enable the Cisco BTS 10200 Softswitch to report the first 100 events of the specified type and number during the 30-minute interval but no more until the beginning of the next interval. If both the threshold and throttle parameters are specified, the throttle parameter is applied before the threshold parameter is considered.</p> <p>NUMERIC: 0–100 (Default = 100).</p> |
| THROTTLE  | <p>Mandatory for change. Reporting reduction factor. For any throttle value, <i>n</i>, the system issues only one report for every <i>n</i> event for the specified event. When setting both throttle and threshold, the throttle value is applied before the threshold values.</p> <p>NUMERIC: 0–100 (Default = 0). A throttle set to zero means no throttling.</p>                                                                                                                                                                                                                                                                                                                                                                      |

## Event Report

The Event Report (event-report) command provides the ability to view events in a near real-time format by subscribing or unsubscribing to each level and type of event report.

Table Containment Area: OAMP

### Command Types

Subscribe and unsubscribe

### Examples



#### Note

```
subscribe event-report severity=info; type=callp;
```

When you subscribe to alarms or events, they take over the screen as they happen, which can interrupt other commands.

```
unsubscribe event-report severity=info, warn; type=callp;
```

---

**Usage Guidelines**

Primary Key Token(s): None.

---

**Syntax Description**

---

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SEVERITY | <p>Specifies the minimum severity of event report to be subscribed to or unsubscribed from.</p> <p>VARCHAR(8): 1–8 ASCII characters. Permitted values are:</p> <p>INFO (Information severity)—Provides only added data to the general processing of an event report. Selecting Info turns on Info and all the levels above it (Warn, Minor, Major, and Critical).</p> <p>WARNING (Warning severity)—Indicates that some potential service degradation is occurring as a result of internal or external processing. At this level, processing is able to continue. Turns on Warn and all the levels above it (Minor, Major, and Critical).</p> <p>MINOR (Minor severity)—Indicates some loss of capacity or availability has occurred. An example is the loss of an Ethernet link or a software outage. Selecting Minor turns on Minor and all the levels above it (Major and Critical).</p> <p>MAJOR (Major severity)—Indicates a loss of capacity or availability. It refers to a larger loss than Minor or an escalation of some earlier alarm. Selecting Major turns on Major and Critical.</p> <p>CRITICAL (Critical severity)—A catastrophic condition in the system that requires operator attention and potential supervision over the situation. This can be an outage or complete loss of service somewhere in the system. Selecting Critical turns on Critical only.</p> <p>ALL—Turns on all severities.</p> |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE | <p>Type of event report to be subscribed to or unsubscribed from.</p> <p>VARCHAR(12): 1–12 ASCII characters. Permitted values are:</p> <p>CALLP (Call processing events)—Events dealing with the processing of actual call data.</p> <p>CONFIG (Configuration events)—Events dealing with the provisioning aspects of the system. Includes all activity such as system devices and facility management.</p> <p>DATABASE (Database events)—Events dealing with database activity. Includes table download, reading, and writing.</p> <p>MAINTENANCE (Maintenance events)—Events dealing with fault handling and diagnostic areas. Includes test facilities and the health of hardware and software components.</p> <p>OSS (Operating System Services events)—Events dealing with the Cisco BTS 10200 Softswitch external interfaces that are on the northbound side of the system. This does not include southbound components in the system.</p> <p>SECURITY (Security events)—Events dealing with access to the system through both human interfaces and machine interfaces.</p> <p>SIGNALING (Signaling events)—Events dealing with protocols stacks such as MGCP and TDM interfaces like SS7.</p> <p>STATISTICS (Statistical events)—Events dealing with the accumulation, collection, and reporting of measurements in the system. This includes traffic and performance data.</p> <p>BILLING (Billing data events)—This includes the generation, collection and retrieval of billing call events.</p> <p>AUDIT (Audit events)—Events dealing with audit. This includes the starting and stopping of an audit, depending on how the audit was defined.</p> <p>SYSTEM (System events)—Events dealing with the system. This includes events dealing with low-level process activities, such as the IDX table reads and IPC messaging.</p> <p>ALL—Report all events.</p> |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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## CHAPTER 3

# Audit

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Revised: July 24, 2009, OL-3743-42

This chapter describes the types of audit commands available. Note that most audit commands are time intensive. Completion time depends upon the number of entries in the table or database—for example, systems with 50,000+ subscribers may take over 7 hours to do a complete database audit.

## Audit Circuit Identification Code

The Audit Circuit Identification Code (CIC) command allows executing a General Remote CIC audit at a scheduled time.

---

### Command Types

Audit

---

### Examples



#### Note

```
audit all-ss7-cics
```

When entered manually, this command initiates a General Remote CIC audit of the entire system on demand. This command does not provide per-trunk results—its primary use is to be automatically scheduled by the command-scheduled CLI capability. This command does not wait for a general remote CIC audit to be completed before responding. The response occurs as soon as the audit starts. An INFO event is logged when this audit starts and completes. Any unexpected results from this audit are written as WARNings in the alarm log.

# Audit Database

The Audit Database command allows users to audit every entry in every table that can be provisioned, or by number of rows in every table.

**Command Types**      Audit

**Examples**

```
audit database;
audit database type=row-count;
audit database platform-state=ems;
```

**Usage Guidelines**      Primary Key Token(s): None.

|                    |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | TYPE           | Type of audit.<br><br>VARCHAR(10): 1–10 ASCII characters. Permitted values are:<br><br>FULL (Default)—Audits the entire table.<br><br>ROW-COUNT—Audits the table by row count.                                                                                                                                                                                                                                                                           |
|                    | PLATFORM-STATE | State of an active or standby system shared memory database; use to audit an active or standby system shared memory database.<br><br>VARCHAR(7): 1–7 ASCII characters. Permitted values are:<br><br>ACTIVE (Default)—System is active (currently running).<br><br>STANDBY—System is in standby mode.<br><br>EMS—Audits the active EMS to the standby EMS.<br><br><b>Note</b> If platform-state=EMS; the system does a full audit even if type=row-count; |

# Audit Table Name

The Audit Table Name command is more specific than the Audit Database command in that it audits only the entries in a particular table (whereas table-name (feature) is any provisionable table). You can audit a particular table from the active side or the standby side. The audit can be made more specific by specifying any valid token and its value for that particular table to narrow the search.

**Command Types** Audit

**Examples**

```
audit trunk platform-state=active;
audit trunk platform-state=active; tgn-id=42;
audit subscriber id=jer%;
```



**Note**

The last example shows how to use the percent sign (%) to specify a search range. This example returns any subscriber entries that have an ID field that begins with *jer*.

**Usage Guidelines**

Primary Key Token(s): None.

There is only one token: PLATFORM-STATE.

|                           |                |                                                                                                                               |
|---------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | PLATFORM-STATE | State of an active or standby system shared memory database; use to audit an active or standby system shared memory database. |
|                           |                | VARCHAR(7): 1–7 ASCII characters. Permitted values are:                                                                       |
|                           |                | ACTIVE (Default)—System is active (currently running).                                                                        |
|                           |                | STANDBY—System is in standby mode.                                                                                            |

 Audit Table Name



# CHAPTER 4

## Billing

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Revised: July 24, 2009, OL-3743-42

This chapter describes the call detail block (CDB) billing tables, commands, and tokens that the Cisco BTS 10200 Softswitch uses for billing data transfer. These tables, commands, and tokens do not apply to event message (EM) billing.



**Caution**

Manual manipulation of billing files can cause Billing to fail. Contact Cisco for assistance before manually manipulating any billing file, including clean up.

---



**Note**

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Billing Account Address

The Billing Account Address (billing-acct-addr) table provisions addresses and polling intervals for billing data transfer. It also provisions the user authorized to transfer the data. Only one billing account address can be set per Cisco BTS 10200 Softswitch.



**Note**

New Cisco BTS 10200 Softswitches are delivered without a billing account address set.

---

Table Name: BILLING-ACCT-ADDR

Table Containment Area: OAMP

---

### Command Types

Show and change

---

### Examples

```
show billing-acct-addr;  
change billing-acct-addr; billing-server-addr=billing-server.cisco.com;billing-file-  
prefix=cisco001; billing-server-directory=/export/billing/ftp/inbound; user-name=cisco001;  
password=test; polling-interval=12;
```

**Usage Guidelines**

Primary Key Token(s): None.

Change Rules: None.

**Syntax Description**

|                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BILLING-DIRECTORY                                                                                                                                                                                                                                  | Specifies the BDMS directory where the billing files are located.<br>VARCHAR(64): 1–64 ASCII characters.                                                                                                                                                                                               |
| AUTO-REFRESH                                                                                                                                                                                                                                       | Specifies whether to display cached data on the screen. Valid only for the show command.<br>CHAR(1): Y/N (Default = Y).<br>Y—Queries the database for the most current data.<br>N—Queries the database for the most current data only if the cached data is unavailable.                               |
| BILLING-FILE-PREFIX                                                                                                                                                                                                                                | Prefix of the filename of a billing-data file at a local office.<br>VARCHAR(10): 1–10 (Default = bil) ASCII characters.<br>VARCHAR(20): 1–20 (Default = bil) characters. (Release 4.4.1)<br>VARCHAR(64): 1–64 (Default = bil) characters. (Release 4.5)                                                |
| <div style="text-align: center;"></div> <div><b>Caution</b> A hyphen is automatically appended to this field. Do not manually enter a hyphen in this field.</div> |                                                                                                                                                                                                                                                                                                        |
| BILLING-SERVER-ADDR                                                                                                                                                                                                                                | Mandatory if billing-server-directory is populated. Address of a remote billing center—the IP address or the domain name of a remote billing server.<br>VARCHAR(64): 1–64 ASCII characters in domain format.                                                                                           |
| BILLING-SERVER-DIRECTORY                                                                                                                                                                                                                           | Directory at a remote billing center—the directory path to the billing server for billing data files.<br>VARCHAR(64): 1–64 ASCII characters.                                                                                                                                                           |
| DEPOSIT-CONFIRMATION-FILE (Release 4.5)                                                                                                                                                                                                            | Specifies whether to send an explicit confirmation file after each CDB file is transferred to the remote billing collection system.<br>CHAR(1): Y/N (Default = N).<br>Y—An empty file with the same name with a suffix of “.done” is appended to the end of the file.<br>N—No file is appended.        |
| LIMIT                                                                                                                                                                                                                                              | Specifies the number of rows to display on the screen. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 100000000).<br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                       |
| ORDER                                                                                                                                                                                                                                              | Specifies whether to display data on the screen in a sorted order. Valid only for the show command.<br>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |

|                           |                                                                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| PASSWORD                  | Mandatory if billing-server-directory is populated. FTP password on the billing server.<br>VARCHAR(32): 1–32 ASCII characters.              |
| POLLING-INTERVAL          | The time in minutes between file transfers of billing information from the BDMS to the billing server.<br>NUMERIC: 1–60 (Default = 15).     |
| SFTP-SUPP (Release 4.4.1) | Specifies whether secure FTP is supported.<br>CHAR(1): Y/N (Default = N).                                                                   |
| START-ROW                 | Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 1). |
| USER-NAME                 | Mandatory if billing-server-directory is populated. FTP login name on the billing server.<br>VARCHAR(32): 1–32 ASCII characters.            |

## Billing Alarm

The Billing Alarm (billing-alarm) table provisions the percentage of disk storage filled that triggers minor, major, and critical alarms.

Table Name: BILLING-ALARM

Table Containment Area: OAMP

### Command Types

Show and change

### Examples

```
show billing-alarm;
change billing-alarm minor-thresh=75; major-thresh=85; critical-thresh=95;
```

### Usage Guidelines

Primary Key Token(s): None.

Change Rules: None.

### Syntax Description

|                 |                                                                                                                                                                                                                                                                          |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AUTO-REFRESH    | Specifies whether to display cached data on the screen. Valid only for the show command.<br>CHAR(1): Y/N (Default = Y).<br>Y—Queries the database for the most current data.<br>N—Queries the database for the most current data only if the cached data is unavailable. |
| CRITICAL-THRESH | Real-time billing data storage—percentage of capacity that triggers a critical alarm.<br>NUMERIC: 4–99 (Default = 90).                                                                                                                                                   |

|                |                                                                                                                                                                                                                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LIMIT          | <p>Specifies the number of rows to display on the screen. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 100000000).</p> <p><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.</p>                                   |
| MAJOR-THRESH   | <p>Real-time billing data storage—percentage of capacity that triggers a major alarm.</p> <p>NUMERIC: 3–98 (Default = 80).</p> <p> <b>Caution</b> Major-thresh <i>must</i> be less than critical-thresh.</p>                     |
| MAXIMUM-RECORD | <p>The maximum number of records to store in a given flat file.</p> <p>NUMERIC: 500–10000 (Default = 1000).</p>                                                                                                                                                                                                   |
| MAXIMUM-SIZE   | <p>The size of a call detail block (CDB) flat file in megabytes.</p> <p>NUMERIC: 1–10 (Default = 2).</p>                                                                                                                                                                                                          |
| MAXIMUM-SPACE  | <p>The allocated storage capacity for billing data in megabytes.</p> <p>NUMERIC: 10–5000 (Default = 1000).</p>                                                                                                                                                                                                    |
| MAXIMUM-TIME   | <p>The maximum number of seconds a given flat file can remain open for the addition of new records.</p> <p>NUMERIC: 10–3600 (Default = 3600).</p>                                                                                                                                                                 |
| MINOR-THRESH   | <p>Real-time billing data storage—percentage of capacity that triggers a minor alarm.</p> <p>NUMERIC: 2–97 (Default = 70).</p> <p> <b>Caution</b> Minor-thresh <i>must</i> be less than major-thresh.</p>                      |
| ORDER          | <p>Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> |
| REGULAR-SPACE  | <p>The percentage of real time capacity used before secondary files are deleted.</p> <p>NUMERIC: 1–90 (Default = 60).</p> <p> <b>Caution</b> Regular-space <i>must</i> be less than minor-thresh.</p>                          |
| START-ROW      | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                            |

# Billing File

The system operator uses the Billing File Report (billing-file) command to manage files that are stored on the Bulk Data Management System (BDMS) platform at any given time. The names of the available files and their operational status can be queried. This command does not query a particular table.

Table Containment Area: OAMP

## Command Types

Report

## Examples

```
report billing-file filename=%;
report billing-file filename=<filename>;
report billing-file state=open;
```

## Usage Guidelines

Primary Key Token(s): None.

## Syntax Description

|              |                                                                                                                                                                                                                                                                                                                     |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0/1          | Specifies whether to turn daylight saving time on or off.<br><br>CHAR(1): 0, 1<br><br>1—On<br><br>0—Off                                                                                                                                                                                                             |
| AUTO-REFRESH | Specifies whether to display cached data on the screen. This token must be entered with at least one other valid token.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Queries the database for the most current data.<br><br>N—Queries the database for the most current data only if the cached data is unavailable. |
| DISPLAY      | Specifies what token information to display on the screen.<br><br>VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                                                 |
| FILENAME     | The name of the billing file to report on. If the filename does not exist, the user is notified that the file does not exist.                                                                                                                                                                                       |
| HHMMSS       | The UTC offset time. Specify +/-HHMMSS.                                                                                                                                                                                                                                                                             |
| LIMIT        | Specifies the number of rows to display on the screen.<br><br>INTEGER: 1–100000000 (Default = 100000000).<br><br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                                                             |
| ORDER        | Specifies whether to display data on the screen in a sorted order.<br><br>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                                           |

|                 |                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SEQUENCE-NUMBER | Used to prevent generation of billing files with the same filename.<br>INTEGER(6): 000001–999999. A monotonically increasing 6 digit number that rolls over to 000001 when the maximum number of 999999 is reached.                                                                                                                               |
| START-ROW       | Specifies to begin displaying data on the screen at a specific row.<br>INTEGER: 1–100000000 (Default = 1).                                                                                                                                                                                                                                        |
| STATE           | The current state of a given file.<br>VARCHAR(10): 1–10 ASCII characters. Valid values are:<br>OPEN—The file is currently being written to.<br>PRIMARY—The file has not been sent to and acknowledged by the external billing mediation system.<br>SECONDARY—The file has been sent to and acknowledged by the external billing mediation system. |
| YYYYMMDD-HHMMSS | The local time the file was created.<br>DATE/TIME                                                                                                                                                                                                                                                                                                 |

## Billing Record Query

The system operator uses the Billing Record Query (billing-record) command to obtain specific billing reports from the Call Detail (calldetail) table.

Table Name: CALLEDDETAIL

Table Containment Area: OAMP

### Command Types

Report

### Examples

```
report billing-record start-time=2000-03-27 12:00:00; end-time=2000-03-27 12:01:00;
orig-number=9726712344;
report billing-record;
```



#### Note

If the command is entered without parameters, it defaults to tail=1 and returns the most recently written record.

### Usage Guidelines

Primary Key Token(s): None.

There is no restriction on the start time and end time that can be entered for searches.

For all searches, only the most recent 500,000 billing records are considered.

The limit on the number of records returned by a search is 500.

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | <p><b>AUTO-REFRESH</b> Specifies whether to display cached data on the screen.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>CALL-TYPE</b>          | <p>Type of call.</p> <p>STRING. Permitted values are:</p> <p>500—Service access code 500, use carrier to route the call.</p> <p>700—700 SAC call-route via PIC or dialed CAC.</p> <p>900—Service access code 900, use carrier to route the call.</p> <p>976—Information service calls.</p> <p>AIRLINES—Airline call.</p> <p>AMBULANCE—Ambulance service call.</p> <p>ATTENDANT—Call to a Centrex attendant.</p> <p>BLV—Busy line verification call.</p> <p>BUSINESS—811 call to business office.</p> <p>CARRIER-OPERATOR—101xxxx+0-, or 00(PIC) call.</p> <p>CUT-THRU—Call to user-dialed access code (101xxxx+#).</p> <p>DA—411, NPA-555-12121 call to directory assistance.</p> <p>DA-TOLL—1+411, 1+NPA-555-1212 toll call to directory assistance.</p> <p>EMG—911 emergency calls.</p> <p>EXTENSION—Call to another extension within a business group.</p> <p>FIRE—Fire department call.</p> <p>INFO—Same as 976.</p> <p>INTERLATA—InterLATA call that uses PIC or dialed CAC.</p> <p>INTL_OPERATOR—International operator.</p> <p>INTL_WORLD_ZONE_1—International world zone 1.</p> <p>INVALID—Partial dialed digits that time out.</p> <p>LOCAL—7-digit or 10-digit nontoll call.</p> <p>LOOPBACK_TEST—Loopback test.</p> <p>LRN—Call to a DN that has been reserved as a local routing number.</p> <p>MOBILE—Calls to a mobile network. (Release 4.5)</p> <p>NAS—Network access server call.</p> <p>NATIONAL—Call within the United States, use LSA table to determine if local, toll or destination call. See the <i>Cisco BTS 10200 Softswitch Provisioning Manual</i> for more information.</p> <p>NATL_OPERATOR—National operator.</p> <p>NONE—No call type was provisioned into the Cisco BTS 10200 Softswitch or the given dialing pattern. No data available regarding call type.</p> |

NON-EMG—311 Civic service call.

NULL—Service activation, deactivation, or interrogation call.

OPERATOR—0—call.

OPERATOR-ASSISTED—0+ call.

PCS—Call to personal communications services line (service access code 500—use carrier to route the call).

POLICE—Police service call.

PREMIUM—Same as 900.

RAILWAYS—Railway.

RELAY—711 relay call.

REPAIR—611 repair call.

SERVICE\_CODE—Service code.

SPEED-DIAL—Speed-dial call.

TANDEM—Tandem call between CA and the next switch or CA.

TEST-CALL—Test call dialed as: 958/959-xxxx or 1xx.

TIME—Time service call.

TOLL—1+NPA-xxx-xxxx IntraLATA toll call.

TOLL-FREE—8NN toll-free call (800, 888, 877, 866, 855).

TRAFFIC—Traffic service call.

TW—Time and weather call.

VACANT—Call attempted to an NPA/DN that is currently unassigned.

VOICE-MAIL (Release 4.5)

VOICE-MAIL-ACCESS (Release 4.5)

WEATHER—Weather service call.

|          |                                                                                                                                                                                                                                                                                                  |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DISPLAY  | Specifies what token information to display on the screen.<br>VARCHAR(51200): 1–51200 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                                  |
| END-TIME | Report billing records that occur at this time and earlier.<br>STRING: yyyy-mm-dd hh:mm:ss.                                                                                                                                                                                                      |
| FILENAME | Specifies the name of a group of records, which can be searched using search qualifiers other than the filename.                                                                                                                                                                                 |
| LIMIT    | Specifies the number of rows to display on the screen.<br>INTEGER: 1–100000000 (Default = 100000000).<br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                                                  |
| ORDER    | Specifies whether to display data on the screen in a sorted order.<br>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command.<br><b>Note</b> In this table, more than one value cannot be specified for this token. |

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORIG-NUMBER  | <p>Dialing number of the calling number.</p> <p>NUMERIC: 4–15 decimal characters. (Do <i>not</i> include hyphens.)</p> <p>NUMERIC: 3–15 decimal characters. (Do <i>not</i> include hyphens.) (Release 4.5.1)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| SERVICE-TYPE | <p>Specifies the type of service to filter against in the billing database.</p> <p>STRING. Permitted values are:</p> <p>911-HANDLING</p> <p>ACCOUNT-CODE</p> <p>AIN-HANDLING</p> <p>ANONYMOUS-CALL-REJECTION</p> <p>AUTHORIZATION-CODE</p> <p>AUTOMATIC-CALLBACK</p> <p>AUTO-RECALL</p> <p>BUSY-LINE-VERIFICATION</p> <p>CALL-BLOCK</p> <p>CALL-FORWARD-BUSY</p> <p>CALL-FORWARD-COMBINATION (Release 4.5)</p> <p>CALL-FORWARD-NO-ANSWER</p> <p>CALL-FORWARD-UNCONDITIONAL</p> <p>CALL-HOLD</p> <p>CALL-PARK</p> <p>CALL-PARK-REOFFERED</p> <p>CALL-PARK-RETRIEVAL</p> <p>CALL-TRANSFER</p> <p>CALL-WAITING</p> <p>CALL-WAITING-DELUXE</p> <p>CALL-WAITING-WITH-CALLER-IDENTITY</p> <p>CALLING-ID-DELIVERY-BLOCK-PERMANENT</p> <p>CALLING-IDENTITY-DELIVERY-SUPPRESSION</p> <p>CALLING-NAME-DELIVERY</p> <p>CALLING-NAME-DELIVERY-BLOCKING</p> <p>CALLING-NUMBER-DELIVERY</p> <p>CALLING-NUMBER-DELIVERY-BLOCK</p> <p>CANCELLED-CALL-WAITING</p> <p>CLASS-OF-SERVICE</p> <p>CNAM-SCP-QUERY</p> <p>CUSTOM-DIALING-PLAN</p> <p>CUSTOMER-ORIGINATED-TRACE</p> <p>DIRECTED-CALL-PICKUP-WITH-BARGE-IN</p> |

DIRECTED-CALL-PICKUP-WITHOUT-BARGE-IN  
 DO-NOT-DISTURB  
 DRCW  
 HOTLINE  
 HOTLINE-VARIABLE  
 NO-SOLICITATION-ANNOUNCEMENT (Release 4.5)  
 LNP  
 OUTGOING-CALL-BARRING  
 PRIVACY-SCREENING (Release 4.5)  
 REFER  
 REJECT-CALLER  
 REMOTE-ACTIVATION-OF-CALL-FORWARDING  
 REMOTE-ACTIVATION-OF-CALL-FORWARDING-PIN  
 REPEAT-CALL  
 RETURN-CALL  
 SCREENING-LIST-EDIT-DRCW  
 SCREENING-LIST-EDIT-SCA  
 SCREENING-LIST-EDIT-SCF  
 SCREENING-LIST-EDIT-SCR  
 SELECTIVE-CALL-ACCEPTANCE  
 SELECTIVE-CALL-FORWARDING  
 SELECTIVE-CALL-REJECTION  
 SERVICE-FEATURE-GROUP-INCOMING  
 SERVICE-FEATURE-GROUP-OUTGOING  
 SPEED-CALLING  
 THREE-WAY-CALL  
 THREE-WAY-CALL-DELUXE  
 TOLL-FREE  
 USER-SENSITIVE-THREE-WAY-CALL  
 WARMLINE

|            |                                                                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------|
| START-ROW  | Specifies to begin displaying data on the screen at a specific row.<br>INTEGER: 1–100000000 (Default = 1).          |
| START-TIME | Report billing records that occur from this time forward.<br>STRING: yyyy-mm-dd hh:mm:ss.                           |
| TAIL       | Causes the system to report only the most recent records of the requested set.<br>NUMERIC: 1–50 decimal characters. |
| TERM-CAUSE | Specifies the call termination cause to filter against in the billing database.<br>STRING. Permitted values are:    |

AAL-PARAM-NOT-SUPPORTED

ACCESS-INFO-DISCARDED  
BEARER-CAPABILITY-NOT-IMPLEMENTED  
BEARER-CAPABILITY-UNAVAILABLE  
BEARER-CAPAB-INCOMPAT-WITH-SERVICE  
CALL-AWARDED  
CALL-PROCEEDING  
CALL-REJECTED  
CALL-RESTRICTED-WITH-CLIR  
CHANNEL-DOES-NOT-EXIST  
CHANNEL-UNACCEPTABLE  
CHANNEL-UNAVAILABLE  
CIRCUIT-CHANNEL-CONGESTED  
DESTINATION-OUT-OF-ORDER  
EXCESS-DIGIT-RECD  
FACILITY-NOT-IMPLEMENTED  
FACILITY-NOT-SUBSCRIBED  
FACILITY-REJECTED  
INCOMPATIBLE-DESTINATION  
INCORRECT-MESSAGE-LENGTH  
INFOELEMENT-NONEXISTENT  
INVALID-CALL-REFERENCE  
INVALID-ENDPOINT-REFERENCE  
INVALID-INFOELEMENT  
INVALID-NUMBER-FORMAT  
INVALID-TRANSIT-NETW-SELECTION  
MANDATORY-INFOELEMENT-MISSING  
MESSAGE-INCOMPAT-WITH-CALL-STATE  
MESSAGE-TYPE-NONEXISTENT  
NETWORK-OUT-OF-ORDER  
NORMAL-CALL-CLEARING  
NORMAL-UNSPECIFIED  
NO-ROUTE-DESTINATION  
NO-ROUTE-TRANSIT-NETWORK  
NO-VPCI-VCI-AVAILABLE  
NUMBER-CHANGED  
ONE-DIALED-IN-ERROR  
ONE-NOT-DIALED  
PROTOCOL-ERROR-THRESHOLD-XCEEDED  
PROTOCOL-ERROR-UNSPECIFIED  
QOS-UNAVAILABLE  
RESOURCE-UNAVAILABLE

SERVICE-DENIED  
SERVICE-NOT-IMPLEMENTED  
SERVICE-OPERATION-VIOLATED  
SERVICE-UNSPECIFIED  
SWITCH-EQUIP-CONGESTED  
TEMPORARY-FAILURE  
TIMER-EXPIRY-RECOVERY  
TOO-MANY-PENDING-ADD-PARTY-REQ  
UNASSIGNED-NUMBER  
UNAUTHORIZED-BEARER-CAPABILITY  
UNSUPPORTED-TRAFFIC-PARAMS  
USER-ALERTED-NO-ANSWER  
USER-BUSY  
USER-CELLRATE-UNAVAILABLE  
USER-NOT-RESPONDING  
VACANT-CODE  
VPCI-VCI-ASSIGNMENT-FAIL  
VPCI-VCI-NOT-AVAILABLE  
ZERO-DIALED-IN-ERROR  
INTERWORKING-ERROR-UNSPECIFIED  
AAL\_PARAM\_NOT\_SUPPORTED (Release 4.5.1)  
ACCESS\_INFO\_DISCARDED (Release 4.5.1)  
ACCOUNT\_LIMIT\_EXCEEDED (Release 4.5.1)  
BEARER\_CAPAB\_INCOMPAT\_WITH\_SERVICE (Release 4.5.1)  
BEARER\_CAPABILITY\_NOT\_IMPLEMENTED (Release 4.5.1)  
BEARER\_CAPABILITY\_UNAVAILABLE (Release 4.5.1)  
CALL\_AWARDED (Release 4.5.1)  
CALL\_PROCEEDING (Release 4.5.1)  
CALL\_REJECTED (Release 4.5.1)  
CALL\_RESTRICTED\_WITH\_CLIR (Release 4.5.1)  
CALLED\_NUMBER\_PORTED\_OUT (Release 4.5.1)  
CHANNEL\_DOES\_NOT\_EXIST (Release 4.5.1)  
CHANNEL\_UNACCEPTABLE (Release 4.5.1)  
CHANNEL\_UNAVAILABLE (Release 4.5.1)  
CIRCUIT\_CHANNEL\_CONGESTED (Release 4.5.1)  
DESTINATION\_OUT\_OF\_ORDER (Release 4.5.1)  
EXCESS\_DIGIT\_RECD (Release 4.5.1)  
FACILITY\_NOT\_IMPLEMENTED (Release 4.5.1)  
FACILITY\_NOT\_SUBSCRIBED (Release 4.5.1)

FACILITY\_REJECTED (Release 4.5.1)  
INCOMPATIBLE\_DESTINATION (Release 4.5.1)  
INCORRECT\_MESSAGE\_LENGTH (Release 4.5.1)  
INFOELEMENT\_NONEXISTENT (Release 4.5.1)  
INTERWORKING\_ERROR\_UNSPECIFIED (Release 4.5.1)  
INVALID\_CALL\_REFERENCE (Release 4.5.1)  
INVALID\_ENDPOINT\_REFERENCE (Release 4.5.1)  
INVALID\_INFOELEMENT (Release 4.5.1)  
INVALID\_NUMBER\_FORMAT (Release 4.5.1)  
INVALID\_TRANSIT\_NETW\_SELECTION (Release 4.5.1)  
MANDATORY\_INFOELEMENT\_MISSING (Release 4.5.1)  
MESSAGE\_INCOMPAT\_WITH\_CALL\_STATE (Release 4.5.1)  
MESSAGE\_TYPE\_NONEXISTENT (Release 4.5.1)  
MISROUTED\_PORTED (Release 4.5.1)  
NE\_CAUSE\_AUDIT\_RELEASE (Release 4.5.1)  
NETWORK\_OUT\_OF\_ORDER (Release 4.5.1)  
NO\_ROUTE\_DESTINATION (Release 4.5.1)  
NO\_ROUTE\_TRANSIT\_NETWORK (Release 4.5.1)  
NO\_VPCI\_VCI\_AVAILABLE (Release 4.5.1)  
NORMAL\_CALL\_CLEARING (Release 4.5.1)  
NORMAL\_UNSPECIFIED (Release 4.5.1)  
NUMBER\_CHANGED (Release 4.5.1)  
ONE\_DIALED\_IN\_ERROR (Release 4.5.1)  
ONE\_NOT\_DIALED (Release 4.5.1)  
PROTOCOL\_ERROR\_THRESHOLD\_XCEEDED (Release 4.5.1)  
PROTOCOL\_ERROR\_UNSPECIFIED (Release 4.5.1)  
QOS\_UNAVAILABLE (Release 4.5.1)  
REPOSE\_STATIC\_ENQ\_MSG (Release 4.5.1)  
RESOURCE\_UNAVAILABLE (Release 4.5.1)  
SERVICE\_DENIED (Release 4.5.1)  
SERVICE\_NOT\_IMPLEMENTED (Release 4.5.1)  
SERVICE\_OPERATION\_VIOLATED (Release 4.5.1)  
SERVICE\_UNSPECIFIED (Release 4.5.1)  
SWITCH\_EQUIP\_CONGESTED (Release 4.5.1)  
TEMPORARY\_FAILURE (Release 4.5.1)  
TIMER\_EXPIRY\_RECOVERY (Release 4.5.1)  
TOO\_MANY\_PENDING\_ADD\_PARTY\_REQ (Release 4.5.1)  
UNASSIGNED\_NUMBER (Release 4.5.1)

UNAUTHORIZED\_BEARER\_CAPABILITY (Release 4.5.1)  
 UNSUPPORTED\_TRAFFIC\_PARAMS (Release 4.5.1)  
 USER\_ALERTED\_NO\_ANSWER (Release 4.5.1)  
 USER\_BUSY (Release 4.5.1)  
 USER\_CELLRATE\_UNAVAILABLE (Release 4.5.1)  
 USER\_NOT\_RESPONDING (Release 4.5.1)  
 VACANT\_CODE (Release 4.5.1)  
 VPCI\_VCI\_ASSIGNMENT\_FAIL (Release 4.5.1)  
 VPCI\_VCI\_NOT\_AVAILABLE (Release 4.5.1)  
 ZERO\_DIALED\_IN\_ERROR (Release 4.5.1)

|             |                                                                                    |
|-------------|------------------------------------------------------------------------------------|
| TERM-NUMBER | Dialing number of the called number.                                               |
|             | NUMERIC: 4–15 decimal characters. (Do <i>not</i> include hyphens.)                 |
|             | NUMERIC: 3–15 decimal characters. (Do <i>not</i> include hyphens.) (Release 4.5.1) |

## Billing Call Detail Block

The Call Detail Block (CDB) (billingcdb) table enables or disables call types for billing using the billing-cdb command. Used to determine what is reported in the billing file.

Table Name: BILLINGCDB

Table Containment Area: OAMP



### Note

CDB is the implementation of CDR, call detail record.

### Command Types

Show and change

### Examples

```
show billing-cdb type=local;
change billing-cdb type=local; enable=y;
```

### Usage Guidelines

Primary Key Token(s): type

**Syntax Description**

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * TYPE       | <p>Primary key. Call type to be enabled or disabled for billing purposes.</p> <p>STRING. Permitted values are:</p> <p>500—Service access code 500, use carrier to route the call.</p> <p>700—700 SAC call-route via PIC or dialed CAC.</p> <p>900—Service access code 900, use carrier to route the call.</p> <p>976—Information service calls.</p> <p>AIRLINES—Airline.</p> <p>AMBULANCE—Ambulance service call.</p> <p>ATTENDANT—Call to a Centrex attendant.</p> <p>BLV—Busy line verification call.</p> <p>BUSINESS—811 call to business office.</p> <p>CALLING-NUMBER-ANNOUNCEMENT (Release 4.5)—Announcement played upon call.</p> <p>CARRIER-OPERATOR—101xxxx+0-, or 00(PIC) call.</p> <p>CUT-THRU—Call to user-dialed access code (101xxxx+#).</p> <p>DA-411, NPA-555—12121 call to directory assistance.</p> <p>DA-TOLL—1+411, 1+NPA-555-1212 toll call to directory assistance.</p> <p>EMG—911 emergency calls.</p> <p>EXTENSION—Call to another extension within a business group.</p> <p>FIRE—Fire department call.</p> <p>INFO—Same as 976.</p> <p>INTERLATA—InterLATA call that uses PIC or dialed CAC.</p> <p>INTERLATA-DA (Release 4.5)—InterLATA Directory Assistance.</p> <p>INTERNATIONAL-DA (Release 4.5)—International Directory Assistance.</p> <p>INTL-OPERATOR—International operator.</p> <p>INTL-WORLD-ZONE-1—International World Zone.</p> <p>INVALID—Partial dialed digits that time out.</p> <p>LOCAL—7-digit or 10-digit nontoll call.</p> <p>LOOPBACK—TEST-Loopback test. (Obsoleted as of Release 4.5)</p> <p>LRN—Call to a DN that has been reserved as a local routing number.</p> <p>NAS—Network access server call.</p> <p>NATIONAL—Call within the United States, use LSA table to determine if local, toll or destination call. See the <i>Cisco BTS 10200 Softswitch Provisioning Guide</i> for more information.</p> <p>NATL-OPERATOR—National operator.</p> <p>NON—EMG-311 Civic service call.</p> <p>NONE—No call type was provisioned into the Cisco BTS 10200 Softswitch or the given dialing pattern. No data available regarding call type.</p> <p>NULL—Service activation, deactivation, or interrogation call.</p> <p>OPERATOR—0-call.</p> <p>OPERATOR-ASSISTED—0+ call.</p> <p>PCS—Call to personal communications services line (service access code 500-use carrier to route the call).</p> <p>POLICE—Police service call.</p> <p>PREMIUM—Same as 900.</p> <p>RAILWAYS—Railway.</p> <p>RELAY—711 relay call.</p> <p>REPAIR—611 repair call.</p> <p>SERVICE-CODE—Service code.</p> <p>SPEED-DIAL—Speed-dial call.</p> <p>TANDEM—Tandem call between CA and the next switch or CA.</p> <p>TEST-CALL—100,101,102,103,105, 108, NLB test calls. 108 and NLB test calls are supported as of Release 4.5.</p> <p>TIME—Time service call.</p> <p>TOLL—1+NPA-xxx-xxxx IntraLATA toll call.</p> <p>TOLL-FREE—8NN toll-free call (800, 888, 877, 866, 855).</p> <p>TRAFFIC—Traffic service call.</p> <p>TW—Time and weather call.</p> <p>UNIVERSAL-ACCESS-NUMBER (Release 4.5)—Universal access number.</p> <p>VACANT—Call attempted to an NPA/DN that is currently unassigned.</p> <p>WEATHER—Weather service call.</p> |
| AUTO-REFRESH | <p>Specifies whether to display cached data on the screen. Valid only for the show command.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|               |                                                                                                                                                                                                                                                                                                        |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENABLE        | Enable or disable collection of the specified type of CDB.<br>CHAR(1): Y/N (Default = Y).<br>Y—Enable<br>N—Disable                                                                                                                                                                                     |
| LIMIT         | Specifies the number of rows to display on the screen. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 100000000).<br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                       |
| ORDER         | Specifies whether to display data on the screen in a sorted order. Valid only for the show command.<br>VARCHAR(51200): 1–51200 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| START-<br>ROW | Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 1).                                                                                                                                                            |



# CHAPTER 5

## Command Scheduler

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Revised: July 24, 2009, OL-3743-42

The Command Scheduler (scheduled-command) table allows an operator to schedule a command to execute daily, weekly, or monthly at a specific time. Once a command is scheduled, the Command Scheduler allows removing a command from the schedule. Regardless of whether the command previously executed, the command can be removed at any time. If the command is scheduled to recur and is currently executing within the Element Management System (EMS), the command completes in a normal fashion but is removed from the list from that point forward.

It is often necessary to schedule commands to occur during periods of least system activity. Using the start time and recurrence command parameters, commands can be scheduled at any time and at any frequency. The recurrence parameter schedules a command daily, weekly, or monthly. Scheduling a command without the recurrence parameter causes the Command Scheduler to execute the command only once.

The characteristics of a scheduled command are read once at execution time. During execution, the characteristics can be changed but do not affect the command that is running.

To view generated a report go to <https://<active EMS IP address>>. Select the report and open ScheduledCommand<generated id>.html. Report results vary based on the scheduled command entered.'



### Note

---

Noun-verb syntax is not checked until execution.

---

Table Name: SCHEDULED-COMMAND

Table Containment Area: OAMP

---

### Command Types

Show, add, change, and delete

---

### Examples

```
show scheduled-command id=1234
add scheduled-command start-time=2001-10-01 12:22:22; noun=database; verb=audit
change scheduled-command id=1234; start-time=2001-10-02 20:00:00
delete scheduled-command id=1234
```

---

### Usage Guidelines

Primary Key Token(s): id

Add Rules: None.

Change Rules: Security privilege levels apply.

Commands with additional tokens use keys as token and key-values as the token values. Multiple token/token values are separated with a comma (no white space is allowed). For example:

```
add scheduled-command start-time=2005-0901 02:22:00; noun=mgw; verb=control;
keys=id,mode,target-state; key-values=emat-11,forced,oos;
```

This forces the mgw id=emat-11 out of service at 2:22AM.



**Note**

An asterisk preceeding a token name means the token is mandatory. A token without an asterisk is optional.

**Syntax Description**

|                                   |                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ID (System generated)             | Mandatory for change command. Primary key. System-generated identifier. INTEGER.                                                                                                                                                                                                                                                                                              |
| VERB                              | Mandatory for add command. Command-line interface (CLI) verb. VARCHAR(64): 1–64 ASCII characters; any valid command verb.                                                                                                                                                                                                                                                     |
| NOUN                              | Mandatory for add command. CLI noun. VARCHAR(64): 1–64 ASCII characters; any valid command noun.                                                                                                                                                                                                                                                                              |
| KEYS                              | Key associated with the noun-verb combination. VARCHAR(1024): 1–1024 ASCII characters; any key or keys allowed for the noun-verb combination, separated by a comma. Spaces are not allowed. For example: type,display<br><b>Note</b> The field size is large because many commands include several keys whose length can be up to 1024 characters.                            |
| KEY-VALUES                        | Value associated with the key entered for the noun-verb combination. VARCHAR(1024): 1–1024 ASCII characters; any value or values associated with the key or keys entered, separated by a comma. Spaces are not allowed. For example: full,none<br><b>Note</b> The field size is large because many commands include several values whose length can be up to 1024 characters. |
| START-TIME                        | Mandatory for add command. Start time of the command. Enter all 19 ASCII characters as shown. DATE: yyyy-mm-dd hh:mm:ss.                                                                                                                                                                                                                                                      |
| NEXT-START-DAY (System generated) | The next time the command will run. System generated based on the start-time. NUMERIC.                                                                                                                                                                                                                                                                                        |
| USER-NAME (System generated)      | Username of the last user to modify the scheduled command. VARCHAR(16): 1–16 ASCII characters.                                                                                                                                                                                                                                                                                |

|                                      |                                                                                                                                                               |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EXECUTION-COUNTER (System generated) | System-generated command repetition counter.<br>NUMERIC.                                                                                                      |
| RECURRENCE                           | Number of times to execute the command.<br>VARCHAR(16): 1–16 ASCII characters. Permitted values are:<br>NONE (Default)—One time<br>DAILY<br>WEEKLY<br>MONTHLY |





## Customer Originated Trace

---

Revised: July 24, 2009, OL-3743-42

The Customer Originated Trace (call-trace) table contains information gathered by the system when a customer activates a trace by pressing \*57 on the telephone. The table logs information pertaining only to the most recently received call. The Call Trace Summary (call-trace-summary) command retrieves the logged information.

Table Name: CALL-TRACE

Table Containment Area: OAMP

---

### Command Types

Report

---

### Examples

```
report call-trace-summary
```

**Note**

Using the command without any tokens returns all entries in the table.

---

---

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): term-id

**Note**

An asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

---

### Syntax Description

|             |                                                  |
|-------------|--------------------------------------------------|
| CUSTOMER-DN | The customer's directory number.                 |
|             | VARCHAR(10): 10 digits in the format npaxxxxxxx. |
| CALLING-DN  | The caller's directory number.                   |
|             | VARCHAR(10): 10 digits in the format npaxxxxxxx. |
| CALL-DATE   | Date of the call.                                |
|             | DATE: yyyy-mm-dd hh:mm:ss.                       |

---

|                            |                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TRACE-DATE                 | Date the trace was activated.<br>DATE: yyyy-mm-dd hh-mm-ss.                                                                                                                                                                                                                                                                                                                    |
| SUB-ID (System generated)  | The subscriber ID of the customer who activated the trace.<br>VARCHAR(30): 1–30 ASCII characters                                                                                                                                                                                                                                                                               |
| TERM-ID (System generated) | Foreign key: Termination table. The termination ID of the customer who activated the trace.<br>VARCHAR(32): 1–32 ASCII characters.                                                                                                                                                                                                                                             |
| PRIVACY-STATUS             | Refers to what caller information is displayed to the person being called. If the caller has this feature activated, only the applicable information is logged.<br><br>VARCHAR(30): 1–30 ASCII characters. Permitted values are:<br>FULL—Nothing is logged.<br>NAME—Name is not logged.<br>NUMBER—Number is not logged.<br>OFF—Whatever is available for the caller is logged. |

**Note**

Table information is logged from the switch. If the system cannot decipher the information from the switch, it returns the value UNKNOWN in the applicable field.



## Database Usage

---

Revised: July 24, 2009, OL-3743-42

The Database Usage (db-usage) table can only be provisioned at installation. It provides maximum, licensed, and current database record statistics. The *current number of records* field is updated by the Element Management System (EMS) in real time. The db-usage command also uses the Database Threshold (db-thresholds) table, which contains default alarm threshold parameters that are preprovisioned during installation. A service provider can change and show these threshold parameters. The default threshold parameters are:

- 80 percent minor
- 85 percent major
- 90 percent critical

**Note**

After a new install or an upgrade, all provisioning is disabled unless the DB-LICENSE file is provisioned. See the *Cisco BTS 10200 Softswitch Provisioning Guide* for steps.

Table Name: DB-USAGE

Table Containment Area: EMS

---

**Command Types**

Show and change

---

**Examples**

```
show db-usage table-name=dial-plan;  
change db-usage table-name=dial-plan; minor-threshold=70; major-threshold=80;  
critical-threshold=95;
```

---

**Usage Guidelines**

Primary Key Token(s): table-name

Change Rules:

- max-record-count must be greater than or equal to licensed-record-count.
- max-record-count must be greater than or equal to current-record-count.
- licensed-record-count must be greater than or equal to current-record-count.
- Major threshold must be less than Critical threshold and more than Minor threshold.

- Minor threshold must be less than Major threshold.

**Note**

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

**Syntax Description**

|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TABLE-NAME                                | Primary key. Table name.<br>VARCHAR(32): 1–32 ASCII characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| MAX-RECORD-COUNT (Not provisionable)      | The size is specified in number of records. This field is populated during installation.<br>INTEGER.                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ALERT-LEVEL                               | Displays the status of record count for each table.<br>VARCHAR(12): 1–12 ASCII characters. Permitted values are:<br>NO-LICENSE—The DB size (license) is not installed.<br>NORMAL—The current record count is lower than the minor threshold.<br>MINOR—The current record count is higher than minor threshold and lower than major threshold.<br>MAJOR—The current record count is higher than major threshold and lower than critical threshold.<br>CRITICAL— The current record count is higher than critical threshold. |
| AUTO-REFRESH                              | Specifies whether to display cached data on the screen. Valid only for the show command.<br>CHAR(1): Y/N (Default = Y).<br>Y—Queries the database for the most current data.<br>N—Queries the database for the most current data only if the cached data is unavailable.                                                                                                                                                                                                                                                   |
| CRITICAL-THRESHOLD                        | Threshold for critical alarm (in percent).<br>INTEGER: 2–100 (Default = 90).                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| CURRENT-RECORD-COUNT (System generated)   | Current number of records in the table. This field is 0 for new installations and is the current table size for existing systems.<br>INTEGER.                                                                                                                                                                                                                                                                                                                                                                              |
| DISPLAY                                   | Specifies what token information to display on the screen. Valid only for the show command.<br>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.                                                                                                                                                                                                                             |
| LICENSED-RECORD-COUNT (Not provisionable) | Number of records authorized for the customer. This field is populated during installation.<br>INTEGER.                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                 |                                                                                                                                                                                                                                                                                                                 |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LIMIT           | <p>Specifies the number of rows to display on the screen. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 100000000).</p> <p><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.</p>                                 |
| MAJOR-THRESHOLD | <p>Threshold for major alarm (in percent).</p> <p>INTEGER: 1–99 (Default = 85).</p>                                                                                                                                                                                                                             |
| MINOR-THRESHOLD | <p>Threshold for minor alarm (in percent).</p> <p>INTEGER: 0–98 (Default = 80).</p>                                                                                                                                                                                                                             |
| ORDER           | <p>Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> |
| SEND-ALERT      | <p>Indicates whether to turn the threshold alarm ON or OFF. If the table size is 10 records or less, the flag is automatically set to OFF.</p> <p>VARCHAR(16): 1–16 ASCII characters. Permitted values are:</p> <p>ON—Turn the threshold alarm on.</p> <p>OFF—Turn the threshold alarm off.</p>                 |
| START-ROW       | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                          |





## Fresh Download

---

Revised: July 24, 2009, OL-3743-42

The Fresh Download command refreshes data in Call Agent (CA) shared memory. It recovers the data in the Call Agent shared memory in the event that shared memory data cannot be recovered by any other means. The fresh download wipes out Call Agent shared memory data and causes a total outage.

**Caution**

Only a operator of "ciscouser" authority can execute a download database command. No other user can execute this command. (Release 4.5)

---

**Caution**

Do not use this command on any live traffic production systems. Contact Cisco TAC if you need additional help regarding the use of this command for disaster recovery.

---

You can perform the command in one of the following ways:

- By ID
- By standby CA or Feature Server (FS)

**Note**

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Download by ID

The download by ID command allows copying database information from the Element Management System (EMS) to a specific CA or FS. If a CA ID is not specified, the command copies to all IDs.

---

**Command Types**

Download

---

**Examples**

```
download database target=ca; id=CA146
download database target=fsptc; id=FSPTC135
download database target=fsain; id=FSAIN125
```

# Download by Standby Call Agent or Feature Server

The download to Standby CA or FS command allows copying database information from the EMS to a specific standby CA or FS. If a target is not specified, the active instance is used.

## Command Types

Download

## Examples

```
download database target=ca; id=CA146;
download database target=ca; id=CA146; target-state=standby;
```

## Syntax Description

|              |                                                                                                                                                                                                                                                                                                                                     |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *TARGET      | Specifies the network element to receive the download.<br>VARCHAR(5): 1–5 ASCII characters. Permitted values are:<br>CA—Network identifier of a Call Agent.<br>FSPTC (POTS/Tandem/Centrex Feature Server)—Network identifier of a specific Feature Server.<br>FSAIN (AIN Feature Server)—Network identifier of AIN Feature Servers. |
| ID           | Network ID of a specific CA or FS.<br>VARCHAR(8): 1–8 ASCII characters consisting of any valid, provisioned CA, FSPTC, or FSAIN ID.                                                                                                                                                                                                 |
| FILE         | This contains all the SQL commands that represent all the data in an EMS database. This is a faster process than the alternative of going through the Queuing and Audit Manager (QAM).<br>VARCHAR(128): 1–128 ASCII characters consisting of any valid filename.                                                                    |
| TARGET-STATE | The state (active or standby) of the Call Agent or Feature Server.<br>VARCHAR(7): 1–7 ASCII characters. Permitted values are:<br>ACTIVE (Default)—Call Agent or Feature Server is in active state.<br>STANDBY—Call Agent or Feature Server is in standby state.                                                                     |



## CHAPTER 9

# History

---

**Revised:** July 24, 2009, OL-3743-42

The History (history) table stores a list of executed commands. A list of all executed commands can be sent to a file (report history), or displayed on the screen (show history).

Table Name: HISTORY

Table Containment Area: EMS only.

---

### Command Types

Show and report

---

### Examples

```
show history
report history
```



#### Note

---

Using the command without any tokens returns all entries in the table.

---

---

### Usage Guidelines

Primary Key Token(s): None.

**Syntax Description**

|              |                                                                                                                                                                                                                                                                                                             |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADAPTER      | <p>The OSS adapter. User input is not modified prior to validation.</p> <p>VARCHAR(30): 1–30 ASCII characters. Permitted values are:</p> <p>CLI</p> <p>SPIT</p> <p>IOS</p> <p>MNT</p> <p>TEST</p> <p>GUI</p> <p>FTP</p> <p>SNMP</p> <p>SUP</p> <p>CORBA</p> <p>HTTP</p> <p>CRON</p> <p>QAM</p> <p>DBASE</p> |
| AUTO-REFRESH | <p>Specifies whether to display cached data on the screen.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p>                                                  |
| DISPLAY      | <p>Specifies what token information to display on the screen.</p> <p>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p>                                    |
| END-TIME     | <p>Ending time for history range.</p> <p>DATE/TIME: in the format: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                 |
| LIMIT        | <p>Specifies the number of rows to display on the screen.</p> <p>INTEGER: 1–100000000 (Default = 100000000).</p> <p><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.</p>                                                              |
| NOUN         | <p>The command noun.</p> <p>VARCHAR(50): 1–50 ASCII characters.</p>                                                                                                                                                                                                                                         |

|                |                                                                                                                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORDER          | Specifies whether to display data on the screen in a sorted order.<br><br>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| RESULT         | The result of the command.<br><br>VARCHAR(100): 1–100 ASCII characters.                                                                                                                                                                                                 |
| SESSION        | The login session ID.<br><br>VARCHAR(30): 1–30 ASCII characters.                                                                                                                                                                                                        |
| START-ROW      | Specifies to begin displaying data on the screen at a specific row.<br><br>INTEGER: 1–100000000 (Default = 1).                                                                                                                                                          |
| START-TIME     | The starting time for history range. Start-time must occur before end-time.<br><br>DATE/TIME: in the format: YYYY-MM-DD HH:MM:SS.                                                                                                                                       |
| TRANSACTION-ID | The transaction id.<br><br>VARCHAR(30): 1–30 ASCII characters.                                                                                                                                                                                                          |
| USER           | The user.<br><br>VARCHAR(50): 1–50 ASCII characters.                                                                                                                                                                                                                    |
| USER-DOMAIN    | The user domain.<br><br>VARCHAR(100): 1–100 ASCII characters.                                                                                                                                                                                                           |
| USER-INPUT     | The command input.<br><br>VARCHAR(100): 1–100 ASCII characters.                                                                                                                                                                                                         |
| VERB           | The command verb.<br><br>VARCHAR(50): 1–50 ASCII characters.                                                                                                                                                                                                            |





# CHAPTER 10

## Maintenance and Administration of System Component Commands

Revised: July 24, 2009, OL-3743-42

This chapter describes the status and control commands that are applicable only to the Call Agent (CA), Feature Server (FS), Element Management System (EMS), and the Bulk Data Management System (BDMS). There is also one System command. Status and control commands do not have their own tables.

Do not attempt to interpret responses from the status commands, or to use any control commands without first referring to the procedures and interpretations in the Cisco BTS 10200 Softswitch Operations Manual. Incorrect interpretation of the status commands, and incorrect usage of the control commands can cause a traffic or data interruption. For a complete list of sample replies and states, see the *Cisco BTS 10200 Softswitch Operations Manual*.



### Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

## Control Command Target States

[Table 10-1](#) lists target states and their descriptions for the control commands.

**Table 10-1** Control Command Target States and Descriptions

| Target State                                        | Description                                                                                                                                           |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| NORMAL<br>(Obsoleted as of Release 4.5)             | Normal allows changing the operational state from FORCED to NORMAL. If the previous configuration was FORCED_STANDBY_ACTIVE, a switchover will occur. |
| ACTIVE_STANDBY<br>(Release 4.5)                     | Controls Side A to active and Side B to standby.                                                                                                      |
| STANDBY_ACTIVE<br>(Release 4.5)                     | Controls Side A to standby and Side B to active.                                                                                                      |
| FORCED-ACTIVE-STANDBY (Obsoleted as of Release 4.5) | Side A is forced to active and Side B is standby.                                                                                                     |

**Table 10-1 Control Command Target States and Descriptions (continued)**

| Target State                                        | Description                                             |
|-----------------------------------------------------|---------------------------------------------------------|
| FORCED-STANDBY-ACTIVE (Obsoleted as of Release 4.5) | Side A has been forced to standby and Side B is active. |

## Call Agent

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Call Agent.

### Status Command

The status command reports the status of a Call Agent.

#### Command Types

Status

#### Examples

```
status call-agent;
```

Reply Example:

```
Reply: Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED-> status call-agent
PRIMARY STATUS -> ACTIVE_NORMAL
SECONDARY STATUS -> STANDBY_NORMAL
```



#### Note

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE\_NORMAL becomes ACTIVE, STANDBY\_NORMAL becomes STANDBY, and so forth.

### Control Command

The control command puts the Call Agent into a specific state.

#### Command Types

Control

#### Examples

```
control call-agent id=CA146; target-state=forced-standby-active;
control call-agent id=CA146; target-state=forced-active-standby;
control call-agent id=CA146; target-state=normal;
```

```
control call-agent id=CA146; target-state=standby-active; (Release 4.5)
control call-agent id=CA146; target-state=active-standby; (Release 4.5)
```

Reply Example:

```
Request was successful
```

REPLY=CONFIGURATION COMMAND EXECUTED->Reconfigured successfully.

**Note**

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE\_NORMAL becomes ACTIVE, STANDBY\_NORMAL becomes STANDBY, and so forth.

## Feature Server

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Feature Server.

### Status Command

The status command reports the status of a Feature Server. Entering the command without an id returns all feature servers except third party (3PTY) feature servers. 3PTY feature servers are not valid for this command.

#### Command Types

Status

#### Examples

```
status feature-server id=FSAIN205.Cisco.com;
```

Reply Example:

```
Request was successful.
REPLY=CONFIGURATION COMMAND EXECUTED-> status feature-server
PRIMARY STATUS -> ACTIVE-NORMAL
SECONDARY STATUS -> STANDBY-NORMAL
```

**Note**

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE\_NORMAL becomes ACTIVE, STANDBY\_NORMAL becomes STANDBY, and so forth.

### Control Command

The control command puts a Feature Server into a specific state. This command is not valid for 3PTY feature servers.

#### Command Types

Control

#### Examples

```
control feature-server id=FSAIN205.Cisco.com; target-state=normal;
```

```
control feature-server id=FSAIN205.Cisco.com; target-state=active-standby; (Release 4.5)
```

Reply Example:

```
Request was successful
```

```
REPLY=CONFIGURATION COMMAND EXECUTED->control feature-server LOCAL STATUS
```

## Element Management System

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Element Management System (EMS). These commands are specific to the EMS. For Billing commands, see the [“Bulk Data Management System” section on page 10-5](#).

### Status Command

The status command reports the status of an EMS.

---

#### Command Types

Status

---

#### Examples

```
status element-manager; id=EM01;
```

Reply Example:

Reply : Success:

```
ELEMENT MANAGER STATUS IS... ->
```

```
APPLICATION INSTANCE -> Element Manager [EM1]
```

```
PRIMARY STATUS -> ACTIVE_NORMAL
```

```
SECONDARY STATUS -> FAULTY
```

```
EMS ORACLE STATUS IS ... -> Daemon is running!
```

```
ORACLE STATUS IS... -> Daemon is running! Control Command
```



---

#### Note

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE\_NORMAL becomes ACTIVE, STANDBY\_NORMAL becomes STANDBY, and so forth.

---

### Control Command

The control command puts an EMS into a specific state.

---

#### Command Types

Control

---

#### Examples

```
control element-manager id=EM01; target-state=normal;
```

```
control element-manager id=EM01; target-state=active-standby; (Release 4.5)
```

Reply Example:

Request was successful

```
REPLY=CONFIGURATION COMMAND EXECUTED->CONTROL EMS LOCAL STATUS
```

# Bulk Data Management System

This section describes the status and control commands for the Cisco BTS 10200 Softswitch Bulk Data Management System (BDMS).

## Status Command

The status command reports the status of the BDMS.

---

### Command Types

Status

---

### Examples

```
status bdms; id=BDMS01;
```

Reply Example:

```
BILLING SERVER STATUS IS... ->
```

```
APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
```

```
PRIMARY STATUS -> ACTIVE
```

```
SECONDARY STATUS -> STANDBY
```

```
BILLING ORACLE STATUS IS... -> Daemon is running!
```

Reply : Success:

```
CLI>
```

```
CLI>control bdms id=BDMS01; target-state=active-standby
```

```
APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
```

```
REASON -> Application instance is already in request configuration
```

Reply : Success:

## Control Command

The control command puts the BDMS into a specific state.

---

### Command Types

Control

---

### Examples

```
control bdms id=BDMS1; target-state=normal;
```

```
control bdms id=BDMS1; target-state=active-standby; (Release 4.5)
```

Reply Example:

Reply : Success:

```
APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
```

```
REASON -> CONFIGURATION COMMAND EXECUTED->CONTROL BDMS LOCAL STATUS System
```

## Status System Command

The status system command returns the status of all applicable components of the system, including the BDMS.

### Command Types

Status

### Examples

```
status system;
```

Reply Example:

```
Checking Call Agent status ...
Checking Feature Server status ...
Checking Billing Server status ...
Checking Billing Oracle status ...
Checking Element Manager status ...
Checking ORACLE status ...

CALL AGENT STATUS IS... ->

APPLICATION INSTANCE -> Call Agent [CA146]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

FEATURE SERVER STATUS IS... ->

APPLICATION INSTANCE -> Feature Server [FSPTC235]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

FEATURE SERVER STATUS IS... ->

APPLICATION INSTANCE -> Feature Server [FSAIN205]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

BILLING SERVER STATUS IS... ->

APPLICATION INSTANCE -> Bulk Data Management Server [BDMS01]
PRIMARY STATUS -> ACTIVE_NORMAL
SECONDARY STATUS -> STANDBY_NORMAL

BILLING ORACLE STATUS IS... -> Daemon is running!

ELEMENT MANAGER STATUS IS... ->

APPLICATION INSTANCE -> Element Manager [EM01]
PRIMARY STATUS -> STANDBY_NORMAL
SECONDARY STATUS -> ACTIVE_NORMAL

EMS ORACLE STATUS IS ... -> Daemon is running!

Reply : Success:
```



#### Note

In Release 4.5, the words FORCED and NORMAL are no longer returned in command responses. ACTIVE\_NORMAL becomes ACTIVE, STANDBY\_NORMAL becomes STANDBY, and so forth.

# Status Application Command

The status application command shows the state of any Cisco BTS 10200 Softswitch application (CA, FS, EMS, BDMS), including uptime, side indications and additional qualifying reason information.

## Command Types

Status

## Examples

```
status application id=*; (returns status of each component)
status application id=1; (returns status of every component containing a 1)
status application id=CA146;
status application id=CA146;
status application id=EM01;
status application id=EM01;
```

## Usage Guidelines

Wild card matching is available for this command. A value can be entered to report any component that has this value. For example, entering id=1 returns every component that has a 1 in its value.

## Syntax Description

|      |                                                                                                                                                                                                                                                                                                           |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * ID | Type of application.<br><br>VARCHAR(8): 1–8 ASCII characters. Permitted values are:<br><br>CA <sup>nnn</sup> (or cannn)—CA<br><br>EM <sup>nn</sup> (or emnn)—EMS<br><br>BDMS <sup>nn</sup> (or bdms)—BDMS<br><br>FSPTC <sup>nnn</sup> (or fsptcnnn)—FSPTC<br><br>FSAIN <sup>nnn</sup> (or fsainnnn)—FSAIN |
| NODE | UNIX system id. Input is not modified prior to validation.<br><br>VARCHAR(64): 1–64 ASCII characters. Enter at least 1 character, but not more than 64 characters. To clear a value, enter NULL.                                                                                                          |

# Control Application Command

The control application command stops or starts a platform instance using the CLI. This is the same as a root user entering the command: platform stop -i CA146.

## Command Types

Control

## Examples

```
control application id=CA146; node=prica01;action=start;
control application id=CA146; node=prica01;action=stop;
control application id=EM01; node=priems01;action=start;
control application id=EM01; node=priems01;action=stop;
```

**Syntax Description**

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * ID                   | <p>Type of application.</p> <p>VARCHAR(8): 1–8 ASCII characters.</p> <p>VARCHAR(64): 1–64 ASCII characters. (Release 4.5.1) Permitted values are:</p> <p>CAnnn (or cannn)—CA</p> <p>EMnn (or emnn)—EMS</p> <p>BDMSnn (or bdms)—BDMS</p> <p>FSnnn (or fsnnn)—FS</p>                                                                                                                                                                                                                                                                       |
| * ACTION               | <p>Activity to perform. Permitted values are:</p> <p>START—Start a CA, EMS, BDMS, or FS. This is the same as performing a <i>platform start</i>.</p> <p>STOP—Stop a CA, EMS, BDMS, or FS. This is the same as performing a <i>platform stop</i>.</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p><b>Caution</b> Performing a platform stop takes down a component and can produce outages.</p> </div> </div> |
| * BYPASS (Release 4.5) | <p>Mandatory in Release 4.5.1. Bypass. Input is not modified prior to validation.</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                                                 |
| * NODE                 | <p>UNIX system id. Input is not modified prior to validation.</p> <p>VARCHAR(64): 1–64 ASCII characters. Enter at least 1 character, but not more than 64 characters. To clear a value, enter NULL.</p>                                                                                                                                                                                                                                                                                                                                  |
| * IRDP (Release 4.5)   | <p>Mandatory in Release 4.5.1. IRDP. Input is not modified prior to validation.</p> <p>CHAR(1): Y/N (Default = Y).</p>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| * PING (Release 4.5)   | <p>Mandatory in Release 4.5.1. Ping. Input is not modified prior to validation.</p> <p>CHAR(1): Y/N (Default = Y).</p>                                                                                                                                                                                                                                                                                                                                                                                                                   |

# System Configuration Command

Use the System Configuration commands to manage the Network Time Protocol servers on the system.

## Command Types

Show and change

## Examples

```
show ems;
change ems ntp-server=ntp-server-1,ntp-server-2; (Obsolete in Release 4.5)
change ems interface=cel;ip-alias=priems09.cisco.com
```



### Note

There are two forms of the change command:

```
change ems ntp-server=xxxx (Obsolete in Release 4.5)
```

```
change ems interface=xxx, ip-alias=xxx
```

The first form identifies the NTP server that the Element Management System (EMS) must synchronize to. The second form creates an IP address alias that tracks the active EMS.

## Usage Guidelines

Primary Key Token(s): None.

Change Rules: None.

## Syntax Description

|            |                                                                                                                                                                                                                                                                                         |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERFACE  | The physical network interface to be made an alias.<br>VARCHAR(10): 1–10 characters.                                                                                                                                                                                                    |
| IP-ALIAS   | Interface alias. Assigned by the service provider.<br>VARCHAR(64): 1–64 characters.                                                                                                                                                                                                     |
| NTP-SERVER | Network time protocol master server name. Defines the Cisco BTS 10200 Softswitch server used for time synchronization.<br>VARCHAR(64): 1–64 ASCII characters.<br><b>Note</b> In Release 4.1, both NTP servers must be specified. In Release 4.2, only one NTP server must be specified. |





# CHAPTER 11

## Measurements

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Revised: July 24, 2009, OL-3743-42

This chapter describes the tables and their commands that are used to provision and manage the types of traffic statistics in Measurement tables.



### Note

Some tokens in this chapter are mandatory for *on-demand requests*. An *on-demand request* takes a snapshot of current counters at a particular point in time. This snapshot can be across current collection intervals (time interval), although only data from the current interval is returned. For example, if you wish to get a current measurement at 6:10 AM, and it is 6:10 AM, you can enter a start time of 6:10 or greater (such as 6:20). But you will receive only those counters collected from 6:01 until 6:10, within the time of the current collection interval. For this type of command, the on-demand tokens are mandatory. However, if it is 6:10 AM and you run a start time of 5:00 and an end time of 5:30, you will receive all measurements collected in that interval and the on-demand tokens are optional.

For any measurement report request, you can specify the creation of a file of comma-separated ASCII data of the values retrieved. This is done using the `output=<filename>` token. This token is created in memory when needed and is not physically present in any of the measurement tables. It is used in conjunction with the `output-type` token. For example, entering the following command results in the creation of a file `Tm_yourfilename.csv` in the `/opt/ems/report` directory:

```
report measurement-callp-summary; output=callpsummary; output-type=CSV
```

All files begin with `Tm_`, followed by the filename entered by the user, and are placed in the `/opt/ems/report` directory on the active Element Management System (EMS).

The output file contains the same data that one receives from issuing a report, except that the data is arranged horizontally in a comma-separated format. Therefore, instead of the following:

```
FIELD-NAME1 value1  
FIELD-NAME2 value2
```

The output is:

```
FIELD-NAME1, FIELD-NAME2, value1, value2, and so forth.
```



### Note

In the following tables, the start-time value must be greater than, or equal to, now when you take snapshots of measurement data that have not yet been logged to the disk yet.



Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

# AIN Services Summary

The Measurement AIN Services Feature Server Summary (measurement-ainsvc-summary) table requests a summary report of AIN service-related statistics for a specified Feature Server that occur during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-AINSVC-SUMMARY

Table Containment Area: OAMP

Command Types

Report, show and clear

Examples

```
show measurement-ainsvc-summary;  
report measurement-ainsvc-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27  
13:00:00; feature-server-id=FSAIN203;output-type=csv;  
clear measurement-ainsvc-summary feature-server-id=FSAIN203;
```



Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

Usage Guidelines

Primary Key Token(s): None.  
Foreign Key Token(s): feature-server-id

Syntax Description

|                   |                                                                                                                                                                                                                         |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. The ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format fsptcnnn or fsainnnn.                               |
| DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-1</a> for permitted values. |
| END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                 |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                              |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

Table 11-1 lists the values for the AIN Services Summary Display token.

**Table 11-1 AIN Services Summary Display Token Values**

|                            |
|----------------------------|
| TIMESTAMP                  |
| NODENAME                   |
| CONDITION                  |
| AIN SVC_TOTAL_QUERY        |
| AIN SVC_8XX_QUERY          |
| AIN SVC_EXT_8XX_QUERY      |
| AIN SVC_EXT_8XX_QUERY_SUCC |
| AIN SVC_EXT_8XX_FAIL_APP   |
| AIN SVC_EXT_8XX_FAIL_NETW  |
| AIN SVC_LOC_8XX_QUERY      |
| AIN SVC_LOC_8XX_QUERY_SUCC |
| AIN SVC_LOC_8XX_ANI_BLOCK  |
| AIN SVC_LOC_8XX_II_BLOCK   |
| AIN SVC_LOC_8XX_DNIS_SUCC  |

|                               |               |
|-------------------------------|---------------|
| AINSVC_LOC_8XX_ROUTING_SUCC   |               |
| AINSVC_LOC_8XX_REROUTE        |               |
| AINSVC_LOC_8XX_FAIL_APP       |               |
| AINSVC_TOTAL_LNP_QUERY        |               |
| AINSVC_EXT_LNP_QUERY          |               |
| AINSVC_EXT_LNP_QUERY_SUCC     |               |
| AINSVC_EXT_LNP_FAIL_APP       |               |
| AINSVC_EXT_LNP_FAIL_NETW      |               |
| AINSVC_EXT_8XX_QUERY_FAIL     |               |
| AINSVC_EXT_LNP_QUERY_LRN      |               |
| AINSVC_EXT_LNP_QUERY_FAIL     |               |
| AINSVC_LOC_LNP_QUERY          | (Release 4.5) |
| AINSVC_LOC_LNP_QUERY_SUCC     | (Release 4.5) |
| AINSVC_LOC_LNP_FAIL_APP       | (Release 4.5) |
| AINSVC_LOC_LNP_QUERY_RN_FOUND | (Release 4.5) |
| AINSVC_LOC_LNP_QUERY_NO_RN    | (Release 4.5) |
| NUM_OF_8XX                    |               |
| NUM_OF_AIN                    |               |
| NUM_OF_CNAM                   |               |
| NUM_OF_EXT_8XX                |               |
| NUM_OF_EXT_8XX_FAIL_APPL      |               |
| NUM_OF_EXT_8XX_FAIL_NET       |               |
| NUM_OF_EXT_8XX_QUERY_FAIL     |               |
| NUM_OF_EXT_8XX_SUCCEED        |               |
| NUM_OF_EXT_CNAM               |               |
| NUM_OF_EXT_CNAM_FAIL_APPL     |               |
| NUM_OF_EXT_CNAM_SUCCEED       |               |
| NUM_OF_EXT_LNP                |               |
| NUM_OF_EXT_LNP_FAIL_APPL      |               |
| NUM_OF_EXT_LNP_QUERY_FAIL     |               |
| NUM_OF_EXT_LNP_QUERY_LRN      |               |
| NUM_OF_EXT_LNP_SUCCEED        |               |
| NUM_OF_LNP                    |               |
| NUM_OF_LOC_8XX                |               |
| NUM_OF_LOC_8XX_ANI_BLOCKED    |               |
| NUM_OF_LOC_8XX_DNIS_SUCCEED   |               |
| NUM_OF_LOC_8XX_FAIL_APPL      |               |
| NUM_OF_LOC_8XX_II_BLOCKED     |               |

|                                |
|--------------------------------|
| NUM_OF_LOC_8XX_REROUTED        |
| NUM_OF_LOC_8XX_ROUTING_SUCCEED |
| NUM_OF_LOC_8XX_SUCCEED         |
| SIP_100_RX                     |
| SIP_100_TX                     |
| SIP_18x_RX                     |
| SIP_18x_TX                     |
| SIP_200_RX                     |
| SIP_200_TX                     |
| SIP_3xx_RX                     |
| SIP_3xx_TX                     |
| SIP_4xx_RX                     |
| SIP_4xx_TX                     |
| SIP_5xx_RX                     |
| SIP_5xx_TX                     |
| SIP_6xx_RX                     |
| SIP_6xx_TX                     |
| SIP_7xx_RX                     |
| SIP_7xx_TX                     |
| SIP_ACK_RX                     |
| SIP_ACK_TX                     |
| SIP_BYE_RX                     |
| SIP_BYE_TX                     |
| SIP_CANCEL_RX                  |
| SIP_CANCEL_TX                  |
| SIP_INFO_RX                    |
| SIP_INFO_TX                    |
| SIP_INVITE_RX                  |
| SIP_INVITE_REPLACES_RX         |
| SIP_INVITE_REPLACES_TX         |
| SIP_INVITE_TX                  |
| SIP_NOTIFY_RX                  |
| SIP_NOTIFY_TX                  |
| SIP_OPTIONS_RX                 |
| SIP_OPTIONS_TX                 |
| SIP_PRACK_RX                   |
| SIP_PRACK_TX                   |
| SIP_PROV_RSP_RETRAN_RX         |

|                          |
|--------------------------|
| SIP_PROV_RSP_RETRAN_TX   |
| SIP_REFER_RX             |
| SIP_REFER_W_REPLACEs_RX  |
| SIP_REFER_TX             |
| SIP_REGISTER_RX          |
| SIP_REGISTER_TX          |
| SIP_REL100_RX            |
| SIP_REL100_TX            |
| SIP_REQ_RETRAN_RX        |
| SIP_REQ_RETRAN_TX        |
| SIP_RSP_RETRAN_RX        |
| SIP_RSP_RETRAN_TX        |
| SIP_SUBSCRIBE_RX         |
| SIP_SUBSCRIBE_TX         |
| SIP_T1_TIMER_EXPIRED     |
| SIP_T2_TIMER_REACHED     |
| SIP_TOTAL_INCOM_MSG      |
| SIP_TOTAL_SUCC_INCOM_MSG |
| SIP_TOTAL_OUTG_MSG_ATTMP |
| SIP_TOTAL_SUCC_OUTG_MSG  |
| SIP_UNSUPPORTED_RX       |
| SIP_UPDATE_RX            |
| SIP_UPDATE_TX            |

## Announcement Measurements Summary

The Announcement Measurements Summary (measurement-anm-summary) table collects announcement statistics, such as how many times a specific announcement was played during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-ANM-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-anm-summary;
report measurement-anm-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-anm-summary call-agent-id=ca001;
```

**Caution**

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Change Rules: None.

**Syntax Description**

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br>TIMESTAMP<br>NODENAME<br>CONDITION<br>ANM_ADDR_INCOMPLETE<br>ANM_AUTHCODE_INVALID<br>ANM_CALL_REJECTED<br>ANM_CAUSE_UNKNOWN<br>ANM_CKT_UNAVAIL<br>ANM_DEST_OUTOFORDER<br>ANM_EMG_CKT_UNAVAIL (Release 4.5)<br>ANM_FAC_REJECT<br>ANM_FEAT_NOT_SUBS<br>ANM_HNPA_ABSENT<br>ANM_NO_ROUTE_DEST<br>ANM_NO_RTE_TRANSITNW<br>ANM_NUM_CHANGED<br>ANM_PRE_0_1_ABSENT<br>ANM_PRE_0_1_PRESENT<br>ANM_TEMP_DISCONNECT<br>ANM_UNALLOCATED_NUM |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events).</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                              |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

## Measurement AIN Tools Summary (Release 4.4.1)

The Measurement AIN Tools Summary (measurement-ain-tools-summary) table collects AIN tools statistics. Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-AIN-TOOLS-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-ain-tools-summary;
report measurement-ain-tools-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27
12:00:00; feature-server-id=FSAIN203; output=ain-tools-report; output-type=csv;
clear measurement-ain-tools-summary feature-server-id=FSAIN203;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                           |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. The ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format fsptcnnn or fsainnnn.                                                                                                                                                                                                                                                                                                                                                                                                 |
|                           | DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-2</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                   |
|                           | END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           | INTERVAL          | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
|                           | OUTPUT-TYPE       | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                           | START-TIME        | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                              |
|                           | SUM               | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                                                                                                                                                                  |
|                           |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

[Table 11-2](#) lists the values for the Measurement AIN Tools Summary Display token.

**Table 11-2 Measurement AIN Tools Summary Display Token Values**

|                           |
|---------------------------|
| TIMESTAMP                 |
| NODENAME                  |
| CONDITION                 |
| AIN SVC_8XX_QUERY         |
| AIN SVC_EXT_8XX_FAIL_APP  |
| AIN SVC_EXT_8XX_FAIL_NETW |
| AIN SVC_EXT_8XX_QUERY     |

|                                |               |
|--------------------------------|---------------|
| AIN SVC_EXT_8XX_QUERY_FAIL     |               |
| AIN SVC_EXT_8XX_QUERY_SUCC     |               |
| AIN SVC_EXT_LNP_FAIL_APP       |               |
| AIN SVC_EXT_LNP_FAIL_NETW      |               |
| AIN SVC_EXT_LNP_QUERY          |               |
| AIN SVC_EXT_LNP_QUERY_FAIL     |               |
| AIN SVC_EXT_LNP_QUERY_LRN      |               |
| AIN SVC_EXT_LNP_QUERY_SUCC     |               |
| AIN SVC_LOC_8XX_ANI_BLOCK      |               |
| AIN SVC_LOC_8XX_DNIS_SUCC      |               |
| AIN SVC_LOC_8XX_FAIL_APP       |               |
| AIN SVC_LOC_8XX_II_BLOCK       |               |
| AIN SVC_LOC_8XX_QUERY          |               |
| AIN SVC_LOC_8XX_QUERY_SUCC     |               |
| AIN SVC_LOC_8XX_REROUTE        |               |
| AIN SVC_LOC_8XX_ROUTING_SUCC   |               |
| AIN SVC_LOC_LNP_FAIL_APP       | (Release 4.5) |
| AIN SVC_LOC_LNP_QUERY          | (Release 4.5) |
| AIN SVC_LOC_LNP_QUERY_NO_RN    | (Release 4.5) |
| AIN SVC_LOC_LNP_QUERY_RN_FOUND | (Release 4.5) |
| AIN SVC_LOC_LNP_QUERY_SUCC     | (Release 4.5) |
| AIN SVC_TOTAL_LNP_QUERY        |               |
| AIN SVC_TOTAL_QUERY            |               |
| SIS_100_RX                     | (Release 4.5) |
| SIS_100_TX                     | (Release 4.5) |
| SIS_18x_RX                     | (Release 4.5) |
| SIS_18x_TX                     | (Release 4.5) |
| SIS_200_RX                     | (Release 4.5) |
| SIS_200_TX                     | (Release 4.5) |
| SIS_3xx_RX                     | (Release 4.5) |
| SIS_3xx_TX                     | (Release 4.5) |
| SIS_4xx_RX                     | (Release 4.5) |
| SIS_4xx_TX                     | (Release 4.5) |
| SIS_5xx_RX                     | (Release 4.5) |
| SIS_5xx_TX                     | (Release 4.5) |
| SIS_6xx_RX                     | (Release 4.5) |
| SIS_6xx_TX                     | (Release 4.5) |
| SIS_7xx_RX                     | (Release 4.5) |

|                          |               |
|--------------------------|---------------|
| SIS_7xx_TX               | (Release 4.5) |
| SIS_ACK_RX               | (Release 4.5) |
| SIS_ACK_TX               | (Release 4.5) |
| SIS_BYE_RX               | (Release 4.5) |
| SIS_BYE_TX               | (Release 4.5) |
| SIS_CANCEL_RX            | (Release 4.5) |
| SIS_CANCEL_TX            | (Release 4.5) |
| SIS_INFO_RX              | (Release 4.5) |
| SIS_INFO_TX              | (Release 4.5) |
| SIS_INVITE_REPLACES_RX   | (Release 4.5) |
| SIS_INVITE_REPLACES_TX   | (Release 4.5) |
| SIS_INVITE_RX            | (Release 4.5) |
| SIS_INVITE_TX            | (Release 4.5) |
| SIS_NOTIFY_RX            | (Release 4.5) |
| SIS_NOTIFY_TX            | (Release 4.5) |
| SIS_OPTIONS_RX           | (Release 4.5) |
| SIS_OPTIONS_TX           | (Release 4.5) |
| SIS_PRACK_RX             | (Release 4.5) |
| SIS_PRACK_TX             | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_RX   | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_TX   | (Release 4.5) |
| SIS_REFER_RX             | (Release 4.5) |
| SIS_REFER_TX             | (Release 4.5) |
| SIS_REFER_W_REPLACES_RX  | (Release 4.5) |
| SIS_REGISTER_RX          | (Release 4.5) |
| SIS_REGISTER_TX          | (Release 4.5) |
| SIS_REL100_RX            | (Release 4.5) |
| SIS_REL100_TX            | (Release 4.5) |
| SIS_REQ_RETRAN_RX        | (Release 4.5) |
| SIS_REQ_RETRAN_TX        | (Release 4.5) |
| SIS_RSP_RETRAN_RX        | (Release 4.5) |
| SIS_RSP_RETRAN_TX        | (Release 4.5) |
| SIS_SUBSCRIBE_RX         | (Release 4.5) |
| SIS_SUBSCRIBE_TX         | (Release 4.5) |
| SIS_T1_TIMER_EXPIRED     | (Release 4.5) |
| SIS_T2_TIMER_REACHED     | (Release 4.5) |
| SIS_TOTAL_INCOM_MSG      | (Release 4.5) |
| SIS_TOTAL_OUTG_MSG_ATTMP | (Release 4.5) |

|                            |               |
|----------------------------|---------------|
| SIS_TOTAL_SUCC_INCOM_MSG   | (Release 4.5) |
| SIS_TOTAL_SUCC_OUTG_MSG    | (Release 4.5) |
| SIS_UNSUPPORTED_RX         | (Release 4.5) |
| SIS_UPDATE_RX              | (Release 4.5) |
| SIS_UPDATE_TX              | (Release 4.5) |
| TOOLS_LNP_QUERY_ATTMP      |               |
| TOOLS_LNP_QUERY_SUCC       |               |
| TOOLS_TOLLFREE_QUERY_ATTMP |               |
| TOOLS_TOLLFREE_QUERY_SUCC  |               |

## Measurement Audit Summary

The Measurement Audit Summary (measurement-audit-summary) table requests a summary report of audit-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-AUDIT-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-audit-summary;  
report measurement-audit-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27  
06:30:00; call-agent-id=CA146;output-type=csv;  
clear measurement-audit-summary call-agent-id=CA146;
```



### Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                           | DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br><br>TIMESTAMP<br><br>NODENAME<br><br>CONDITION<br><br>AUDIT_FS_TOTAL_SIP_RESP_TMO (Release 4.5)<br>AUDIT_FS_TOTAL_SIP_NOACK_TMO (Release 4.5)<br>AUDIT_FS_TOTAL_CA_SWITCHOVER (Release 4.5)<br>AUDIT_SIP_CCB_FREED (Release 4.5)<br>AUDIT_SIP_CALL_RELEASED (Release 4.5)<br>AUDIT_SIP_BCM_CALL_RELEASED (Release 4.5)<br>AUDIT_SIP_REGCONTACT_FREED (Release 4.5)<br>AUDIT_SS7_TRUNK_STATE_SYNCED (Release 4.5)<br>AUDIT_SS7_LONG_DUR_EXCEEDED (Release 4.5)<br>SS7_AUDIT_LONG_DUR_EXCEEDED<br>SS7_AUDIT_TRUNK_STATE_SYNCED |
|                           | END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                           | INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.                                                                                                                                |
|                           | OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p> |
| SUM        | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                     |

# Measurement Billing Summary

The Measurement Billing Summary (measurement-billing-summary) table requests a summary report of billing-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-BILLING-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-billing-summary;
report measurement-billing-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-billing-summary call-agent-id=CA146;
```



### Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-3</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                   |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT-TYPE | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                          |
| START-TIME  | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS |
| SUM         | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                    |

Table 11-3 lists the values for the Measurement Billing Summary Display token.

**Table 11-3 Measurement Billing Summary Display Token Values**

|                        |
|------------------------|
| TIMESTAMP              |
| NODENAME               |
| CONDITION              |
| BILLING_EM_ACKED       |
| BILLING_EM_LOGGED      |
| BILLING_EM_RETRANS     |
| BILLING_TOTAL_AIRLINES |
| BILLING_TOTAL_CNA      |
| BILLING_TOTAL_DA_INTER |
| BILLING_TOTAL_DA_INTL  |
| BILLING_TOTAL_INTL_OPR |
| BILLING_TOTAL_INTL_WZ1 |
| BILLING_TOTAL_LB_TEST  |
| BILLING_TOTAL_NAT_OPR  |
| BILLING_TOTAL_RAILWAYS |
| BILLING_TOTAL_SVC_CODE |
| BILLING_TOTAL_MOBILE   |
| BILLING_TOTAL_UAN      |
| CALLTYPE_500           |
| CALLTYPE_700           |
| CALLTYPE_900           |
| CALLTYPE_976           |
| CALLTYPE_AMBULANCE     |

|                            |
|----------------------------|
| CALLTYPE_ATTENDANT         |
| CALLTYPE_BLV               |
| CALLTYPE_BUSINESS          |
| CALLTYPE_CARRIER_OPERATOR  |
| CALLTYPE_CUT_THRU          |
| CALLTYPE_DA                |
| CALLTYPE_DA_TOLL           |
| CALLTYPE_EMG               |
| CALLTYPE_EXTENSION         |
| CALLTYPE_FIRE              |
| CALLTYPE_INFO              |
| CALLTYPE_INTERLATA         |
| CALLTYPE_INTL              |
| CALLTYPE_INVALID           |
| CALLTYPE_LOCAL             |
| CALLTYPE_LRN               |
| CALLTYPE_NAS               |
| CALLTYPE_NATIONAL          |
| CALLTYPE_NON_EMG           |
| CALLTYPE_NONE              |
| CALLTYPE_OPERATOR          |
| CALLTYPE_OPERATOR_ASSISTED |
| CALLTYPE_PCS               |
| CALLTYPE_POLICE            |
| CALLTYPE_PREMIUM           |
| CALLTYPE_RELAY             |
| CALLTYPE_REPAIR            |
| CALLTYPE_SPEED_DIAL        |
| CALLTYPE_TANDEM            |
| CALLTYPE_TEST_CALL         |
| CALLTYPE_TIME              |
| CALLTYPE_TOLL              |
| CALLTYPE_TOLL_FREE         |
| CALLTYPE_TRAFFIC           |
| CALLTYPE_TW                |
| CALLTYPE_VACANT            |
| CALLTYPE_WEATHER           |

# Measurement Call Processing Summary

The Measurement Call Processing Summary (measurement-callp-summary) table provides a summary report of call processing statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-CALLP-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-callp-summary;
report measurement-callp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-callp-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                           |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br>STRING. See <a href="#">Table 11-4</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                           |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br>STRING.<br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
| OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-4 lists the values for the Measurement Call Processing Summary Display token.

**Table 11-4 Measurement Call Processing Summary Display Token Values**

|                                           |
|-------------------------------------------|
| TIMESTAMP                                 |
| NODENAME                                  |
| CONDITION                                 |
| BCM_CALL_SUCC                             |
| BCM_CAS_CALL_SUCCBCM_CAS_CALL_A<br>BAND   |
| BCM_CAS_CAS_CALL                          |
| BCM_CAS_H323_CALLS                        |
| BCM_CAS_ISDN_CALL                         |
| BCM_CAS_MGCP_CALL                         |
| BCM_CAS_ORIG_ATTMP                        |
| BCM_CAS_ORIG_FAIL                         |
| BCM_CAS_SIP_CALL                          |
| BCM_CAS_SS7_CALL                          |
| BCM_CAS_TERM_ATTMP                        |
| BCM_CAS_TERM_FAIL                         |
| BCM_EMGNCY_ATTMP                          |
| BCM_EMGNCY_CALL_ABAND                     |
| BCM_EMGNCY_CALL_SUCC                      |
| BCM_EMGNCY_FAIL                           |
| BCM_H323_CALLS_ABANDON                    |
| BCM_H323_CALLS_SUCCESS                    |
| BCM_H323_CAS_CALLSBCM_H323_H323_C<br>ALLS |
| BCM_H323_ISDN_CALLS                       |
| BCM_H323_MGCP_CALLS                       |
| BCM_H323_ORIG_ATTEMPTS                    |
| BCM_H323_ORIG_FAILURES                    |

|                                      |
|--------------------------------------|
| BCM_H323_SIP_CALLS                   |
| BCM_H323_SS7_CALLS                   |
| BCM_H323_TERM_ATTEMPTS               |
| BCM_H323_TERM_FAILURES               |
| BCM_INTERLA_ATTMP                    |
| BCM_INTERLA_CALL_ABAND               |
| BCM_INTERLA_FAILBCM_INTERL_CALL_SUCC |
| BCM_INTL_ATTMP                       |
| BCM_INTL_CALL_ABAND                  |
| BCM_INTL_CALL_SUCC                   |
| BCM_INTL_FAIL                        |
| BCM_INTRAL_CALL_SUCC                 |
| BCM_INTRALA_ATTMP                    |
| BCM_INTRALA_CALL_ABAND               |
| BCM_INTRALA_FAIL                     |
| BCM_ISDN_CALL_ABAND                  |
| BCM_ISDN_CALL_SUCC                   |
| BCM_ISDN_CAS_CALL                    |
| BCM_ISDN_H323_CALLS                  |
| BCM_ISDN_ISDN_CALL                   |
| BCM_ISDN_MGCP_CALL                   |
| BCM_ISDN_ORIG_ATTMP                  |
| BCM_ISDN_ORIG_FAIL                   |
| BCM_ISDN_SIP_CALL                    |
| BCM_ISDN_SS7_CALL                    |
| BCM_ISDN_TERM_ATTMP                  |
| BCM_ISDN_TERM_FAIL                   |
| BCM_LOCAL_ATTMP                      |
| BCM_LOCAL_CALL_ABAND                 |
| BCM_LOCAL_CALL_SUCC                  |
| BCM_LOCAL_FAIL                       |
| BCM_MGCP_CALL_ABAND                  |
| BCM_MGCP_CALL_SUCC                   |
| BCM_MGCP_CAS_CALL                    |
| BCM_MGCP_H323_CALLS                  |
| BCM_MGCP_ISDN_CALL                   |
| BCM_MGCP_MGCP_CALL                   |
| BCM_MGCP_ORIG_ATTMP                  |

|                                           |
|-------------------------------------------|
| BCM_MGCP_ORIG_FAIL                        |
| BCM_MGCP_SIP_CALL                         |
| BCM_MGCP_SS7_CALL                         |
| BCM_MGCP_TERM_ATTMP                       |
| BCM_MGCP_TERM_FAIL                        |
| BCM_ORIG_ATTMP                            |
| BCM_ORIG_FAIL                             |
| BCM_SIP_CALL_ABAND                        |
| BCM_SIP_CALL_SUCC                         |
| BCM_SIP_CAS_CALL                          |
| BCM_SIP_H323_CALLS                        |
| BCM_SIP_ISDN_CALL                         |
| BCM_SIP_MGCP_CALL                         |
| BCM_SIP_ORIG_ATTMP                        |
| BCM_SIP_ORIG_FAIL                         |
| BCM_SIP_SIP_CALL                          |
| BCM_SIP_SS7_CALL                          |
| BCM_SIP_TERM_ATTMP                        |
| BCM_SIP_TERM_FAIL                         |
| BCM_SS7_CALL_ABAND                        |
| BCM_SS7_CALL_SUCC                         |
| BCM_SS7_CAS_CALL                          |
| BCM_SS7_H323_CALLS                        |
| BCM_SS7_ISDN_CALL                         |
| BCM_SS7_MGCP_CALL                         |
| BCM_SS7_ORIG_ATTMP                        |
| BCM_SS7_ORIG_FAIL                         |
| BCM_SS7_SIP_CALL                          |
| BCM_SS7_SS7_CALL                          |
| BCM_SS7_TERM_ATTMP                        |
| BCM_SS7_TERM_FAIL                         |
| BCM_TERM_ATTMP                            |
| BCM_TERM_FAIL                             |
| BCM_TOLL_FREE_ATTMP                       |
| BCM_TOLL_FREE_CALL_ABAND                  |
| BCM_TOLL_FREE_CALL_SUCCBCM_CALL<br>_ABAND |
| BCM_TOLL_FREE_FAIL                        |
| BCM_TPM_NAS_ADMIN_REBOOT                  |

|                                |               |
|--------------------------------|---------------|
| BCM_TPM_NAS_ADMIN_RESET        |               |
| BCM_TPM_NAS_AUTH_FAIL          |               |
| BCM_TPM_NAS_AUTH_SUCC          |               |
| BCM_TPM_NAS_CALLBACK           |               |
| BCM_TPM_NAS_CLD_UNACC          |               |
| BCM_TPM_NAS_CLG_UNACC          |               |
| BCM_TPM_NAS_HOST_REQUEST       |               |
| BCM_TPM_NAS_IDLE_TIMEOUT       |               |
| BCM_TPM_NAS_ISP_PORT_LIMIT     |               |
| BCM_TPM_NAS_LOST_CARRIER       |               |
| BCM_TPM_NAS_LOST_SERVICE       |               |
| BCM_TPM_NAS_NAS_ERROR          |               |
| BCM_TPM_NAS_NAS_REBOOT         |               |
| BCM_TPM_NAS_NAS_REQUEST        |               |
| BCM_TPM_NAS_NO_MODEMS          |               |
| BCM_TPM_NAS_OP_FAIL            |               |
| BCM_TPM_NAS_PORT_ERROR         |               |
| BCM_TPM_NAS_PORT_PREEMPTED     |               |
| BCM_TPM_NAS_PORT_SUSPENDED     |               |
| BCM_TPM_NAS_PORT_UNNEEDED      |               |
| BCM_TPM_NAS_SERVICE_UNAVAIL    |               |
| BCM_TPM_NAS_SESSION_TIMEOUT    |               |
| BCM_TPM_NAS_USER_ERROR         |               |
| BCM_TPM_NAS_USER_REQUEST       |               |
| CALLP_LB_TEST_SUCC             | (Release 4.5) |
| CALLP_NCT_TEST_SUCC            | (Release 4.5) |
| CALLP_NCT_TEST_FAIL            | (Release 4.5) |
| CALLP_NLB_TEST_SUCC            | (Release 4.5) |
| CALLP_NLB_TEST_FAIL            | (Release 4.5) |
| CALLP_TEST_ROUTE_SUCC          | (Release 4.5) |
| CALLP_TOTAL_TDISC_ORIG_ATTMP   | (Release 4.5) |
| CALLP_T38_FAX_MEDIA_SETUP_SUCC | (Release 4.5) |
| CALLP_T38_FAX_MEDIA_SETUP_FAIL | (Release 4.5) |

## Measurement Call Tools Summary (Release 4.4.1)

The Measurement Call Tools Summary (measurement-call-tools-summary) table collects call tools statistics. Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-CALL-TOOLS-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-call-tools-summary;
report measurement-call-tools-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27
12:00:00; call-agent-id=CA146; output=call-tools-report; output-type=csv;
clear measurement-call-tools-summary call-agent-id=CA146;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

### Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | <p>Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.</p> <p>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.</p>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY       | <p>Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).</p> <p>STRING. Permitted values are:</p> <p>STIMESTAMP</p> <p>NODENAME</p> <p>CONDITION</p> <p>TOOLS_TRUNK_TRANS_ATTMP</p> <p>TOOLS_TRUNK_TRANS_SUCC</p> <p>TOOLS_LINE_TRANS_ATTMP</p> <p>TOOLS_LINE_TRANS_SUCC</p>                                                                                                                                                                                                                       |
| END-TIME      | <p>Ending time for measurement summary. Enter all 19 ASCII characters as shown.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL      | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT-TYPE | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                           |
| START-TIME  | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM         | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

## Measurement Dynamic QOS Summary

The Measurement Dynamic Quality of Service (QOS) Summary (measurement-dqos-summary) table requests a summary report of quality-of-service-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-DQOS-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-dqos-summary;
report measurement-dqos-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-dqos-summary call-agent-id=CA146;
```



### Caution

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           | DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br><br>TIMESTAMP<br><br>NODENAME<br><br>CONDITION<br><br>DQOS_GATE_COMMIT—The number of successfully committed DQOS gates of all types on the reporting CMTS.<br><br>DQOS_GATESET_ATTMP—The number of DQOS gate set attempts of all types on the reporting CMTS.<br><br>DQOS_GATESET_SUCC—The number of successful DQOS gate set attempts of all types on the reporting CMTS.                    |
|                           | END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           | INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
|                           | OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                           | START-TIME    | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                              |
|                           | SUM           | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                                                                                                                                                                  |

# Measurement Event Messaging Summary

The Measurement Event Messaging Summary (measurement-em-summary) table requests a summary report of billing event-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-EM-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-em-summary;
report measurement-em-summary start-time=2003-03-27 06:00:00;end-time=2003-03-27 06:30:00;
call-agent-id=CA146;output-type=csv;
clear measurement-em-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | <p>Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.</p> <p>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| DISPLAY       | <p>Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).</p> <p>STRING. Permitted values are:</p> <p>TIMESTAMP</p> <p>NODENAME</p> <p>CONDITION</p> <p>BILLING_EM_ACKED—The number of EMs acknowledged by the RKS.</p> <p>BILLING_EM_LOGGED—The number of EMs written to disk but not sent to any RKS.</p> <p>BILLING_EM_RETRANS—The number of event messages that were transmitted to an alternate RKS due to the lack of a response from a previously tried RKS, excluding retries. The counter is incremented when an event message is first sent to an alternate RKS. Any retries that occur at the RADIUS stack level (as provided in the radius-profile table) will not be included in this count.</p> |
| END-TIME      | <p>Ending time for measurement summary. Enter all 19 ASCII characters as shown.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS</p>                                                                                                                                               |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

## Measurement H323 Summary

The Measurement H323 Summary (measurement-h323-summary) table requests a summary report of H.323-related statistics for a specified Call Agent that occur during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-H323-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-h323-summary;
report measurement-h323-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-h323-summary call-agent-id=ca001;
```



#### Note

The clear command clears all current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Other Rules: None.

**Syntax Description**

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table.<br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br>STRING. See <a href="#">Table 11-5</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                   |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
| OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| START-TIME    | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events).<br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                              |
| SUM           | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                                                                                                                                                              |

[Table 11-5](#) lists the values for the Measurement H.323 Summary Display token.

**Table 11-5 Measurement H.323 Summary Display Token Values**

|               |
|---------------|
| TIMESTAMP     |
| NODENAME      |
| CONDITION     |
| H323_ALERT_RX |

|                           |
|---------------------------|
| H323_ALERT_TX             |
| H323_ARJ_RX               |
| H323_ARJ_TX               |
| H323_ARQ_RX               |
| H323_ARQ_TX               |
| H323_BCF_RX               |
| H323_BCF_TX               |
| H323_BRJ_RX               |
| H323_BRJ_TX               |
| H323_BRQ_RX               |
| H323_BRQ_TX               |
| H323_CALL_PROCEEDING_FAIL |
| H323_CALL_PROCEEDING_RX   |
| H323_CALL_PROCEEDING_TX   |
| H323_CONNECT_FAIL         |
| H323_DCF_RX               |
| H323_DCF_TX               |
| H323_DRJ_RX               |
| H323_DRJ_TX               |
| H323_DRQ_RX               |
| H323_DRQ_TX               |
| H323_FACILITY_FAIL        |
| H323_FACILITY_RX          |
| H323_FACILITY_TX          |
| H323_GCF_RX               |
| H323_GCF_TX               |
| H323_GRJ_RX               |
| H323_GRJ_TX               |
| H323_GRQ_RX               |
| H323_GRQ_TX               |
| H323_IN_PROGRESS_FAIL     |
| H323_IN_PROGRESS_RX       |
| H323_IN_PROGRESS_TX       |
| H323_INFORMATION_FAIL     |
| H323_INFORMATION_RX       |
| H323_INFORMATION_TX       |
| H323_NOTIFY_FAIL          |
| H323_NOTIFY_RX            |

|                            |
|----------------------------|
| H323_NOTIFY_TX             |
| H323_PASSTHROU_FAIL        |
| H323_PASSTHROU_RX          |
| H323_PASSTHROU_TX          |
| H323_RAC_RX                |
| H323_RAC_TX                |
| H323_RAI_RX                |
| H323_RAI_TX                |
| H323_RCF_RX                |
| H323_RCF_TX                |
| H323_REJECT_FAIL           |
| H323_REJECT_RX             |
| H323_REJECT_TX             |
| H323_RELEASE_COMPLETE_FAIL |
| H323_RELEASE_COMPLETE_RX   |
| H323_RELEASE_COMPLETE_TX   |
| H323_RIP_RX                |
| H323_RIP_TX                |
| H323_RRJ_RX                |
| H323_RRJ_TX                |
| H323_RRQ_RX                |
| H323_RRQ_TX                |
| H323_SETUP_CONFIRM_RX      |
| H323_SETUP_CONFIRM_TX      |
| H323_SETUP_FAIL            |
| H323_SETUP_RX              |
| H323_SETUP_TX              |
| H323_UCF_RX                |
| H323_UCF_TX                |
| H323_URJ_RX                |
| H323_URJ_TX                |
| H323_URQ_RX                |
| H323_URQ_TX                |
| H323_USER_INFO_FAIL        |
| H323_USER_INFO_RX          |
| H323_USER_INFO_TX          |

# Measurement INAP Summary



## Note

This table is obsoleted in Release 4.5.

The Measurement Intelligent Network Application Part (INAP) Summary (measurement-inap-summary) table requests a summary report of INAP-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-INAP-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-inap-summary;
report measurement-inap-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-inap-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-6</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                   |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT-TYPE | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                           |
| START-TIME  | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM         | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-6 lists the values for the Measurement INAP Summary Display token.

**Table 11-6 Measurement INAP Summary Display Token Values**

|                             |                          |
|-----------------------------|--------------------------|
| INAP_CANCEL_RX              | Obsolete in Release 4.5. |
| INAP_CANCEL_TX              | Obsolete in Release 4.5. |
| INAP_DATABASE_ERR_RX        | Obsolete in Release 4.5. |
| INAP_DATABASE_ERR_TX        | Obsolete in Release 4.5. |
| INAP_ETC_FAIL_RX            | Obsolete in Release 4.5. |
| INAP_ETC_FAIL_TX            | Obsolete in Release 4.5. |
| INAP_IMPROP_CALLER_RSP_RX   | Obsolete in Release 4.5. |
| INAP_IMPROP_CALLER_RSP_TX   | Obsolete in Release 4.5. |
| INAP_INFO_KEY_ERR_RX        | Obsolete in Release 4.5. |
| INAP_INFO_KEY_ERR_TX        | Obsolete in Release 4.5. |
| INAP_MISSING_CUST_REC_RX    | Obsolete in Release 4.5. |
| INAP_MISSING_CUST_REC_TX    | Obsolete in Release 4.5. |
| INAP_MISSING_PARM_RX        | Obsolete in Release 4.5. |
| INAP_MISSING_PARM_TX        | Obsolete in Release 4.5. |
| INAP_NUM_CAPAB_FAIL         | Obsolete in Release 4.5. |
| INAP_NUM_CHANNEL_BUSY       | Obsolete in Release 4.5. |
| INAP_NUM_RSRC_NOT_AVAIL     | Obsolete in Release 4.5. |
| INAP_NUM_RSRC_NOT_SUPP      | Obsolete in Release 4.5. |
| INAP_NUM_TASK_REFUSED       | Obsolete in Release 4.5. |
| INAP_NUM_INVALID_CALLER_RSP | Obsolete in Release 4.5. |
| INAP_NUM_IP_TMO             | Obsolete in Release 4.5. |
| INAP_NUM_SUPPL_SVC_INVOKE   | Obsolete in Release 4.5. |
| INAP_NUM_SEND_RSCR_CANCEL   | Obsolete in Release 4.5. |

|                           |                          |
|---------------------------|--------------------------|
| INAP_NUM_TEMP_FAIL        | Obsolete in Release 4.5. |
| INAP_NUM_UNAUTH_REQ       | Obsolete in Release 4.5. |
| INAP_NUM_UNAUTH_DEST      | Obsolete in Release 4.5. |
| INAP_NUM_PROCEED_ERR      | Obsolete in Release 4.5. |
| INAP_PARM_OUT_OF_RANGE_RX | Obsolete in Release 4.5. |
| INAP_PARM_OUT_OF_RANGE_TX | Obsolete in Release 4.5. |
| INAP_REFERRAL_RX          | Obsolete in Release 4.5. |
| INAP_REFERRAL_TX          | Obsolete in Release 4.5. |
| INAP_REPORT_ERR_RX        | Obsolete in Release 4.5. |
| INAP_REPORT_ERR_TX        | Obsolete in Release 4.5. |
| INAP_REQ_INFO_RX          | Obsolete in Release 4.5. |
| INAP_REQ_INFO_TX          | Obsolete in Release 4.5. |
| INAP_SYS_FAIL_RX          | Obsolete in Release 4.5. |
| INAP_SYS_FAIL_TX          | Obsolete in Release 4.5. |
| INAP_TASK_REFUSED_RX      | Obsolete in Release 4.5. |
| INAP_TASK_REFUSED_TX      | Obsolete in Release 4.5. |
| INAP_UNAVIL_RSRC_RX       | Obsolete in Release 4.5. |
| INAP_UNAVIL_RSRC_TX       | Obsolete in Release 4.5. |
| INAP_UNEXPECT_COMP_SEQ_RX | Obsolete in Release 4.5. |
| INAP_UNEXPECT_COMP_SEQ_TX | Obsolete in Release 4.5. |
| INAP_UNEXPECT_DATA_VAL_RX | Obsolete in Release 4.5. |
| INAP_UNEXPECT_DATA_VAL_TX | Obsolete in Release 4.5. |
| INAP_UNEXPECT_PARM_RX     | Obsolete in Release 4.5. |
| INAP_UNEXPECT_PARM_TX     | Obsolete in Release 4.5. |
| INAP_UNKNOWN_LEG_ID_RX    | Obsolete in Release 4.5. |
| INAP_UNKNOWN_LEG_ID_TX    | Obsolete in Release 4.5. |
| INAP_UNKNOWN_RSRC_RX      | Obsolete in Release 4.5. |
| INAP_UNKNOWN_RSRC_TX      | Obsolete in Release 4.5. |
| INAP_UNRECOG_INVOKE_ID_RX | Obsolete in Release 4.5. |
| INAP_UNRECOG_INVOKE_ID_TX | Obsolete in Release 4.5. |

## Measurement ISDN Summary

The Measurement ISDN Summary (measurement-isdn-summary) table requests a summary report of ISDN-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-ISDN-SUMMARY

Table Containment Area: OAMP

**Command Types** Report, show and clear

### Examples

```
show measurement-isdn-summary;
report measurement-isdn-summary start-time=2003-03-27 06:00:00;end-time=2003-03-27
06:30:00; call-agent-id=CA146; output-type=csv;
clear measurement-isdn-summary call-agent-id=CA146;
```

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           | DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-7</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                   |
|                           | END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                           | INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
|                           | OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-7 lists the values for the Measurement ISDN Summary Display token.

**Table 11-7 Measurement ISDN Summary Display Token Values**

|                                   |
|-----------------------------------|
| TIMESTAMP                         |
| NODENAME                          |
| CONDITION                         |
| ISDN_ALERTING_RX                  |
| ISDN_ALERTING_TX                  |
| ISDN_CALL_PROCEED_RX              |
| ISDN_CALL_PROCEED_TX              |
| ISDN_CONG_CNTL_RX (Release 4.4.0) |
| ISDN_CONG_CNTL_TX (Release 4.4.0) |
| ISDN_CONNECT_ACK_RX               |
| ISDN_CONNECT_ACK_TX               |
| ISDN_CONNECT_RX                   |
| ISDN_CONNECT_TX                   |
| ISDN_DISCONNECT_RX                |
| ISDN_DISCONNECT_TX                |
| ISDN_INFORMATION_RX               |
| ISDN_INFORMATION_TX               |
| ISDN_NOTIFY_RX                    |
| ISDN_NOTIFY_TX                    |
| ISDN_NUM_OF_SRVC_ACK_RX           |
| ISDN_NUM_OF_SRVC_ACK_TX           |
| ISDN_NUM_OF_SRVC_RX               |
| ISDN_NUM_OF_SRVC_TX               |
| ISDN_PROGRESS_RX                  |
| ISDN_PROGRESS_TX                  |
| ISDN_RELEASE_COMPLETE_RX          |

|                          |                 |
|--------------------------|-----------------|
| ISDN_RELEASE_COMPLETE_TX |                 |
| ISDN_RELEASE_RX          |                 |
| ISDN_RELEASE_TX          |                 |
| ISDN_RESTART_ACK_RX      |                 |
| ISDN_RESTART_ACK_TX      |                 |
| ISDN_RESTART_RX          |                 |
| ISDN_RESTART_TX          |                 |
| ISDN_RESUME_ACK_RX       | (Release 4.4.0) |
| ISDN_RESUME_ACK_TX       | (Release 4.4.0) |
| ISDN_RESUME_REJ_RX       | (Release 4.4.0) |
| ISDN_RESUME_REJ_TX       | (Release 4.4.0) |
| ISDN_RESUME_RX           | (Release 4.4.0) |
| ISDN_RESUME_TX           | (Release 4.4.0) |
| ISDN_SEGMENT_RX          | (Release 4.4.0) |
| ISDN_SEGMENT_TX          | (Release 4.4.0) |
| ISDN_SETUP_ACK_RX        |                 |
| ISDN_SETUP_ACK_TX        |                 |
| ISDN_SETUP_RX            |                 |
| ISDN_SETUP_TX            |                 |
| ISDN_STATUS_ENQUIRY_RX   |                 |
| ISDN_STATUS_ENQUIRY_TX   |                 |
| ISDN_STATUS_RX           |                 |
| ISDN_STATUS_TX           |                 |
| ISDN_SUSPEND_ACK_RX      |                 |
| ISDN_SUSPEND_ACK_TX RX   | (Release 4.4.0) |
| ISDN_SUSPEND_REJ_RX      | (Release 4.4.0) |
| ISDN_SUSPEND_REJ_TX      | (Release 4.4.0) |
| ISDN_SUSPEND_RX          | (Release 4.4.0) |
| ISDN_SUSPEND_TX          | (Release 4.4.0) |
| ISDN_USER_INFO_RX        | (Release 4.4.0) |
| ISDN_USER_INFO_TX        | (Release 4.4.0) |
|                          |                 |
| TIMESTAMP                |                 |
| NODENAME                 |                 |
| CONDITION                |                 |

# Measurement ISUP Summary

The Measurement ISUP Summary (measurement-isup-summary) table requests a summary report of ISDN user part (ISUP)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-ISUP-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-isup-summary;
report measurement-isup-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-isup-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-8</a> for permitted values.<br><br><b>Note</b> SGA counters are renamed to ISUP in Release 4.5.                                                                                                                                                                                                                                                                                               |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
| OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-8 lists the values for the Measurement ISUP Summary Display token.

**Table 11-8 Measurement ISUP Summary Display Token Values**

|                      |               |
|----------------------|---------------|
| TIMESTAMP            |               |
| NODENAME             |               |
| CONDITION            |               |
| TRKGRP-ID            |               |
| ISUP_ABNORMAL_REL_RX | (Release 4.5) |
| ISUP_ABNORMAL_REL_TX | (Release 4.5) |
| ISUP_ACM_RX          | (Release 4.5) |
| ISUP_ACM_TX          | (Release 4.5) |
| ISUP_ANM_RX          | (Release 4.5) |
| ISUP_ANM_TX          | (Release 4.5) |
| ISUP_ARR_RX          | (Release 4.5) |
| ISUP_ARR_TX          | (Release 4.5) |
| ISUP_BLA_RX          | (Release 4.5) |
| ISUP_BLA_TX          | (Release 4.5) |
| ISUP_BLO_RX          | (Release 4.5) |
| ISUP_BLO_TX          | (Release 4.5) |
| ISUP_CCL_RX          | (Release 4.5) |
| ISUP_CCL_TX          | (Release 4.5) |
| ISUP_CCR_RX          | (Release 4.5) |
| ISUP_CCR_TX          | (Release 4.5) |
| ISUP_CFN_RX          | (Release 4.5) |
| ISUP_CFN_TX          | (Release 4.5) |
| ISUP_CGB_RX          | (Release 4.5) |
| ISUP_CGB_TX          | (Release 4.5) |
| ISUP_CGBA_RX         | (Release 4.5) |
| ISUP_CGBA_TX         | (Release 4.5) |

|              |               |
|--------------|---------------|
| ISUP_CGU_RX  | (Release 4.5) |
| ISUP_CGU_TX  | (Release 4.5) |
| ISUP_CGUA_RX | (Release 4.5) |
| ISUP_CGUA_TX | (Release 4.5) |
| ISUP_CON_RX  | (Release 4.5) |
| ISUP_CON_TX  | (Release 4.5) |
| ISUP_COT_RX  | (Release 4.5) |
| ISUP_COT_TX  | (Release 4.5) |
| ISUP_CPG_RX  | (Release 4.5) |
| ISUP_CPG_TX  | (Release 4.5) |
| ISUP_CQM_RX  | (Release 4.5) |
| ISUP_CQM_TX  | (Release 4.5) |
| ISUP_CQR_RX  | (Release 4.5) |
| ISUP_CQR_TX  | (Release 4.5) |
| ISUP_CRA_RX  | (Release 4.5) |
| ISUP_CRA_TX  | (Release 4.5) |
| ISUP_CRG_RX  | (Release 4.5) |
| ISUP_CRG_TX  | (Release 4.5) |
| ISUP_CRM_RX  | (Release 4.5) |
| ISUP_CRM_TX  | (Release 4.5) |
| ISUP_CVR_RX  | (Release 4.5) |
| ISUP_CVR_TX  | (Release 4.5) |
| ISUP_CVT_RX  | (Release 4.5) |
| ISUP_CVT_TX  | (Release 4.5) |
| ISUP_EXM_RX  | (Release 4.5) |
| ISUP_EXM_TX  | (Release 4.5) |
| ISUP_FAA_RX  | (Release 4.5) |
| ISUP_FAA_TX  | (Release 4.5) |
| ISUP_FAC_RX  | (Release 4.5) |
| ISUP_FAC_TX  | (Release 4.5) |
| ISUP_FAR_RX  | (Release 4.5) |
| ISUP_FAR_TX  | (Release 4.5) |
| ISUP_FOT_RX  | (Release 4.5) |
| ISUP_FOT_TX  | (Release 4.5) |
| ISUP_FRJ_RX  | (Release 4.5) |
| ISUP_FRJ_TX  | (Release 4.5) |
| ISUP_FWT_RX  | (Release 4.5) |
| ISUP_FWT_TX  | (Release 4.5) |

|             |                 |
|-------------|-----------------|
| ISUP_GRA_RX | (Release 4.5)   |
| ISUP_GRA_TX | (Release 4.5)   |
| ISUP_GRS_RX | (Release 4.5)   |
| ISUP_GRS_TX | (Release 4.5)   |
| ISUP_IAM_RX | (Release 4.5)   |
| ISUP_IAM_TX | (Release 4.5)   |
| ISUP_IDR_RX | (Release 4.5)   |
| ISUP_IDR_TX | (Release 4.5)   |
| ISUP_INF_RX | (Release 4.5)   |
| ISUP_INF_TX | (Release 4.5)   |
| ISUP_INR_RX | (Release 4.5)   |
| ISUP_INR_TX | (Release 4.5)   |
| ISUP_IRS_RX | (Release 4.5)   |
| ISUP_IRS_TX | (Release 4.5)   |
| ISUP_ITX_RX | (Release 4.5.1) |
| ISUP_ITX_TX | (Release 4.5.1) |
| ISUP_LPA_RX | (Release 4.5)   |
| ISUP_LPA_TX | (Release 4.5)   |
| ISUP_LPM_RX | (Release 4.5)   |
| ISUP_LPM_TX | (Release 4.5)   |
| ISUP_MSG_RX | (Release 4.5)   |
| ISUP_MSG_TX | (Release 4.5)   |
| ISUP_NRM_RX | (Release 4.5)   |
| ISUP_NRM_TX | (Release 4.5)   |
| ISUP_OLM_RX | (Release 4.5)   |
| ISUP_OLM_TX | (Release 4.5)   |
| ISUP_OPR_RX | (Release 4.5)   |
| ISUP_OPR_TX | (Release 4.5)   |
| ISUP_PAM_RX | (Release 4.5)   |
| ISUP_PAM_TX | (Release 4.5)   |
| ISUP_PRI_RX | (Release 4.5)   |
| ISUP_PRI_TX | (Release 4.5)   |
| ISUP_REL_RX | (Release 4.5)   |
| ISUP_REL_TX | (Release 4.5)   |
| ISUP_RES_RX | (Release 4.5)   |
| ISUP_RES_TX | (Release 4.5)   |
| ISUP_RLC_RX | (Release 4.5)   |
| ISUP_RLC_TX | (Release 4.5)   |

|                      |                          |
|----------------------|--------------------------|
| ISUP_RSC_RX          | (Release 4.5)            |
| ISUP_RSC_TX          | (Release 4.5)            |
| ISUP_SAM_RX          | (Release 4.5)            |
| ISUP_SAM_TX          | (Release 4.5)            |
| ISUP_SGM_RX          | (Release 4.5)            |
| ISUP_SGM_TX          | (Release 4.5)            |
| ISUP_SUS_RX          | (Release 4.5)            |
| ISUP_SUS_TX          | (Release 4.5)            |
| ISUP_UBA_RX          | (Release 4.5)            |
| ISUP_UBA_TX          | (Release 4.5)            |
| ISUP_UBL_RX          | (Release 4.5)            |
| ISUP_UBL_TX          | (Release 4.5)            |
| ISUP_UCIC_RX         | (Release 4.5)            |
| ISUP_UCIC_TX         | (Release 4.5)            |
| ISUP_UNEXPECT_MSG_RX | (Release 4.5)            |
| ISUP_UNRECOG_MSG_RX  | (Release 4.5)            |
| ISUP_UPA_RX          | (Release 4.5)            |
| ISUP_UPA_TX          | (Release 4.5)            |
| ISUP_UPT_RX          | (Release 4.5)            |
| ISUP_UPT_TX          | (Release 4.5)            |
| ISUP_USR_RX          | (Release 4.5)            |
| ISUP_USR_TX          | (Release 4.5)            |
| MEAS_SGA_ITX_RX      | (France) (Release 4.5.1) |
| MEAS_SGA_ITX_TX      | (France) (Release 4.5.1) |
| MEAS_SGA_TXA_RX      | (France) (Release 4.5.1) |
| MEAS_SGA_TXA_TX      | (France) (Release 4.5.1) |
| S7A_TPM_ACM_RX       |                          |
| S7A_TPM_ACM_TX       |                          |
| S7A_TPM_ANM_RX       |                          |
| S7A_TPM_ANM_TX       |                          |
| S7A_TPM_BLA_RX       |                          |
| S7A_TPM_BLA_TX       |                          |
| S7A_TPM_BLO_RX       |                          |
| S7A_TPM_BLO_TX       |                          |
| S7A_TPM_CGB_RX       |                          |
| S7A_TPM_CGB_TX       |                          |
| S7A_TPM_CGBA_RX      |                          |
| S7A_TPM_CGBA_TX      |                          |

|                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| S7A_TPM_CGU_RX      |                                                                                                        |
| S7A_TPM_CGU_TX      |                                                                                                        |
| S7A_TPM_CGUA_RX     |                                                                                                        |
| S7A_TPM_CGUA_TX     |                                                                                                        |
| S7A_TPM_CPG_RX      |                                                                                                        |
| S7A_TPM_CPG_TX      |                                                                                                        |
| S7A_TPM_CVR_RX      |                                                                                                        |
| S7A_TPM_CVR_TX      |                                                                                                        |
| S7A_TPM_CVT_RX      |                                                                                                        |
| S7A_TPM_CVT_TX      |                                                                                                        |
| S7A_TPM_GRA_RX      |                                                                                                        |
| S7A_TPM_GRA_TX      |                                                                                                        |
| S7A_TPM_GRS_RX      |                                                                                                        |
| S7A_TPM_GRS_TX      |                                                                                                        |
| S7A_TPM_IAM_RX      |                                                                                                        |
| S7A_TPM_IAM_TX      |                                                                                                        |
| S7A_TPM_MSU_RX      |                                                                                                        |
| S7A_TPM_MSU_TX      |                                                                                                        |
| S7A_TPM_MSU_TXRX    |                                                                                                        |
| S7A_TPM_MSU8_RETX   |                                                                                                        |
| S7A_TPM_MSU8_RX     |                                                                                                        |
| S7A_TPM_MSU8_TX     |                                                                                                        |
| S7A_TPM_MSU8_TXRX   |                                                                                                        |
| S7A_TPM_REL_RX      |                                                                                                        |
| S7A_TPM_REL_TX      |                                                                                                        |
| S7A_TPM_RLC_RX      |                                                                                                        |
| S7A_TPM_RLC_TX      |                                                                                                        |
| S7A_TPM_RSC_RX      |                                                                                                        |
| S7A_TPM_RSC_TX      |                                                                                                        |
| S7A_TPM_UBA_RX      |                                                                                                        |
| S7A_TPM_UBA_TX      |                                                                                                        |
| S7A_TPM_UBL_RX      |                                                                                                        |
| S7A_TPM_UBL_TX      |                                                                                                        |
| SGA_ABNORMAL_REL_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_ABNORMAL_REL_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_ABNORMAL_REL_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_ABNORMAL_REL_RX | (ITU-Hong Kong) Release 4.2                                                                            |

|                     |                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------|
| SGA_ABNORMAL_REL_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_ABNORMAL_REL_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_ABNORMAL_REL_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_ABNORMAL_REL_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_ABNORMAL_REL_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_ABNORMAL_REL_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_ACM_RX          | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_ACM_RX          | (Thailand) (Release 4.2)                                                                               |
| SGA_ACM_RX          | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_ACM_RX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_ACM_RX          | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_ACM_TX          | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_ACM_TX          | (Thailand) (Release 4.2)                                                                               |
| SGA_ACM_TX          | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_ACM_TX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_ACM_TX          | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_ANM_RX          | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_ANM_RX          | (Thailand) (Release 4.2)                                                                               |
| SGA_ANM_RX          | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_ANM_RX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_ANM_RX          | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_ANM_TX          | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_ANM_TX          | (Thailand) (Release 4.2)                                                                               |
| SGA_ANM_TX          | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_ANM_TX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_ANM_TX          | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_ARR_RX          | (Thailand) (Release 4.2)                                                                               |
| SGA_ARR_TX          | (Thailand) (Release 4.2)                                                                               |
| SGA_BLA_RX          | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_BLA_RX          | (Thailand) (Release 4.2)                                                                               |

|            |                                                                                                        |
|------------|--------------------------------------------------------------------------------------------------------|
| SGA_BLA_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_BLA_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_BLA_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_BLA_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_BLA_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_BLA_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_BLA_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_BLA_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_BLO_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_BLO_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_BLO_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_BLO_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_BLO_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_BLO_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_BLO_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_BLO_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_BLO_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_BLO_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CCL_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CCL_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CCL_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CCL_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CCR_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CCR_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_CCR_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CCR_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CCR_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CCR_TX | (Thailand) (Release 4.2)                                                                               |

|             |                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------|
| SGA_CCR_TX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CCR_TX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CFN_RX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CFN_RX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CFN_RX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CFN_TX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CFN_TX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CFN_TX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGB_RX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGB_RX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CGB_RX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGB_RX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGB_RX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGB_TX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGB_TX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CGB_TX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGB_TX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGB_TX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGBA_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGBA_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_CGBA_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGBA_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGBA_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGBA_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGBA_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_CGBA_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGBA_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGBA_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGU_RX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGU_RX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CGU_RX  | (ITU-Hong Kong) Release 4.2                                                                            |

|             |                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------|
| SGA_CGU_RX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGU_RX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGU_TX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGU_TX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CGU_TX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGU_TX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGU_TX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGUA_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGUA_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CGUA_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_CGUA_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGUA_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGUA_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CGUA_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_CGUA_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CGUA_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CGUA_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CON_RX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CON_RX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CON_RX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CON_RX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CON_RX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CON_TX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CON_TX  | (Thailand) (Release 4.2)                                                                               |
| SGA_CON_TX  | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CON_TX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CON_TX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_COT_RX  | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_COT_RX  | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_COT_RX  | (Thailand) (Release 4.2)                                                                               |

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|------------|--------------------------------------------------------------------------------------------------------|
| SGA_COT_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_COT_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_COT_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_COT_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_COT_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_COT_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_COT_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CPG_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CPG_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_CPG_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CPG_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CPG_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CPG_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_CPG_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_CPG_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_CPG_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CPG_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CQM_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CQM_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_CQM_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CQM_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_CQR_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CQR_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_CQR_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_CQR_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_CRG_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_CRG_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FAC_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_FAC_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FAC_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_FAC_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FAR_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FAR_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FRJ_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |

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|------------|--------------------------------------------------------------------------------------------------------|
| SGA_FRJ_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FWT_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_FWT_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_GRA_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_GRA_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_GRA_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_GRA_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_GRA_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_GRA_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_GRA_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_GRA_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_GRA_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_GRA_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_GRS_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_GRS_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_GRS_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_GRS_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_GRS_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_GRS_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_GRS_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_GRS_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_IAM_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_IAM_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_IAM_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_IAM_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_IAM_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_IAM_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_IAM_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_IAM_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_IAM_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_IAM_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_IDR_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |

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|------------|--------------------------------------------------------------------------------------------------------|
| SGA_IDR_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_INF_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_INF_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_INF_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_INF_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_INF_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_INF_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_INF_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_INF_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_INR_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_INR_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_INR_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_INR_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_INR_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_INR_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_INR_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_INR_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_IRS_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_IRS_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_LPM_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_LPM_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_MSG_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_MSG_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_MSG_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_MSG_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_MSG_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_MSG_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_MSG_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_MSG_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_MSG_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_MSG_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_NRM_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_NRM_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_NRM_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_NRM_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |

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|------------|--------------------------------------------------------------------------------------------------------|
| SGA_OPR_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_OPR_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_PAM_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_PAM_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_PAM_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_PAM_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_PRI_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_PRI_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_REL_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_REL_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_REL_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_REL_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_REL_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_REL_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_REL_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_REL_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_REL_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_REL_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_RES_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_RES_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_RES_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_RES_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_RES_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_RES_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_RES_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_RES_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_RES_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_RES_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |

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|------------|--------------------------------------------------------------------------------------------------------|
| SGA_RLC_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_RLC_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_RLC_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_RLC_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_RLC_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_RLC_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_RLC_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_RLC_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_RLC_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_RLC_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_RSC_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_RSC_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_RSC_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_RSC_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_RSC_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_RSC_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_RSC_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_RSC_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_RSC_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_RSC_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_SAM_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_SAM_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_SAM_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_SAM_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_SAM_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_SAM_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_SAM_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_SAM_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_SAM_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_SAM_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |

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|------------|--------------------------------------------------------------------------------------------------------|
| SGA_SGM_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_SGM_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_SGM_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_SGM_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_SUS_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_SUS_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_SUS_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_SUS_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_SUS_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_SUS_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_SUS_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_SUS_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_SUS_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_SUS_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_UBA_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_UBA_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_UBA_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_UBA_RX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_UBA_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_UBA_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_UBA_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_UBA_TX | (Thailand) (Release 4.2)                                                                               |
| SGA_UBA_TX | (ITU-Hong Kong) Release 4.2                                                                            |
| SGA_UBA_TX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_UBL_RX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_UBL_RX | (ITU-Mexico) (Release 4.5.1)                                                                           |
| SGA_UBL_RX | (Thailand) (Release 4.2)                                                                               |
| SGA_UBL_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                            |
| SGA_UBL_TX | (ITU-China) (ITU-Israel, Australia, ETSI: Release 4.4.0, 4.5) (Israel and Australia are not supported) |
| SGA_UBL_TX | (ITU-Mexico) (Release 4.5.1)                                                                           |

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|---------------------|--------------------------------------------------------------------------------------------------------------|
| SGA_UBL_TX          | (Thailand) (Release 4.2)                                                                                     |
| SGA_UBL_TX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
| SGA_UCIC_RX         | (ITU-Mexico) (Release 4.5.1)                                                                                 |
| SGA_UCIC_RX         | (Thailand) (Release 4.2)                                                                                     |
| SGA_UCIC_RX         | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
| SGA_UCIC_TX         | (ITU-Mexico) (Release 4.5.1)                                                                                 |
| SGA_UCIC_TX         | (Thailand) (Release 4.2)                                                                                     |
| SGA_UCIC_TX         | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
| SGA_UNEXPECT_MSG_RX | (ITU-China) (ITU-Israel, Australia, ETSI:<br>Release 4.4.0, 4.5) (Israel and Australia are not<br>supported) |
| SGA_UNEXPECT_MSG_RX | (ITU-Mexico) (Release 4.5.1)                                                                                 |
| SGA_UNEXPECT_MSG_RX | (Thailand) (Release 4.2)                                                                                     |
| SGA_UNEXPECT_MSG_RX | (ITU-Hong Kong) Release 4.2                                                                                  |
| SGA_UNEXPECT_MSG_RX | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
| SGA_UNRECOG_MSG_RX  | (ITU-China) (ITU-Israel, Australia, ETSI:<br>Release 4.4.0, 4.5) (Israel and Australia are not<br>supported) |
| SGA_UNRECOG_MSG_RX  | (ITU-Mexico) (Release 4.5.1)                                                                                 |
| SGA_UNRECOG_MSG_RX  | (Thailand) (Release 4.2)                                                                                     |
| SGA_UNRECOG_MSG_RX  | (ITU-Hong Kong) Release 4.2                                                                                  |
| SGA_UNRECOG_MSG_RX  | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
| SGA_USR_RX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
| SGA_USR_TX          | (ITU-Chile) (Release 4.4.0) (Not supported)                                                                  |
|                     |                                                                                                              |
| TIMESTAMP           |                                                                                                              |
| NODENAME            |                                                                                                              |
| CONDITION           |                                                                                                              |
|                     |                                                                                                              |
| TIMESTAMP           |                                                                                                              |
| NODENAME            |                                                                                                              |
| CONDITION           |                                                                                                              |
|                     |                                                                                                              |
| TIMESTAMP           |                                                                                                              |
| NODENAME            |                                                                                                              |
| CONDITION           |                                                                                                              |

# Measurement M3UA Summary

The Measurement M3UA Summary (measurement-m3ua-summary) table requests a summary report of M3UA-related statistics for all media gateways (MGWs) that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-M3UA-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-m3ua-summary;
report measurement-m3ua-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id =CA146;
clear measurement-m3ua-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                           |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br>STRING. Permitted values are:                                                                                                                                                                                                                                                                                                                                                                                          |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br>STRING.<br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
| OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p> |
| SUM        | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                     |

Table 11-9 lists the values for the Measurement M3UA Summary Display token.

**Table 11-9 Measurement M3UA Summary Display Token Values**

|                      |
|----------------------|
| TIMESTAMP            |
| NODENAME             |
| CONDITION            |
| M3UA-SGP-ID          |
| M3UA_ACTIVE_ACK_RX   |
| M3UA_ACTIVE_TX       |
| M3UA_ASSOC_FAIL      |
| M3UA_BEAT_ACK_RX     |
| M3UA_BEAT_ACK_TX     |
| M3UA_BEAT_RX         |
| M3UA_BEAT_TX         |
| M3UA_DATA_BYTES_RX   |
| M3UA_DATA_BYTES_TX   |
| M3UA_DATA_TRANS_RX   |
| M3UA_DATA_TRANS_TX   |
| M3UA_DAUD_TX         |
| M3UA_DAVA_RX         |
| M3UA_DOWN_ACK_RX     |
| M3UA_DOWN_TX         |
| M3UA_DRST_RX         |
| M3UA_DUNA_RX         |
| M3UA_DUPU_RX         |
| M3UA_ERR_RX          |
| M3UA_ERR_TX          |
| M3UA_INACTIVE_ACK_RX |
| M3UA_INACTIVE_TX     |

|                             |
|-----------------------------|
| M3UA_INVALID_SCTP_SIGNALS   |
| M3UA_MSG_CLASS_ERR          |
| M3UA_MSG_LENGTH_ERR         |
| M3UA_MSG_RX_OTHER_ERR       |
| M3UA_MSG_TYPE_ERR           |
| M3UA_NETWORK_APPEAR_ERR     |
| M3UA_NO_MEMORY_ERR          |
| M3UA_NOTIFY_TX              |
| M3UA_NOTIFY_RX              |
| M3UA_PARAM_FIELD_ERR        |
| M3UA_PARAM_VALUE_ERR        |
| M3UA_PROTOCOL_ERR           |
| M3UA_ROUTING_CONTEXT_ERR    |
| M3UA_SCON_TX                |
| M3UA_SCON_RX                |
| M3UA_SCTP_TX_FAIL           |
| M3UA_SGP_ID                 |
| M3UA_SINCE_LAST_RESET_ASSOC |
| M3UA_STREAM_ID_ERR          |
| M3UA_UNEXPECT_MSG_ERR       |
| M3UA_UNEXPECT_PARAM_ERR     |
| M3UA_UP_TX                  |
| M3UA_UP_ACK_RX              |
| M3UA_VERSION_ERR            |

## Measurement MGCP Signaling Adapter Summary

The Measurement MGCP Signaling Adapter Summary (measurement-mgcp-summary) table requests a summary report of Media Gateway Control Protocol (MGCP) signaling adapter-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-MGCP-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-mgcp-summary;
report measurement-mgcp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146; output-type=csv;
```

**Caution**

```
clear measurement-mgcp-summary call-agent-id=CA146;
```

The clear command clears *all* current collecting measurement values for the specified Call Agent. There will not be any announcement data to report until the next interval.

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                    |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Syntax Description | CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. ID of the associated Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                    | DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br><br>TIMESTAMP<br><br>NODENAME<br><br>CONDITION<br><br>MGCP_AUEP_ACK_RX<br><br>MGCP_AUEP_NACK_RX<br><br>MGCP_AUEP_TX<br><br>MGCP_AUCX_TX (Release 4.5)<br><br>MGCP_AUCX_ACK_RX (Release 4.5)<br><br>MGCP_AUCX_NACK_RX (Release 4.5)<br><br>MGCP_CRCX_ACK_RX<br><br>MGCP_CRCX_NACK_RX<br><br>MGCP_CRCX_TX<br><br>MGCP_DECODE_ERROR<br><br>MGCP_DLCX_ACK_RX<br><br>MGCP_DLCX_NACK_RX<br><br>MGCP_DLCX_RX<br><br>MGCP_DLCX_TX<br><br>MGCP_ENCODE_ERROR<br><br>MGCP_MDCX_ACK_RX<br><br>MGCP_MDCX_NACK_RX<br><br>MGCP_MDCX_TX<br><br>MGCP_NTIFY_RX<br><br>MGCP_RQNT_ACK_RX<br><br>MGCP_RQNT_NACK_RX<br><br>MGCP_RQNT_TX<br><br>MGCP_RSIP_ACK_TX<br><br>MGCP_RSIP_RX<br><br>MGCP_SEND_FAILED<br><br>MGCP_UNREACHABLE |
|                    | END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS</p>                                                                                                                                               |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

## Measurement PCT Tools Summary (Release 4.4.1)

The Measurement POTS/Centrex/Tandem (PCT) Tools Summary (measurement-pct-tools-summary) table collects PCT tools statistics. Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-PCT-TOOLS-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-pct-tools-summary;
report measurement-pct-tools-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27
12:00:00; call-agent-id=CA146; output=pct-tools-report; output-type=csv;
clear measurement-pct-tools-summary call-agent-id=CA146;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                           |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.                                                                                                                                                                                                                                      |
|                           | DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br><br>TIMESTAMP<br><br>NODENAME<br><br>CONDITION<br><br>TOOLS_LIDB_QUERY_ATTMP<br><br>TOOLS_LIDB_QUERY_SUCC                                                                                                                                        |
|                           | END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                      |
|                           | OUTPUT-TYPE       | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                   |
|                           | START-TIME        | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
|                           | SUM               | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

## Measurement POTS Auto Callback/Recall/Call Rejection Feature Server Summary

The Measurement POTS Auto Callback/Recall/Call Rejection Feature Server Summary (measurement-pots-acar-summary) table requests a summary report of Auto Callback/Recall/Call Rejection-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-ACAR-SUMMARY

Table Containment Area: OAMP

|                      |                        |
|----------------------|------------------------|
| <b>Command Types</b> | Report, show and clear |
|----------------------|------------------------|

|                 |                                                  |
|-----------------|--------------------------------------------------|
| <b>Examples</b> | <code>show measurement-pots-acar-summary;</code> |
|-----------------|--------------------------------------------------|

```
report measurement-pots-acar-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27  
06:30:00; feature-server-id= FSAIN203;output-type=csv;  
clear measurement-pots-acar-summary feature-server-id=fsptc203;
```

---

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

|                           |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                           | DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br><br>TIMESTAMP<br>NODENAME<br>CONDITION<br>POTS_AC_ACT_ATTMP<br>POTS_AC_DEACT_ATTMP<br>POTS_AC_DEACT_BY_SYSTEM<br>POTS_AC_DELAYED_PROC<br>POTS_AC_IMMEDIATE_PROC<br>POTS_AC_INTERLATA_ATTMP<br>POTS_AC_OVERFLOW<br>POTS_ACART_ORIG_SCAN_REQ<br>POTS_ACART_QUEUED_REQ<br>POTS_ACART_REJECT_NO_RSRC<br>POTS_ACART_TERM_SCAN_REQ<br>POTS_ACR_ACT_ATTMP<br>POTS_ACR_ACT_REJECT_NO_RSRC<br>POTS_ACR_DEACT_ATTMP<br>POTS_ACR_DEACT_REJECT_NO_RSRC<br>POTS_ACR_SUCC<br>POTS_AR_ACT_ATTMP<br>POTS_AR_DEACT_ATTMP<br>POTS_AR_DEACT_BY_SYSTEM<br>POTS_AR_DELAYED_PROC<br>POTS_AR_IMMEDIATE_PROC<br>POTS_AR_INTERLATA_ATTMP<br>POTS_AR_OVERFLOW |
|                           | END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                              |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

## Measurement POTS Class of Service Feature Server Summary

The Measurement POTS Class of Service Feature Server Summary (measurement-pots-cos-summary) table requests a summary report of class of service-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-COS-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-pots-cos-summary;
report measurement-pots-cos-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203; output-type=csv;
clear measurement-pots-cos-summary feature-server-id=fsptc203;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

### Syntax Description

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-10</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                  |
| END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL          | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
| OUTPUT-TYPE       | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME        | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                              |
| SUM               | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                                                                                                                                                                  |

[Table 11-10](#) lists the values for the Measurement POTS Class of Service Feature Server Summary Display token.

**Table 11-10 Measurement POTS Class of Service Feature Server Summary**

|           |
|-----------|
| TIMESTAMP |
| NODENAME  |

|                               |               |
|-------------------------------|---------------|
| CONDITION                     |               |
| POTS_COS_900_BLOCKED          |               |
| POTS_COS_976_BLOCKED          |               |
| POTS_COS_ACCT_CODE_FAIL       |               |
| POTS_COS_ACCT_CODE_SUCC       |               |
| POTS_COS_ANI_ATTMP_SUCC       |               |
| POTS_COS_ANI_BLOCKED_CALL     |               |
| POTS_COS_AUTH_CODE_FAIL       |               |
| POTS_COS_AUTH_CODE_SUCC       |               |
| POTS_COS_CASUAL_RESTRICT      |               |
| POTS_COS_DA_BLOCKED           |               |
| POTS_COS_INTL_BLOCKED_BW      |               |
| POTS_COS_INTL_OP_BLOCKED      |               |
| POTS_COS_INTL_RESTRICT        |               |
| POTS_COS_NANP_BLOCKED_BW      |               |
| POTS_COS_NANP_OP_BLOCKED      |               |
| POTS_COS_NANP_RESTRICT        |               |
| POTS_COS_TOLLFREE_BLOCKED     | (Release 4.5) |
| POTS_COS_TOT_ACCT_IVR_SESSION | (Release 4.5) |
| POTS_COS_TOT_AUTH_IVR_SESSION | (Release 4.5) |
| POTS_COS_TOT_IVR_FAIL         | (Release 4.5) |
| POTS_TDISC_CALLS_OUTG_BLOCKED | (Release 4.5) |

## Measurement POTS Customer-Originated Trace Feature Server Summary

The Measurement POTS Customer-Originated Trace Feature Server Summary (measurement-pots-cot-summary) table requests a summary report of customer-originated trace-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-COT-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-pots-cot-summary;
report measurement-pots-cot-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-cot-summary feature-server-id=fsptc203;
```

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

**Syntax Description**

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | <p>Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.</p> <p>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.</p>                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY           | <p>Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).</p> <p>STRING. Permitted values are:</p> <p>TIMESTAMP</p> <p>NODENAME</p> <p>CONDITION</p> <p>POTS_COT_ABAND</p> <p>POTS_COT_ACCESS</p> <p>POTS_COT_ACT</p> <p>POTS_COT_DENY</p> <p>POTS_COT_DN_UNAVAIL</p> <p>POTS_COT_TRACE_CONFIRM</p> <p>POTS_COT_TRACE_OUTPUT</p>                                                                                                                                                                    |
| END-TIME          | <p>Ending time for measurement summary. Enter all 19 ASCII characters as shown.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL          | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE       | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

## Measurement POTS Local Feature Server Summary

The Measurement POTS Local Feature Server Summary (measurement-pots-local-summary) table requests a summary report of local-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-LOCAL-SUMMARY

Table Containment Area: OAMP

**Command Types** Report, show and clear

### Examples

```
show measurement-pots-local-summary;
report measurement-pots-local-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203; output-type=csv;
clear measurement-pots-local-summary feature-server-id=fsptc203;
```

**Usage Guidelines** Primary Key Token(s): None.  
Foreign Key Token(s): feature-server-id

### Syntax Description

|                   |                                                                                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.                  |
| DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-11</a> for permitted values. |
| END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                  |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                              |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

Table 11-11 lists the values for the Measurement POTS Local Feature Server Summary Display token.

**Table 11-11 Measurement POTS Local Feature Server Summary Display Token Values**

|                         |
|-------------------------|
| TIMESTAMP               |
| NODENAME                |
| CONDITION               |
| POTS_CCW_ATTMP          |
| POTS_CCW_LENGTH         |
| POTS_CCW_REJECT_BY_CCW  |
| POTS_CCW_REJECT_NO_RSRC |
| POTS_CFB_ACT_ATTMP      |
| POTS_CFB_ACT_REFUSED    |
| POTS_CFB_DEACT_ATTMP    |
| POTS_CFB_FORWARD_FAIL   |
| POTS_CFB_FORWARD_SUCC   |
| POTS_CFB_INTERROG_ATTMP |
| POTS_CFC_ACT_ATTMP      |
| (Release 4.5)           |

|                           |               |
|---------------------------|---------------|
| POTS_CFC_ACT_FAIL         | (Release 4.5) |
| POTS_CFC_ACT_SUCC         | (Release 4.5) |
| POTS_CFC_DEACT_ATTMP      | (Release 4.5) |
| POTS_CFC_DEACT_FAIL       | (Release 4.5) |
| POTS_CFC_DEACT_SUCC       | (Release 4.5) |
| POTS_CFC_DN_CHG_ACT_ATTMP | (Release 4.5) |
| POTS_CFC_DN_CHG_ACT_FAIL  | (Release 4.5) |
| POTS_CFC_DN_CHG_ACT_SUCC  | (Release 4.5) |
| POTS_CFC_FORWARD_ATTMP    | (Release 4.5) |
| POTS_CFC_FORWARD_FAIL     | (Release 4.5) |
| POTS_CFC_FORWARD_SUCC     | (Release 4.5) |
| POTS_CFC_INTERROG_ATTMP   | (Release 4.5) |
| POTS_CFC_INTERROG_FAIL    | (Release 4.5) |
| POTS_CFC_INTERROG_SUCC    | (Release 4.5) |
| POTS_CFNA_ACT_ATTMP       |               |
| POTS_CFNA_ACT_REFUSED     |               |
| POTS_CFNA_DEACT_ATTMP     |               |
| POTS_CFNA_FORWARD_FAIL    |               |
| POTS_CFNA_FORWARD_SUCC    |               |
| POTS_CFNA_INTERROG_ATTMP  |               |
| POTS_CFU_ACT_ATTMP        |               |
| POTS_CFU_DEACT_ATTMP      |               |
| POTS_CFU_ACT_REFUSED      |               |
| POTS_CFU_ACT_ANSWERED     |               |
| POTS_CFU_ACT_SECOND       |               |
| POTS_CFU_FORWARD_FAIL     |               |
| POTS_CFU_FORWARD_SUCC     |               |
| POTS_CFU_INTERROG_ATTMP   |               |
| POTS_CHD_ANSWER           |               |
| POTS_CHD_ATTMP            |               |
| POTS_CHD_NOT_ANSWER       |               |
| POTS_CHD_REJECT_INTERACT  |               |
| POTS_CHD_REJECT_NO_RSRC   |               |
| POTS_CIDS_ATTMP           |               |
| POTS_CIDSS_ATTMP          |               |
| POTS_CNAB_ATTMP           |               |
| POTS_CNDB_ATTMP           |               |
| POTS_CPRK_CLEAR           |               |

|                                       |
|---------------------------------------|
| POTS_CPRK_FAIL_ATTMP                  |
| POTS_CPRK_FAIL_RET_ATTMP              |
| POTS_CPRK_FORWARD                     |
| POTS_CPRK_SUCC_ATTMP                  |
| POTS_CPRK_SUCC_RET_ATTMP              |
| POTS_CT_ANSWER                        |
| POTS_CT_ATTMP                         |
| POTS_CT_CONF                          |
| POTS_CT_FAIL                          |
| POTS_CT_TRANSFER                      |
| POTS_CW_ANSWERED                      |
| POTS_CW_ATTMP                         |
| POTS_CW_NOT_ANSWERED                  |
| POTS_CW_REJECT_NO_RSRC                |
| POTS_CW_REJECT_INTERACT               |
| POTS_CWD_ACT_FAIL                     |
| POTS_CWD_ACT_SUCC                     |
| POTS_CWD_ANSWER                       |
| POTS_CWD_ATTMP                        |
| POTS_CWD_DEACT_FAIL                   |
| POTS_CWD_DEACT_SUCC                   |
| POTS_CWD_INTERROG_SUCC                |
| POTS_CWD_INTERROG_FAIL                |
| POTS_DND_ACT_FAIL                     |
| POTS_DND_ACT_SUCC                     |
| POTS_DND_DEACT_FAIL                   |
| POTS_DND_DEACT_SUCC                   |
| POTS_DND_REJECT                       |
| POTS_DRCW_ATTMP                       |
| POTS_DRCW_REJECT_NO_RSRC              |
| POTS_DRCW_SUCC                        |
| POTS_MDC_ATTMP                        |
| POTS_MDC_REJECT_INTERACT              |
| POTS_MDC_REJECT_NO_RSRC               |
| POTS_MDC_REJECT_OTHERS                |
| POTS_NSA_INVOKE_ABANDON (Release 4.5) |
| POTS_NSA_INVOKE_ATTMP (Release 4.5)   |
| POTS_NSA_INVOKE_FAIL (Release 4.5)    |

---

POTS\_NSA\_INVOKE\_SUCC (Release 4.5)

---

POTS\_OCB\_ACT\_SUCC

---

POTS\_OCB\_DEACT\_SUCC

---

POTS\_OCB\_INTERROG\_SUCC

---

POTS\_OCB\_INTL\_BLOCK

---

POTS\_OCB\_INVALID\_PASSWORD

---

POTS\_OCB\_INVOCATION

---

POTS\_OCB\_LOCAL\_BLOCK

---

POTS\_OCB\_NATL\_BLOCK

---

POTS\_RACF\_ATTMP

---

POTS\_RACF\_CFU\_ACT

---

POTS\_RACF\_CFU\_DEACT

---

POTS\_RACF\_CFU\_UNCHANGED

---

POTS\_RACF\_PIN\_ATTMP

---

POTS\_RACF\_PIN\_CHANGE

---

POTS\_RACF\_PIN\_REFUSE

---

POTS\_RACF\_PIN\_REJECT\_NO\_RSRC

---

POTS\_RACF\_PIN\_UNCHANGE

---

POTS\_RACF\_REFUSE

---

POTS\_RACF\_REJECT\_NO\_RSRC

---

POTS\_RC\_SUCC

---

POTS\_REFERER\_ATTMP

---

POTS\_REFERER\_FAIL

---

POTS\_REFERER\_SUCC

---

POTS\_SC\_1\_DIGIT\_ATTMP

---

POTS\_SC\_2\_DIGIT\_ATTMP

---

POTS\_SC\_SUCC\_CCSC

---

POTS\_TWC\_ANSWERED

---

POTS\_TWC\_ATTMP

---

POTS\_TWC\_CONF

---

POTS\_TWC\_FAIL

---

POTS\_TWCD\_ATTMP

---

POTS\_TWCD\_CONF

---

# Measurement POTS Miscellaneous Feature Server Summary

The Measurement POTS Miscellaneous Feature Server Summary (measurement-pots-misc-summary) table requests a summary report of miscellaneous-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-MISC-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-pots-misc-summary;
report measurement-pots-misc-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-misc-summary feature-server-id=fsptc203;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

## Syntax Description

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.                                                                                                                                                                                                                                                                                                                                                                                   |
| DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-12</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                  |
| END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL          | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT-TYPE | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                           |
| START-TIME  | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM         | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-12 lists the values for the Measurement POTS Miscellaneous Feature Server Summary Display token.

**Table 11-12 Measurement POTS Miscellaneous Feature Server Summary Display Token Values**

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| TIMESTAMP                             |                                   |
| NODENAME                              |                                   |
| CONDITION                             |                                   |
| POTS_BLV_ATTMP                        | (Release 4.5)                     |
| POTS_CTX_SFG_OVERFLOW (Release 4.5)   | (Release 4.5)                     |
| POTS_HOTLINE_ATTMP (Release 4.5)      | (Release 4.5)                     |
| POTS_HOTV_ACT_SUCC (Release 4.5)      | (Release 4.5)                     |
| POTS_HOTV_ATTMP (Release 4.5)         | (Release 4.5)                     |
| POTS_HOTV_DEACT_SUCC (Release 4.5)    | (Release 4.5)                     |
| POTS_HOTV_INTERROG_SUCC (Release 4.5) | (Release 4.5)                     |
| POTS_LCD_AUTH_ATTEMPTS                | (Release 4.4.1) (Obsolete in 4.5) |
| POTS_LCD_AUTH_ATTMP (Release 4.5)     | (Release 4.5)                     |
| POTS_LCD_AUTH_FAIL (Release 4.4.1)    | (Release 4.5)                     |
| POTS_LCD_AUTH_SUCC (Release 4.5)      | (Release 4.5)                     |
| POTS_LCD_AUTH_SUCCESS                 | (Release 4.4.1) (Obsolete in 4.5) |
| POTS_LCD_FORCED_DISC                  | (Release 4.5)                     |
| POTS_LCD_FORCED_DISCONNECT            | (Release 4.4.1) (Obsolete in 4.5) |
| POTS_LCD_REAUTH_FAIL                  | (Release 4.4.1)                   |
| POTS_OP_INTERRUPT_ATTMP               | (Release 4.5)                     |
| POTS_PS_FAIL                          | (Release 4.5)                     |
| POTS_PS_MANAGE_FAIL                   | (Release 4.5)                     |
| POTS_PS_MANAGE_SUCC                   | (Release 4.5)                     |

|                        |               |
|------------------------|---------------|
| POTS_PS_SUCC           | (Release 4.5) |
| POTS_VM_ACCESS         | (Release 4.5) |
| POTS_VM_ACT_FAIL       | (Release 4.5) |
| POTS_VM_ACT_SUCC       | (Release 4.5) |
| POTS_VM_ATTMP          | (Release 4.5) |
| POTS_VM_DEACT_FAIL     | (Release 4.5) |
| POTS_VM_DEACT_SUCC     | (Release 4.5) |
| POTS_WARMLINE_ATTMP    | (Release 4.5) |
| SIS_100_RX             | (Release 4.5) |
| SIS_100_TX             | (Release 4.5) |
| SIS_18x_RX             | (Release 4.5) |
| SIS_18x_TX             | (Release 4.5) |
| SIS_200_RX             | (Release 4.5) |
| SIS_200_TX             | (Release 4.5) |
| SIS_3xx_RX             | (Release 4.5) |
| SIS_3xx_TX             | (Release 4.5) |
| SIS_4xx_RX             | (Release 4.5) |
| SIS_4xx_TX             | (Release 4.5) |
| SIS_5xx_RX             | (Release 4.5) |
| SIS_5xx_TX             | (Release 4.5) |
| SIS_6xx_RX             | (Release 4.5) |
| SIS_6xx_TX             | (Release 4.5) |
| SIS_7xx_RX             | (Release 4.5) |
| SIS_7xx_TX             | (Release 4.5) |
| SIS_ACK_RX             | (Release 4.5) |
| SIS_ACK_TX             | (Release 4.5) |
| SIS_BYE_RX             | (Release 4.5) |
| SIS_BYE_TX             | (Release 4.5) |
| SIS_CANCEL_RX          | (Release 4.5) |
| SIS_CANCEL_TX          | (Release 4.5) |
| SIS_INFO_RX            | (Release 4.5) |
| SIS_INFO_TX            | (Release 4.5) |
| SIS_INVITE_REPLACES_RX | (Release 4.5) |
| SIS_INVITE_REPLACES_TX | (Release 4.5) |
| SIS_INVITE_RX          | (Release 4.5) |
| SIS_INVITE_TX          | (Release 4.5) |
| SIS_NOTIFY_RX          | (Release 4.5) |
| SIS_NOTIFY_TX          | (Release 4.5) |

|                          |               |
|--------------------------|---------------|
| SIS_OPTIONS_RX           | (Release 4.5) |
| SIS_OPTIONS_TX           | (Release 4.5) |
| SIS_PRACK_RX             | (Release 4.5) |
| SIS_PRACK_TX             | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_RX   | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_TX   | (Release 4.5) |
| SIS_REFER_RX             | (Release 4.5) |
| SIS_REFER_TX             | (Release 4.5) |
| SIS_REFER_W_REPLACES_RX  | (Release 4.5) |
| SIS_REGISTER_RX          | (Release 4.5) |
| SIS_REGISTER_TX          | (Release 4.5) |
| SIS_REL100_RX            | (Release 4.5) |
| SIS_REL100_TX            | (Release 4.5) |
| SIS_REQ_RETRAN_RX        | (Release 4.5) |
| SIS_REQ_RETRAN_TX        | (Release 4.5) |
| SIS_RSP_RETRAN_RX        | (Release 4.5) |
| SIS_RSP_RETRAN_TX        | (Release 4.5) |
| SIS_SUBSCRIBE_RX         | (Release 4.5) |
| SIS_SUBSCRIBE_TX         | (Release 4.5) |
| SIS_T1_TIMER_EXPIRED     | (Release 4.5) |
| SIS_T2_TIMER_REACHED     | (Release 4.5) |
| SIS_TOTAL_INCOM_MSG      | (Release 4.5) |
| SIS_TOTAL_OUTG_MSG_ATTMP | (Release 4.5) |
| SIS_TOTAL_SUCC_INCOM_MSG | (Release 4.5) |
| SIS_TOTAL_SUCC_OUTG_MSG  | (Release 4.5) |
| SIS_UNSUPPORTED_RX       | (Release 4.5) |
| SIS_UPDATE_RX            | (Release 4.5) |
| SIS_UPDATE_TX            | (Release 4.5) |

## Measurement POTS Screening List Editing Feature Server Summary

The Measurement POTS Screening List Editing Feature Server Summary (measurement-pots-sle-summary) table requests a summary report of POTS screening list editing (SLE)-related statistics for a specified Feature Server that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-POTS-SLE-SUMMARY

Table Containment Area: OAMP

**Command Types** Report, show and clear

### Examples

```
show measurement-pots-sle-summary;
report measurement-pots-sle-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; feature-server-id= FSAIN203;output-type=csv;
clear measurement-pots-sle-summary feature-server-id=fsptc203;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): feature-server-id

### Syntax Description

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format FSPTCnnn/fsptcnnn or FSAINnnn/fsainnnn.                                                                                                                                                                                                                      |
| DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. Permitted values are:<br><br>TIMESTAMP<br>NODENAME<br>CONDITION<br>POTS_SCA_ATTMP<br>POTS_SCA_REJECT_NO_RSRC<br>POTS_SCA_SUCC<br>POTS_SCF_ATTMP<br>POTS_SCF_REJECT_NO_RSRC<br>POTS_SCF_SUCC<br>POTS_SCR_ATTMP<br>POTS_SCR_REJECT_NO_RSRC<br>POTS_SCR_SUCC |
| END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                      |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                              |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

## Measurement Provisioning

The Measurement Provisioning (measurement-provisioning) table collects all current traffic statistics by type.

Table Name: MEASUREMENT-PROVISIONING

Table Containment Area: OAMP

### Command Types

Show and change

### Examples

```
show measurement-prov type=isup;
change measurement-prov time-interval=60;
```

### Usage Guidelines

Primary Key Token(s): None.

**Syntax Description**

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *ENABLE | <p>Indicates whether the specified type is currently being collected.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Type is collected.</p> <p>N—Type is not collected.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| *TYPE   | <p>Specifies what measurements the traffic subsystem supports.</p> <p><b>Note</b> Entering a show command without specifying a TYPE value will return all types as of Release 4.4.1.</p> <p>VARCHAR(10): 1–10 ASCII characters. Permitted values are:</p> <p>ALL—(Default) All types. (Obsolete as of Release 4.4.1) (Supported in Release 4.5.1)</p> <p>AIN-SVC—Advanced Intelligent Network server</p> <p>AIN-TOOLS (Release 4.4.1)—Advanced Intelligent Network tools</p> <p>ANM—Announcement Module</p> <p>AUDIT—Audit</p> <p>BILLING—Billing</p> <p>CALLP—Call Processing</p> <p>CALL-TOOLS (Release 4.4.1)—Call tools</p> <p>DQOS—Dynamic Quality of Service</p> <p>EM—Event Messaging (Billing)</p> <p>H323—H.323</p> <p>INAP—Intelligent Network Application Protocol</p> <p>ISDN—Integrated Services Digital Network</p> <p>ISUP—ISDN User Part (SS7)</p> <p>M3UA—M3UA signaling protocol</p> <p>MGCP—Media Gateway Control Protocol</p> <p>PCT-TOOLS (Release 4.4.1)—PCT tools</p> <p>POTS-FS—POTS Feature Server</p> <p>    POTS-LOCAL—Local Feature</p> <p>    POTS-MISC—Miscellaneous Feature</p> <p>    POTS-SLE—Screening List Editing</p> <p>    POTS-ACAR—Auto Callback/Recall</p> <p>    POTS-COS—Class of Service</p> <p>    POTS-COT—Customer-Originated Trace</p> <p>SCCP—Signaling Connection Control Part protocol—SCTP signaling protocol</p> <p>SIA—SIP interface adapter</p> <p>SIM—Service Interaction Manager</p> <p>SNMP—Signaling Network Management Protocol</p> <p>SUA—SUA signaling protocol</p> <p>TCAP—Transactional Capabilities Application Part protocol</p> <p>TG-USG—Trunk Group usage</p> <p>TSA—TCAP Signaling Adapter (TSA) application</p> |

|               |                                                                                                                                        |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------|
| TIME-INTERVAL | The collection time.<br>SMALLINT: 5, 15, 30, 60 minutes (Default = 15).<br>If type=lg-usg, the default collection time is 100 seconds. |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------|

## Measurement SCCP Summary

The Measurement SCCP Summary (measurement-sccp-summary) table requests a summary report of Signaling Connection Control Part (SCCP)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SCCP-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-sccp-summary;
report measurement-sccp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-sccp-summary call-agent-id=CA146;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

### Syntax Description

|               |                                                                                                                                                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters.                                                                             |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-13</a> for permitted values. |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                  |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL    | <p>Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.</p> <p>STRING.</p> <p>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.</p> <p>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used.</p> |
| OUTPUT-TYPE | <p>Specifies the desired output format. Permitted values are:</p> <p>CSV (Default)—Comma-separated view</p> <p>XML—Extensible Markup Language</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| START-TIME  | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                              |
| SUM         | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                                                                                                                                  |

Table 11-13 lists the values for the Measurement SCCP Summary Display token.

**Table 11-13 Measurement SCCP Summary Display Token Values**

|                              |
|------------------------------|
| SCCP_HOP_COUNTER_FAIL        |
| SCCP_MSG_TX_BACKUP_SUBSYS    |
| SCCP_NETWORK_CONGEST_FAIL    |
| SCCP_NETWORK_FAIL            |
| SCCP_NO_TRANS_ADDR_FAIL      |
| SCCP_NO_TRANS_SPEC_ADDR_FAIL |
| SCCP_NSAP_ALLOW_MSG_RX       |
| SCCP_NSAP_ALLOW_MSG_TX       |
| SCCP_NSAP_CONGEST_RX         |
| SCCP_NSAP_CONGEST_TX         |
| SCCP_NSAP_OOS_GRANT_RX       |
| SCCP_NSAP_OOS_GRANT_TX       |
| SCCP_NSAP_OOS_REQ_RX         |
| SCCP_NSAP_OOS_REQ_TX         |

|                              |
|------------------------------|
| SCCP_NSAP_PROHIBIT_RX        |
| SCCP_NSAP_PROHIBIT_TX        |
| SCCP_NSAP_STAT_TEST_RX       |
| SCCP_NSAP_STAT_TEST_TX       |
| SCCP_SUBSYS_CONGEST_FAIL     |
| SCCP_SUBSYS_FAIL             |
| SCCP_SUBSYS_OOS_REQ_DENY     |
| SCCP_SUBSYS_OOS_REQ_GRANT    |
| SCCP_SYNTAX_ERR              |
| SCCP_TOTAL_CLASS_0_RX        |
| SCCP_TOTAL_CLASS_0_TX        |
| SCCP_TOTAL_CLASS_1_RX        |
| SCCP_TOTAL_CLASS_1_TX        |
| SCCP_TOTAL_EXT_UDATA_TX      |
| SCCP_TOTAL_EXT_UDATA_SVC_TX  |
| SCCP_TOTAL_EXT_UDATA_RX      |
| SCCP_TOTAL_EXT_UDATA_SVC_RX  |
| SCCP_TOTAL_GLOBAL_ADDR_TRAN  |
| SCCP_TOTAL_LOCAL_MSG         |
| SCCP_TOTAL_LONG_UDATA_RX     |
| SCCP_TOTAL_LONG_UDATA_SVC_RX |
| SCCP_TOTAL_LONG_UDATA_SVC_TX |
| SCCP_TOTAL_LONG_UDATA_TX     |
| SCCP_TOTAL_MSG               |
| SCCP_TOTAL_UDATA_RX          |
| SCCP_TOTAL_UDATA_SVC_RX      |
| SCCP_TOTAL_UDATA_SVC_TX      |
| SCCP_TOTAL_UDATA_TX          |
| SCCP_USAP_TOTAL_CLASS_0_RX   |
| SCCP_USAP_TOTAL_CLASS_0_TX   |
| SCCP_USAP_TOTAL_CLASS_1_RX   |
| SCCP_USAP_TOTAL_CLASS_1_TX   |
| SCCP_UNEQUIP_USER_FAIL       |
| SCCP_UNKNOWN_FAIL            |

# Measurement Sctp Summary

The Measurement Stream Control Transmission Protocol (SCTP) Summary (measurement-sctp-summary) table requests a summary report of SCTP-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SCTP-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-sctp-summary;  
report measurement-sctp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27  
06:30:00; call-agent-id=CA146;  
clear measurement-sctp-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-14</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                                  |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br><br>STRING.<br><br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br><br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |
| OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                                                                                                                                                                |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-14 lists the values for the Measurement SCTP Summary Display token.

**Table 11-14 Measurement SCTP Summary Display Token Values**

|                                |
|--------------------------------|
| TIMESTAMP                      |
| NODENAME                       |
| CONDITION                      |
| SCTP_ASSOC_COMM_LOST           |
| SCTP_ASSOC_ID                  |
| SCTP_CHUNK_ORDER_ERR           |
| SCTP_CHUNK_TOO_LARGE_ERR       |
| SCTP_CHUNK_TOO_SMALL_ERR       |
| SCTP_CONTROL_CHUNK_RX          |
| SCTP_CONTROL_CHUNK_TX          |
| SCTP_COOKIE_IN_SHUTDOWN_ERR_RX |
| SCTP_CWR_CHUNK_RX              |
| SCTP_DATA_BYTE_RX              |
| SCTP_DATA_BYTE_TX              |
| SCTP_DATA_CHUNK_DISCARD        |
| SCTP_DATA_CHUNK_RETRAN         |
| SCTP_DATA_CHUNK_RX             |
| SCTP_DATA_CHUNK_RX_BUNDLE      |
| SCTP_DATA_CHUNK_RX_ORDER       |
| SCTP_DATA_CHUNK_RX_SEQ_ERR     |
| SCTP_DATA_CHUNK_RX_UNORDER     |
| SCTP_DATA_CHUNK_TX             |
| SCTP_DATA_CHUNK_TX_BUNDLE      |
| SCTP_DATA_CHUNK_TX_ORDER       |
| SCTP_DATA_CHUNK_TX_UNORDER     |
| SCTP_DATAG_RX                  |

|                            |
|----------------------------|
| SCTP_DATAG_TX              |
| SCTP_DEST_ADDR_FAIL        |
| SCTP_ECNE_CHUNK_RX         |
| SCTP_EMPTY_DATAG_ERR       |
| SCTP_EXPIRED_COOKIE_ERR    |
| SCTP_INVALID_BUNDLE_CHUNK  |
| SCTP_INVALID_CHECKSUM      |
| SCTP_INVALID_COOKIE_SIG    |
| SCTP_INVALID_DATAG_LENGTH  |
| SCTP_INVALID_PARAM_ERR_RX  |
| SCTP_INVALID_STREAM        |
| SCTP_INVALID_STREAM_ERR_RX |
| SCTP_INVALID_VERIF_TAG     |
| SCTP_MISSING_PARAM_ERR     |
| SCTP_MISSING_PARAM_ERR_RX  |
| SCTP_NO_SPACE_INCOM_ERR    |
| SCTP_NO_USER_DATA_ERR_RX   |
| SCTP_OOTB                  |
| SCTP_OUT_OF_RSCR_ERR_RX    |
| SCTP_PARTIAL_CHUNK_ERR     |
| SCTP_PEER_RESTART_ERR      |
| SCTP_STALE_COOKIE_ERR      |
| SCTP_STALE_COOKIE_ERR_RX   |
| SCTP_ULP_QUEUE             |
| SCTP_ULP_READY             |
| SCTP_ULP_RX                |
| SCTP_ULP_TX                |
| SCTP_UNKNOWN_CHUNK_TYPE    |
| SCTP_UNKNOWN_INIT_PARAM    |
| SCTP_UNRECOG_CHUNK_ERR_RX  |
| SCTP_UNRECOG_PARAM_ERR_RX  |
| SCTP_UNRESOLV_ADDR_ERR_RX  |
| SCTP_V6_ADDR_PARAM_RX      |

# Measurement SIA Summary

The Measurement SIA Summary (measurement-sia-summary) table requests a summary report of SIP+ interface adapter (SIA)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SIA-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-sia-summary;
report measurement-sia-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-sia-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent.<br>VARCHAR(8): 1–8 ASCII characters.                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br>STRING. See <a href="#">Table 11-15</a> for permitted values.                                                                                                                                                                                                                                                                                                                                                          |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| INTERVAL      | Specifies whether to report measurement entries for all intervals, or to get the current data that is not yet in a report.<br>STRING.<br>CURRENT—Returns the measurement data available for the latest interval that is not yet in a report for the Call Agent and Feature Server. If used with the START-TIME token, the START-TIME token is ignored and the INTERVAL=CURRENT value is used.<br>ALL—returns all the entries in regardless of the timestamp or reported intervals. If used with the START-TIME token, this token is ignored and the START-TIME value is used. |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-15 lists the values for the Measurement SIA Summary Display token.

**Table 11-15 Measurement SIA Summary Display Token Values**

|                                |                           |
|--------------------------------|---------------------------|
| TIMESTAMP                      |                           |
| NODENAME                       |                           |
| CONDITION                      |                           |
| SIA_ATTENDED_TRANSFER          | (Obsolete in Release 4.5) |
| SIA_AUDIT_BCM_CALL_RELEASED    | (Release 4.5)             |
| SIA_AUDIT_CALL_RELEASED        | (Release 4.5)             |
| SIA_AUDIT_CCB_FREED            | (Release 4.5)             |
| SIA_AUDIT_REGCONTACT_FREED     | (Release 4.5)             |
| SIA_CALL_FAIL_BY_EXPIRED_REG   |                           |
| SIA_INCOM_FAIL                 | (Release 4.5)             |
| SIA_INCOM_INIT                 | (Release 4.5)             |
| SIA_INCOM_SUCC                 | (Release 4.5)             |
| SIA_MWI_NOTIFY_RX              |                           |
| SIA_MWI_NOTIFY_TX              |                           |
| SIA_MWI_NOTIFY_TX_FAIL         | (Obsolete in Release 4.5) |
| SIA_OUTG_FAIL                  | (Release 4.5)             |
| SIA_OUTG_INIT                  | (Release 4.5)             |
| SIA_OUTG_SUCC                  | (Release 4.5)             |
| SIA_REFRESHES_TX               |                           |
| SIA_SECURE_FQDN_VIOLATION_REQ  | (Release 4.5)             |
| SIA_SECURE_FQDN_VIOLATION_RESP | (Release 4.5)             |
| SIA_SIP_INCOM_FAIL             | (Obsolete in Release 4.5) |
| SIA_SIP_INCOM_INIT             | (Obsolete in Release 4.5) |
| SIA_SIP_INCOM_SUCC             | (Obsolete in Release 4.5) |
| SIA_SIP_OUTG_FAIL              | (Obsolete in Release 4.5) |
| SIA_SIP_OUTG_INIT              | (Obsolete in Release 4.5) |

|                           |                           |
|---------------------------|---------------------------|
| SIA_SIP_OUTG_SUCC         | (Obsolete in Release 4.5) |
| SIA_TOTAL_FAIL            | (Obsolete in Release 4.5) |
| SIA_TOTAL_INCOM_MSG_FAIL  | (Obsolete in Release 4.5) |
| SIA_TOTAL_OUTG_MSG_FAIL   | (Obsolete in Release 4.5) |
| SIA_TOTAL_SESS_TIMER_FAIL |                           |
| SIA_TOTAL_SUCC            | (Obsolete in Release 4.5) |
| SIA_UNATTENDED_TRANSFER   | (Obsolete in Release 4.5) |
| SIS_100_RX                | (Release 4.5)             |
| SIS_100_TX                | (Release 4.5)             |
| SIS_18x_RX                | (Release 4.5)             |
| SIS_18x_TX                | (Release 4.5)             |
| SIS_200_RX                | (Release 4.5)             |
| SIS_200_TX                | (Release 4.5)             |
| SIS_3xx_RX                | (Release 4.5)             |
| SIS_3xx_TX                | (Release 4.5)             |
| SIS_4xx_RX                | (Release 4.5)             |
| SIS_4xx_TX                | (Release 4.5)             |
| SIS_5xx_RX                | (Release 4.5)             |
| SIS_5xx_TX                | (Release 4.5)             |
| SIS_6xx_RX                | (Release 4.5)             |
| SIS_6xx_TX                | (Release 4.5)             |
| SIS_7xx_RX                | (Release 4.5)             |
| SIS_7xx_TX                | (Release 4.5)             |
| SIS_ACK_RX                | (Release 4.5)             |
| SIS_ACK_TX                | (Release 4.5)             |
| SIS_BYE_RX                | (Release 4.5)             |
| SIS_BYE_TX                | (Release 4.5)             |
| SIS_CANCEL_RX             | (Release 4.5)             |
| SIS_CANCEL_TX             | (Release 4.5)             |
| SIS_INFO_RX               | (Release 4.5)             |
| SIS_INFO_TX               | (Release 4.5)             |
| SIS_INVITE_REPLACES_RX    | (Release 4.5)             |
| SIS_INVITE_REPLACES_TX    | (Release 4.5)             |
| SIS_INVITE_RX             | (Release 4.5)             |
| SIS_INVITE_TX             | (Release 4.5)             |
| SIS_NOTIFY_RX             | (Release 4.5)             |
| SIS_NOTIFY_TX             | (Release 4.5)             |
| SIS_OPTIONS_RX            | (Release 4.5)             |

|                          |               |
|--------------------------|---------------|
| SIS_OPTIONS_TX           | (Release 4.5) |
| SIS_PRACK_RX             | (Release 4.5) |
| SIS_PRACK_TX             | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_RX   | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_TX   | (Release 4.5) |
| SIS_REFER_RX             | (Release 4.5) |
| SIS_REFER_TX             | (Release 4.5) |
| SIS_REFER_W_REPLACES_RX  | (Release 4.5) |
| SIS_REGISTER_RX          | (Release 4.5) |
| SIS_REGISTER_TX          | (Release 4.5) |
| SIS_REL100_RX            | (Release 4.5) |
| SIS_REL100_TX            | (Release 4.5) |
| SIS_REQ_RETRAN_RX        | (Release 4.5) |
| SIS_REQ_RETRAN_TX        | (Release 4.5) |
| SIS_RSP_RETRAN_RX        | (Release 4.5) |
| SIS_RSP_RETRAN_TX        | (Release 4.5) |
| SIS_SUBSCRIBE_RX         | (Release 4.5) |
| SIS_SUBSCRIBE_TX         | (Release 4.5) |
| SIS_T1_TIMER_EXPIRED     | (Release 4.5) |
| SIS_T2_TIMER_REACHED     | (Release 4.5) |
| SIS_TOTAL_INCOM_MSG      | (Release 4.5) |
| SIS_TOTAL_OUTG_MSG_ATTMP | (Release 4.5) |
| SIS_TOTAL_SUCC_INCOM_MSG | (Release 4.5) |
| SIS_TOTAL_SUCC_OUTG_MSG  | (Release 4.5) |
| SIS_UNSUPPORTED_RX       | (Release 4.5) |
| SIS_UPDATE_RX            | (Release 4.5) |
| SIS_UPDATE_TX            | (Release 4.5) |

# Measurement SIM Summary

The Measurement SIM Summary (measurement-sim-summary) table requests a summary report of Service Interaction Module (SIM)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SIM-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-sim-summary;
report measurement-sim-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-sim-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

Change Rules: None.

## Syntax Description

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters in the format CAnnn or cannn.                                                                                                                                                                                                                                                                    |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-16</a> for permitted values.                                                                                                                                                                                                                     |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                      |
| START-TIME    | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM           | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-16 lists the values for the Measurement Sim Summary Display token.

**Table 11-16 Measurement Sim Summary Display Token Values**

|                                |               |
|--------------------------------|---------------|
| TIMESTAMP                      |               |
| NODENAME                       |               |
| CONDITION                      |               |
| BCM_MESSAGES_CTR               |               |
| CA_ASYNC_MESSAGES_SENT_CTR     |               |
| CA_RESTART_MESSAGES_SENT_CTR   |               |
| EDP_N_CTR                      |               |
| EDP_R_CTR                      |               |
| FS_MESSAGES_RECEIVED_CTR       |               |
| FS_MESSAGES_SENT_CTR           |               |
| FS_PING_MESSAGES_SENT_CTR      |               |
| FS_PING_NO_RESPONSE_FAULTY_CTR |               |
| NSTRUCT_CTR                    |               |
| NSTRUCT_RESPONSE_CTR           |               |
| RELATIONS_CTR                  |               |
| SIM_AUDIT_CCB_FREED            | (Release 4.5) |
| SIM_AUDIT_SIP_CCB_FREED        | (Release 4.5) |
| SIM_BCM_MSG                    |               |
| SIM_EDP_N                      |               |
| SIM_EDP_R                      |               |
| SIM_FS_ASYNC_MSG_TX            |               |
| SIM_FS_MSG_RX                  |               |
| SIM_FS_MSG_TX                  |               |
| SIM_FS_PING_MSG_TX             |               |
| SIM_FS_PING_NO_RSP_FAULTY      |               |
| SIM_FS_RESTART_MSG_TX          |               |
| SIM_INSTRUCT                   |               |
| SIM_INSTRUCT_RSP               |               |
| SIM_RELATIONS                  |               |
| SIM_TDP_N                      |               |
| SIM_TDP_R                      |               |
| SIM_TERMINATE_RX               |               |
| SIM_TERMINATE_TX               |               |
| SIS_100_RX                     | (Release 4.5) |
| SIS_100_TX                     | (Release 4.5) |
| SIS_18x_RX                     | (Release 4.5) |

|                         |               |
|-------------------------|---------------|
| SIS_18x_TX              | (Release 4.5) |
| SIS_200_RX              | (Release 4.5) |
| SIS_200_TX              | (Release 4.5) |
| SIS_3xx_RX              | (Release 4.5) |
| SIS_3xx_TX              | (Release 4.5) |
| SIS_4xx_RX              | (Release 4.5) |
| SIS_4xx_TX              | (Release 4.5) |
| SIS_5xx_RX              | (Release 4.5) |
| SIS_5xx_TX              | (Release 4.5) |
| SIS_6xx_RX              | (Release 4.5) |
| SIS_6xx_TX              | (Release 4.5) |
| SIS_7xx_RX              | (Release 4.5) |
| SIS_7xx_TX              | (Release 4.5) |
| SIS_ACK_RX              | (Release 4.5) |
| SIS_ACK_TX              | (Release 4.5) |
| SIS_BYE_RX              | (Release 4.5) |
| SIS_BYE_TX              | (Release 4.5) |
| SIS_CANCEL_RX           | (Release 4.5) |
| SIS_CANCEL_TX           | (Release 4.5) |
| SIS_INFO_RX             | (Release 4.5) |
| SIS_INFO_TX             | (Release 4.5) |
| SIS_INVITE_REPLACES_RX  | (Release 4.5) |
| SIS_INVITE_REPLACES_TX  | (Release 4.5) |
| SIS_INVITE_RX           | (Release 4.5) |
| SIS_INVITE_TX           | (Release 4.5) |
| SIS_NOTIFY_RX           | (Release 4.5) |
| SIS_NOTIFY_TX           | (Release 4.5) |
| SIS_OPTIONS_RX          | (Release 4.5) |
| SIS_OPTIONS_TX          | (Release 4.5) |
| SIS_PRACK_RX            | (Release 4.5) |
| SIS_PRACK_TX            | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_RX  | (Release 4.5) |
| SIS_PROV_RSP_RETRAN_TX  | (Release 4.5) |
| SIS_REFER_RX            | (Release 4.5) |
| SIS_REFER_TX            | (Release 4.5) |
| SIS_REFER_W_REPLACES_RX | (Release 4.5) |
| SIS_REGISTER_RX         | (Release 4.5) |
| SIS_REGISTER_TX         | (Release 4.5) |

|                          |               |
|--------------------------|---------------|
| SIS_REL100_RX            | (Release 4.5) |
| SIS_REL100_TX            | (Release 4.5) |
| SIS_REQ_RETRAN_RX        | (Release 4.5) |
| SIS_REQ_RETRAN_TX        | (Release 4.5) |
| SIS_RSP_RETRAN_RX        | (Release 4.5) |
| SIS_RSP_RETRAN_TX        | (Release 4.5) |
| SIS_SUBSCRIBE_RX         | (Release 4.5) |
| SIS_SUBSCRIBE_TX         | (Release 4.5) |
| SIS_T1_TIMER_EXPIRED     | (Release 4.5) |
| SIS_T2_TIMER_REACHED     | (Release 4.5) |
| SIS_TOTAL_INCOM_MSG      | (Release 4.5) |
| SIS_TOTAL_OUTG_MSG_ATTMP | (Release 4.5) |
| SIS_TOTAL_SUCC_INCOM_MSG | (Release 4.5) |
| SIS_TOTAL_SUCC_OUTG_MSG  | (Release 4.5) |
| SIS_UNSUPPORTED_RX       | (Release 4.5) |
| SIS_UPDATE_RX            | (Release 4.5) |
| SIS_UPDATE_TX            | (Release 4.5) |
| SIP_100_RX               |               |
| SIP_100_TX               |               |
| SIP_18x_RX               |               |
| SIP_18x_TX               |               |
| SIP_200_RX               |               |
| SIP_200_TX               |               |
| SIP_3xx_RX               |               |
| SIP_3xx_TX               |               |
| SIP_4xx_RX               |               |
| SIP_4xx_TX               |               |
| SIP_5xx_RX               |               |
| SIP_5xx_TX               |               |
| SIP_6xx_RX               |               |
| SIP_6xx_TX               |               |
| SIP_7xx_RX               |               |
| SIP_7xx_TX               |               |
| SIP_ACK_RX               |               |
| SIP_ACK_TX               |               |
| SIP_BYE_RX               |               |
| SIP_BYE_TX               |               |
| SIP_CANCEL_RX            |               |

|                          |
|--------------------------|
| SIP_CANCEL_TX            |
| SIP_IC_CALL_FAILED       |
| SIP_IC_CALL_INIT         |
| SIP_IC_CALL_SUCCEEDED    |
| SIP_INFO_RX              |
| SIP_INFO_TX              |
| SIP_INVITE_RX            |
| SIP_INVITE_REPLACED_RX   |
| SIP_INVITE_REPLACES_TX   |
| SIP_INVITE_TX            |
| SIP_NOTIFY_RX            |
| SIP_NOTIFY_TX            |
| SIP_OG_CALL_INIT         |
| SIP_OG_CALL_SUCCEEDED    |
| SIP_OG_CALL_FAILED       |
| SIP_OPTIONS_RX           |
| SIP_OPTIONS_TX           |
| SIP_PRACK_RX             |
| SIP_PRACK_TX             |
| SIP_PROV_RSP_RETRAN_RX   |
| SIP_PROV_RSP_RETRAN_TX   |
| SIP_REFER_RX             |
| SIP_REFER_W_REPLACES_RX  |
| SIP_REFER_TX             |
| SIP_REGISTER_RX          |
| SIP_REGISTER_TX          |
| SIP_REL100_RX            |
| SIP_REL100_TX            |
| SIP_REQ_RETRAN_RX        |
| SIP_REQ_RETRAN_TX        |
| SIP_RSP_RETRAN_RX        |
| SIP_RSP_RETRAN_TX        |
| SIP_SUBSCRIBE_RX         |
| SIP_SUBSCRIBE_TX         |
| SIP_T1_TIMER_EXPIRED     |
| SIP_T2_TIMER_REACHED     |
| SIP_TOTAL_INCOM_MSG      |
| SIP_TOTAL_OUTG_MSG_ATTMP |

|                              |
|------------------------------|
| SIP_TOTAL_SUCC_INCOM_MSG     |
| SIP_TOTAL_SUCC_OUTG_MSG      |
| SIP_UNSUPPORTED_RX           |
| TDP_N_CTR                    |
| TDP_R_CTR                    |
| TERMINATE_RECEIVED_CTR       |
| TERMINATE_SENT_CTR           |
| TOTAL_SUCCESS_CALL           |
| TOTAL_UNSUCCESS_CALL         |
| TOTAL_UNSUCCESS_INCOMING_MSG |
| TOTAL_UNSUCCESS_OUTGOING_MSG |

# Measurement SNMP Summary

The Measurement SNMP Summary (measurement-snmp-summary) provides a summary report of Simple Network Management Protocol (SNMP)-related statistics that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SNMP-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-snmp-summary;
report measurement-snmp-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00;output-type=csv;
clear measurement-snmp-summary;
```

## Usage Guidelines

Primary Key Token(s): None.  
Change Rules: None.

## Syntax Description

|       |                                                                                    |
|-------|------------------------------------------------------------------------------------|
| EM-ID | Mandatory for the clear command. The EM id.<br>VARCHAR(64): 1–64 ASCII characters. |
|-------|------------------------------------------------------------------------------------|

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DISPLAY    | <p>Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).</p> <p>STRING. Permitted values are:</p> <p>TIMESTAMP</p> <p>NODENAME</p> <p>CONDITION</p> <p>SNMP_GET_NEXT_RX</p> <p>SNMP_GET_NEXT_TX</p> <p>SNMP_GET_RX</p> <p>SNMP_GET_TX</p> <p>SNMP_SET_RX</p> <p>SNMP_SET_TX</p> <p>SNMP_TRAP_TX</p>                                                   |
| END-TIME   | <p>Ending time for measurement summary. Enter all 19 ASCII characters as shown.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                                                                                      |
| START-TIME | <p>Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p> |
| SUM        | <p>Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                     |

## Measurement SUA Protocol Feature Server Summary

The Measurement SUA Summary (measurement-sua-summary) table requests a summary report of SCCP-User Adaptation Layer (SUA)-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-SUA-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-sua-summary;
```

```
report measurement-sua-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27
06:30:00; call-agent-id=CA146;
clear measurement-sua-summary call-agent-id=CA146;
```

**Usage Guidelines**

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

**Syntax Description**

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters.                                                                                                                                                                                                                                                                                                 |
| DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-17</a> for permitted values.                                                                                                                                                                                                                     |
| END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                      |
| START-TIME    | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM           | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

[Table 11-17](#) lists the values for the Measurement SUA Summary Display token.

**Table 11-17 Measurement SUA Summary Display Token Values**

|                   |
|-------------------|
| TIMESTAMP         |
| NODENAME          |
| CONDITION         |
| SUA_ACTIVE_ACK_RX |
| SUA_ACTIVE_TX     |
| SUA_ASSOC_FAIL    |
| SUA_BEAT_ACK_RX   |
| SUA_BEAT_ACK_TX   |
| SUA_BEAT_RX       |
| SUA_BEAT_TX       |
| SUA_CLDR_RX       |

|                            |
|----------------------------|
| SUA_CLDR_TX                |
| SUA_CLDT_RX                |
| SUA_CLDT_TX                |
| SUA_DATA_BYTES_RX          |
| SUA_DATA_BYTES_TX          |
| SUA_DAUD_TX                |
| SUA_DAVA_RX                |
| SUA_DOWN_ACK_RX            |
| SUA_DOWN_TX                |
| SUA_DRST_RX                |
| SUA_DUNA_RX                |
| SUA_DUPU_RX                |
| SUA_ERR_RX                 |
| SUA_ERR_TX                 |
| SUA_INACTIVE_ACK_RX        |
| SUA_INACTIVE_TX            |
| SUA_INVALID_SCTP_SIGNALS   |
| SUA_MSG_CLASS_ERR          |
| SUA_MSG_INVALID_LENGTH_RX  |
| SUA_MSG_TYPE_ERR           |
| SUA_NETWORK_APPEAR_ERR     |
| SUA_NO_MEMORY_FAIL         |
| SUA_NOTIFY_RX              |
| SUA_NOTIFY_TX              |
| SUA_PARAM_FIELD_ERR        |
| SUA_PARAM_VALUE_ERR        |
| SUA_PROTOCOL_ERR           |
| SUA_ROUTING_CONTEXT_ERR    |
| SUA_SCON_RX                |
| SUA_SCON_TX                |
| SUA_SCTP_TX_FAIL           |
| SUA_SINCE_LAST_RESET_ASSOC |
| SUA_STREAM_ID_ERR          |
| SUA_UNEXPECT_MSG_ERR       |
| SUA_UNEXPECT_PARAM_ERR     |
| SUA_UP_ACK_RX              |
| SUA_UP_TX                  |
| SUA_VERSION_ERR            |

# Measurement TCAP Protocol Summary

The Measurement Transaction Capabilities Application Part (TCAP) Protocol Summary (measurement-tcap-summary) table requests a summary report of TCAP-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-TCAP-SUMMARY

Table Containment Area: OAMP

## Command Types

Report, show and clear

## Examples

```
show measurement-tcap-summary;  
report measurement-tcap-summary start-time=2003-03-27 06:00:00; end-time=2003-03-27  
06:30:00; call-agent-id=CA146; output-type=csv;  
clear measurement-tcap-summary call-agent-id=CA146;
```

## Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

## Syntax Description

|                   |                                                                                                                                                                                                                          |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEATURE-SERVER-ID | Mandatory for on-demand requests. Foreign key: Feature Server table. The ID of the associated Feature Server.<br><br>VARCHAR(8): 1–8 ASCII characters in the format fsptcnnn or fsainnnn.                                |
| DISPLAY           | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-18</a> for permitted values. |
| END-TIME          | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                  |
| OUTPUT-TYPE       | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                               |

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| SUM        | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |

Table 11-18 lists the values for the Measurement TCAP Summary Display token.

**Table 11-18 Measurement TCAP Summary Display Token Values**

|                                         |
|-----------------------------------------|
| TIMESTAMP                               |
| NODENAME                                |
| CONDITION                               |
| TCAP_ABORT_IND_RX (Release 4.5)         |
| TCAP_ABORT_MSG_RX                       |
| TCAP_ABORT_MSG_TX                       |
| TCAP_ACT_INVOCATIONS                    |
| TCAP_ACT_TRANSACTIONS                   |
| TCAP_BAD_STRUCT_COMP_PORT_RX            |
| TCAP_BAD_STRUCT_COMP_PORT_TX            |
| TCAP_BAD_STRUCT_DIALOG_PORT_RX          |
| TCAP_BAD_STRUCT_DIALOG_PORT_TX          |
| TCAP_BAD_STRUCT_TRANS_PORT_RX           |
| TCAP_BAD_STRUCT_TRANS_PORT_TX           |
| TCAP_BEGIN_MSG_RX                       |
| TCAP_BEGIN_MSG_TX                       |
| TCAP_BIND_CONFIRM_RX (Release 4.5)      |
| TCAP_CLOSE_IND_RX (Release 4.5)         |
| TCAP_COMPONENT_CONFIRM_RX (Release 4.5) |
| TCAP_COMPONENT_IND_RX (Release 4.5)     |
| TCAP_COMPONENT_REQ_RX (Release 4.5)     |
| TCAP_CONT_MSG_RX                        |
| TCAP_CONT_MSG_TX                        |
| TCAP_DATA_IND_RX (Release 4.5)          |
| TCAP_DATA_REQ_RX (Release 4.5)          |
| TCAP_DELIMITER_IND_RX (Release 4.5)     |

|                                |               |
|--------------------------------|---------------|
| TCAP_DELIMITER_REQ_RX          | (Release 4.5) |
| TCAP_DIALOG_CONFIRM_RX         | (Release 4.5) |
| TCAP_DUP_INVOKE_ID_RX          |               |
| TCAP_DUP_INVOKE_ID_TX          |               |
| TCAP_END_MSG_RX                |               |
| TCAP_END_MSG_TX                |               |
| TCAP_INCONSIST_DIALOG_PORT_RX  |               |
| TCAP_INCONSIST_DIALOG_PORT_TX  |               |
| TCAP_INCORRECT_COMP_ENCODE_RX  |               |
| TCAP_INCORRECT_COMP_ENCODE_TX  |               |
| TCAP_INCORRECT_COMP_PORT_RX    |               |
| TCAP_INCORRECT_COMP_PORT_TX    |               |
| TCAP_INCORRECT_PARAM_RE_RX     |               |
| TCAP_INCORRECT_PARAM_RE_TX     |               |
| TCAP_INCORRECT_PARAM_RR_RX     |               |
| TCAP_INCORRECT_PARAM_RR_TX     |               |
| TCAP_INCORRECT_PARAM_RX        |               |
| TCAP_INCORRECT_PARAM_TX        |               |
| TCAP_INCORRECT_TRANS_PORT_RX   |               |
| TCAP_INCORRECT_TRANS_PORT_TX   |               |
| TCAP_INIT_REL_RX               |               |
| TCAP_INIT_REL_TX               |               |
| TCAP_INVOKE_COMP_RX            |               |
| TCAP_INVOKE_COMP_TX            |               |
| TCAP_INVOKE_RSCR_LIMIT_PROB_RX |               |
| TCAP_INVOKE_RSCR_LIMIT_PROB_TX |               |
| TCAP_MISSING_DIALOG_PORT_RX    |               |
| TCAP_MISSING_DIALOG_PORT_TX    |               |
| TCAP_NO_PERMISS_CONVERS_RX     |               |
| TCAP_NO_PERMISS_CONVERS_TX     |               |
| TCAP_NO_PERMISS_QUERY_RX       |               |
| TCAP_NO_PERMISS_QUERY_TX       |               |
| TCAP_NOTICE_IND_RX             | (Release 4.5) |
| TCAP_OPEN_CONFIRM_RX           | (Release 4.5) |
| TCAP_OPEN_IND_RX               | (Release 4.5) |
| TCAP_OPERATION_CONFIRM_RX      | (Release 4.5) |
| TCAP_OPERATION_IND_RX          | (Release 4.5) |
| TCAP_OPERATION_REQ_RX          | (Release 4.5) |

|                             |               |
|-----------------------------|---------------|
| TCAP_PERMISS_CONVERS_RX     |               |
| TCAP_PERMISS_CONVERS_TX     |               |
| TCAP_PERMISS_QUERY_RX       |               |
| TCAP_PERMISS_QUERY_TX       |               |
| TCAP_REJECT_COMP_RX         |               |
| TCAP_REJECT_COMP_TX         |               |
| TCAP_RETURN_ERR_COMP_RX     |               |
| TCAP_RETURN_ERR_COMP_TX     |               |
| TCAP_RETURN_RESULT_COMP_RX  |               |
| TCAP_RETURN_RESULT_COMP_TX  |               |
| TCAP_RSCR_LIMIT_RX          |               |
| TCAP_RSCR_LIMIT_TX          |               |
| TCAP_RSP_RX                 |               |
| TCAP_RSP_TX                 |               |
| TCAP_STAT_CONFIRM_RX        | (Release 4.5) |
| TCAP_STAT_IND_RX            | (Release 4.5) |
| TCAP_STATUS_IND_RX          | (Release 4.5) |
| TCAP_TOTAL_COMP_RX          |               |
| TCAP_TOTAL_COMP_TX          |               |
| TCAP_TOTAL_DROPPED_MSG_RX   |               |
| TCAP_TOTAL_MSG_RX           |               |
| TCAP_TOTAL_MSG_TX           |               |
| TCAP_TOTAL_UNI_MSG_RX       |               |
| TCAP_TOTAL_UNI_MSG_TX       |               |
| TCAP_TRANS_PORT_PERM_REL_RX |               |
| TCAP_TRANS_PORT_PERM_REL_TX |               |
| TCAP_TRANSACTION_IDS_INUSE  |               |
| TCAP_UDATA_IND_RX           | (Release 4.5) |
| TCAP_UNEXPECT_ERR_CODE_RX   |               |
| TCAP_UNEXPECT_ERR_CODE_TX   |               |
| TCAP_UNEXPECT_LINK_OPER_RX  |               |
| TCAP_UNEXPECT_LINK_OPER_TX  |               |
| TCAP_UNEXPECT_LINK_RSP_RX   |               |
| TCAP_UNEXPECT_LINK_RSP_TX   |               |
| TCAP_UNEXPECT_RE_RX         |               |
| TCAP_UNEXPECT_RE_TX         |               |
| TCAP_UNEXPECT_RR_RX         |               |
| TCAP_UNEXPECT_RR_TX         |               |

|                                |               |
|--------------------------------|---------------|
| TCAP_UNRECOG_COMP_RX           |               |
| TCAP_UNRECOG_COMP_TX           |               |
| TCAP_UNRECOG_DIALOG_PORT_ID_RX |               |
| TCAP_UNRECOG_DIALOG_PORT_ID_TX |               |
| TCAP_UNRECOG_ERR_CODE_RX       |               |
| TCAP_UNRECOG_ERR_CODE_TX       |               |
| TCAP_UNRECOG_INVOKE_ID_RX      |               |
| TCAP_UNRECOG_INVOKE_ID_TX      |               |
| TCAP_UNRECOG_LINK_ID_RX        |               |
| TCAP_UNRECOG_LINK_ID_TX        |               |
| TCAP_UNRECOG_MSG_TYPE_RX       |               |
| TCAP_UNRECOG_MSG_TYPE_TX       |               |
| TCAP_UNRECOG_OPCODE_RX         |               |
| TCAP_UNRECOG_OPCODE_TX         |               |
| TCAP_UNRECOG_RE_INVOKE_ID_RX   |               |
| TCAP_UNRECOG_RE_INVOKE_ID_TX   |               |
| TCAP_UNRECOG_TRANS_ID_RX       |               |
| TCAP_UNRECOG_TRANS_ID_TX       |               |
| TSA_ABORT_IND_RX               | (Release 4.5) |
| TSA_CLOSE_IND_RX               | (Release 4.5) |
| TSA_COMPONENT_CONFIRM_RX       | (Release 4.5) |
| TSA_COMPONENT_IND_RX           | (Release 4.5) |
| TSA_COMPONENT_REQ_RX           | (Release 4.5) |
| TSA_DATA_IND_RX                | (Release 4.5) |
| TSA_DATA_REQ_RX                | (Release 4.5) |
| TSA_DELIMITER_IND_RX           | (Release 4.5) |
| TSA_DELIMITER_REQ_RX           | (Release 4.5) |
| TSA_DIALOG_CONFIRM_RX          | (Release 4.5) |
| TSA_INAP_BIND_CONFIRM_RX       | (Release 4.5) |
| TSA_INAP_NOTICE_IND_RX         | (Release 4.5) |
| TSA_INAP_STAT_CONFIRM_RX       | (Release 4.5) |
| TSA_INAP_STAT_IND_RX           | (Release 4.5) |
| TSA_OPEN_CONFIRM_RX            | (Release 4.5) |
| TSA_OPEN_IND_RX                | (Release 4.5) |
| TSA_OPERATION_CONFIRM_RX       | (Release 4.5) |
| TSA_OPERATION_IND_RX           | (Release 4.5) |
| TSA_OPERATION_REQ_RX           | (Release 4.5) |
| TSA_STATUS_IND_RX              | (Release 4.5) |

|                          |               |
|--------------------------|---------------|
| TSA_TCAP_BIND_CONFIRM_RX | (Release 4.5) |
| TSA_TCAP_NOTICE_IND_RX   | (Release 4.5) |
| TSA_TCAP_STAT_CONFIRM_RX | (Release 4.5) |
| TSA_TCAP_STAT_IND_RX     | (Release 4.5) |
| TSA_UDATA_IND_RX         | (Release 4.5) |

## Trunk Group Usage Summary

The Trunk Group Usage Summary (tg-usage-summary) table provides trunk group usage information.

Table Name: TG-USAGE-SUMMARY

Table Containment Area: OAMP

### Command Types

Report and show

### Examples

```
show measurement-tg-usage-summary;  
report measurement-tg-usage-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27  
12:00:00; tgn-id=dallas01; call-agent-id=CA146; output=tg-report; output-type=csv;
```

The following example uses the reporting option to gather statistics on a per-POP basis:

```
report measurement-tg-usage-summary start-time=2002-03-27 10:00:00; end-time=2002-03-27  
12:00:00; trkgrp-exchange=RONLVA31GT; trkgrp-name=RONKVACSDS0_LC; call-agent-id=CA146;  
output=tg-report; output-type=csv;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): tgn-id



#### Note

This table does not support on-demand requests.

### Syntax Description

|               |                                                                                                                                                                          |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CALL-AGENT-ID | The identity of the call agent that collected the measurement data.<br>VARCHAR(8): 1–8 ASCII characters. The form of the id is CAnnn or cannn where<br>nnn = 000 to 999. |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DISPLAY  | <p>Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).</p> <p>STRING. Permitted values are:</p> <p>CONDITION</p> <p>INCOMING_BSY_TRK</p> <p>INCOMING_CALL_ATTMP</p> <p>INCOMING_USAGE</p> <p>NODENAME</p> <p>NUM_OF_OOS_TRK</p> <p>NUM_OF_OVERFLOW</p> <p>NUM_OF_TRUNK</p> <p>OUTBOUND_CALL_FAIL</p> <p>OUTGOING_BSY_TRK</p> <p>OUTGOING_CALL_ATTMP</p> <p>OUTGOING_USAGE</p> <p>TIMESTAMP</p> <p>TOTAL_USAGE</p> <p>TRK_GRP_ID</p> <p>TRK_GRP_TYPE</p> <p>TRKGRP_AVERAGE_USAGE</p> <p>TRKGRP_EXCHANGE (Release 4.5)</p> <p>TRKGRP_GLARE_COUNT (Release 4.5)</p> <p>TRKGRP_INCOM_ATTMP</p> <p>TRKGRP_INCOM_BUSY_TRK</p> <p>TRKGRP_INCOM_USAGE</p> <p>TRKGRP_LBLK_TRK_USAGE (Release 4.5)</p> <p>TRKGRP_MAINT_TRK_USAGE (Release 4.5)</p> <p>TRKGRP_NAME (Release 4.5)</p> <p>TRKGRP_OOS_TRK_USAGE (Release 4.5)</p> <p>TRKGRP_OUTBOUND_FAIL</p> <p>TRKGRP_OUTG_ATTMP</p> <p>TRKGRP_OUTG_BUSY_TRK</p> <p>TRKGRP_OUTG_USAGE</p> <p>TRKGRP_RBLK_TRK_USAGE (Release 4.5)</p> <p>TRKGRP_TOTAL_INS_TRK (Release 4.5)</p> <p>TRKGRP_TOTAL_OOS_TRK</p> <p>TRKGRP_TOTAL_OVERFLOW</p> <p>TRKGRP_TOTAL_TRK</p> <p>TRKGRP_TOTAL_USAGE</p> <p>TRKGRP_UEQP_TRK_USAGE (Release 4.5)</p> |
| END-TIME | <p>Ending time for measurement summary. Enter all 19 ASCII characters as shown.</p> <p>DATE and TIME: YYYY-MM-DD HH:MM:SS.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                               |                                                                                                                                                                                                                                                                                        |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT-TYPE                   | Specifies the desired output format. Permitted values are:<br>CSV (Default)—Comma-separated view<br>XML—Extensible Markup Language                                                                                                                                                     |
| START-TIME                    | Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events).<br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
| TGN-ID (or TG)                | Mandatory for on-demand requests. Foreign key: Trunk Group table. Trunk group ID. You can use TG instead of tgn-id.<br>INTEGER: 1–99999999.                                                                                                                                            |
| TRKGRP-EXCHANGE (Release 4.5) | The trunk group exchange to report measurement data for. This value directly maps to the CLLI Code Id field in the Pop table. Applies only to the tg-usage measurement type.<br>VARCHAR(11): 1–11 ASCII characters.                                                                    |
| TRKGRP-NAME (Release 4.5)     | The trunk group name to report measurement data for. This value directly maps to the CLLI field in the Trunk Group table. Applies only to the tg-usage measurement type.<br>VARCHAR(15): 1–15 ASCII characters.                                                                        |

## Measurement TSA Summary



### Note

This table is obsoleted in Release 4.5. Display values are now in the Measurement TCAP Summary table.

The Measurement TCAP Signaling Adapter (TSA) Summary (measurement-tsa-summary) table requests a summary report of TSA-related statistics for a specified Call Agent that occurred during a specified collection interval (time-interval). Each collection interval starts on the hour, half-hour, or quarter-hour.

Table Name: MEASUREMENT-TSA-SUMMARY

Table Containment Area: OAMP

### Command Types

Report, show and clear

### Examples

```
show measurement-tsa-summary;
report measurement-tsa-summary start-time=2001-03-27 06:00:00; end-time=2001-03-27
06:30:00; call-agent-id=CA146;output-type=csv;
clear measurement-tsa-summary call-agent-id=CA146;
```

### Usage Guidelines

Primary Key Token(s): None.

Foreign Key Token(s): call-agent-id

|                           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | CALL-AGENT-ID | Mandatory for on-demand requests. Foreign key: Call Agent table. The ID of the selected Call Agent.<br><br>VARCHAR(8): 1–8 ASCII characters.                                                                                                                                                                                                                                                                                                 |
|                           | DISPLAY       | Specifies particular report counters to display on the screen. Display token values must be entered with an underscore (_). Do not use hyphens (-).<br><br>STRING. See <a href="#">Table 11-19</a> for permitted values.                                                                                                                                                                                                                     |
|                           | END-TIME      | Ending time for measurement summary. Enter all 19 ASCII characters as shown.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                                                                                      |
|                           | OUTPUT-TYPE   | Specifies the desired output format. Permitted values are:<br><br>CSV (Default)—Comma-separated view<br><br>XML—Extensible Markup Language                                                                                                                                                                                                                                                                                                   |
|                           | START-TIME    | Mandatory for on-demand requests. Starting time for measurements summary. Enter all 19 ASCII characters as shown. Start-time must occur before end-time. Measurement items are available for the current and previous calendar days only (up to a maximum of 48 hours of events). If the time specified is during the current collection interval only, partial measurement counts are displayed.<br><br>DATE and TIME: YYYY-MM-DD HH:MM:SS. |
|                           | SUM           | Specifies whether the resulting report request must contain the individual interval reports (N) or a summation of all interval reports into one composite report (Y).<br><br>CHAR(1): Y/N (Default = N).                                                                                                                                                                                                                                     |
|                           |               |                                                                                                                                                                                                                                                                                                                                                                                                                                              |

[Table 11-19](#) lists the values for the Measurement TSA Summary Display token.

**Table 11-19 Measurement TSA Summary Display Token Values**

|                          |
|--------------------------|
| TSA_ABORT_IND_RX         |
| TSA_CLOSE_IND_RX         |
| TSA_COMPONENT_CONFIRM_RX |
| TSA_COMPONENT_IND_RX     |
| TSA_COMPONENT_REQ_RX     |
| TSA_DATA_IND_RX          |
| TSA_DATA_REQ_RX          |
| TSA_DELIMITER_IND_RX     |
| TSA_DELIMITER_REQ_RX     |
| TSA_DIALOG_CONFIRM_RX    |
| TSA_INAP_BIND_CONFIRM_RX |
| TSA_INAP_NOTICE_IND_RX   |
| TSA_INAP_STAT_CONFIRM_RX |
| TSA_INAP_STAT_IND_RX     |

|                          |
|--------------------------|
| TSA_OPEN_CONFIRM_RX      |
| TSA_OPEN_IND_RX          |
| TSA_OPERATION_CONFIRM_RX |
| TSA_OPERATION_IND_RX     |
| TSA_OPERATION_REQ_RX     |
| TSA_STATUS_IND_RX        |
| TSA_TCAP_BIND_CONFIRM_RX |
| TSA_TCAP_NOTICE_IND_RX   |
| TSA_TCAP_STAT_CONFIRM_RX |
| TSA_TCAP_STAT_IND_RX     |
| TSA_UDATA_IND_RX         |





# CHAPTER 12

## Media Gateway Provisioning Command (Obsolete as of Release 4.4.0)

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Revised: July 24, 2009, OL-3743-42

The Media Gateway Provisioning (MGP) command allows direct command access to the gateway, and is used to provision configurations on the gateway through the Cisco BTS 10200 Softswitch. It is not associated with any table. After an MGP entry is added to the system, you can access the gateway via the escape command sequence at the command line interface (CLI), FTP adapter, or by using the MGP object interface in the Common Object Request Broker Architecture (CORBA) Adapter.

This command applies only to the following media gateway types:

- Cisco AS5850
- Cisco MGX 8850
- Cisco AS5400



### Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

### Command Types

Show, add, change, and delete

### Examples

```
show mgp;  
add mgp ip-addr=10.89.224.10; type=As5400; user-name=cisco; password=cisco123;
```



### Note

After adding a gateway, use your applicable vendor documentation to configure the gateway using the escape command. The format for the escape command is: `mgp <IPaddress> gateway command <ENTER>`.

The `mgp` keyword indicates to the CLI that the command is not for the Cisco BTS 10200 Softswitch. It is to be sent to the gateway defined by the IP address. This is the same address as the one used to create the MGP entry in the `add mgp` command.

---

```
change mgp gateway1.cisco.com; password=cisco; type=AS5850;  
delete mgp ip-addr=10.89.224.10;
```

|                           |           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Syntax Description</b> | IPADDR    | Mandatory for the add and change commands. The domain name or physical IP address of the device to manage. This may or may not be the same value as the tsap-addr token, used when adding a gateway for subscriber provisioning.<br><br>VARCHAR(80): 1–80 ASCII characters. |
|                           | TYPE      | Mandatory for the add and change commands. Type of gateway.<br><br>VARCHAR(7): 1–7 ASCII characters. Permitted values are:<br>MGX8260 (Not supported)<br>MGX8850<br>AS5400<br>AS5850                                                                                        |
|                           | USER-NAME | Mandatory for the add command. Username to access the gateway.<br><br>VARCHAR(30): 1–30 ASCII characters.                                                                                                                                                                   |
|                           | PASSWORD  | Mandatory for the add command. Password to access the gateway.<br><br>VARCHAR(30): 1–30 ASCII characters.                                                                                                                                                                   |



# CHAPTER 14

## Query

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Revised: July 24, 2009, OL-3743-42

This chapter describes the Cisco BTS 10200 Softswitch Query commands. For information regarding using query commands in troubleshooting, see the *Cisco BTS 10200 Softswitch Troubleshooting Guide*.

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

## Query Call Trace (Release 4.5)

This section describes the query call trace command, which displays the call information of a currently active call. The command applies to originating or terminating calls. With this command, a service provider can enter a directory number (DN) or other suitable input and retrieve information about any call(s) the subscriber is currently involved in. This type of trace is made on a call in progress.

Command parameters are any subscriber specific information such as DN or Fully Qualified Domain Name (FQDN) of a residential gateway. The call processing information displayed includes originating number, terminating number, residential gateway(s) and Session Description Protocol (SDP) IP addresses involved, trunk group number and Carrier Identification Code (CIC) as applicable (such as off-net calling) as well as any other information pertaining to the call made by the subject.

---

### Command Types

Query

---

### Examples

```
query call-trace dn=4695551234;
query call-trace mlhg-id=mlhg1 terminal=23;
query call-trace ctxg-id=ctxg1 ext=1234;
query call-trace tgn-id=123 trunk-id=456;
query call-trace sip-call-id=1494777952@sial.test.cisco.com;
query call-trace h323-call-id=29C51D96AC1C11D98007C67E816B4BFB;
query call-trace term=aaln/2@x1-6-00-00-ca-30-88-79.ctlab.cisco.com; (This example uses
the MGW termination and FQDN to identify term.)
query call-trace term=aaln/2@10.101.140.231; (This example uses the MGW termination and IP
address to identify term.)
query call-trace rgw=x1-6-00-00-ca-30-88-79.ctlab.cisco.com; (This example uses the FQDN
of the RGW.)
query call-trace rgw=10.101.140.231; (This example uses the IP address of the RGW.)
```

**Usage Guidelines**

Foreign keys: ctxg-id, ext, dn, mgw, mlhg-id, terminal, term, tgn-id, trunk-id.

The mode token is optional (default=brief).

One token (or token pair) from the following list is mandatory for this command (see the examples):

- ctxg-id and ext
- dn
- h323-call-id
- mlhg-id and terminal
- rgw
- sip-call-id
- term
- tgn-id and trunk-id

**Syntax Description**

|              |                                                                                                                                                                                                                                   |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CTXG-ID      | Foreign key: Centrex Group table. Valid Centrex group ID. Use for POTS Centrex subscribers.<br><br><b>Note</b> Use with the EXT token.<br><br>VARCHAR(16): 1–16 ASCII characters.                                                 |
| DN           | Foreign key: Subscriber table. Directory number. Use for POTS/H323/SIP subscribers.<br><br>VARCHAR(10): 10 digits in the format npaxxxxxxx.                                                                                       |
| EXT          | Foreign key: Extension2Subscriber table. Valid extension in the Centrex group.<br><br><b>Note</b> Use with the CTXG-ID token.<br><br>VARCHAR(7): 1–7 digits.                                                                      |
| H323-CALL-ID | Where the call originated. Can be obtained from a Call Agent logfile. Use for H.323 trunks.                                                                                                                                       |
| MLHG-ID      | Foreign key: Multiline Hunt Group table. ID for this MLHG in the Multiline Hunt Group table. Use for POTS MLHG terminals.<br><br><b>Note</b> Use with the TERMINAL token.<br><br>VARCHAR(16): 1–16 ASCII characters.              |
| MODE         | Specifies the information returned by the command.<br><br>VARCHAR(8): 1–8 ASCII characters (Default = BRIEF). Permitted values are:<br><br>BRIEF—See <a href="#">Table 14-1</a> .<br><br>VERBOSE—See <a href="#">Table 14-1</a> . |
| RGW          | Foreign key: Media Gateway table. The residential gateway TSAP address (either FQDN or IP address) from the MGW table.<br><br>VARCHAR(32): 1–32 ASCII characters.                                                                 |

|             |                                                                                                                                                                                                                                                           |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SIP-CALL-ID | The SIP call identification. The SIP call id can be obtained from a Call Agent logfile or any switch connected to the Cisco BTS 10200 Softswitch. Use for SIP trunks.                                                                                     |
| TERM        | Foreign keys: Termination table, MGW table. Enter the termination ID (from the Termination table), the @ symbol, and the TSAP address of the MGW (either FQDN or IP address) from the MGW table. See the examples.<br>VARCHAR(32): 1–32 ASCII characters. |
| TERMINAL    | Foreign key: Multiline Hunt Group Terminal table. Valid terminal in the MLHG.<br><b>Note</b> Use with the MLHG-ID token.<br>SMALLINT: 1–512.                                                                                                              |
| TGN-ID      | Foreign key: Trunk Group table. Trunk group ID. Use for SS7, ISDN, and CAS trunks.<br><b>Note</b> Use with the TRUNK-ID token.<br>INTEGER: 1–99999999.                                                                                                    |
| TRUNK-ID    | Foreign key: Trunk table. Valid trunk ID.<br><b>Note</b> Use with the TGN-ID token.<br>INTEGER: 1–4095.<br>INTEGER: 1–16383 (Release 4.5.1).                                                                                                              |

Table 14-1 shows the response fields returned when using brief or verbose modes.

**Table 14-1 Brief and Verbose Mode Response Fields**

| Mode    | Fields                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Brief   | <p>CALL-STATE—The state of the call: IDLE   OOS   CALL-SETUP   ALERTING   CONNECTED.</p> <p>TYPE—The trunk type: POTS-SUB   POTS-MLHG   POTS-CTXG   SIP-SUB   H323-SUB   SS7   ISDN   CAS   SIP-TG   H323-TG.</p> <p>CALLING-PARTY-INFO/CALLED-PARTY-INFO—The calling or called party information can be one of the following for POTS/H323/SIP subscribers: DN   MLHG-ID   TERMINAL   CTXG-ID   EXT   TGN-ID   TRUNK-ID   SIP-CALL-ID   H323-CALL-ID.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Verbose | <p>CALL-STATE—The state of the call: IDLE   OOS   CALL-SETUP   ALERTING   CONNECTED.</p> <p>CALLED-NUMBER—The called number.</p> <p>CALLING-NUMBER—The calling number.</p> <p>CALL-STATE—IDLE   OOS   CALL-SETUP   ALERTING   CONNECTED</p> <p>CHARGE-NUMBER—The charge number if available.</p> <p>CTXG-ID—The Centrex id.</p> <p>EXT—The Centrex extension.</p> <p>FULL-ENDPOINT-ID—The termination id plus the media gateway id for all POTS subscribers.</p> <p>H323-CALL-ID—The H.323 call id for H.323 trunks.</p> <p>MLHG-ID—The multiline hunt group id.</p> <p>MLHG-TERMINAL—The multiline hung group terminal.</p> <p>ORIGINAL-CALLED-NUMBER—The original called number if available.</p> <p>REDIRECTED-NUMBER—The redirected number if available.</p> <p>SDP-IP-ADDR—The SIP IP address.</p> <p>SDP-IP-PORT—The SDP IP port.</p> <p>SIP-CALL-ID—The SIP call id for SIP trunk groups.</p> <p>TERMINAL-ALIAS—The terminal alias for H323 trunk groups.</p> <p>TG-ID/TGN-ID—The trunk group id for SS7, ISDN and CAS trunks.</p> <p>TYPE—Type of trunk: POTS-SUB   POTS-MLHG   POTS-CTXG   SIP-SUB   H323-SUB   SS7   ISDN   CAS   SIP-TG   H323-TG.</p> |



**Note**

For call-trace scenarios involving forwarded calls and multileg calls, plus an example of a system response display, see the “[Operations](#)” chapter of the *Cisco BTS 10200 Softswitch Operations and Maintenance Guide*.

# Query Verification (Release 4.4)

The Query Verification command generates Transaction Capabilities Application Part (TCAP) queries to external databases. The command supports the following query types:

- Line Information Database (LIDB)-Generated by the POTS Feature Server
- Toll-Free-Generated by the AIN Feature Server
- LNP-Generated by the AIN Feature Server



**Note**

These query verification commands may also be collectively referred to in documentation as the query verification tool (QVT).

## Line Information Database

This section describes the LIDB query verification command.

### Command Types

Query

### Examples

```
query lidb calling-dn=8002550002; opc-id=opc;
```

### Usage Guidelines

Foreign key(s): opc-id

### Syntax

|              |                                                                                                                                                                                              |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * OPC-ID     | Foreign key: Origination Point Code (OPC) table. Specifies the OPC to use for TCAP queries originating on behalf of subscribers assigned to this POP.<br>VARCHAR(16): 1–16 ASCII characters. |
| * CALLING-DN | The caller’s directory number.<br>VARCHAR(10): 10 digits in the format npaxxxxxxx.                                                                                                           |
| TABLE-INFO   | Specifies whether to show the tables that are accessed when processing the query.<br>CHAR(1): Y/N (Default = N).                                                                             |

## Toll-Free and Toll Free Message Type

This section describes the toll-free query verification commands. Use the toll free message type query to determine if the toll free number is IN/1 or AIN0.1.

### Command Types

Query

### Examples

```
query toll-free opc-id=opc; called-dn=8002550002; user-type=calling-dn;
user-id=2182640018; lata=100;
```

```
query toll-free-msg-type opc-id=opc; (An opc-id is the only needed token for this query.
Queries if the toll free is using IN1 or AIN0.1.)
```

### Usage Guidelines

Foreign key(s): opc-id

### Syntax Description

|              |                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * CALLED-DN  | The called DN.<br>VARCHAR(32): 1–32 ASCII characters in the format: npa-nxx-xxxx.                                                                                                                                                                                                                                                                                                          |
| * CALLING-DN | The caller's directory number.<br>VARCHAR(10): 10 digits in the format npaxxxxxxx.                                                                                                                                                                                                                                                                                                         |
| * LATA       | Local access and transport area.<br>INTEGER: 100–65535 (3–5 numeric digits).<br>INTEGER: 100–99999 (Default = 99999) (3–5 numeric digits). (Release 4.5)<br><b>Note</b> There are 5 spaces for entering the LATA code. The last two digits are for entering the LATA sub-zone (only Florida has 5-digit LATA numbers, which represent Equal Access Exchange Areas [EAEAs]), if applicable. |
| * OPC-ID     | Foreign key: Origination Point Code (OPC) table. Specifies the OPC to use for TCAP queries originating on behalf of subscribers assigned to this POP.<br>VARCHAR(16): 1–16 ASCII characters.                                                                                                                                                                                               |
| * USER-ID    | Mandatory for AIN0.1 queries. The trunk group id or calling DN, depending on what was entered for user-type. Not used in IN/1 queries.<br>VARCHAR(32): 1–32 ASCII characters.                                                                                                                                                                                                              |
| * USER-TYPE  | Mandatory for AIN0.1 queries. Specifies whether the user-id is a trunk group id or the calling DN. Not used in IN/1 queries.<br>VARCHAR(12): 1–12 ASCII character. Permitted values:<br>TGN_ID<br>CALLING_DN                                                                                                                                                                               |

|                   |                                                                                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| BEARER-CAPABILITY | Specifies the bearer capability.<br>VARCHAR(12): 1–12 ASCII characters. Permitted values are:<br>SPEECH<br>F31KHZAUDIO<br>B56KBPS<br>B64KBPS              |
| TABLE-INFO        | Specifies whether to show the tables that are accessed when processing the query.<br>CHAR(1): Y/N (Default = N).                                          |
| TRIGGER-CRITERIA  | Specifies whether the trigger is npa or npanxxx.<br>Permitted values are:<br>3—npa<br>6—npaxxx<br>7—npaxxxx<br>8—npaxxxxx<br>9—npaxxxxxx<br>10—npaxxxxxxx |

## Local Number Portability

This section describes the LNP query verification command.

### Command Types

Query

### Examples

```
query lnp opc-id=opc_tx; user-id=2182640018; called-dn=4692552002; user-type=calling-dn;
lata=100;
```

### Usage Guidelines

Foreign key(s): opc-id

### Syntax Description

|              |                                                                                    |
|--------------|------------------------------------------------------------------------------------|
| * CALLED-DN  | The called DN.<br>VARCHAR(32): 1–32 ASCII characters in the format: npa-nxx-xxxx.  |
| * CALLING-DN | The caller's directory number.<br>VARCHAR(10): 10 digits in the format npaxxxxxxx. |

|                   |                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * LATA            | <p>Local access and transport area.</p> <p>INTEGER: 100–65535 (3–5 numeric digits).</p> <p>INTEGER: 100–99999 (Default = 99999) (3–5 numeric digits). (Release 4.5)</p> <p>There are 5 spaces for entering the LATA code. The last two digits are for entering the LATA sub-zone (only Florida has 5-digit LATA numbers, which represent Equal Access Exchange Areas [EAEAs]), if applicable.</p> |
| * OPC-ID          | <p>Foreign key: Origination Point Code (OPC) table. Specifies the OPC to use for TCAP queries originating on behalf of subscribers assigned to this POP.</p> <p>VARCHAR(16): 1–16 ASCII characters.</p>                                                                                                                                                                                           |
| * USER-ID         | <p>Mandatory for AIN0.1 queries. The trunk group id or calling DN, depending on what was entered for user-type. Not used in IN/1 queries.</p> <p>VARCHAR(32): 1–32 ASCII characters.</p>                                                                                                                                                                                                          |
| * USER-TYPE       | <p>Mandatory for AIN0.1 queries. Specifies whether the user-id is a trunk group id or the calling DN. Not used in IN/1 queries.</p> <p>VARCHAR(12): 1–12 ASCII character. Permitted values are:</p> <p>TGN-ID</p> <p>CALLING-DN</p>                                                                                                                                                               |
| BEARER-CAPABILITY | <p>Specifies the bearer capability.</p> <p>VARCHAR(12): 1–12 ASCII characters. Permitted values are:</p> <p>SPEECH</p> <p>F31KHZAUDIO</p> <p>B56KBPS</p> <p>B64KBPS</p>                                                                                                                                                                                                                           |
| OLI               | <p>Originating line information; used if message-type = IN/1.</p> <p>SMALLINT: 0–99 or 255. (Default = 0 (POTS)).</p>                                                                                                                                                                                                                                                                             |
| TABLE-INFO        | <p>Specifies whether to show the tables that are accessed when processing the query.</p> <p>CHAR(1): Y/N (Default = N).</p>                                                                                                                                                                                                                                                                       |
| TRIGGER-CRITERIA  | <p>Specifies whether the trigger is npa or npanxxx.</p> <p>Permitted values are:</p> <p>3—npa</p> <p>6—npaxxx</p> <p>7—npaxxxx</p> <p>8—npaxxxxx</p> <p>9—npaxxxxxx</p> <p>10—npaxxxxxxx</p>                                                                                                                                                                                                      |



# CHAPTER 15

## Security

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Revised: July 24, 2009, OL-3743-42

Security tables are used to report user activities and manage user accounts.



### Note

---

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Activity Summary

See [Chapter 9, “History.”](#)

## Command Level

The Command Level (command-level) table identifies the ten command levels and their descriptions.

Table Name: COMMAND-LEVEL

Table Containment Area: OAMP

---

### Command Types

Show and change

---

### Examples

```
show command-level id=10;  
change command-level id=10; description=This is the highest level administration access;
```

---

### Usage Guidelines

Primary Key Token(s): id

Change Rules: None.

**Syntax Description**

|                                 |                                                                                                                                                                                                                                                                                                      |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * ID                            | Primary key. Command level number.<br>NUMERIC: 1–10.                                                                                                                                                                                                                                                 |
| AUTO-REFRESH                    | Specifies whether to display cached data on the screen. Valid only for the show command.<br>CHAR(1): Y/N (Default = Y).<br>Y—Queries the database for the most current data.<br>N—Queries the database for the most current data only if the cached data is unavailable.                             |
| DESCRIPTION<br>(EMS-only field) | Mandatory for change command; optional for show command. Described by the service provider.<br>VARCHAR(64): 1–64 ASCII characters.                                                                                                                                                                   |
| DISPLAY                         | Specifies what token information to display on the screen. Valid only for the show command.<br>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.       |
| LIMIT                           | Specifies the number of rows to display on the screen. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 100000000).<br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                     |
| ORDER                           | Specifies whether to display data on the screen in a sorted order. Valid only for the show command.<br>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| START-ROW                       | Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.<br>INTEGER: 1–100000000 (Default = 1).                                                                                                                                                          |

# Command Table

The Command Table (command-table) table allows a system administrator to show, change, and reset the command privilege level (CPL) of a specific noun-verb pair. Higher command privilege levels are granted all lower level privileges.

Table Name: COMMAND-TABLE

Table Containment Area: OAMP

## Command Types

Show, change, and reset

## Examples

```
show command-table noun=mgw; verb=add;
change command-table noun=mgw; verb=add; sec-level=9;
reset command-table noun=mgw; verb=add;
```

## Usage Guidelines

Primary Key Token(s): noun

Change Rules: Noun and verb must exist.

## Syntax Description

|              |                                                                                                                                                                                                                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * NOUN       | Primary key. The table or command name, such as User, MGW, CA, TGN-ID.<br><br>VARCHAR(65): 1–65 ASCII characters.                                                                                                                                                                                  |
| * VERB       | Verb used in the reported command. Valid verbs are add, audit, change, clear, control, delete, report, reset, show, and status.<br><br>VARCHAR(8): 1–8 ASCII characters.                                                                                                                           |
| AUTO-REFRESH | Specifies whether to display cached data on the screen. Valid only for the show command.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Queries the database for the most current data.<br><br>N—Queries the database for the most current data only if the cached data is unavailable.               |
| DISPLAY      | Specifies what token information to display on the screen. Valid only for the show command.<br><br>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| LIMIT        | Specifies the number of rows to display on the screen. Valid only for the show command.<br><br>INTEGER: 1–100000000 (Default = 100000000).<br><br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                           |

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORDER       | <p>Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p>                                                                                                                                                                                                                                                                                                                                                                                    |
| SEC-LEVEL   | <p>Mandatory for change command. Security level. Used only in the change command.</p> <p>NUMERIC: 1–10.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| START-ROW   | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| WORK-GROUPS | <p>Assigns a command to a given workgroup. A workgroup is a logical collection of commands created by the service provider. Valid only for the change command.</p> <p>Use the equal sign (=) to add a command to a workgroup for the first time, or to replace all existing workgroups of that command with one or more new workgroups.</p> <p>A plus sign (+) before the work-groups name adds one or more workgroups to a command.</p> <p>A minus sign (–) before the work-groups name removes one or more workgroups from a command.</p> <p>For example:</p> <p>change command-table noun=somenoun; verb=someverb;<br/>work-groups=newworkgroup;</p> <p>VARCHAR(64): 1–64 ASCII characters.</p> |

## Password

The Password command allows the system administrator to reset any user's password. It also allows setting the number of days that the password is valid and the number of days before password expiration that the user is warned. It also forces the system administrator to enter a new password. Once the user logs in for the first time, the user should execute this command again to change the password.

Users can only reset their own passwords. Users are allowed to reset the days a password is valid, the number of days before password expiration, and the user must enter a new password when executing this command.

This command is not directly associated with any table. It checks if a user exists and manages the system password attributes.

### Command Types

Reset

### Examples

```
reset password name=wilburwabash; days-valid=15; warn=2; new-password=table1R;
```

**Usage Guidelines**

Primary Key Token(s): name

Reset Rules: User must exist.

You must construct passwords to meet the following UNIX standards:

- A password must have at least six characters. If it is longer than six characters, only the first eight characters are significant.
- A password must contain at least two alphabetic characters and at least one numeric or special character. In this case, *alphabetic* refers to all upper- or lowercase letters.
- A password must differ from the user's login name and any reverse or circular shift of that login name. For comparison purposes, an uppercase letter and its corresponding lowercase letter are equivalent.
- New passwords must differ from the old by in the first three characters. For comparison purposes, an uppercase letter and its corresponding lowercase letter are equivalent.

**Syntax Description**

|                |                                                                                                                    |
|----------------|--------------------------------------------------------------------------------------------------------------------|
| * NAME         | Primary key. Username, entered into the system by the system administrator.<br>VARCHAR(16): 1–16 ASCII characters. |
| * NEW-PASSWORD | Specifies a password for a user.<br>VARCHAR(12): 6–12 ASCII characters.                                            |
| DAYS-VALID     | Number of days a password is valid.<br>NUMERIC: 0–364 (Default = 30).                                              |
| WARN           | Number of days before password expiration to start warning the user.<br>NUMERIC: 0–10 (Default = 4).               |

## Security Summary

The Security Summary (security-summary) command provides a summary report of security infractions by source and start/stop times from the Security Log (securitylog) table. The table logs at least 30 days of infractions. It writes and deletes only when infractions occur. For example, if a security infraction occurred 10 days ago, and none since, that infraction will show up in the database today when a show is performed. On the next infraction, all security violations 7 days prior to the current infraction are lost.

Table Name: SECURITYLOG

Table Containment Area: OAMP

**Command Types**

Report

**Examples**

```
report security-summary start-time=2002-03-27 00:00:00; end-time=2002-03-27 00:00:00;
source=all;
```

**Note**

If this command is entered without any tokens, the report shows all security infractions.

**Usage Guidelines**

Primary Key Token(s): None.

**Syntax Description**

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| START-TIME   | <p>Starting time for a security summary. Enter all 19 ASCII characters as shown. If you enter a start-time—but not an end-time—the report will show security infractions from the start-time to the present.</p> <p>Start-time must occur before end-time. Security items are available for the current and previous calendar days only (up to a maximum of 48 hours of events).</p> <p>If you enter this command without any tokens, the report returns all security infractions.</p> <p>DATE and TIME: yyyy-mm-dd hh:mm:ss.</p> |
| END-TIME     | <p>Ending time for security summary. Enter all 19 ASCII characters as shown. If you enter an end-time—but not a start-time—the report returns all security infractions up to the end-time.</p> <p>DATE and TIME: yyyy-mm-dd hh:mm:ss.</p>                                                                                                                                                                                                                                                                                         |
| SOURCE       | <p>Source of the infraction—name in the Users table. Source is actually the username. If you enter source without a start-time or end-time, all infractions are shown.</p> <p>VARCHAR(16): 1–16 ASCII characters.</p>                                                                                                                                                                                                                                                                                                             |
| AUTO-REFRESH | <p>Specifies whether to display cached data on the screen.</p> <p>CHAR(1): Y/N (Default = Y).</p> <p>Y—Queries the database for the most current data.</p> <p>N—Queries the database for the most current data only if the cached data is unavailable.</p>                                                                                                                                                                                                                                                                        |
| DISPLAY      | <p>Specifies what token information to display on the screen.</p> <p>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p>                                                                                                                                                                                                                                                          |
| LIMIT        | <p>Specifies the number of rows to display on the screen.</p> <p>INTEGER: 1–100000000 (Default = 100000000).</p> <p><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.</p>                                                                                                                                                                                                                                                                                    |
| ORDER        | <p>Specifies whether to display data on the screen in a sorted order.</p> <p>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p>                                                                                                                                                                                                                                                    |
| START-ROW    | <p>Specifies to begin displaying data on the screen at a specific row.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                                                                                                                                                                                                                                                                             |

# Users

The User (user) command identifies each user with the designated command level in the Security Level (securitylevels) table. The system administrator enters the command level for each user.

Table Name: SECURITYLEVELS

Table Containment Area: OAMP

## Command Types

Show, add, change, and delete

## Examples

```
show user name=john smith;
add user name=john smith; command-level=1;work-groups=thisworkgroup, thatworkgroup;
```



### Note

As of Release 4.5, setting a user password is done in one step by using the new mandatory password token in the add user command. For example:

```
add user name=UserABC;command_level=9;warn=5;days-valid=50;shell=CLI;password=secret01;
```



### Note

```
change user name=john smith; command-level=5;
```

To change a user's shell, delete the user and re-add specifying **shell=maint** or **cli**. To change a password, use the **reset password** command. See the [Password](#) section for more information.

As of Release 4.5, it is possible to change user attributes days-valid and warn by using the change user command. For example:

```
change user name=john; command-level=5;warn=1;
change user name=jobh; command-level=5;warn=2;days-valid=45;
change user name=john; command-level=1;days-valid=4;
```

```
delete user name=john smith;
```

## Usage Guidelines

Primary Key Token(s): name

Add Rules:

- user must not exist in the User table.
- name and command-level must both be entered in the add command.
- password must be entered.

Change Rules: User must exist in the User table. Name and command-level must both be entered in the change command.

Delete Rules: User must exist in the User table.



### Note

A user's actual password is stored in the Cisco BTS 10200 Softswitch EMS. It is not included here. A new user is not prompted to change a new password at first login. Users must change their password themselves at first login. Thereafter, they enter that password upon login to the EMS.

**Syntax Description**

|                          |                                                                                                                                                                                                                                                                                                          |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * COMMAND-LEVEL          | User command level, entered into the system by the system administrator. This token is optional for the show command; it is mandatory for the add and change commands.<br><br>NUMERIC: 1–10.                                                                                                             |
| * NAME                   | Primary key. Username, entered into the system by the system administrator.<br><br>VARCHAR(16): 1–16 ASCII characters.                                                                                                                                                                                   |
| * PASSWORD (Release 4.5) | User password. See the <a href="#">Password</a> section for user password creation requirements.<br><br>VARCHAR(12): 6–12 ASCII characters.                                                                                                                                                              |
| AUTO-REFRESH             | Specifies whether to display cached data on the screen. Valid only for the show command.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Queries the database for the most current data.<br><br>N—Queries the database for the most current data only if the cached data is unavailable.                     |
| DAYS-VALID               | Number of days a password is valid.<br><br>NUMERIC: 0–364 (Default = 30).                                                                                                                                                                                                                                |
| DISPLAY                  | Specifies what token information to display on the screen. Valid only for the show command.<br><br>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.       |
| FIRST                    | Not provisionable. Indicates whether an account has been used more than once. On a second login, the “true” indicator of a new account is changed to “false.”<br><br>CHAR(1): T/F (Default = T).                                                                                                         |
| LIMIT                    | Specifies the number of rows to display on the screen. Valid only for the show command.<br><br>INTEGER: 1–100000000 (Default = 100000000).<br><br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                                 |
| ORDER                    | Specifies whether to display data on the screen in a sorted order. Valid only for the show command.<br><br>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |

|                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SHELL                                                                                                                                                                                                                                                                                                                                                                                             | <p>Specifies the type of interface for the user. This token is valid only for the add command. Delete and then re-add the user to change the type of shell.</p> <p>VARCHAR(5): CLI or MAINT (Default = CLI).</p> <p>CLI—User interface for entering commands and their parameters in command-line format. A user must log in to the active EMS. The session terminates if it is idle for a provisionable number of minutes (see the idle-time parameter in the Session table, default = 30 minutes) or if there is an EMS switchover from active to standby. This shell displays the CLI&gt; prompt.</p> <p>MAINT—Maintenance interface for CLI commands that does not time out or disconnect on switchover. This shell can be used, when necessary, for maintenance and recovery purposes. The MAINT user can login to either the active or standby EMS. This interface displays a prompt based on the username, rather than a CLI&gt; prompt.</p> |
| <div></div> <div> <p><b>Caution</b> The MAINT shell is not intended for normal provisioning activities. Use it only if the CLI shell is unusable in a maintenance or recovery scenario. An unattended MAINT session does not autodisconnect.</p> </div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| START-DATE                                                                                                                                                                                                                                                                                                                                                                                        | <p>Not provisionable. Specifies the date the account was first used. Used to track and age idle accounts.</p> <p>DATE: YYYY-MM-DD.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| START-ROW                                                                                                                                                                                                                                                                                                                                                                                         | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| WARN                                                                                                                                                                                                                                                                                                                                                                                              | <p>Number of days before password expiration to start warning the user.</p> <p>NUMERIC: 0–10 (Default = 4).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

---

**WORK-GROUPS**

Logical collection of commands created by the service provider. Valid only for the change command.

Use the equal sign (=) to add a user to a work-group for the first time, or to replace all existing workgroups of that user with one or more new workgroups.

A plus sign (+) before the work-group name adds one or more workgroups to an existing user via the change command. This does not replace any already existing workgroups.

A minus sign (–) before the work-group name removes one or more workgroups from an existing user via the change command.

The following examples show the ways to specify values for the work-group token:

- Specifying work-groups = +somewkgrp adds the user somewkgrp to the workgroups.
- Specifying work-groups = -someoldwkgrp deletes the user someoldwkgrp from the work-groups.
- Specifying work-groups = somenewworkgroup either adds somenewworkgroup for the first time, or replaces any previously existing work-groups with somenewworkgroup.

**Note** The plus or minus sign is not allowed when adding a new user. Use the plus or minus sign only with the change command.

VARCHAR(64): 1–64 ASCII characters.

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# CHAPTER 16

## Session Manager

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Revised: July 24, 2009, OL-3743-42

The Session Manager (SMG) user management tool tracks the session clients (users) that have logged in to the Cisco BTS 10200 Softswitch. The commands listed in this chapter display and control the behavior of users in the system. For example, when user *wilmer7* logs in to the system, the SMG assigns a terminal ID to the user. A terminal ID is similar in concept to a UNIX terminal port. This terminal ID is then used in the commands below. It allows a service provider to force users off the system during a maintenance procedure such as a database backup.

The SMG supports a craft command interface by messages. These can be incorporated into a RequestManager implementation for use in the Cisco BTS 10200 Softswitch commands. This allows a craft to control the operations of the SMG.



### Note

---

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Session Management Activity Commands

This section describes the session management activity commands.

**Note** The **block session terminal** command is not supported during a maintenance (MNT) session. All other block and unblock commands are only available during a MNT session. Mode is for the entire EMS and not just for a specific session.

---

### Command Types

The supported commands are as follows:

- **show**—The interface supports a query listing all terminals in the system. The SMG returns a list of currently defined terminals. It allows the service provider to differentiate the list based on a user ID. If the terminal is not listed, all terminals are shown. The asterisk wildcard (\*) is not supported.

```
show session terminal={1-32 characters}
show session terminal={4-5 characters} (Release 4.5.1)
show block-information (Release 4.5.1)
```

- **block**—This command requires a single terminal ID. The terminal is then blocked and a notification is sent to the terminal to suspend all further operation. The state of the specified terminal is changed to *blocked*.

```
block session [terminal={1-32 characters}]
block session [terminal | user | type=#]; (Release 4.5.1)
block session mode = MAINTENANCE | UPGRADE (Release 4.5.1)
block session < type | user> =#; [ level=PROVISION | COMPLETE ] (Release 4.5.1)
```

**Caution**

If the terminal type of a terminal is associated with either an FTP or SNMP application (such as type=ftp or type=snmp), the FTP or SNMP application is blocked as well.

- **change**—This command requires the idle-time token. See the syntax description for its properties.

```
change session idle-time=20;
```

- **unblock**—This command requires a single terminal ID. The terminal is then unblocked and notification is sent to the terminal for the user to resume normal operation. The state of the specified terminal is changed to *unblocked*.

```
unblock session [terminal={1-32 characters}]
unblock session [terminal | type | user] (Release 4.5.1)
unblock session (Release 4.5.1)
unblock session <type | user> =#; (Release 4.5.1)
```

- **stop**—This command requires a single terminal ID. The selected terminal is then notified to terminate and its associated terminal definition in the SMG is removed.

```
stop session [terminal={1-32 characters}]
stop session [terminal={4-52 characters}] (Release 4.5.1)
```

**Note**

The **stop**, **block**, and **unblock** commands cannot be executed on the terminal from which the command was entered.

**Note**

Command information in square brackets ( [ ] ) is mandatory. There is no mandatory information for the show command.

Command information in curly braces ( { } ) is optional.

**Examples**

```
show session
stop session terminal=USR5
block session terminal=USR5
unblock session terminal=USR5
change session idle-time=20;
```

**Syntax Description**

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| *IDLE-TIME            | This token defines the number of minutes that a user can be idle on the CLI interface before being automatically logged off the Cisco BTS 10200 Softswitch.<br><br>INTEGER: 10–30 (Default = 30).                                                                                                                                                                                                                                                                                                                                                                                              |
| MODE (Release 4.5.1)  | Mandatory for the block and unblock commands as of Release 4.5.1. Specifies the operator mode.<br><br>VARCHAR(12): 1–12 ASCII characters. Permitted values are:<br>MAINTENANCE—Regular maintenance window<br>UPGRADE—Upgrade                                                                                                                                                                                                                                                                                                                                                                   |
| TERMINAL              | Mandatory for the stop command. Terminal id.<br><br>VARCHAR(5) 4–5 ASCII characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| TYPE (Release 4.5.1)  | Mandatory for the block and unblock commands as of Release 4.5.1. Blocks or unblocks sessions based on type definition. Must be used in conjunction with the user token. Valid only for the block or unblock command.<br><br>VARCHAR(6): 1–6 ASCII characters. Permitted values are:<br>ALL—all sessions with type CLI, CORBA, FTP, or SNMP are blocked<br>CLI—all sessions with type CLI are blocked<br>CORBA—all sessions with type CORBA are blocked<br>FTP—all sessions with type FTP are blocked<br>SNMP—all sessions with type SNMP are blocked<br><br><b>Note</b> MNT is never blocked. |
| USER (Release 4.5.1)  | Mandatory for the block and unblock commands as of Release 4.5.1. Specifies whether one or all users are blocked or unblocked. Must be used in conjunction with the type token. Valid only for the block or unblock command.<br><br>VARCHAR(16): 1–16 ASCII characters. Permitted values are:<br><name>—Block or unblock sessions by of a specific user name. suppose<br><%>—Block or unblock all users. For example, user=% blocks or unblocks all users.                                                                                                                                     |
| LEVEL (Release 4.5.1) | Specifies the block level. Valid only for the block or unblock command.<br><br>VARCHAR(10): 1–10 ASCII characters (Default = complete). Permitted values are:<br>PROVISION—All provisioning commands are blocked (change, delete, add, clear, sync, audit, reset, stop, and start)<br>COMPLETE—All commands are blocked.                                                                                                                                                                                                                                                                       |





# CHAPTER 17

## Simple Network Management Protocol

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Revised: July 24, 2009, OL-3743-42

This chapter describes the tables and commands pertaining to the Simple Network Management Protocol (SNMP) in the Cisco BTS 10200 Softswitch.



**Note**

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Simple Network Management Protocol Community

The Simple Network Management Protocol (SNMP) Agent uses the SNMP Community (snmpcommunity) table using the snmpconfig command to:

- manually block particular IP addresses (or hostnames) due to abuse, unauthorized access, or access attempts using the SNMP blocking command. In addition, if the Agent detects what appear to be multiple failed attempts from a particular source, it automatically blocks that source IP address, or hostname. To unblock either the manual or automatically blocked hosts, the blocked entries from this table must be manually deleted.
- configure settings for conformance to RFC 1213 using the MIB to System (MIB2SYS) configuration command.
- couple or decouple the SNMP Agent to the Sun Solaris SNMP subagent using the SNMP setting command.
- stores community strings for SNMP agents, which can be modified using the snmpconfig command. A community string is a password-like variable used for Cisco BTS 10200 Softswitch SNMP Agent access.

At installation, this table is initially provisioned with the value PUBLIC for both the READCOMMUNITY and WRITECOMMUNITY tokens. Service providers can delete either value and specify their own value(s). During upgrades, whatever values are in these tables are maintained. READCOMMUNITY and WRITECOMMUNITY are case insensitive. The PUBLIC value is case sensitive.

Table Name: SNMPCOMMUNITY

Table Containment Area: OAMP

**Command Types**

Show, add change and delete

**Examples**

Block Command Examples:

```
show snmpconfig type=MANUALBLOCKED
show snmpconfig type=AUTOBLOCKED
add snmpconfig type=MANUALBLOCKED; value=hostnameABC
add snmpconfig type=MANUALBLOCKED; value=192.168.1.192
delete snmpconfig type=MANUALBLOCKED; value=hostnameABC
delete snmpconfig type=AUTOBLOCKED; value=hostnameABC
```

MIB2SYS Command Examples:

```
show snmpconfig type=MIB2SYS; value=sys_name;
add snmpconfig type=MIB2SYS; value=sys_name;
change snmpconfig type=MIB2SYS; value=sys_location; value1=Cisco Systems
delete snmpconfig type=MIB2SYS; value=sys_name;
```

Setting Command Examples:

```
show snmpconfig type=SETTING;
add snmpconfig type=SETTING; value=COUPLE_SUN_AGENT;
delete snmpconfig type=SETTING;
```

Store Command Examples:

```
show snmpconfig type=readcommunity
show snmpconfig type=writecommunity
add snmpconfig type=readcommunity; Value=whateverreadvalue
add snmpconfig type=writecommunity; Value=whateverwritevalue
delete snmpconfig type=readcommunity; Value=whateverreadvalue
delete snmpconfig type=writecommunity; Value=whateverwritevalue
```

**Usage Guidelines**

Primary Key Token(s): type, value

Add Rules: None.

Delete Rules: None.

**Syntax Description**

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * TYPE  | <p>Primary key. Mandatory for show, add, change and delete. Type of blockage.</p> <p>VARCHAR(64): 1–64 ASCII characters. Permitted values are:</p> <p>AUTOBLOCKED—SNMP Agent detects what it perceives are suspicious sources trying to access the system.</p> <p>MANUALBLOCKED—Operator manually blocks a source from accessing the system using SNMP.</p> <p>MIB2SYS—MIB2 definition.</p> <p>SETTING—Setting using the add command couples Agents; setting using the delete command uncouples Agents.</p> <p>READCOMMUNITY—Variable to read agent data.</p> <p>WRITECOMMUNITY—Variable to set agent data.</p>                                                                         |
| * VALUE | <p>Mandatory for add, change and delete. Valid for commands: show, add, change and delete. Primary key. IP Address or hostname of the blocked source.</p> <p>VARCHAR(64): 1–64 ASCII characters.</p> <p>Actual value of a community string. Valid only if type=READCOMMUNITY or WRITECOMMUNITY.</p> <p>SYS_NAME—System name. Valid only if type=MIB2SYS.</p> <p>SYS_CONTACT—System contact. Valid only if type=MIB2SYS.</p> <p>SYS_LOCATION—System location. Valid only if type=MIB2SYS.</p> <p>COUPLE_SUN_AGENT—Couples the Cisco BTS 10200 Softswitch SNMP Agent with the Sun SNMP Agent. Valid only if type=SETTING. Use underscores (_) for this value. Do not use hyphens (-).</p> |
| KEY1    | <p>Valid for Commands: show, add, change and delete. Used to specify a privilege level similar to the CLI noun privilege level. This is required when accessing “status” command branches for the SNMP MIB such as when accessing statuses of a media gateway, Call Agent, and so forth. See the <a href="#">Command Level</a> section in the <a href="#">Security</a> chapter for more information.</p> <p>VARCHAR (14): 1–14 ASCII characters. Permitted value is COMMAND-LEVEL.</p>                                                                                                                                                                                                  |
| VALUE1  | <p>Valid for commands: show, add, change and delete. Used to further define the type and value tokens. Defined by service provider.</p> <p>VARCHAR(64): 1–64 ASCII characters.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

# Simple Network Management Protocol Trap Destination

The Simple Network Management Protocol (SNMP) Agent uses the SNMP Trap Destination (snmptrapdest) table to send traps to the network management systems (NMSs) listed in the table. This provides the SNMP Agent with a persistent list of NMSs to send SNMP traps to. When performing trap retransmission, valid destination addresses must be provisioned here.

Table Name: SNMPTRAPDEST

Table Containment Area: EMS

## Command Types

Show, add, change, and delete

## Examples

```
show snmptrapdest;
add snmptrapdest; trapdestaddress=190.10.100.199; trapdestport=162;
change snmptrapdest trapdestindex=1; trapdestport=16222;
delete snmptrapdest trapdestindex=1;
```

## Usage Guidelines

Primary Key Token(s): trapdestindex

Add Rules: None.

Change Rules: None.

Delete Rules: None.

|                                     |                                                                                                                                              |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| *TRAPDESTADDRESS                    | IP address, or host name, of the NMS machine.<br><br>VARCHAR(15): 7–15 ASCII characters in formats ranging from: n.n.n.n to nnn.nnn.nnn.nnn. |
| *TRAPDESTPORT                       | Port number to which the NMS machine is listening for incoming traps.<br><br>INTEGER: 1–65535.                                               |
| TRAPDESTINDEX                       | Primary Key. Mandatory for change and delete. Index into the table.<br><br>INTEGER: 1–4294967296.                                            |
| TRAPDEST<br>COMMUNITY (Not<br>used) | Community name associated with the trap to be sent to the NMS.<br><br>VARCHAR(64): 1–64 ASCII characters.                                    |
| TRAPDESTOWNER<br>(Not used)         | Owner of this NMS.<br><br>VARCHAR(64): 1–64 ASCII characters.                                                                                |
| TRAPDESTSTATUS<br>(Not used)        | Status state of this entry.<br><br>INTEGER: 1–6.                                                                                             |

---

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FILTERTYPES  | <p>Specifies which subsystem events to filter on, or permit to be sent to, this address. Used in combination with FILTERLEVELS to provide a granular filter for traps from the SNMP Agent side.</p> <p>VARCHAR(12) 1–12 ASCII characters. Permitted values are:</p> <p>BILLING</p> <p>CALLP</p> <p>CONFIG</p> <p>DATABASE</p> <p>MAINTENANCE</p> <p>OSS</p> <p>SECURITY</p> <p>SIGNALING</p> <p>STATISTICS</p> <p>SYSTEM</p> <p>AUDIT</p> |
| FILTERLEVELS | <p>Specifies which event levels to filter on, or permit to be sent to, this address. Used in combination with FILTERTYPES to provide a granular filter for traps from the SNMP Agent side.</p> <p>VARCHAR(8) 1–8 ASCII characters. Permitted values are:</p> <p>DEBUG</p> <p>INFO</p> <p>WARNING</p> <p>MINOR</p> <p>MAJOR</p> <p>CRITICAL</p>                                                                                            |

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# CHAPTER 18

## Transactions

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Revised: July 24, 2009, OL-3743-42

This chapter describes the following Cisco BTS 10200 Softswitch transaction commands:

- Transaction Queue
- Queue Throttle



### Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

## Transaction Queue

The Transaction Queue (transaction-queue) table allows users to view and delete entries in a transaction-queue, if any exist. The Transaction Queue table tracks updates into the database, as well as into the shared memory of the Call Agent and Feature Servers. Entries should never remain in the transaction-queue for more than a few seconds, unless an Element Management System (EMS), Call Agent (CA), or Feature Server (FS) is in an error state. In the case of an error state, the Transaction Queue table continues to store entries for later updates.

Table Name: TRANSACTION-QUEUE

Table Containment Area: OAMP

---

### Command Types

Show and delete

---

### Examples

```
show transaction-queue target=CA146
delete transaction-queue target=CA146 transaction-id=<id>
```



### Caution

Only a operator of “ciscouser” authority can execute a delete transaction-queue command. No other user can execute this command. Contact the Cisco Technical Assistance Center for assistance. (Release 4.5)

The delete transaction-queue command causes a database inconsistency. Contact the Cisco Technical Assistance Center to determine usage necessity.

---

**Note**

The **transaction-id** parameter enables you to delete only one transaction at a time from the transaction\_queue table. Note that to delete an entry from the transaction-queue, you should login as **ciscouser**.

If there are thousands of entries stuck in the transaction queue, it is recommended to flush all the entries from Oracle after logging in as **oamp** user.

**Usage Guidelines**

Primary Key Token(s): transaction-id, target

Delete Rules: Transaction-queue must exist; must specify a target.

**Syntax Description**

|               |                                                                                                                                                                                                                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACTIVE-TARGET | System generated. Specifies whether the target is in an active or standby state.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Target is in an active state.<br><br>N—Target is in a standby state.                                                                                                  |
| SEQUENCE-NUM  | System generated. Numerical representation of the order of the statement in the transaction.<br><br>INTEGER: 0–nnn, where nnn represents the number of the transaction in the queue.                                                                                                               |
| STATEMENT     | System generated. Oracle and DBM SQL statement applied to the transaction.<br><br>VARCHAR(4000).                                                                                                                                                                                                   |
| AUTO-REFRESH  | Specifies whether to display cached data on the screen. Valid only for the show command.<br><br>CHAR(1): Y/N (Default = Y).<br><br>Y—Queries the database for the most current data.<br><br>N—Queries the database for the most current data only if the cached data is unavailable.               |
| DISPLAY       | Specifies what token information to display on the screen. Valid only for the show command.<br><br>VARCHAR(1024): 1–1024 (Default = all tokens are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma. |
| LIMIT         | Specifies the number of rows to display on the screen. Valid only for the show command.<br><br>INTEGER: 1–100000000 (Default = 100000000).<br><br><b>Note</b> The actual maximum number of rows displayed is currently lower than 100000000 due to software limitations.                           |

|           |                                                                                                                                                                                                                                                                                                                 |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ORDER     | <p>Specifies whether to display data on the screen in a sorted order. Valid only for the show command.</p> <p>VARCHAR(1024): 1–1024 (Default = all rows are displayed). Permitted values are any valid token that can be shown for this command. Multiple tokens can be entered by separating with a comma.</p> |
| START-ROW | <p>Specifies to begin displaying data on the screen at a specific row. Valid only for the show command.</p> <p>INTEGER: 1–100000000 (Default = 1).</p>                                                                                                                                                          |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STATUS (Release 4.5) | <p>Status of the transaction.</p> <p>VARCHAR(32): 1-32 ASCII characters. Permitted values are:</p> <p>PENDING - The transaction is queued for execution.</p> <p>ERROR - Got an erroneous response from the TARGET or Request timed out from the OAM.</p> <p>DB_DUPLICATE</p> <p>DB_NOT_FOUND</p> <p>DB_INVALID_ARGS</p> <p>DB_INVALID_DATA</p> <p>DB_OPERATION_FAIL</p> <p>DB_SET_FAIL</p> <p>DB_OUT_OF_MEMORY</p> <p>DB_INVALID_INDEX</p> <p>DB_FREE_INDEX</p> <p>DB_SET_VALIDATE_FAIL</p> <p>ERR_INIT_DEFAULT_BUFFERS</p> <p>ERR_MALLOC_FAILED</p> <p>ERR_UPDATE_INFO_ARR_OVERFLOW</p> <p>ERR_INTERNAL_ERROR</p> <p>ERR_SQL_UPDATE_INFO_ARR_OVERFLOW</p> <p>ERR_INVALID_COL_TYPE</p> <p>ERR_INVALID_TBL_ID</p> <p>ERR_INVALID_ACTION_TYPE</p> <p>ERR_UNKOWN_TABLE_ID</p> <p>ERR_INVALID_TABLE_NAME</p> <p>ERR_COL_VALUE_LIST_MISMATCH</p> <p>ERR_PRIMARY_KEY_SQL_UPDATE</p> <p>ERR_INVALID_COL_NAME</p> <p>ERR_TOO_MANY_FOREIGN_KEYS</p> <p>ERR_INVALID_ENUM_NAME</p> <p>ERR_U8_VALUE_OUT_OF_RANGE</p> <p>ERR_U16_VALUE_OUT_OF_RANGE</p> <p>GENERIC OAM ERROR</p> <p>ERR_NO_REPLY</p> |
| TARGET               | <p>Primary Key. ID of the CA, FS, or EMS where the transaction resides.</p> <p>VARCHAR(32): 1-32 ASCII characters. For example: CAnnn, FSPTCnnn, or FSAINnnn where nnn is the numeric ID of the target.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                              |                                                                                                                                                                                                                                                                                                                                               |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TERMINAL-ID<br>(Release 4.5) | Unique terminal ID for a user.<br>VARCHAR2(32): 1-32 ASCII characters.                                                                                                                                                                                                                                                                        |
| TIMESTAMP                    | System generated. Day and time of the transaction.<br>DATE and TIME: YYYY-MM-DD HH:MM:SS.                                                                                                                                                                                                                                                     |
| TRANSACTION-ID               | System generated. Mandatory for the delete command in Release 4.5.1.<br>Primary key. Transaction number. The numerical value of transaction. The value can be any number larger than 900,000,000,000. The actual value depends on the current system time on the EMS and the time that the command was executed.<br>INTEGER: 12-digit number. |
| USER-ID (Release 4.5)        | Unique user id.<br>VARCHAR(32): 1-32 ASCII characters.                                                                                                                                                                                                                                                                                        |

## Queue Throttle

The Queue Throttle (queue-throttle) table holds the maximum download capacity used for transaction queuing. Show is the only valid command for this table.

Table Name: QUEUE-THROTTLE

Table Containment Area: OAMP

### Command Types

Show

### Examples

```
show queue-throttle
```



#### Note

The response to the show command is “The Queuing Manager is operating within normal parameters. Queuing Manager activity can be suspended using the block session command.”





# CHAPTER 19

## Translation (Release 4.4)

---

Revised: July 24, 2009, OL-3743-42

This chapter describes the Cisco BTS 10200 Softswitch Translation Verification command is a diagnostic command that simulates a call from the originator to a specific destination based on dialed digits. The command checks system translations and permits determining if routing will occur as expected without making a call. However, it may be necessary to use both a call trace query and a translation query to determine the routing of a call. If the results of a translate command indicate that a toll-free or local number portability (LNP) call is generated, execute a toll-free or LNP query command. Use the results of the toll-free or LNP query to generate another translation query. For more information regarding using the translation command in troubleshooting, see the *Cisco BTS 10200 Softswitch Troubleshooting Guide*.



### Note

The translation verification command may also be referred to in documentation as the translation verification tool (TVT).

---



### Note

In this chapter, an asterisk preceding a token name means the token is mandatory. A token without an asterisk is optional.

---

---

### Command Types

Translate line, translate trunk

---

### Examples

```
translate line calling-dn=2189722345; called-dn=8002550005
```

---



### Caution

Translate line is not supported for Centrex groups.

---

```
translate trunk tgn-id= 1; called-dn=7034321234;
```

---

### Usage Guidelines

Foreign key(s): tgn-id

**Syntax Description**

|             |                                                                                                                                       |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------|
| * CALLED-DN | Mandatory for line and trunk translation. The called DN.<br>VARCHAR(32): 1–32 ASCII characters in the format: npa-nxx-xxxx.           |
| CALLING-DN  | Mandatory for line translation. The caller's directory number.<br>VARCHAR(10): 10 digits in the format npaxxxxxxx.                    |
| TGN-ID      | Mandatory for trunk translation. Foreign key: Trunk Group table. Trunk group ID. Use for SS7 and ISDN trunks.<br>INTEGER: 1–99999999. |
| GAP         | The generic address parameter. Used for trunk translation.<br>INTEGER(10): 10 numeric digits.                                         |



## Appendixes





## APPENDIX 2

# Predefined Database Usage Defaults

Revised: July 24, 2009, OL-3743-42

This appendix details the predefined defaults for the Database Usage tables for configurations in Releases 4.1 through 4.5. This appendix contains the following sections:

- [Common Database Usage Defaults and Sizing Rules](#)
- [Release 4.1](#)
- [Release 4.2](#)
- [Release 4.4.x](#) (Includes 4.4.0 and 4.4.1)
- [Release 4.5](#)
- [Release 4.5.1](#)

Within the tables in the following sections, *Maximum record count* is the total number of records that shared memory allows. For example, this is the total number of subscribers a particular switch or hardware configuration allows. *Licensed record count* indicates the number of records a customer is allowed by purchase. For example, the number of subscriber records that are licensed.

## Common Database Usage Defaults and Sizing Rules

[Table 2-1](#) shows the database usage defaults and sizing rules that apply to all configurations and all releases.

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases**

| EMS Filename   | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old) | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                                                    |
|----------------|--------------|----------------|-------------------------------------|-----------------------|--------------------|-----------------------------------------------------------------------------------------------------------------|
| AAA-SERVER-GRP | N            | Y              | 50                                  | 0                     |                    | 10 percent of POPs.                                                                                             |
| ACTIVITY       | N            | Y              | 100                                 | 0                     |                    | None.                                                                                                           |
| ACTIVITY-BASE  | N            | N              | 100                                 | 0                     |                    | Same as number in the Activity table.                                                                           |
| AGGR           | N            | Y              | 1000                                | 0                     |                    | 100 Embedded Media Terminal Adapters (MTAs) ( media gateways (MGWs)) per Cable Modem Termination System (CMTS). |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename           | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old) | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                                                                                                                                               |
|------------------------|--------------|----------------|-------------------------------------|-----------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AGGR-PROFILE           | N            | Y              | 0                                   | 100                   |                    | No rules.                                                                                                                                                                                                  |
| ANI                    | Y            | Y              | 400000                              | 0                     |                    | None. If the Split NPA feature is invoked, not all ANI records are provisioned. Leave room for the split NPA feature.                                                                                      |
| ANI-SCREENING          | Y            | Y              | 12500                               | 6300                  |                    | 10 entries per ANI screening profile.                                                                                                                                                                      |
| ANI-SCREENING-PROFILE  | N            | Y              | 1000                                | 500                   |                    | Same as the number of PRI trunk groups.                                                                                                                                                                    |
| ANI-WB-LIST            | Y            | Y              | 31250                               | 0                     |                    | Used for 800 service. 10 times the number of customer groups.                                                                                                                                              |
| ANNC-TG-PROFILE        | N            | Y              | 100                                 | 0                     |                    | None.                                                                                                                                                                                                      |
| ANNC-TRUNK             | N            | Y              | 12000                               | 0                     |                    | 24 times the number of POPs                                                                                                                                                                                |
| ANNOUNCEMENT           | N            | Y              | 1000                                | 0                     |                    | None.                                                                                                                                                                                                      |
| AOR2SUB                | N            | Y              | 50000                               | 0                     |                    | Number of SIP subscribers.                                                                                                                                                                                 |
| AUDIO-SEGMENT          | N            | Y              | 5000                                | 0                     |                    | 5 segments per audio sequence.                                                                                                                                                                             |
| AUDIO-SEQ              | N            | Y              | 1000                                | 0                     |                    | 10 audio sequences per feature.                                                                                                                                                                            |
| AUTH-CODE              | N            | Y              | 250000                              | 0                     |                    | None.                                                                                                                                                                                                      |
| AUTH-CODE-GRP          | N            | Y              | 25000                               | 0                     |                    | Number of authorization codes divided by 10.                                                                                                                                                               |
| AUTH-REALM             | N            | Y              | 1000                                | 0                     |                    | Same as the number of serving domains                                                                                                                                                                      |
| BACKHAUL-SET           | N            | Y              | 1500<br>2500<br>(Release 4.5.1)     | 0                     |                    | Number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 2000 active D-channels to process although the system supports 2500. Only 2000 D-channels are available for use. |
| CA-CONFIG              | Y            | Y              | 1000                                | 0                     |                    | None.                                                                                                                                                                                                      |
| CALL-AGENT             | N            | Y              | 10                                  | 0                     | 10                 | None.                                                                                                                                                                                                      |
| CALL-AGENT-PROFILE     | N            | Y              | 10                                  | 0                     | 10                 | None.                                                                                                                                                                                                      |
| CALL-CTRL-ROUTE        | N            | Y              | 4096                                | 0                     |                    | 2 times the number of DPCs.                                                                                                                                                                                |
| CALL-SUBTYPE           |              |                |                                     |                       |                    |                                                                                                                                                                                                            |
| CALL-TYPE              | N            | N              | 100                                 | 0                     |                    | None.                                                                                                                                                                                                      |
| CARRIER                | N            | Y              | 10000                               | 0                     |                    | Based on the 4-digit carrier ID.                                                                                                                                                                           |
| CAS-TG-PROFILE         | N            | Y              | 100                                 | 0                     |                    | None.                                                                                                                                                                                                      |
| CASUAL-WB-LIST         | N            | Y              | 75000                               | 0                     |                    | 10 entries for 10 percent of the COS restrict ids.                                                                                                                                                         |
| CAUSE-CODE-MAP         | N            | Y              | 2000                                | 0                     |                    | 20 times the number of cause code map profiles.                                                                                                                                                            |
| CAUSE-CODE-MAP-PROFILE | N            | Y              | 100                                 | 0                     |                    | None.                                                                                                                                                                                                      |
| CENTREX-GRP            | N            | Y              | 500                                 | 0                     |                    | Number of Centrex groups.                                                                                                                                                                                  |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename             | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old) | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                                                                                                 |
|--------------------------|--------------|----------------|-------------------------------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CHANGED-NUMBER           | Y            | Y              | 2000                                | 0                     |                    | 1 percent of directory numbers (DNs) to save as changed numbers                                                                                              |
| CIPHERSUITE              | N            | Y              | 1000                                | 0                     |                    | Same as the number of QoSs.                                                                                                                                  |
| CIPHERSUITE-PROFILE      | N            | N              | 1000                                | 0                     |                    | Same as the number of quality of services (QoSs).                                                                                                            |
| CIRCUIT-CODE             | N            | Y              | 500                                 | 0                     |                    | Circuit Code table is AT trunk group specific. Used to populate the Transit Network Selection (TNS) parameter in an SS7 message. Same as the number of POPs. |
| CLLI-CODE                | N            | Y              | 500                                 | 0                     |                    | Same as number of POPs. One local (self) CLLI code is allowed per POP.                                                                                       |
| COS-RESTRICT             | N            | Y              | 75000                               | 0                     |                    | 75percent of subscribers with individual COS restrict ids.                                                                                                   |
| CPSG                     | N            | Y              | 1000                                | 0                     |                    | 2 times the number of Centrex groups.                                                                                                                        |
| CUST-GRP                 | N            | Y              | 2500                                | 0                     |                    | 100 DNs (800) per DN2customer group.                                                                                                                         |
| CUSTOM-DIAL-PLAN         | N            | Y              | 10000                               | 0                     |                    | 20 custom dial plan entries per Centrex group.                                                                                                               |
| CUSTOM-DIAL-PLAN-PROFILE | N            | N              | 500                                 | 0                     |                    | Number of Centrex groups.                                                                                                                                    |
| DB-THRESHOLDS            | N            | N              | 1000                                | 0                     |                    | None.                                                                                                                                                        |
| DB-USAGE                 | N            | N              | 1000                                | 0                     |                    | None.                                                                                                                                                        |
| DESTINATION              | N            | Y              | 5000                                | 0                     |                    | 10 destinations per POP.                                                                                                                                     |
| DIAL-PLAN                | N            | Y              | 1000000                             | 0                     |                    | 1000 records per dial plan profile.                                                                                                                          |
| DIAL-PLAN-PROFILE        | N            | Y              | 1000                                | 0                     |                    | Same as the number of POPs.                                                                                                                                  |
| DIGIT-MAP                | N            | Y              | 1000                                | 0                     |                    | Number of digit maps. Calculated based on number of POPs plus the number of Centrex Groups.                                                                  |
| DIGMAN                   | N            | Y              | 13500                               | 0                     |                    | 5 rules times the number of digman profiles.                                                                                                                 |
| DIGMAN-PROFILE           | N            | Y              | 2700                                | 0                     |                    | 2 times the number of dial plan profiles plus 10 percent of the routes plus 10 percent of the destination ids.                                               |
| DN2CUST-GRP              | N            | Y              | 250000                              | 0                     |                    | Number of supported 800 DNs.                                                                                                                                 |
| DN2GN                    | N            | Y              | 100                                 | 0                     |                    | Number of DN2GN records. Used when the LNP database is local to the AIN Feature Server.                                                                      |
| DN2SUBSCRIBER            | N            | Y              | 150000                              | 0                     |                    | Number of DNs. Calculated as 1.5 times the number of subscribers. Rule does not apply to Tandem deployments.                                                 |
| DOMAIN2ROUTE             | N            | Y              | 1000                                | 0                     |                    | None.                                                                                                                                                        |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename                    | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old) | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                  |
|---------------------------------|--------------|----------------|-------------------------------------|-----------------------|--------------------|-------------------------------------------------------------------------------|
| DPC                             | N            | Y              | 2048                                | 0                     |                    | 256 times the number of OPCs                                                  |
| DS1                             | N            | Y              | 4200                                | 0                     |                    | Number of DS1s.                                                               |
| EMERGENCY-NUMBER-<br>LIST       | N            | Y              | 50                                  | 0                     |                    | None.                                                                         |
| ENUM-CALL-TYPE                  | N            | Y              | 100                                 | 0                     |                    | None.                                                                         |
| ENUM-PROFILE                    | N            | Y              | 50                                  | 0                     |                    | 10 percent of POPs.                                                           |
| ESS                             | N            | Y              | 500                                 | 0                     |                    | Same as number of POPs.                                                       |
| EXCHANGE-CODE                   | N            | Y              | 50000                               | 0                     |                    | Number of exchange codes.                                                     |
| EXT2SUBSCRIBER                  | N            | Y              | 25000                               | 0                     |                    | 50 times the number of Centrex groups.                                        |
| FEATURE                         | N            | Y              | 1000                                | 0                     |                    | None.                                                                         |
| FEATURE-CONFIG                  | N            | Y              | 1000                                | 0                     |                    | Number of configurable parameters.                                            |
| FEATURE-CONFIG-BASE             | N            | N              | 1000                                | 0                     |                    | None.                                                                         |
| FEATURE-CONFIG-BASE-P<br>OS-VAL | N            | N              | 1000                                | 0                     |                    | None.                                                                         |
| FEATURE-PROFILE-BASE            |              |                |                                     |                       |                    |                                                                               |
| FEATURE-SERVER                  | N            | Y              | 10                                  | 0                     | 10                 | None.                                                                         |
| FS-AUDIT-PROFILE                | N            | Y              | 10                                  | 0                     | 10                 | Same as number of Feature Servers .                                           |
| GTD-PARM-VALUES                 | N            | N              | 100                                 | 0                     |                    | None.                                                                         |
| H323-GW                         | N            | Y              | 4                                   | 0                     | 4                  | Fixed at 4 media gateways.                                                    |
| H323-GW2GK                      | N            | Y              | 100                                 | 0                     |                    | 25times the number of gateways.                                               |
| H323-TERM                       | N            | Y              | 10000                               | 0                     |                    | Number of H323 endpoints (subscribers).                                       |
| H323-TERM-PROFILE               | N            | Y              | 200                                 | 0                     |                    | 2 times the number of H323 trunk group profiles.                              |
| H323-TG-PROFILE                 | N            | Y              | 100                                 | 0                     |                    | None.                                                                         |
| HTTP-FEATURE-SERVER             | N            | Y              | 1                                   | 0                     | 1                  | None.                                                                         |
| II-RESTRICT-LIST                | N            | Y              | 2500                                | 0                     |                    | 10 times 10 percent times the number of customer groups.                      |
| II-WB-LIST                      | N            | Y              | 9375                                | 0                     |                    | 12.5 percent of the number of COS restricts. Used for Tandem applications.    |
| INTL-DIAL-PLAN                  | N            | Y              | 60000                               | 0                     |                    | 300 times the number of international dial plan profiles.                     |
| INTL-DIAL-PLAN-PROFILE          | N            | Y              | 200                                 | 0                     |                    | None.                                                                         |
| INTL-WB-LIST                    | N            | Y              | 75000                               | 0                     |                    | 10 entries for 10 percent of COS restricts.                                   |
| IPSEC-KERBEROS                  | N            | Y              | 1                                   | 0                     | 1                  | Only 1 entry is allowed.                                                      |
| IPSEC-KERBEROS-KEYS             | N            | Y              | 256                                 | 0                     |                    | Based on the krb-max-old-srv-keys values defined in the IPSEC Kerberos table. |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename        | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old)  | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                                                                                                                                               |
|---------------------|--------------|----------------|--------------------------------------|-----------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IPSEC-POLICY        | N            | Y              | 1000                                 | 0                     |                    | Same as number of aggregations.                                                                                                                                                                            |
| IPSEC-SA            | N            | Y              | 256                                  | 0                     |                    | None.                                                                                                                                                                                                      |
| ISDN-BCHAN          | N            | Y              | 36000<br>60000<br>(Release<br>4.5.1) | 0                     |                    | 24 times the number of ISDN interfaces.                                                                                                                                                                    |
| ISDN-DCHAN          | N            | Y              | 1500<br>2500<br>(Release<br>4.5.1)   | 0                     |                    | Number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 2000 active D-channels to process although the system supports 2500. Only 2000 d-channels are available for use. |
| ISDN-INTF           | N            | Y              | 1500<br>2500<br>(Release<br>4.5.1)   | 0                     |                    | Number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 2000 active D-channels to process although the system supports 2500. Only 2000 d-channels are available for use. |
| ISDN-TG-PROFILE     | N            | Y              | 250                                  | 0                     |                    | Number of ISDN trunk group profiles.                                                                                                                                                                       |
| IVR-SCRIPT-PROFILE  | N            | Y              | 100                                  | 0                     |                    | 100 features requiring IVR.                                                                                                                                                                                |
| LANGUAGE            | N            | N              | 1000                                 | 0                     |                    | None.                                                                                                                                                                                                      |
| LATA                | N            | Y              | 1000                                 | 0                     |                    | Number of LATAs.                                                                                                                                                                                           |
| LATA-MAP            | N            | Y              | 150000                               | 0                     |                    | 150 NPAs divided by the number of NPANXXs per LATA.                                                                                                                                                        |
| LNP-PROFILE         | N            | Y              | 10                                   | 0                     | 10                 | Number of LNP profiles.                                                                                                                                                                                    |
| LSA                 | Y            | Y              | 30000                                | 0                     |                    | 30 NPAs divided by the number of NXXs per LSA.                                                                                                                                                             |
| LSA-PROFILE         | N            | N              | 1000                                 | 0                     |                    | Number of local serving areas.                                                                                                                                                                             |
| MAC2SUB             | N            | Y              | 50000                                | 0                     |                    | Same as AOR2SUB.                                                                                                                                                                                           |
| MGCP-RETCODE-ACTION | N            | Y              | 2000                                 | 0                     |                    | 10 codes per MGW profile.                                                                                                                                                                                  |
| MGW                 | N            | Y              | 100000                               | 0                     |                    | Number of MTAs divided by the number of MGWs divided by the number of trunking gateways.                                                                                                                   |
| MGW-PROFILE         | N            | Y              | 100                                  | 0                     |                    | Number of MGW profiles.                                                                                                                                                                                    |
| MLHG                | N            | Y              | 20000                                | 0                     |                    | Number of Multiline Hunt groups (MLHGs).                                                                                                                                                                   |
| MLHG-PREF-LIST      | N            | Y              | 2000                                 | 0                     |                    | 10 percent of MLHGs.                                                                                                                                                                                       |
| MLHG-TERMINAL       | N            | Y              | 100000                               | 0                     |                    | 5 terminals per MLHG.                                                                                                                                                                                      |
| NATIONAL-WB-LIST    | Y            | Y              | 94000                                | 0                     |                    | 10 entries for 10 percent of the COS restricts.                                                                                                                                                            |
| NDC                 | N            | Y              | 800                                  | 0                     |                    | Number of supported local area codes.                                                                                                                                                                      |
| NOA                 | N            | N              | 0                                    | 0                     | 0                  | Not used.                                                                                                                                                                                                  |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename       | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old) | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                                                 |
|--------------------|--------------|----------------|-------------------------------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------------------|
| NOD                | N            | N              | 100                                 | 0                     |                    | Nature of Dial table.                                                                                        |
| NOD-RESTRICT-LIST  | N            | Y              | 1000                                | 0                     |                    | 10 NOD for 10 percent of the features.                                                                       |
| NOD-WB-LIST        | N            | Y              | 7500                                | 0                     |                    | 10 times the 1 percent of the COS restricts.                                                                 |
| OCB-K-VALUE        | N            | Y              | 1350                                | 0                     |                    | Number of OCB profiles times the number of K-values (9) times the number of Call Types (3).                  |
| OCB-PROFILE        | N            | Y              | 50                                  | 0                     |                    | 10 percent of POPs.                                                                                          |
| OFFICE-CODE        | Y            | Y              | 50000                               | 0                     |                    | Number supported office codes.                                                                               |
| OPC                | N            | Y              | 8                                   | 0                     | 8                  | Number of supported OPCs.                                                                                    |
| POLICY-NXX         | N            | Y              | 400                                 | 0                     |                    | Number of Policy NXX records.                                                                                |
| POLICY-ODR         | Y            | Y              | 10000                               | 0                     |                    | Number of Policy ODR records.                                                                                |
| POLICY-OLI         | N            | Y              | 100                                 | 0                     |                    | Number of Policy OLI records.                                                                                |
| POLICY-PERCENT     | N            | Y              | 400                                 | 0                     |                    | Number of Policy Percent records                                                                             |
| POLICY-POP         | N            | Y              | 12500                               | 0                     |                    | Number of Policy POP records.                                                                                |
| POLICY-PREFIX      | N            | Y              | 10000                               | 0                     |                    | Number of Policy Prefix entries. 1 entry is allowed per carrier.                                             |
| POLICY-REGION      | N            | Y              | 1100                                | 0                     |                    | Number of Policy Region records.                                                                             |
| POLICY-TOD         | N            | Y              | 400                                 | 0                     |                    | Number of Policy Time of Day records.                                                                        |
| POP                | N            | Y              | 500                                 | 0                     |                    | Number of POPs.                                                                                              |
| PORTED-OFFICE-CODE | Y            | Y              | 640000                              | 0                     |                    | Number of area codes times 800 NXX codes.                                                                    |
| QOS                | N            | Y              | 1000                                | 0                     |                    | One QOS record per 100 MTAs (same as number of AGGRs).                                                       |
| RADIUS-PROFILE     | N            | Y              | 20                                  | 0                     |                    | 2 per Call Agent—the primary divided by the secondary.                                                       |
| REGION-CODE        | N            | Y              | 0                                   | 800                   |                    | Used in NANP installations that require EAOSS signaling.                                                     |
| REGION-PROFILE     | Y            | Y              | 25000                               | 0                     |                    | Number of Region Profile entries. Defines regions based on the NPA or the NPA-NXX or the NPA-NXX-X(X)(X)(X). |
| RELEASE-CAUSE      | N            | Y              | 10000                               | 0                     |                    | None.                                                                                                        |
| ROUTE              | N            | Y              | 2000                                | 0                     |                    | Number of routes.                                                                                            |
| ROUTE-GUIDE        | N            | Y              | 1000                                | 0                     |                    | Number of route guides (required for Policy Routing).                                                        |
| ROUTING-KEY        | N            | Y              | 4096                                | 0                     |                    | 2 times the number of DPCs.                                                                                  |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename          | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old)  | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                                                                                                                                                                 |
|-----------------------|--------------|----------------|--------------------------------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RUDP-BACKHAUL-SESSION | N            | Y              | 6000<br><br>10000<br>(Release 4.5.1) | 0                     |                    | 4 times the number of ISDN PRIs. In Release 4.5.1, for a medium configuration, throttling allows only 8000 sessions to process although the system supports 10000. Only 8000 sessions are available for use. |
| SC1D                  | N            | Y              | 20000                                | 0                     |                    | 20 percent of the subscribers with 1 digit speed call.                                                                                                                                                       |
| SC2D                  | N            | Y              | 1000                                 | 0                     |                    | 1 percent of the subscribers with 2 digit speed call.                                                                                                                                                        |
| SCCP-NW               | N            | Y              | 255                                  | 0                     |                    | None.                                                                                                                                                                                                        |
| SCCP-ROUTE            | N            | Y              | 32768                                | 0                     |                    | Number of DPC times the number of subsystems.                                                                                                                                                                |
| SCRIPT                | N            | Y              | 1000                                 | 0                     |                    | None.                                                                                                                                                                                                        |
| SCTP-ASSOC            | N            | Y              | 240                                  | 0                     |                    | 2 times the number of SCTP association profiles.                                                                                                                                                             |
| SCTP-ASSOC-PROFILE    | N            | Y              | 120                                  | 0                     |                    | 3 times the number of SGPs (1 for each platform).                                                                                                                                                            |
| SERVICE               | N            | Y              | 2000                                 | 0                     |                    | Number of services.                                                                                                                                                                                          |
| SERVICE-PROVIDER      | N            | Y              | 1000                                 | 0                     |                    | Number of service providers. Used primarily for Tandem or route server configurations.                                                                                                                       |
| SERVICE-TRIGGER       | N            | Y              | 20000                                | 0                     |                    | 10 triggers per service.                                                                                                                                                                                     |
| SERVING-DOMAIN-NAME   | N            | Y              | 1000                                 | 0                     |                    | Number of supported serving domains.                                                                                                                                                                         |
| SG                    | N            | Y              | 20                                   | 0                     |                    | None.                                                                                                                                                                                                        |
| SG-GRP                | N            | Y              | 20                                   | 0                     |                    | 1 SG per pair.                                                                                                                                                                                               |
| SGP                   | N            | Y              | 40                                   | 0                     |                    | 2 SGPs per SG.                                                                                                                                                                                               |
| SIPT-ISUP-VER-ALIAS   | N            | Y              | 200                                  | 0                     |                    | None.                                                                                                                                                                                                        |
| SLE                   | N            | Y              | 20000                                | 0                     |                    | 20 entries per feature (1 feature) for 1 percent of the subscribers.                                                                                                                                         |
| SLHR                  | N            | Y              | 96                                   | 32                    |                    | Number of services times the number of OPCs.                                                                                                                                                                 |
| SLHR-PROFILE          | N            | N              | 16                                   | 0                     |                    | Number of SCCP based services.                                                                                                                                                                               |
| SOFTSW-TG-PROFILE     | N            | Y              | 100                                  | 0                     |                    | Number of SIP (Soft Switch) trunk group profiles.                                                                                                                                                            |
| SPECIAL-CALL-TYPE     | N            | Y              | 100                                  | 0                     |                    | Number of special call type entries.                                                                                                                                                                         |
| SPLIT-NPA             | N            | Y              | 1100                                 | 0                     |                    | Number of Split NPA records.                                                                                                                                                                                 |
| SS7_Q761_TG_PROFILE   | N            | Y              | 100                                  | 0                     |                    | None.                                                                                                                                                                                                        |
| SS7_Q767_TG_PROFILE   | N            | Y              | 100                                  | 0                     |                    | None.                                                                                                                                                                                                        |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename               | Split<br>NPA | Audit<br>Table | Maximum<br>Record<br>Count<br>(Old) | Diff<br>(New<br>-Old) | Display<br>if <=10 | Sizing Rules                                                              |
|----------------------------|--------------|----------------|-------------------------------------|-----------------------|--------------------|---------------------------------------------------------------------------|
| SS7-ANSI-TG-PROFILE        | N            | Y              | 100                                 | 0                     |                    | None.                                                                     |
| SS7-CIC                    | N            | Y              | 96000                               | 0                     |                    | Maximum number of supported SS7 CICs.                                     |
| STATIC-CONTACT             | N            | Y              | 5000                                | 0                     |                    | 10 percent of SIP subscribers configured with static contact.             |
| SUBSCRIBER                 | N            | Y              | 100000                              | 0                     |                    | Maximum number of supported subscribers.                                  |
| SUBSCRIBER-FEATURE-DATA    | N            | Y              | 600000                              | 0                     |                    | 3 feature data records per subscriber.                                    |
| SUBSCRIBER-PROFILE         | N            | Y              | 5000                                | 0                     |                    | 10 subscriber profiles per POP.                                           |
| SUBSCRIBER-SERVICE-PROFILE | N            | Y              | 500000                              | 0                     |                    | Number of service records based on number of subscribers.                 |
| SUBSCRIBER-TOD-SCHEDULE    | N            | Y              | 1000                                | 0                     |                    | 1 percent of subscribers requiring a time of day (TOD) schedule.          |
| SUBSYSTEM                  | N            | Y              | 16                                  | 0                     |                    | Number of supported subsystems.                                           |
| SUBSYSTEM-PROFILE          | N            | Y              | 16                                  | 0                     |                    | Number of supported subsystems.                                           |
| TECH-PREFIX-GRP            | N            | Y              | 1000                                | 0                     |                    | Number of technical prefix records. Used in H323 networks.                |
| TECH-PREFIX-GRP-PROFILE    | N            | Y              | 4                                   | 0                     | 4                  | Number of configurable H323 gateways on Cisco BTS 10200 Softswitch.       |
| TERMINATION                | N            | Y              | 180000                              | 0                     |                    | Maximum number of supported terminations.                                 |
| TIMEZONE                   | N            | N              | 200                                 | 0                     |                    | None.                                                                     |
| TRIGGER-DETECTION-POINT    | N            | N              | 50                                  | 0                     |                    | None.                                                                     |
| TRIGGER-ID                 | N            | N              | 100                                 | 0                     |                    | None.                                                                     |
| TRIGGER-NOD-ESCAPE-LIST    | N            | Y              | 100                                 | 0                     |                    | None.                                                                     |
| TRUNK                      | N            | Y              | 100000                              | 0                     |                    | Number of supported trunks.                                               |
| TRUNK-GRP                  | N            | Y              | 10000                               | 0                     |                    | Number of trunk groups.                                                   |
| TRUNK-GRP-FEATURE-DATA     | N            | Y              | 1000                                | 0                     |                    | 10 percent times the number of trunk groups. Used in Tandem applications. |
| TRUNK-GRP-SERVICE-PROFILE  | N            | Y              | 1100                                | 0                     |                    | 11percent times the number of trunk groups.                               |
| USER-AUTH                  | N            | Y              | 50000                               | 0                     |                    | Same as number of AOR2SUB records                                         |
| USER-PART-VARIANT          | N            | Y              | 200                                 | 0                     |                    | None.                                                                     |
| VAR-DEFAULT                | N            | N              | 1000                                | 0                     |                    | None.                                                                     |
| VSC                        | N            | Y              | 1000                                | 0                     |                    | Vertical Service Code table.                                              |

**Table 2-1 Common Database Usage Defaults and Sizing Rules—All Configurations and Releases (continued)**

| EMS Filename | Split NPA | Audit Table | Maximum Record Count (Old) | Diff (New -Old) | Display if <=10 | Sizing Rules                                                               |
|--------------|-----------|-------------|----------------------------|-----------------|-----------------|----------------------------------------------------------------------------|
| WIRETAP      | Y         | Y           | 2500                       | 0               |                 | 2 percent of subscribers.                                                  |
| ZZZ-CODE     | N         | Y           | 0                          | 500             |                 | ZZZ Code table is used in NANP installations that require EAOSS signaling. |

## Release 4.1

This section describes the Database Usage tables for small and medium configurations in Release 4.1.

### Small Configuration Database Usage Defaults

[Table 2-2](#) details the predefined defaults for the Database Usage table for a small configuration for Release 4.1.

**Table 2-2 Release 4.1 Small Configuration Database Usage Defaults**

| Table Name or Noun | Number of Records Before Split NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|--------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| ACTIVITY           | 100                                | 100                  | 100                   | Y        | Y           | Y           |
| ACTIVITY-BASE      | 100                                | 100                  | 100                   | N        | N           | N           |
| AGGR               | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| ANI                | 100000                             | 100000               | 100000                | N        | Y           | N           |
| ANI-WB-LIST        | 5000                               | 6250                 | 6250                  | N        | N           | Y           |
| ANNC-TG-PROFILE    | 100                                | 100                  | 100                   | Y        | N           | N           |
| ANNC-TRUNK         | 1200                               | 1200                 | 1200                  | Y        | N           | N           |
| ANNOUNCEMENT       | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| AOR2SUB            | 4500                               | 4500                 | 4500                  | Y        | N           | N           |
| AUTH-CODE          | 50000                              | 50000                | 50000                 | N        | Y           | N           |
| AUTH-CODE-GRP      | 5000                               | 5000                 | 5000                  | N        | Y           | N           |
| AUTH-REALM         | 4500                               | 4500                 | 4500                  | Y        | N           | N           |
| BACKHAUL-SET       | 100                                | 100                  | 100                   | Y        | N           | N           |
| CA-CONFIG          | 1000                               | 1000                 | 1000                  | Y        | Y           | Y           |
| CALL-AGENT         | 10                                 | 10                   | 10                    | Y        | Y           | Y           |
| CALL-AGENT-PROFILE | 10                                 | 10                   | 10                    | Y        | Y           | Y           |
| CALL-CTRL-ROUTE    | 2048                               | 2048                 | 2048                  | Y        | N           | N           |
| CALL-TYPE          | 100                                | 100                  | 100                   | N        | N           | N           |

**Table 2-2 Release 4.1 Small Configuration Database Usage Defaults (continued)**

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| CHANGED-NUMBER           | 675                                      | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE              | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 1100                                     | 1100                    | 1100                     | N           | N              | N              |
| CIRCUIT-CODE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT             | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CPSG                     | 200                                      | 200                     | 200                      | Y           | Y              | N              |
| CUST-GRP                 | 500                                      | 500                     | 500                      | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 100                                      | 100                     | 100                      | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION              | 500                                      | 500                     | 500                      | Y           | N              | N              |
| DIAL-PLAN                | 200000                                   | 200000                  | 200000                   | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| DIGIT-MAP                | 150                                      | 150                     | 150                      | Y           | N              | N              |
| DIGMAN                   | 2375                                     | 2375                    | 2375                     | Y           | N              | N              |
| DIGMAN-PROFILE           | 475                                      | 475                     | 475                      | Y           | N              | N              |
| DN2CUST-GRP              | 50000                                    | 50000                   | 50000                    | N           | N              | Y              |
| DN2SUBSCRIBER            | 67500                                    | 67500                   | 67500                    | Y           | N              | N              |
| DPC                      | 1024                                     | 1024                    | 1024                     | Y           | Y              | Y              |
| DS1                      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ESS                      | 50                                       | 50                      | 50                       | Y           | N              | N              |
| EXCHANGE-CODE            | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER           | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER           | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                  | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-2** Release 4.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 500                                      | 500                     | 500                      | N           | N              | Y              |
| II-WB-LIST             | 1125                                     | 1125                    | 1125                     | N           | Y              | N              |
| INTL-DIAL-PLAN         | 1200                                     | 1200                    | 1200                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 4                                        | 4                       | 4                        | Y           | N              | N              |
| INTL-WB-LIST           | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 39070                                    | 39070                   | 39070                    | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 2400                                     | 2400                    | 2400                     | Y           | N              | N              |
| ISDN-DCHAN             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-INTF              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP               | 3000                                     | 3000                    | 3000                     | Y           | Y              | N              |
| LSA                    | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB                | 4500                                     | 4500                    | 4500                     | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                    | 38000                                    | 38000                   | 38000                    | Y           | N              | N              |
| MGW-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                   | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| MLHG-PREF-LIST         | 10                                       | 10                      | 10                       | Y           | N              | N              |
| MLHG-TERMINAL          | 500                                      | 500                     | 500                      | Y           | N              | N              |
| NATIONAL-WB-LIST       | 9000                                     | 11250                   | 11250                    | N           | Y              | N              |
| NDC                    | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOA                    | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                    | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST      | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST            | 900                                      | 900                     | 900                      | N           | Y              | N              |
| OFFICE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                    | 4                                        | 4                       | 4                        | Y           | Y              | Y              |
| POLICY-NXX             | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-ODR             | 2500                                     | 2500                    | 2500                     | Y           | N              | Y              |

**Table 2-2 Release 4.1 Small Configuration Database Usage Defaults (continued)**

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| POLICY-OLI            | 25                                       | 25                      | 25                       | Y           | N              | Y              |
| POLICY-PERCENT        | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-POP            | 625                                      | 625                     | 625                      | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION         | 275                                      | 275                     | 275                      | Y           | N              | Y              |
| POLICY-TOD            | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POP                   | 50                                       | 50                      | 50                       | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 120000                                   | 120000                  | 120000                   | Y           | N              | N              |
| QOS                   | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE        | 25000                                    | 31250                   | 31250                    | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 250                                      | 250                     | 250                      | Y           | N              | N              |
| ROUTE-GUIDE           | 250                                      | 250                     | 250                      | Y           | N              | Y              |
| ROUTING-KEY           | 2048                                     | 2048                    | 2048                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 400                                      | 400                     | 400                      | Y           | N              | N              |
| SC1D                  | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SC2D                  | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 16384                                    | 16384                   | 16384                    | N           | Y              | Y              |
| SCTP-ASSOC            | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER      | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                    | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                   | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SLHR                  | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE          | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA             | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |

**Table 2-2** Release 4.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 18000                                    | 18000                   | 18000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 4500                                     | 4500                    | 4500                     | Y           | N              | N              |
| SUBSCRIBER                 | 45000                                    | 45000                   | 45000                    | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 135000                                   | 135000                  | 135000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 225000                                   | 225000                  | 225000                   | Y           | Y              | N              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 110                                      | 110                     | 110                      | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                      | 32000                                    | 32000                   | 32000                    | Y           | N              | N              |
| TRUNK-GRP                  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 100                                      | 100                     | 100                      | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 110                                      | 110                     | 110                      | Y           | Y              | N              |
| USER-AUTH                  | 4500                                     | 4500                    | 4500                     | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 900                                      | 1125                    | 1125                     | Y           | N              | N              |

## Medium Configuration Database Usage Defaults

Table 2-3 details the predefined defaults for the Database Usage table for a medium configuration for Release 4.1.

**Table 2-3** Release 4.1 Medium Configuration Database Usage Defaults

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY                 | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE            | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                     | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ANI                      | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-WB-LIST              | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK               | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| AUTH-CODE                | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM               | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| BACKHAUL-SET             | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE                | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER           | 1500                                     | 2000                    | 2000                     | Y           | N              | N              |
| CIPHERSUITE              | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 1100                                     | 1100                    | 1100                     | N           | N              | N              |
| CIRCUIT-CODE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT             | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |

**Table 2-3** Release 4.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| DB-USAGE               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION            | 2550                                     | 2550                    | 2550                     | Y           | N              | N              |
| DIAL-PLAN              | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP              | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN                 | 12275                                    | 12275                   | 12275                    | Y           | N              | N              |
| DIGMAN-PROFILE         | 2455                                     | 2455                    | 2455                     | Y           | N              | N              |
| DN2CUST-GRP            | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2SUBSCRIBER          | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| DPC                    | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                    | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                    | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE          | 50000                                    | 5000                    | 50000                    | Y           | N              | N              |
| EXT2SUBSCRIBER         | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| INTL-DIAL-PLAN         | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 101275                                   | 101275                  | 101275                   | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 26400                                    | 26400                   | 26400                    | Y           | N              | N              |
| ISDN-DCHAN             | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-INTF              | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                      | 250                     | 250                      | Y           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP               | 3000                                     | 3000                    | 3000                     | Y           | Y              | N              |

**Table 2-3 Release 4.1 Medium Configuration Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| LSA                    | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB                | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                    | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| MGW-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                   | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST         | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL          | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST       | 20000                                    | 25000                   | 25000                    | N           | Y              | N              |
| NDC                    | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                    | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                    | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST      | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST            | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| OFFICE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                    | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX             | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR             | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI             | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT         | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP             | 12750                                    | 12750                   | 12750                    | Y           | N              | Y              |
| POLICY-PREFIX          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION          | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD             | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                    | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-<br>CODE | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                    | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| RADIUS-PROFILE         | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE         | 100000                                   | 125000                  | 125000                   | Y           | N              | Y              |
| RELEASE-CAUSE          | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                  | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE            | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY            | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |

**Table 2-3** Release 4.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| RUDP-BACKHAUL-SESSION      | 4400                                     | 4400                    | 4400                     | Y           | N              | N              |
| SC1D                       | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SC2D                       | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| SCCP-NW                    | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE                 | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCTP-ASSOC                 | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE         | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE                    | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                         | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                        | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                        | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SLHR                       | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| SUBSCRIBER                 | 100000                                   | 100000                  | 100000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 300000                                   | 300000                  | 300000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 500000                                   | 500000                  | 500000                   | Y           | Y              | N              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 110                                      | 110                     | 110                      | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |

**Table 2-3** Release 4.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun        | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| TRIGGER-ID                | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                     | 134400                                   | 134400                  | 134400                   | Y           | N              | N              |
| TRUNK-GRP                 | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA    | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                 | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| USER-PART-VARIANT         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                       | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                   | 2000                                     | 2500                    | 2500                     | Y           | N              | N              |

## Release 4.2

This section describes the Database Usage tables for small and medium configurations, Routeserver and Local Number Portability (LNP) in Release 4.2.

### Small Configuration Database Usage Defaults

[Table 2-4](#) details the predefined defaults for the Database Usage table for a small configuration for Release 4.2.

**Table 2-4** Release 4.2 Small Configuration Database Usage Defaults

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|-----------------------------|-------------|----------------|----------------|
| ACTIVITY            | 100                                      | 100                     | 100                         | Y           | Y              | Y              |
| ACTIVITY-BASE       | 100                                      | 100                     | 100                         | N           | N              | N              |
| AGGR                | 3000                                     | 3000                    | 3000                        | Y           | N              | N              |
| ANI                 | 100000                                   | 100000                  | 100000                      | N           | Y              | N              |
| ANI-WB-LIST         | 5000                                     | 6250                    | 6250                        | N           | N              | Y              |
| ANNC-TG-<br>PROFILE | 100                                      | 100                     | 100                         | Y           | N              | N              |
| ANNC-TRUNK          | 1200                                     | 1200                    | 1200                        | Y           | N              | N              |
| ANNOUNCEMENT        | 1000                                     | 1000                    | 1000                        | Y           | N              | N              |
| AOR2SUB             | 45000                                    | 45000                   | 45000                       | Y           | N              | N              |
| AUTH-CODE           | 50000                                    | 50000                   | 50000                       | N           | Y              | N              |

**Table 2-4** Release 4.2 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun               | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------------|------------------------------------------|-------------------------|-----------------------------|-------------|----------------|----------------|
| AUTH-CODE-GRP                    | 5000                                     | 5000                    | 5000                        | N           | Y              | N              |
| AUTH-REALM                       | 45000                                    | 45000                   | 45000                       | Y           | N              | N              |
| BACKHAUL-SET                     | 100                                      | 100                     | 100                         | Y           | N              | N              |
| CA-CONFIG                        | 1000                                     | 1000                    | 1000                        | Y           | Y              | Y              |
| CALL-AGENT                       | 10                                       | 10                      | 10                          | Y           | Y              | Y              |
| CALL-AGENT-<br>PROFILE           | 10                                       | 10                      | 10                          | Y           | Y              | Y              |
| CALL-CTRL-<br>ROUTE              | 2048                                     | 2048                    | 2048                        | Y           | N              | N              |
| CALL-TYPE                        | 100                                      | 100                     | 100                         | N           | N              | N              |
| CARRIER                          | 10000                                    | 10000                   | 10000                       | Y           | N              | N              |
| CAS-TG-PROFILE                   | 100                                      | 100                     | 100                         | Y           | N              | N              |
| CASUAL-WB-LIST                   | 9000                                     | 9000                    | 9000                        | N           | Y              | N              |
| CAUSE-CODE-<br>MAP               | 2000                                     | 2000                    | 2000                        | Y           | N              | N              |
| CAUSE-CODE-<br>MAP-PROFILE       | 100                                      | 100                     | 100                         | Y           | N              | N              |
| CENTREX-GRP                      | 100                                      | 100                     | 100                         | Y           | Y              | N              |
| CHANGED-<br>NUMBER               | 675                                      | 1000                    | 1000                        | Y           | N              | N              |
| CIPHERSUITE-<br>PROFILE          | 3000                                     | 3000                    | 3000                        | N           | N              | N              |
| CIPHERSUITE                      | 3000                                     | 3000                    | 3000                        | Y           | N              | N              |
| CIRCUIT-CODE                     | 1000                                     | 1000                    | 1000                        | Y           | N              | N              |
| COS-RESTRICT                     | 9000                                     | 9000                    | 9000                        | N           | Y              | N              |
| CPSG                             | 200                                      | 200                     | 200                         | Y           | Y              | N              |
| CUST-GRP                         | 500                                      | 500                     | 500                         | N           | N              | Y              |
| CUSTOM-DIAL-<br>PLAN             | 2000                                     | 2000                    | 2000                        | N           | Y              | N              |
| CUSTOM-<br>DIAL-PLAN-<br>PROFILE | 100                                      | 100                     | 100                         | N           | N              | N              |
| DB-THRESHOLDS                    | 1000                                     | 1000                    | 1000                        | N           | N              | N              |
| DB-USAGE                         | 1000                                     | 1000                    | 1000                        | N           | N              | N              |
| DESTINATION                      | 500                                      | 500                     | 500                         | Y           | N              | N              |
| DIAL-PLAN                        | 200000                                   | 200000                  | 200000                      | Y           | N              | N              |

**Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)**

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|-----------------------------|-------------|----------------|----------------|
| DIAL-PLAN-<br>PROFILE      | 200                                      | 200                     | 200                         | Y           | N              | N              |
| DIGIT-MAP                  | 150                                      | 150                     | 150                         | Y           | N              | N              |
| DIGMAN-<br>PROFILE         | 475                                      | 475                     | 475                         | Y           | N              | N              |
| DIGMAN                     | 2375                                     | 2375                    | 2375                        | Y           | N              | N              |
| DN2CUST-GRP                | 50000                                    | 50000                   | 50000                       | N           | N              | Y              |
| DN2SUBSCRIBER              | 67500                                    | 67500                   | 67500                       | Y           | N              | N              |
| DPC                        | 1024                                     | 1024                    | 1024                        | Y           | Y              | Y              |
| DS1                        | 1000                                     | 1000                    | 1000                        | Y           | N              | N              |
| ESS                        | 50                                       | 50                      | 50                          | Y           | N              | N              |
| EXCHANGE-CODE              | 5000                                     | 5000                    | 5000                        | Y           | N              | N              |
| EXT2SUBSCRIBER             | 5000                                     | 5000                    | 5000                        | Y           | Y              | N              |
| FEATURE                    | 1000                                     | 1000                    | 1000                        | N           | Y              | N              |
| FEATURE-SERVER             | 10                                       | 10                      | 10                          | Y           | Y              | Y              |
| H323-GW                    | 4                                        | 4                       | 4                           | Y           | N              | N              |
| H323-GW2GK                 | 100                                      | 100                     | 100                         | Y           | N              | N              |
| H323-TG-PROFILE            | 100                                      | 100                     | 100                         | Y           | N              | N              |
| HTTP-FEATURE-<br>SERVER    | 1                                        | 1                       | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST           | 500                                      | 500                     | 500                         | N           | N              | Y              |
| II-WB-LIST                 | 1125                                     | 1125                    | 1125                        | N           | Y              | N              |
| INTL-DIAL-PLAN             | 1200                                     | 1200                    | 1200                        | Y           | N              | N              |
| INTL-DIAL-PLAN-<br>PROFILE | 4                                        | 4                       | 4                           | Y           | N              | N              |
| INTL-WB-LIST               | 9000                                     | 9000                    | 9000                        | N           | Y              | N              |
| IPSEC-KERBEROS             | 1                                        | 1                       | 1                           | Y           | N              | N              |
| IPSEC-<br>KERBEROS-KEYS    | 256                                      | 256                     | 256                         | Y           | N              | N              |
| IPSEC-POLICY               | 42000                                    | 42000                   | 42000                       | Y           | N              | N              |
| IPSEC-SA                   | 256                                      | 256                     | 256                         | Y           | N              | N              |
| ISDN-BCHAN                 | 2400                                     | 2400                    | 2400                        | Y           | N              | N              |
| ISDN-DCHAN                 | 100                                      | 100                     | 100                         | Y           | N              | N              |
| ISDN-INTF                  | 100                                      | 100                     | 100                         | Y           | N              | N              |
| ISDN-TG-PROFILE            | 100                                      | 100                     | 100                         | Y           | N              | N              |
| LATA                       | 1000                                     | 1000                    | 1000                        | Y           | Y              | N              |

**Table 2-4** Release 4.2 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|-----------------------------|-------------|----------------|----------------|
| LATA-MAP               | 150000                                   | 150000                  | 150000                      | Y           | Y              | N              |
| LSA                    | 30000                                    | 30000                   | 30000                       | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                    | 1000                        | N           | N              | N              |
| MAC2SUB                | 45000                                    | 45000                   | 45000                       | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                    | 2000                        | Y           | N              | N              |
| MGW                    | 38000                                    | 38000                   | 38000                       | Y           | N              | N              |
| MGW-PROFILE            | 100                                      | 100                     | 100                         | Y           | N              | N              |
| MLHG                   | 100                                      | 100                     | 100                         | Y           | Y              | N              |
| MLHG-PREF-LIST         | 10                                       | 10                      | 10                          | Y           | N              | N              |
| MLHG-TERMINAL          | 500                                      | 500                     | 500                         | Y           | N              | N              |
| NATIONAL-WB-LIST       | 9000                                     | 11250                   | 11250                       | N           | Y              | N              |
| NDC                    | 50                                       | 50                      | 50                          | Y           | N              | N              |
| NOA                    | 0                                        | 0                       | 0                           | N           | N              | N              |
| NOD                    | 100                                      | 100                     | 100                         | N           | N              | N              |
| NOD-RESTRICT-<br>LIST  | 1000                                     | 1000                    | 1000                        | N           | Y              | N              |
| NOD-WB-LIST            | 900                                      | 900                     | 900                         | N           | Y              | N              |
| OFFICE-CODE            | 50000                                    | 50000                   | 50000                       | Y           | Y              | N              |
| OPC                    | 4                                        | 4                       | 4                           | Y           | Y              | Y              |
| POLICY-NXX             | 100                                      | 100                     | 100                         | Y           | N              | Y              |
| POLICY-ODR             | 2500                                     | 2500                    | 2500                        | Y           | N              | Y              |
| POLICY-OLI             | 25                                       | 25                      | 25                          | Y           | N              | Y              |
| POLICY-PERCENT         | 100                                      | 100                     | 100                         | Y           | N              | Y              |
| POLICY-POP             | 625                                      | 625                     | 625                         | Y           | N              | Y              |
| POLICY-PREFIX          | 10000                                    | 10000                   | 10000                       | Y           | N              | Y              |
| POLICY-REGION          | 275                                      | 275                     | 275                         | Y           | N              | Y              |
| POLICY-TOD             | 100                                      | 100                     | 100                         | Y           | N              | Y              |
| POP                    | 50                                       | 50                      | 50                          | Y           | Y              | Y              |
| PORTED-OFFICE-<br>CODE | 120000                                   | 120000                  | 120000                      | Y           | N              | N              |
| QOS                    | 3000                                     | 3000                    | 3000                        | Y           | N              | N              |
| RADIUS-PROFILE         | 20                                       | 20                      | 20                          | Y           | N              | N              |
| REGION-PROFILE         | 25000                                    | 31250                   | 31250                       | Y           | N              | Y              |
| RELEASE-CAUSE          | 10000                                    | 10000                   | 10000                       | Y           | N              | N              |
| ROUTE                  | 250                                      | 250                     | 250                         | Y           | N              | N              |

**Table 2-4 Release 4.2 Small Configuration Database Usage Defaults (continued)**

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|-----------------------------|-------------|----------------|----------------|
| ROUTE-GUIDE                 | 250                                      | 250                     | 250                         | Y           | N              | Y              |
| ROUTING-KEY                 | 2048                                     | 2048                    | 2048                        | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION       | 400                                      | 400                     | 400                         | Y           | N              | N              |
| SC1D                        | 9000                                     | 9000                    | 9000                        | N           | Y              | N              |
| SC2D                        | 450                                      | 450                     | 450                         | N           | Y              | N              |
| SCCP-NW                     | 255                                      | 255                     | 255                         | N           | Y              | Y              |
| SCCP-ROUTE                  | 16384                                    | 16384                   | 16384                       | N           | Y              | Y              |
| SCTP-ASSOC-<br>PROFILE      | 120                                      | 120                     | 120                         | Y           | Y              | Y              |
| SCTP-ASSOC                  | 240                                      | 240                     | 240                         | Y           | Y              | Y              |
| SERVICE                     | 2000                                     | 2000                    | 2000                        | N           | Y              | N              |
| SERVICE-<br>PROVIDER        | 100                                      | 100                     | 100                         | Y           | N              | N              |
| SERVICE-TRIGGER             | 20000                                    | 20000                   | 20000                       | Y           | N              | N              |
| SERVING-DOMAIN-NAME         | 1000                                     | 1000                    | 1000                        | Y           | N              | N              |
| SG                          | 20                                       | 20                      | 20                          | Y           | Y              | Y              |
| SG-GRP                      | 20                                       | 20                      | 20                          | Y           | Y              | Y              |
| SGP                         | 40                                       | 40                      | 40                          | Y           | Y              | Y              |
| SLE                         | 9000                                     | 9000                    | 9000                        | N           | Y              | N              |
| SLHR-PROFILE                | 16                                       | 16                      | 16                          | N           | N              | N              |
| SLHR                        | 96                                       | 96                      | 96                          | N           | Y              | Y              |
| SOFTSW-TG-<br>PROFILE       | 100                                      | 100                     | 100                         | Y           | N              | N              |
| SPECIAL-CALL-<br>TYPE       | 100                                      | 100                     | 100                         | Y           | N              | N              |
| SPLIT-NPA                   | 1100                                     | 1100                    | 1100                        | Y           | Y              | N              |
| SS7-CIC                     | 18000                                    | 18000                   | 18000                       | Y           | N              | N              |
| SS7-Q761-TG-<br>PROFILE     | 100                                      | 100                     | 100                         | Y           | N              | N              |
| SS7-Q767-TG-<br>PROFILE     | 100                                      | 100                     | 100                         | Y           | N              | N              |
| SS7-ANSI-TG-<br>PROFILE     | 100                                      | 100                     | 100                         | Y           | N              | N              |
| STATIC-CONTACT              | 45000                                    | 45000                   | 45000                       | Y           | N              | N              |
| SUBSCRIBER                  | 45000                                    | 45000                   | 45000                       | Y           | Y              | N              |
| SUBSCRIBER-<br>FEATURE-DATA | 135000                                   | 135000                  | 135000                      | N           | Y              | N              |

**Table 2-4** Release 4.2 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun             | Number of<br>Records Before<br>Split NPA | Maximum Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------------|------------------------------------------|-------------------------|-----------------------------|-------------|----------------|----------------|
| SUBSCRIBER-<br>PROFILE         | 500                                      | 500                     | 500                         | Y           | Y              | N              |
| SUBSCRIBER-<br>SERVICE-PROFILE | 225000                                   | 225000                  | 225000                      | Y           | Y              | N              |
| SUBSYSTEM-<br>PROFILE          | 16                                       | 16                      | 16                          | N           | Y              | Y              |
| SUBSYSTEM                      | 16                                       | 16                      | 16                          | N           | Y              | Y              |
| TECH-PREFIX-GRP                | 110                                      | 110                     | 110                         | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE        | 4                                        | 4                       | 4                           | Y           | N              | N              |
| TERMINATION                    | 60000                                    | 60000                   | 60000                       | Y           | N              | N              |
| TRIGGER-<br>DETECTION-POINT    | 50                                       | 50                      | 50                          | N           | N              | N              |
| TRIGGER-ID                     | 100                                      | 100                     | 100                         | N           | N              | N              |
| TRUNK                          | 32000                                    | 32000                   | 32000                       | Y           | N              | N              |
| TRUNK-GRP                      | 1000                                     | 1000                    | 1000                        | Y           | N              | N              |
| TRUNK-GRP-<br>FEATURE-DATA     | 100                                      | 100                     | 100                         | N           | Y              | N              |
| TRUNK-GRP-<br>SERVICE-PROFILE  | 110                                      | 110                     | 110                         | Y           | Y              | N              |
| USER-AUTH                      | 45000                                    | 45000                   | 45000                       | Y           | N              | N              |
| USER-PART-<br>VARIANT          | 200                                      | 200                     | 200                         | Y           | N              | N              |
| VAR-DEFAULT                    | 1000                                     | 1000                    | 1000                        | N           | N              | N              |
| VSC                            | 1000                                     | 1000                    | 1000                        | N           | Y              | N              |
| WIRETAP                        | 900                                      | 1125                    | 1125                        | Y           | N              | N              |
| ANI-SCREENING                  | 1000                                     | 1250                    | 1250                        | Y           | N              | N              |
| LNP-PROFILE                    | 10                                       | 10                      | 10                          | Y           | Y              | Y              |
| DN2GN                          | 2000000                                  | 2000000                 | 2000000                     | N           | N              | Y              |
| H323-TERM-<br>PROFILE          | 200                                      | 200                     | 200                         | Y           | N              | N              |
| H323-TERM                      | 45000                                    | 45000                   | 45000                       | Y           | N              | N              |
| ANI-SCREENING-<br>PROFILE      | 100                                      | 100                     | 100                         | Y           | N              | N              |
| SIPT-ISUP-VER-<br>ALIAS        | 200                                      | 200                     | 200                         | Y           | N              | N              |

## Medium Configuration Database Usage Defaults

Table 2-5 details the predefined defaults for the Database Usage table for a medium configuration in Release 4.2.

**Table 2-5** Release 4.2 Medium Configuration Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 12000                                    | 12000                   | 12000                    | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| BACKHAUL-SET           | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 1500                                     | 2000                    | 2000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIPHERSUITE            | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIRCUIT-CODE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CPSG                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP               | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |

**Table 2-5** Release 4.2 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN-PROFILE           | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DIGMAN                   | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2SUBSCRIBER            | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| DPC                      | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                      | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                      | 500                                      | 500                     | 500                      | Y           | N              | N              |
| EXCHANGE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| EXT2SUBSCRIBER           | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER           | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                  | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER      | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST         | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST               | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| INTL-DIAL-PLAN           | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE   | 200                                      | 200                     | 200                      | Y           | N              | N              |
| INTL-WB-LIST             | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| IPSEC-KERBEROS           | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS      | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY             | 154000                                   | 154000                  | 154000                   | Y           | N              | N              |
| IPSEC-SA                 | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN               | 26400                                    | 26400                   | 26400                    | Y           | N              | N              |
| ISDN-DCHAN               | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |

**Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults (continued)**

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ISDN-INTF           | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-TG-PROFILE     | 250                                      | 250                     | 250                      | Y           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 100000                                   | 100000                  | 100000                   | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST    | 20000                                    | 25000                   | 25000                    | N           | Y              | N              |
| NDC                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP          | 25000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION       | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                 | 500                                      | 500                     | 500                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE  | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                 | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE      | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE      | 100000                                   | 125000                  | 125000                   | Y           | N              | Y              |
| RELEASE-CAUSE       | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |

**Table 2-5 Release 4.2 Medium Configuration Database Usage Defaults (continued)**

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ROUTE                      | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE                | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY                | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION      | 4400                                     | 4400                    | 4400                     | Y           | N              | N              |
| SC1D                       | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SC2D                       | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| SCCP-NW                    | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE                 | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCTP-ASSOC-PROFILE         | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SCTP-ASSOC                 | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SERVICE                    | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                         | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                        | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                        | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SLHR                       | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-CIC                    | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| SUBSCRIBER                 | 100000                                   | 100000                  | 100000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 300000                                   | 300000                  | 300000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 500000                                   | 500000                  | 500000                   | Y           | Y              | N              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |

**Table 2-5** Release 4.2 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun        | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| TECH-PREFIX-GRP-PROFILE   | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION               | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TRIGGER-DETECTION-POINT   | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                     | 134400                                   | 134400                  | 134400                   | Y           | N              | N              |
| TRUNK-GRP                 | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA    | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| USER-PART-VARIANT         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                       | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                   | 2000                                     | 2500                    | 2500                     | Y           | N              | N              |
| ANI-SCREENING             | 10000                                    | 12500                   | 12500                    | Y           | N              | N              |
| LNP-PROFILE               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| DN2GN                     | 10000                                    | 10000                   | 10000                    | N           | N              | Y              |
| H323-TERM-PROFILE         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TERM                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| ANI-SCREENING-PROFILE     | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS       | 200                                      | 200                     | 200                      | Y           | N              | N              |

## Routeserver Database Usage Defaults

Table 2-6 details the predefined defaults for the Database Usage table for a Routeserver in Release 4.2.

**Table 2-6** Release 4.2 Routeserver Database Usage Defaults

| Table Name or Noun | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY           | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE      | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR               | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-WB-LIST        | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE    | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-6** Release 4.2 Routeserver Database Usage Defaults (continued)

| Table Name or Noun           | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ANNC-TRUNK                   | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT                 | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                      | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| AUTH-CODE                    | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP                | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM                   | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| BACKHAUL-SET                 | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CA-CONFIG                    | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT                   | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-<br>PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE              | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE                    | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                      | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST               | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CAUSE-CODE-MAP               | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP                  | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| CHANGED-<br>NUMBER           | 675                                      | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE-<br>PROFILE      | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIPHERSUITE                  | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIRCUIT-CODE                 | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT                 | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CPSG                         | 200                                      | 200                     | 200                      | Y           | Y              | N              |
| CUST-GRP                     | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-<br>PLAN         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| CUSTOM-DIAL-<br>PLAN-PROFILE | 100                                      | 100                     | 100                      | N           | N              | N              |
| DB-THRESHOLDS                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                     | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION                  | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN                    | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |

**Table 2-6 Release 4.2 Routeserver Database Usage Defaults (continued)**

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| DIAL-PLAN-<br>PROFILE      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                  | 355                                      | 355                     | 355                      | Y           | N              | N              |
| DIGMAN-PROFILE             | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIGMAN                     | 25000                                    | 25000                   | 25000                    | Y           | N              | N              |
| DN2CUST-GRP                | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2SUBSCRIBER              | 67500                                    | 67500                   | 67500                    | Y           | N              | N              |
| DPC                        | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ESS                        | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER             | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| FEATURE                    | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK                 | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-<br>SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST           | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST                 | 1125                                     | 1125                    | 1125                     | N           | Y              | N              |
| INTL-DIAL-PLAN             | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-<br>PROFILE | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST               | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| IPSEC-KERBEROS             | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-<br>KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY               | 42000                                    | 42000                   | 42000                    | Y           | N              | N              |
| IPSEC-SA                   | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN                 | 2400                                     | 2400                    | 2400                     | Y           | N              | N              |
| ISDN-DCHAN                 | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-INTF                  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| LATA                       | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP                   | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |

**Table 2-6** Release 4.2 Routeserver Database Usage Defaults (continued)

| Table Name or Noun      | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| LSA                     | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE             | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB                 | 45000                                    | 45000                   | 45000                    | N           | Y              | N              |
| MGCP-RETCODE-<br>ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                     | 38000                                    | 38000                   | 38000                    | Y           | N              | N              |
| MGW-PROFILE             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                    | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| MLHG-PREF-LIST          | 10                                       | 10                      | 10                       | Y           | N              | N              |
| MLHG-TERMINAL           | 500                                      | 500                     | 500                      | Y           | N              | N              |
| NATIONAL-WB-LIST        | 9000                                     | 11250                   | 11250                    | N           | Y              | N              |
| NDC                     | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                     | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                     | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-<br>LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST             | 900                                      | 900                     | 900                      | N           | Y              | N              |
| OFFICE-CODE             | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                     | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX              | 8000                                     | 8000                    | 8000                     | Y           | N              | Y              |
| POLICY-ODR              | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-OLI              | 8000                                     | 8000                    | 8000                     | Y           | N              | Y              |
| POLICY-PERCENT          | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-POP              | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-PREFIX           | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION           | 88000                                    | 88000                   | 88000                    | Y           | N              | Y              |
| POLICY-TOD              | 120000                                   | 120000                  | 120000                   | Y           | N              | Y              |
| POP                     | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-<br>CODE  | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                     | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE          | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE          | 80000                                    | 100000                  | 100000                   | Y           | N              | Y              |
| RELEASE-CAUSE           | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                   | 600000                                   | 600000                  | 600000                   | Y           | N              | N              |

**Table 2-6** Release 4.2 Routeserver Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ROUTE-GUIDE                 | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| ROUTING-KEY                 | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |
| RUDDP-BACKHAUL-<br>SESSION  | 400                                      | 400                     | 400                      | Y           | N              | N              |
| SC1D                        | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SC2D                        | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SCCP-NW                     | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE                  | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCTP-ASSOC-<br>PROFILE      | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SCTP-ASSOC                  | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SERVICE                     | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER             | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME         | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                          | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                      | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                         | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                         | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SLHR-PROFILE                | 16                                       | 16                      | 16                       | N           | N              | N              |
| SLHR                        | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SOFTSW-TG-<br>PROFILE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-<br>TYPE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                   | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-CIC                     | 18000                                    | 18000                   | 18000                    | Y           | N              | N              |
| SS7-Q761-TG-<br>PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-<br>PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-<br>PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT              | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| SUBSCRIBER                  | 45000                                    | 45000                   | 45000                    | Y           | Y              | N              |
| SUBSCRIBER-<br>FEATURE-DATA | 135000                                   | 135000                  | 135000                   | N           | Y              | N              |

**Table 2-6** Release 4.2 Routeserver Database Usage Defaults (continued)

| Table Name or Noun             | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SUBSCRIBER-<br>PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-<br>SERVICE-PROFILE | 225000                                   | 225000                  | 225000                   | Y           | Y              | N              |
| SUBSYSTEM-<br>PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM                      | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE        | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                    | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| TRIGGER-<br>DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                     | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                          | 32000                                    | 32000                   | 32000                    | Y           | N              | N              |
| TRUNK-GRP                      | 25000                                    | 25000                   | 25000                    | Y           | N              | N              |
| TRUNK-GRP-<br>FEATURE-DATA     | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| TRUNK-GRP-<br>SERVICE-PROFILE  | 2750                                     | 2750                    | 2750                     | Y           | Y              | N              |
| USER-AUTH                      | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| USER-PART-<br>VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                            | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                        | 900                                      | 1125                    | 1125                     | Y           | N              | N              |
| ANI-SCREENING                  | 25000                                    | 31250                   | 31250                    | Y           | N              | N              |
| LNP-PROFILE                    | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| DN2GN                          | 10000                                    | 10000                   | 10000                    | N           | N              | Y              |
| H323-TERM-<br>PROFILE          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TERM                      | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| ANI-SCREENING-<br>PROFILE      | 2500                                     | 2500                    | 2500                     | Y           | N              | N              |
| SIPT-ISUP-VER-<br>ALIAS        | 200                                      | 200                     | 200                      | Y           | N              | N              |

## Local Number Portability Database Usage Defaults

Table 2-7 details the predefined defaults for the Database Usage table for Local Number Portability in Release 4.2.

**Table 2-7** Release 4.2 Local Number Portability Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING          | 10000                                    | 12500                   | 12500                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-<br>PROFILE    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCE<br>MENT       | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-<br>GRP      | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| BACKHAUL-SET           | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 1500                                     | 2000                    | 2000                     | Y           | N              | N              |
| CIPHERSUITE            | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 3000                                     | 3000                    | 3000                     | N           | N              | N              |

**Table 2-7** Release 4.2 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CIRCUIT-CODE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT             | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN                   | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DIGMAN-PROFILE           | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                    | 5000000                                  | 5000000                 | 5000000                  | N           | N              | Y              |
| DN2SUBSCRIBER            | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| DPC                      | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                      | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                      | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE            | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER           | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER           | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                  | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| H323-TERM-PROFILE        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER      | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST         | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST               | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| INTL-DIAL-PLAN           | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE   | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST             | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |

**Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| IPSEC-KERBEROS      | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY        | 104000                                   | 104000                  | 104000                   | Y           | N              | N              |
| IPSEC-SA            | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN          | 26400                                    | 26400                   | 26400                    | Y           | N              | N              |
| ISDN-DCHAN          | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-INTF           | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-TG-PROFILE     | 250                                      | 250                     | 250                      | Y           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 100000                                   | 100000                  | 100000                   | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST    | 20000                                    | 25000                   | 25000                    | N           | Y              | N              |
| NDC                 | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP          | 25000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION       | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |

**Table 2-7 Release 4.2 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| POLICY-TOD            | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                   | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE        | 100000                                   | 125000                  | 125000                   | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE           | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY           | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 4400                                     | 4400                    | 4400                     | Y           | N              | N              |
| SC1D                  | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SC2D                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCTP-ASSOC            | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                    | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIPT-ISUP-VER-ALIAS   | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                   | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SLHR                  | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE          | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA             | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-ANSI-TG-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC               | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-7** Release 4.2 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| STATIC-CONTACT             | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| SUBSCRIBER                 | 100000                                   | 100000                  | 100000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 300000                                   | 300000                  | 300000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 500000                                   | 500000                  | 500000                   | Y           | Y              | N              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                      | 134400                                   | 134400                  | 134400                   | Y           | N              | N              |
| TRUNK-GRP                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                  | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 2000                                     | 2500                    | 2500                     | Y           | N              | N              |

## Release 4.4.x

This section describes the Database Usage tables for Release 4.4.0 and 4.4.1.

### Small Configuration Database Usage Defaults

[Table 2-8](#) details the predefined defaults for the Database Usage table for a small configuration in Release 4.4.

**Table 2-8** Release 4.4.x Small Configuration Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                    | 100000                                   | 100000                  | 100000                   | N           | Y              | N              |
| ANI-SCREENING          | 1000                                     | 1250                    | 1250                     | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANI-WB-LIST            | 5000                                     | 6250                    | 6250                     | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 1200                                     | 1200                    | 1200                     | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| AUDIO-SEGMENT          | 25000                                    | 25000                   | 25000                    | N           | Y              | Y              |
| AUDIO-SEQ              | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUTH-CODE              | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| AUTH-CODE-GRP          | 5000                                     | 5000                    | 5000                     | N           | Y              | N              |
| AUTH-REALM             | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| BACKHAUL-SET           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 2048                                     | 2048                    | 2048                     | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 675                                      | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE            | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIRCUIT-CODE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT           | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CPSG                   | 200                                      | 200                     | 200                      | Y           | Y              | N              |

**Table 2-8** Release 4.4.x Small Configuration Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CUST-GRP                    | 500                                      | 500                     | 500                      | N           | N              | Y              |
| CUSTOM-DIAL-PLAN            | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE    | 100                                      | 100                     | 100                      | N           | N              | N              |
| DB-THRESHOLDS               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION                 | 100                                      | 100                     | 100                      | Y           | N              | N              |
| DIAL-PLAN                   | 200000                                   | 200000                  | 200000                   | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| DIGIT-MAP                   | 150                                      | 150                     | 150                      | Y           | N              | N              |
| DIGMAN                      | 2375                                     | 2375                    | 2375                     | Y           | N              | N              |
| DIGMAN-PROFILE              | 475                                      | 475                     | 475                      | Y           | N              | N              |
| DN2CUST-GRP                 | 50000                                    | 50000                   | 50000                    | N           | N              | Y              |
| DN2GN                       | 2000000                                  | 2000000                 | 2000000                  | N           | N              | Y              |
| DN2SUBSCRIBER               | 67500                                    | 67500                   | 67500                    | Y           | N              | N              |
| DPC                         | 1024                                     | 1024                    | 1024                     | Y           | Y              | Y              |
| DS1                         | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ESS                         | 50                                       | 50                      | 50                       | Y           | N              | N              |
| EXCHANGE-CODE               | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2<br>SUBSCRIBER          | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| FEATURE                     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                     | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                   | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST            | 500                                      | 500                     | 500                      | N           | N              | Y              |
| II-WB-LIST                  | 1125                                     | 1125                    | 1125                     | N           | Y              | N              |
| INTL-DIAL-PLAN              | 1200                                     | 1200                    | 1200                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 4                                        | 4                       | 4                        | Y           | N              | N              |

**Table 2-8** Release 4.4.x Small Configuration Database Usage Defaults (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| INTL-WB-LIST        | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| IPSEC-KERBEROS      | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY        | 42000                                    | 42000                   | 42000                    | Y           | N              | N              |
| IPSEC-SA            | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN          | 2400                                     | 2400                    | 2400                     | Y           | N              | N              |
| ISDN-DCHAN          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-INTF           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE  | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 45000                                    | 45000                   | 45000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 38000                                    | 38000                   | 38000                    | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| MLHG-PREF-LIST      | 10                                       | 10                      | 10                       | Y           | N              | N              |
| MLHG-TERMINAL       | 500                                      | 500                     | 500                      | Y           | N              | N              |
| NATIONAL-WB-LIST    | 9000                                     | 11250                   | 11250                    | N           | Y              | N              |
| NDC                 | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 900                                      | 900                     | 900                      | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 4                                        | 4                       | 4                        | Y           | Y              | Y              |
| POLICY-NXX          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-ODR          | 2500                                     | 2500                    | 2500                     | Y           | N              | Y              |
| POLICY-OLI          | 25                                       | 25                      | 25                       | Y           | N              | Y              |
| POLICY-PERCENT      | 100                                      | 100                     | 100                      | Y           | N              | Y              |

**Table 2-8** Release 4.4.x Small Configuration Database Usage Defaults (continued)

| Table Name or Noun      | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| POLICY-POP              | 625                                      | 625                     | 625                      | Y           | N              | Y              |
| POLICY-PREFIX           | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION           | 275                                      | 275                     | 275                      | Y           | N              | Y              |
| POLICY-TOD              | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POP                     | 50                                       | 50                      | 50                       | Y           | Y              | Y              |
| PORTED-OFFICE-CODE      | 120000                                   | 120000                  | 120000                   | Y           | N              | N              |
| QOS                     | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE          | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE          | 25000                                    | 31250                   | 31250                    | Y           | N              | Y              |
| RELEASE-CAUSE           | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                   | 250                                      | 250                     | 250                      | Y           | N              | N              |
| ROUTE-GUIDE             | 250                                      | 250                     | 250                      | Y           | N              | Y              |
| ROUTING-KEY             | 2048                                     | 2048                    | 2048                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION   | 400                                      | 400                     | 400                      | Y           | N              | N              |
| SC1D                    | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SC2D                    | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SCCP-NW                 | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE              | 16384                                    | 16384                   | 16384                    | N           | Y              | Y              |
| SCRIPT                  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC              | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE      | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE                 | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-<br>PROVIDER    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SERVICE-<br>TRIGGER     | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-<br>DOMAIN-NAME | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                      | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                  | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                     | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIPT-ISUP-VER-ALIAS     | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                     | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SLHR                    | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE            | 16                                       | 16                      | 16                       | N           | N              | N              |

**Table 2-8** Release 4.4.x Small Configuration Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 18000                                    | 18000                   | 18000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| SUBSCRIBER                 | 45000                                    | 45000                   | 45000                    | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 135000                                   | 135000                  | 135000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 225000                                   | 225000                  | 225000                   | Y           | Y              | N              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 110                                      | 110                     | 110                      | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| TIMEZONE                   | 200                                      | 200                     | 200                      | N           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                      | 32000                                    | 32000                   | 32000                    | Y           | N              | N              |
| TRUNK-GRP                  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 100                                      | 100                     | 100                      | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 110                                      | 110                     | 110                      | Y           | Y              | N              |
| USER-AUTH                  | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 900                                      | 1125                    | 1125                     | Y           | N              | N              |

## Medium Configuration Database Usage Defaults

Table 2-9 details the predefined defaults for the Database Usage table for a medium configuration in Release 4.4.

**Table 2-9** Release 4.4.x Medium Configuration Database Usage Defaults

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY                 | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE            | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                     | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                      | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-WB-LIST              | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK               | 12000                                    | 12000                   | 12000                    | Y           | N              | N              |
| ANNOUNCEMENT             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                  | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| AUTH-CODE                | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM               | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| BACKHAUL-SET             | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE                | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER           | 1500                                     | 2000                    | 2000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIPHERSUITE              | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIRCUIT-CODE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT             | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |

**Table 2-9** Release 4.4.x Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| DB-THRESHOLDS          | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION            | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN              | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP              | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN-PROFILE         | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DIGMAN                 | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DN2CUST-GRP            | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2SUBSCRIBER          | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| DPC                    | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                    | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                    | 500                                      | 500                     | 500                      | Y           | N              | N              |
| EXCHANGE-CODE          | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| EXT2SUBSCRIBER         | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| INTL-DIAL-PLAN         | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 200                                      | 200                     | 200                      | Y           | N              | N              |
| INTL-WB-LIST           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 154000                                   | 154000                  | 154000                   | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 26400                                    | 26400                   | 26400                    | Y           | N              | N              |
| ISDN-DCHAN             | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-INTF              | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                      | 250                     | 250                      | Y           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |

**Table 2-9** Release 4.4.x Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 100000                                   | 100000                  | 100000                   | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST    | 20000                                    | 25000                   | 25000                    | N           | Y              | N              |
| NDC                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP          | 25000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION       | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                 | 500                                      | 500                     | 500                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE  | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                 | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE      | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE      | 100000                                   | 125000                  | 125000                   | Y           | N              | Y              |
| RELEASE-CAUSE       | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE               | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE         | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY         | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |

**Table 2-9** Release 4.4.x Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun             | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| RUDP-BACKHAUL-SESSION          | 4400                                     | 4400                    | 4400                     | Y           | N              | N              |
| SC1D                           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SC2D                           | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| SCCP-NW                        | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE                     | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCTP-ASSOC-PROFILE             | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SCTP-ASSOC                     | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SERVICE                        | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER               | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER                | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                             | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                         | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                            | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                            | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SLHR-PROFILE                   | 16                                       | 16                      | 16                       | N           | N              | N              |
| SLHR                           | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SOFTSW-TG-PROFILE              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                      | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-CIC                        | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| SUBSCRIBER                     | 100000                                   | 100000                  | 100000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA        | 300000                                   | 300000                  | 300000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE             | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-<br>PROFILE | 500000                                   | 500000                  | 500000                   | Y           | Y              | N              |
| SUBSYSTEM-PROFILE              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM                      | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE        | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                    | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |

**Table 2-9** Release 4.4.x Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| TRIGGER-DETECTION-POINT     | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                  | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                       | 134400                                   | 134400                  | 134400                   | Y           | N              | N              |
| TRUNK-GRP                   | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA      | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE   | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                   | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| USER-PART-VARIANT           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                         | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                     | 2000                                     | 2500                    | 2500                     | Y           | N              | N              |
| ANI-SCREENING               | 10000                                    | 12500                   | 12500                    | Y           | N              | N              |
| LNP-PROFILE                 | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| DN2GN                       | 10000                                    | 10000                   | 10000                    | N           | N              | Y              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TERM                   | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| ANI-SCREENING-PROFILE       | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| TIMEZONE                    | 200                                      | 200                     | 200                      | N           | N              | N              |
| SCRIPT                      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IVR-SCRIPT-PROFILE          | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| AUDIO-SEQ                   | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUDIO-SEGMENT               | 25000                                    | 25000                   | 25000                    | N           | Y              | Y              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |

## Large Configuration Database Usage Defaults

Table 2-10 details the predefined defaults for the Database Usage table for a large configuration in Release 4.4.x.

**Table 2-10** Release 4.4.x Large Configuration Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING          | 10000                                    | 12500                   | 12500                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 12000                                    | 12000                   | 12000                    | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 300000                                   | 300000                  | 300000                   | Y           | N              | N              |
| AUDIO-SEGMENT          | 25000                                    | 25000                   | 25000                    | N           | Y              | Y              |
| AUDIO-SEQ              | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 300000                                   | 300000                  | 300000                   | Y           | N              | N              |
| BACKHAUL-SET           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 15360                                    | 15360                   | 15360                    | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 60000                                    | 60000                   | 60000                    | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CHANGED-NUMBER         | 4500                                     | 6000                    | 6000                     | Y           | N              | N              |
| CIPHERSUITE            | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIRCUIT-CODE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT           | 60000                                    | 60000                   | 60000                    | N           | Y              | N              |
| CPSG                   | 2000                                     | 2000                    | 2000                     | Y           | Y              | N              |

**Table 2-10** Release 4.4.x Large Configuration Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CUST-GRP                    | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN            | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-THRESHOLDS               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION                 | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                   | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                   | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| DIGMAN                      | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DIGMAN-PROFILE              | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DN2CUST-GRP                 | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                       | 10000                                    | 10000                   | 10000                    | N           | N              | Y              |
| DN2SUBSCRIBER               | 450000                                   | 450000                  | 450000                   | Y           | N              | N              |
| DPC                         | 7680                                     | 7680                    | 7680                     | Y           | Y              | Y              |
| DS1                         | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| ESS                         | 500                                      | 500                     | 500                      | Y           | N              | N              |
| EXCHANGE-CODE               | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| EXT2SUBSCRIBER              | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| FEATURE                     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                     | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                   | 300000                                   | 300000                  | 300000                   | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST                  | 7500                                     | 7500                    | 7500                     | N           | Y              | N              |
| INTL-DIAL-PLAN              | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 200                                      | 200                     | 200                      | Y           | N              | N              |
| INTL-WB-LIST                | 60000                                    | 60000                   | 60000                    | N           | Y              | N              |

**Table 2-10** Release 4.4.x Large Configuration Database Usage Defaults (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| IPSEC-KERBEROS      | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY        | 254000                                   | 254000                  | 254000                   | Y           | N              | N              |
| IPSEC-SA            | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN          | 48000                                    | 48000                   | 48000                    | Y           | N              | N              |
| ISDN-DCHAN          | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ISDN-INTF           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ISDN-TG-PROFILE     | 250                                      | 250                     | 250                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE  | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 300000                                   | 300000                  | 300000                   | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 250000                                   | 250000                  | 250000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST    | 60000                                    | 75000                   | 75000                    | N           | Y              | N              |
| NDC                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 6000                                     | 6000                    | 6000                     | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 30                                       | 30                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |

**Table 2-10** Release 4.4.x Large Configuration Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| POLICY-POP            | 25000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION         | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD            | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                   | 500                                      | 500                     | 500                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE        | 100000                                   | 125000                  | 125000                   | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE           | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY           | 15360                                    | 15360                   | 15360                    | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 8000                                     | 8000                    | 8000                     | Y           | N              | N              |
| SC1D                  | 60000                                    | 60000                   | 60000                    | N           | Y              | N              |
| SC2D                  | 3000                                     | 3000                    | 3000                     | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 122880                                   | 122880                  | 122880                   | N           | Y              | Y              |
| SCRIPT                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC            | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                    | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIPT-ISUP-VER-ALIAS   | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                   | 60000                                    | 60000                   | 60000                    | N           | Y              | N              |
| SLHR                  | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE          | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA             | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |

**Table 2-10** Release 4.4.x Large Configuration Database Usage Defaults (continued)

| Table Name or Noun             | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed<br>Record Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SS7-ANSI-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                        | 128000                                   | 128000                  | 128000                   | Y           | N              | N              |
| SS7-Q761-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT                 | 300000                                   | 300000                  | 300000                   | Y           | N              | N              |
| SUBSCRIBER                     | 300000                                   | 300000                  | 300000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA        | 900000                                   | 900000                  | 900000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE             | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-<br>PROFILE | 1500000                                  | 1500000                 | 1500000                  | Y           | Y              | N              |
| SUBSYSTEM                      | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE        | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                    | 400000                                   | 400000                  | 400000                   | Y           | N              | N              |
| TIMEZONE                       | 200                                      | 200                     | 200                      | N           | N              | N              |
| TRIGGER-DETECTION-POINT        | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                     | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                          | 160000                                   | 160000                  | 160000                   | Y           | N              | N              |
| TRUNK-GRP                      | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA         | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE      | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                      | 300000                                   | 300000                  | 300000                   | Y           | N              | N              |
| USER-PART-VARIANT              | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                            | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                        | 6000                                     | 7500                    | 7500                     | Y           | N              | N              |

## Routeserver Database Usage Defaults

Table 2-11 details the predefined defaults for the Database Usage table for a small configuration in Release 4.4.

**Table 2-11** Release 4.4.x Routeserver Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING          | 25000                                    | 31250                   | 31250                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 2500                                     | 2500                    | 2500                     | Y           | N              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| AUDIO-SEGMENT          | 25000                                    | 25000                   | 25000                    | N           | Y              | Y              |
| AUDIO-SEQ              | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| BACKHAUL-SET           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 675                                      | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE            | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIRCUIT-CODE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT           | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| CPSG                   | 200                                      | 200                     | 200                      | Y           | Y              | N              |

**Table 2-11** Release 4.4.x Routeserver Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CUST-GRP                    | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN            | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE    | 100                                      | 100                     | 100                      | N           | N              | N              |
| DB-THRESHOLDS               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION                 | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN                   | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                   | 355                                      | 355                     | 355                      | Y           | N              | N              |
| DIGMAN                      | 25000                                    | 25000                   | 25000                    | Y           | N              | N              |
| DIGMAN-PROFILE              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DN2CUST-GRP                 | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                       | 10000                                    | 10000                   | 10000                    | N           | N              | Y              |
| DN2SUBSCRIBER               | 67500                                    | 67500                   | 67500                    | Y           | N              | N              |
| DPC                         | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                         | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ESS                         | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-<br>CODE           | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER              | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| FEATURE                     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                     | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                   | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST                  | 1125                                     | 1125                    | 1125                     | N           | Y              | N              |
| INTL-DIAL-PLAN              | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 10                                       | 10                      | 10                       | Y           | N              | N              |

**Table 2-11** Release 4.4.x Routeserver Database Usage Defaults (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| INTL-WB-LIST        | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| IPSEC-KERBEROS      | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY        | 42000                                    | 42000                   | 42000                    | Y           | N              | N              |
| IPSEC-SA            | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN          | 2400                                     | 2400                    | 2400                     | Y           | N              | N              |
| ISDN-DCHAN          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-INTF           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE  | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 45000                                    | 45000                   | 45000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 38000                                    | 38000                   | 38000                    | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| MLHG-PREF-LIST      | 10                                       | 10                      | 10                       | Y           | N              | N              |
| MLHG-TERMINAL       | 500                                      | 500                     | 500                      | Y           | N              | N              |
| NATIONAL-WB-LIST    | 9000                                     | 11250                   | 11250                    | N           | Y              | N              |
| NDC                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 900                                      | 900                     | 900                      | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX          | 8000                                     | 8000                    | 8000                     | Y           | N              | Y              |
| POLICY-ODR          | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-OLI          | 8000                                     | 8000                    | 8000                     | Y           | N              | Y              |
| POLICY-PERCENT      | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |

**Table 2-11** Release 4.4.x Routeserver Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| POLICY-POP            | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION         | 88000                                    | 88000                   | 88000                    | Y           | N              | Y              |
| POLICY-TOD            | 120000                                   | 120000                  | 120000                   | Y           | N              | Y              |
| POP                   | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE        | 800000                                   | 1000000                 | 1000000                  | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 600000                                   | 600000                  | 600000                   | Y           | N              | N              |
| ROUTE-GUIDE           | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| ROUTING-KEY           | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 400                                      | 400                     | 400                      | Y           | N              | N              |
| SC1D                  | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SC2D                  | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCRIPT                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC            | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                    | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIPT-ISUP-VER-ALIAS   | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                   | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SLHR                  | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE          | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA             | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |

**Table 2-11** Release 4.4.x Routeserver Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 18000                                    | 18000                   | 18000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| SUBSCRIBER                 | 45000                                    | 45000                   | 45000                    | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 135000                                   | 135000                  | 135000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 225000                                   | 225000                  | 225000                   | Y           | Y              | N              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| TIMEZONE                   | 200                                      | 200                     | 200                      | N           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                      | 32000                                    | 32000                   | 32000                    | Y           | N              | N              |
| TRUNK-GRP                  | 25000                                    | 25000                   | 25000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 2750                                     | 2750                    | 2750                     | Y           | Y              | N              |
| USER-AUTH                  | 45000                                    | 45000                   | 45000                    | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 900                                      | 1125                    | 1125                     | Y           | N              | N              |

## Local Number Portability Database Usage Defaults

Table 2-12 details the predefined defaults for the Database Usage table for a small configuration in Release 4.4.x.

**Table 2-12** Release 4.4.x Local Number Portability Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING          | 10000                                    | 12500                   | 12500                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| AUDIO-SEGMENT          | 25000                                    | 25000                   | 25000                    | N           | Y              | Y              |
| AUDIO-SEQ              | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| BACKHAUL-SET           | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 2560                                     | 2560                    | 2560                     | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 1500                                     | 2000                    | 2000                     | Y           | N              | N              |
| CIPHERSUITE            | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 3000                                     | 3000                    | 3000                     | N           | N              | N              |
| CIRCUIT-CODE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| COS-RESTRICT           | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CPSG                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |

**Table 2-12** Release 4.4.x Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CUST-GRP                    | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN            | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE    | 500                                      | 500                     | 500                      | N           | N              | N              |
| DB-THRESHOLDS               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION                 | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                   | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN                      | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DIGMAN-PROFILE              | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DN2CUST-GRP                 | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                       | 5000000                                  | 5000000                 | 5000000                  | N           | N              | Y              |
| DN2SUBSCRIBER               | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| DPC                         | 1280                                     | 1280                    | 1280                     | Y           | Y              | Y              |
| DS1                         | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                         | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE               | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER              | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                     | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                   | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST                  | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| INTL-DIAL-PLAN              | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST                | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |

**Table 2-12** Release 4.4.x Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| IPSEC-KERBEROS      | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY        | 104000                                   | 104000                  | 104000                   | Y           | N              | N              |
| IPSEC-SA            | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN          | 26400                                    | 26400                   | 26400                    | Y           | N              | N              |
| ISDN-DCHAN          | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-INTF           | 1100                                     | 1100                    | 1100                     | Y           | N              | N              |
| ISDN-TG-PROFILE     | 250                                      | 250                     | 250                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE  | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 100000                                   | 100000                  | 100000                   | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST    | 20000                                    | 25000                   | 25000                    | N           | Y              | N              |
| NDC                 | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 5                                        | 5                       | 5                        | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP          | 25000                                    | 25000                   | 25000                    | Y           | N              | Y              |

**Table 2-12** Release 4.4.x Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun      | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| POLICY-PREFIX           | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION           | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD              | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                     | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE      | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                     | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| RADIUS-PROFILE          | 20                                       | 20                      | 20                       | Y           | N              | N              |
| REGION-PROFILE          | 100000                                   | 125000                  | 125000                   | Y           | N              | Y              |
| RELEASE-CAUSE           | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                   | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE             | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY             | 2560                                     | 2560                    | 2560                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION   | 4400                                     | 4400                    | 4400                     | Y           | N              | N              |
| SC1D                    | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SC2D                    | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| SCCP-NW                 | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE              | 20480                                    | 20480                   | 20480                    | N           | Y              | Y              |
| SCRIPT                  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC              | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE      | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE                 | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER         | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME     | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                      | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                  | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                     | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIPT-ISUP-VER-<br>ALIAS | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                     | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SLHR                    | 96                                       | 96                      | 96                       | N           | Y              | Y              |
| SLHR-PROFILE            | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA               | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |

**Table 2-12** Release 4.4.x Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7-Q761-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-Q767-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| SUBSCRIBER                 | 100000                                   | 100000                  | 100000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 300000                                   | 300000                  | 300000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 500000                                   | 500000                  | 500000                   | Y           | Y              | N              |
| SUBSYSTEM                  | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TIMEZONE                   | 200                                      | 200                     | 200                      | N           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                      | 134400                                   | 134400                  | 134400                   | Y           | N              | N              |
| TRUNK-GRP                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                  | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 2000                                     | 2500                    | 2500                     | Y           | N              | N              |

## Release 4.5

This section describes the Database Usage tables for small, medium, routeserver, LNP and Cable8 configurations in Release 4.5.

## Small Configuration Database Usage Defaults

Table 2-13 details the predefined defaults for the Database Usage table for a small configuration in Release 4.5.

**Table 2-13** Release 4.5 Small Configuration Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP         | 1                                        | 1                       | 1                        | N           | Y              | N              |
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| AGGR                   | 380                                      | 380                     | 380                      | Y           | N              | N              |
| AGGR-PROFILE           | 10                                       | 10                      | 10                       | Y           | N              | N              |
| ANI                    | 100000                                   | 100000                  | 100000                   | N           | Y              | N              |
| ANI-SCREENING          | 1000                                     | 1300                    | 1300                     | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANI-WB-LIST            | 5000                                     | 6250                    | 6250                     | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 240                                      | 240                     | 240                      | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 22500                                    | 22500                   | 22500                    | Y           | N              | N              |
| APP-SERVER             | 10                                       | 10                      | 10                       | Y           | Y              | N              |
| AUDIO-SEGMENT          | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUDIO-SEQ              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| AUTH-CODE              | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| AUTH-CODE-GRP          | 5000                                     | 5000                    | 5000                     | N           | Y              | N              |
| AUTH-REALM             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 4096                                     | 4096                    | 4096                     | Y           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 33750                                    | 33750                   | 33750                    | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 675                                      | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE            | 380                                      | 380                     | 380                      | Y           | N              | N              |

**Table 2-13** Release 4.5 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CIPHERSUITE-PROFILE      | 380                                      | 380                     | 380                      | N           | N              | N              |
| CIRCUIT-CODE             | 10                                       | 10                      | 10                       | Y           | N              | N              |
| CLLI-CODE                | 10                                       | 10                      | 10                       | N           | N              | N              |
| COS-RESTRICT             | 33750                                    | 33750                   | 33750                    | N           | Y              | N              |
| CPSG                     | 200                                      | 200                     | 200                      | Y           | Y              | N              |
| CUST-GRP                 | 500                                      | 500                     | 500                      | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 100                                      | 100                     | 100                      | N           | N              | N              |
| DESTINATION              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| DIAL-PLAN                | 200000                                   | 200000                  | 200000                   | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| DIGIT-MAP                | 110                                      | 110                     | 110                      | Y           | N              | N              |
| DIGMAN                   | 2175                                     | 2175                    | 2175                     | Y           | N              | N              |
| DIGMAN-PROFILE           | 435                                      | 435                     | 435                      | Y           | N              | N              |
| DN2CUST-GRP              | 50000                                    | 50000                   | 50000                    | N           | N              | Y              |
| DN2GN                    | 100                                      | 100                     | 100                      | N           | N              | Y              |
| DN2SUBSCRIBER            | 67500                                    | 67500                   | 67500                    | Y           | N              | N              |
| DOMAIN2ROUTE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DPC                      | 2048                                     | 2048                    | 2048                     | Y           | Y              | Y              |
| DS1                      | 800                                      | 800                     | 800                      | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST    | 50                                       | 50                      | 50                       | Y           | N              | N              |
| ENUM-CALL-TYPE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ENUM-PROFILE             | 1                                        | 1                       | 1                        | Y           | N              | Y              |
| ESS                      | 10                                       | 10                      | 10                       | Y           | N              | N              |
| EXCHANGE-CODE            | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER           | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG           | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-SERVER           | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| FS-AUDIT-PROFILE         | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| H323-GW                  | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                | 4500                                     | 4500                    | 4500                     | Y           | N              | N              |
| H323-TERM-PROFILE        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-13 Release 4.5 Small Configuration Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 500                                      | 500                     | 500                      | N           | N              | Y              |
| II-WB-LIST             | 4219                                     | 4219                    | 4219                     | N           | Y              | N              |
| INTL-DIAL-PLAN         | 1200                                     | 1200                    | 1200                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 4                                        | 4                       | 4                        | Y           | N              | N              |
| INTL-WB-LIST           | 33750                                    | 33750                   | 33750                    | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 380                                      | 380                     | 380                      | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 2400                                     | 2400                    | 2400                     | Y           | N              | N              |
| ISDN-DCHAN             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-INTF              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE     | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP               | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE            | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                    | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB                | 22500                                    | 22500                   | 22500                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                    | 38000                                    | 38000                   | 38000                    | Y           | N              | N              |
| MGW-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                   | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| MLHG-PREF-LIST         | 10                                       | 10                      | 10                       | Y           | N              | N              |
| MLHG-TERMINAL          | 500                                      | 500                     | 500                      | Y           | N              | N              |
| NATIONAL-WB-LIST       | 33750                                    | 43000                   | 43000                    | N           | Y              | N              |
| NDC                    | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOD-RESTRICT-LIST      | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST            | 3375                                     | 3375                    | 3375                     | N           | Y              | N              |
| OCB-K-VALUE            | 27                                       | 27                      | 27                       | N           | Y              | N              |
| OCB-PROFILE            | 1                                        | 1                       | 1                        | N           | Y              | N              |
| OFFICE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |

**Table 2-13** Release 4.5 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| OPC                   | 8                                        | 8                       | 30                       | Y           | Y              | Y              |
| POLICY-NXX            | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-ODR            | 2500                                     | 2500                    | 2500                     | Y           | N              | Y              |
| POLICY-OLI            | 25                                       | 25                      | 25                       | Y           | N              | Y              |
| POLICY-PERCENT        | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-POP            | 125                                      | 125                     | 125                      | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION         | 275                                      | 275                     | 275                      | Y           | N              | Y              |
| POLICY-TOD            | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POP                   | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 120000                                   | 120000                  | 120000                   | Y           | N              | N              |
| QOS                   | 380                                      | 380                     | 380                      | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-CODE           | 800                                      | 800                     | 800                      | Y           | N              | N              |
| REGION-PROFILE        | 5000                                     | 7000                    | 7000                     | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 250                                      | 250                     | 250                      | Y           | N              | N              |
| ROUTE-GUIDE           | 250                                      | 250                     | 250                      | Y           | N              | Y              |
| ROUTING-KEY           | 4096                                     | 4096                    | 4096                     | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 400                                      | 400                     | 400                      | Y           | N              | N              |
| SC1D                  | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SC2D                  | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCRIPT                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC            | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER      | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                    | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIP-TIMER-PROFILE     | 10                                       | 10                      | 10                       | Y           | N              | N              |

**Table 2-13 Release 4.5 Small Configuration Database Usage Defaults (continued)**

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SIPT-ISUP-VER-ALIAS        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                        | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SLHR                       | 128                                      | 128                     | 128                      | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 18000                                    | 18000                   | 18000                    | Y           | N              | N              |
| STATIC-CONTACT             | 2250                                     | 2250                    | 2250                     | Y           | N              | N              |
| SUBSCRIBER                 | 45000                                    | 45000                   | 45000                    | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 270000                                   | 270000                  | 270000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 225000                                   | 225000                  | 225000                   | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SUBSYSTEM                  | 128                                      | 128                     | 128                      | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 110                                      | 110                     | 110                      | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| TRUNK                      | 24000                                    | 24000                   | 24000                    | Y           | N              | N              |
| TRUNK-GRP                  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 100                                      | 100                     | 100                      | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 110                                      | 110                     | 110                      | Y           | Y              | N              |
| USER-AUTH                  | 22500                                    | 22500                   | 22500                    | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 900                                      | 1125                    | 1125                     | Y           | N              | N              |
| ZZZ-CODE                   | 10                                       | 10                      | 10                       | Y           | N              | N              |

## Medium Configuration Database Usage Defaults

Table 2-14 details the predefined defaults for the Database Usage table for a medium configuration in Release 4.5.

**Table 2-14** Release 4.5 Medium Configuration Database Usage Defaults

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP         | 50                                       | 50                      | 50                       | N           | Y              | N              |
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| AGGR                   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AGGR-PROFILE           | 10                                       | 10                      | 10                       | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING          | 15000                                    | 18800                   | 18800                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 12000                                    | 12000                   | 12000                    | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| APP-SERVER             | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| AUDIO-SEGMENT          | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUDIO-SEQ              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET           | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 15360                                    | 15360                   | 15360                    | Y           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 2250                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |

**Table 2-14** Release 4.5 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CIPHERSUITE-PROFILE      | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| CIRCUIT-CODE             | 500                                      | 500                     | 500                      | Y           | N              | N              |
| CLLI-CODE                | 500                                      | 500                     | 500                      | N           | N              | N              |
| COS-RESTRICT             | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN                   | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DIGMAN-PROFILE           | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                    | 100                                      | 100                     | 100                      | N           | N              | Y              |
| DN2SUBSCRIBER            | 225000                                   | 225000                  | 225000                   | Y           | N              | N              |
| DOMAIN2ROUTE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DPC                      | 7680                                     | 7680                    | 7680                     | Y           | Y              | Y              |
| DS1                      | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST    | 50                                       | 50                      | 50                       | Y           | N              | N              |
| ENUM-CALL-TYPE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ENUM-PROFILE             | 50                                       | 50                      | 50                       | Y           | N              | Y              |
| ESS                      | 500                                      | 500                     | 500                      | Y           | N              | N              |
| EXCHANGE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| EXT2SUBSCRIBER           | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG           | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-SERVER           | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| FS-AUDIT-PROFILE         | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| H323-GW                  | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM                | 15000                                    | 15000                   | 15000                    | Y           | N              | N              |
| H323-TERM-PROFILE        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-14 Release 4.5 Medium Configuration Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 14063                                    | 14063                   | 14063                    | N           | Y              | N              |
| INTL-DIAL-PLAN         | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 200                                      | 200                     | 200                      | Y           | N              | N              |
| INTL-WB-LIST           | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 36000                                    | 36000                   | 36000                    | Y           | N              | N              |
| ISDN-DCHAN             | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-INTF              | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                      | 250                     | 250                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE     | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP               | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE            | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                    | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB                | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                    | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| MGW-PROFILE            | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                   | 20000                                    | 20000                   | 20000                    | Y           | Y              | N              |
| MLHG-PREF-LIST         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MLHG-TERMINAL          | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| NATIONAL-WB-LIST       | 112500                                   | 141000                  | 141000                   | N           | Y              | N              |
| NDC                    | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOD-RESTRICT-LIST      | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST            | 11250                                    | 11250                   | 11250                    | N           | Y              | N              |
| OCB-K-VALUE            | 1350                                     | 1350                    | 1350                     | N           | Y              | N              |
| OCB-PROFILE            | 50                                       | 50                      | 50                       | N           | Y              | N              |
| OFFICE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |

**Table 2-14 Release 4.5 Medium Configuration Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| OPC                    | 30                                       | 30                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX             | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR             | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI             | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT         | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP             | 12500                                    | 12500                   | 12500                    | Y           | N              | Y              |
| POLICY-PREFIX          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION          | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD             | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                    | 500                                      | 500                     | 500                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE     | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                    | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| RADIUS-PROFILE         | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-CODE            | 800                                      | 800                     | 800                      | Y           | N              | N              |
| REGION-PROFILE         | 20000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| RELEASE-CAUSE          | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                  | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE            | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY            | 15360                                    | 15360                   | 15360                    | Y           | Y              | Y              |
| RUUDP-BACKHAUL-SESSION | 6000                                     | 6000                    | 6000                     | Y           | N              | N              |
| SC1D                   | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SC2D                   | 1500                                     | 1500                    | 1500                     | N           | Y              | N              |
| SCCP-NW                | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE             | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCRIPT                 | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC             | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE     | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE                | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER       | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER        | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME    | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                 | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                    | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIP-TIMER-PROFILE      | 10                                       | 10                      | 10                       | Y           | N              | N              |

**Table 2-14** Release 4.5 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SIPT-ISUP-VER-ALIAS        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                        | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SLHR                       | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| STATIC-CONTACT             | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| SUBSCRIBER                 | 150000                                   | 150000                  | 125000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 900000                                   | 900000                  | 900000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 750000                                   | 750000                  | 750000                   | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 1500                                     | 1500                    | 1500                     | N           | Y              | N              |
| SUBSYSTEM                  | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| TRUNK                      | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| TRUNK-GRP                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                  | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 3000                                     | 3750                    | 3750                     | Y           | N              | N              |
| ZZZ-CODE                   | 500                                      | 500                     | 500                      | Y           | N              | N              |

## Medium Database Usage Defaults - Generic Routing

Table 2-15 details the predefined defaults for the Database Usage table for a medium generic routing configuration in Release 4.5.

**Table 2-15** Release 4.5 Medium Database Usage Defaults - Generic Routing

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ACTIVITY               | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                      | 100                     | 100                      | N           | N              | N              |
| AGGR                   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| ANI                    | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-WB-LIST            | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK             | 12000                                    | 12000                   | 12000                    | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                | 33000                                    | 33000                   | 33000                    | Y           | N              | N              |
| AUTH-CODE              | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET           | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| CA-CONFIG              | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT             | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 15360                                    | 15360                   | 15360                    | Y           | N              | N              |
| CALL-TYPE              | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST         | 75000                                    | 75000                   | 75000                    | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP            | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER         | 1500                                     | 2000                    | 2000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| CIPHERSUITE            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| CIRCUIT-CODE           | 500                                      | 500                     | 500                      | Y           | N              | N              |
| COS-RESTRICT           | 75000                                    | 75000                   | 75000                    | N           | Y              | N              |
| CPSG                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP               | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |

**Table 2-15** Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN-PROFILE           | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DIGMAN                   | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2SUBSCRIBER            | 150000                                   | 150000                  | 150000                   | Y           | N              | N              |
| DPC                      | 7680                                     | 7680                    | 7680                     | Y           | Y              | Y              |
| DS1                      | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                      | 500                                      | 500                     | 500                      | Y           | N              | N              |
| EXCHANGE-CODE            | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| EXT2SUBSCRIBER           | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER           | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                  | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER      | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST         | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST               | 9375                                     | 9375                    | 9375                     | N           | Y              | N              |
| INTL-DIAL-PLAN           | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE   | 200                                      | 200                     | 200                      | Y           | N              | N              |
| INTL-WB-LIST             | 75000                                    | 75000                   | 75000                    | N           | Y              | N              |
| IPSEC-KERBEROS           | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS      | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IPSEC-SA                 | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN               | 36000                                    | 36000                   | 36000                    | Y           | N              | N              |
| ISDN-DCHAN               | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-INTF                | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |

**Table 2-15** Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ISDN-TG-PROFILE     | 250                                      | 250                     | 250                      | Y           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 33000                                    | 33000                   | 33000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 20000                                    | 20000                   | 20000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| NATIONAL-WB-LIST    | 75000                                    | 94000                   | 94000                    | N           | Y              | N              |
| NDC                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOA                 | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 7500                                     | 7500                    | 7500                     | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 30                                       | 30                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP          | 12500                                    | 12500                   | 12500                    | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION       | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                 | 500                                      | 500                     | 500                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE  | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                 | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| RADIUS-PROFILE      | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-PROFILE      | 20000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| RELEASE-CAUSE       | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE               | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |

**Table 2-15** Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ROUTE-GUIDE                | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY                | 15360                                    | 15360                   | 15360                    | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION      | 6000                                     | 6000                    | 6000                     | Y           | N              | N              |
| SC1D                       | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SC2D                       | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SCCP-NW                    | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE                 | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCTP-ASSOC-PROFILE         | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SCTP-ASSOC                 | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SERVICE                    | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                         | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                        | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                        | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SLHR                       | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-CIC                    | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7_Q761_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 3300                                     | 3300                    | 3300                     | Y           | N              | N              |
| SUBSCRIBER                 | 100000                                   | 100000                  | 100000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 600000                                   | 600000                  | 600000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 1000000                                  | 1000000                 | 1000000                  | Y           | Y              | N              |
| SUBSYSTEM-GRP              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM                  | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |

**Table 2-15** Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| TERMINATION                 | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TRIGGER-DETECTION-POINT     | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                  | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                       | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| TRUNK-GRP                   | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA      | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE   | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                   | 33000                                    | 33000                   | 33000                    | Y           | N              | N              |
| USER-PART-VARIANT           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                         | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                     | 2000                                     | 2500                    | 2500                     | Y           | N              | N              |
| ANI-SCREENING               | 15000                                    | 18800                   | 18800                    | Y           | N              | N              |
| LNP-PROFILE                 | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| DN2GN                       | 100                                      | 100                     | 100                      | N           | N              | Y              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TERM                   | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE       | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| TIMEZONE                    | 400                                      | 400                     | 400                      | N           | N              | N              |
| SCRIPT                      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IVR-SCRIPT-PROFILE          | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| AUDIO-SEQ                   | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| AUDIO-SEGMENT               | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| OCB-PROFILE                 | 50                                       | 50                      | 50                       | N           | Y              | N              |
| OCB-K-VALUE                 | 1350                                     | 1350                    | 1350                     | N           | Y              | N              |
| ENUM-PROFILE                | 50                                       | 50                      | 50                       | Y           | N              | Y              |
| ENUM-CALL-TYPE              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| DOMAIN2ROUTE                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| CLLI-CODE                   | 500                                      | 500                     | 500                      | N           | N              | N              |
| SUBSCRIBER-TOD-SCHEDULE     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |

**Table 2-15** Release 4.5 Medium Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun      | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| EMERGENCY-NUMBER-LIST   | 50                                       | 50                      | 50                       | Y           | N              | N              |
| FS-AUDIT-PROFILE        | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| TRIGGER-NOD-ESCAPE-LIST | 100                                      | 100                     | 100                      | Y           | N              | N              |
| GTD-PARM-VALUES         | 100                                      | 100                     | 100                      | N           | N              | N              |
| AAA-SERVER-GRP          | 50                                       | 50                      | 50                       | N           | Y              | N              |
| REGION-CODE             | 800                                      | 800                     | 800                      | Y           | N              | N              |
| ZZZ-CODE                | 500                                      | 500                     | 500                      | Y           | N              | N              |
| AGGR-PROFILE            | 10                                       | 10                      | 10                       | Y           | N              | N              |
| CALL-SUBTYPE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| CA-CONFIG-BASE          | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| APP-SERVER              | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| SIP-TIMER-PROFILE       | 10                                       | 10                      | 10                       | Y           | N              | N              |
| ENUM-ROOT               | 10                                       | 10                      | 10                       | Y           | N              | Y              |
| SUBSYSTEM-PROFILE       | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| CALL-TYPE-PROFILE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| NOA-ROUTE-PROFILE       | 100                                      | 100                     | 100                      | Y           | N              | N              |
| NOA-ROUTE               | 100                                      | 100                     | 100                      | Y           | N              | N              |
| DN2RN                   | 100                                      | 100                     | 100                      | N           | N              | Y              |

## Routeserver Database Usage Defaults

Table 2-16 details the predefined defaults for the Database Usage table for a routeserver configuration in Release 4.5.

**Table 2-16** Release 4.5 Routeserver Database Usage Defaults

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP        | 26                                       | 26                      | 26                       | N           | Y              | N              |
| ACTIVITY              | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| AGGR                  | 380                                      | 380                     | 380                      | Y           | N              | N              |
| AGGR-PROFILE          | 10                                       | 10                      | 10                       | Y           | N              | N              |
| ANI                   | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING         | 1000                                     | 1300                    | 1300                     | Y           | N              | N              |
| ANI-SCREENING-PROFILE | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANI-WB-LIST           | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |

**Table 2-16** Release 4.5 Routeserver Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ANNC-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK               | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                  | 4500                                     | 4500                    | 4500                     | Y           | N              | N              |
| APP-SERVER               | 255                                      | 255                     | 255                      | Y           | Y              | N              |
| AUDIO-SEGMENT            | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUDIO-SEQ                | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| AUTH-CODE                | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM               | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 10240                                    | 10240                   | 10240                    | Y           | N              | N              |
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 33750                                    | 33750                   | 33750                    | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| CHANGED-NUMBER           | 675                                      | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE              | 380                                      | 380                     | 380                      | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 380                                      | 380                     | 380                      | N           | N              | N              |
| CIRCUIT-CODE             | 255                                      | 255                     | 255                      | Y           | N              | N              |
| CLLI-CODE                | 255                                      | 255                     | 255                      | N           | N              | N              |
| COS-RESTRICT             | 33750                                    | 33750                   | 33750                    | N           | Y              | N              |
| CPSG                     | 200                                      | 200                     | 200                      | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 100                                      | 100                     | 100                      | N           | N              | N              |
| DESTINATION              | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |

**Table 2-16** Release 4.5 Routeserver Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| DIGMAN                 | 25000                                    | 25000                   | 25000                    | Y           | N              | N              |
| DIGMAN-PROFILE         | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DN2CUST-GRP            | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                  | 10000                                    | 10000                   | 10000                    | N           | N              | Y              |
| DN2SUBSCRIBER          | 67500                                    | 67500                   | 67500                    | Y           | N              | N              |
| DOMAIN2ROUTE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DPC                    | 5120                                     | 5120                    | 5120                     | Y           | Y              | Y              |
| DS1                    | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST  | 50                                       | 50                      | 50                       | Y           | N              | N              |
| ENUM-CALL-TYPE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ENUM-PROFILE           | 26                                       | 26                      | 26                       | Y           | N              | Y              |
| ESS                    | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE          | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER         | 5000                                     | 5000                    | 5000                     | Y           | Y              | N              |
| FEATURE                | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-SERVER         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| FS-AUDIT-PROFILE       | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| H323-GW                | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM              | 4500                                     | 4500                    | 4500                     | Y           | N              | N              |
| H323-TERM-PROFILE      | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 4219                                     | 4219                    | 4219                     | N           | Y              | N              |
| INTL-DIAL-PLAN         | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST           | 33750                                    | 33750                   | 33750                    | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 380                                      | 380                     | 380                      | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 2400                                     | 2400                    | 2400                     | Y           | N              | N              |
| ISDN-DCHAN             | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-16 Release 4.5 Routeserver Database Usage Defaults (continued)**

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ISDN-INTF           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ISDN-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE  | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 4500                                     | 4500                    | 4500                     | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 38000                                    | 38000                   | 38000                    | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 100                                      | 100                     | 100                      | Y           | Y              | N              |
| MLHG-PREF-LIST      | 10                                       | 10                      | 10                       | Y           | N              | N              |
| MLHG-TERMINAL       | 500                                      | 500                     | 500                      | Y           | N              | N              |
| NATIONAL-WB-LIST    | 33750                                    | 43000                   | 43000                    | N           | Y              | N              |
| NDC                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 3375                                     | 3375                    | 3375                     | N           | Y              | N              |
| OCB-K-VALUE         | 689                                      | 689                     | 689                      | N           | Y              | N              |
| OCB-PROFILE         | 26                                       | 26                      | 26                       | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 20                                       | 20                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX          | 8000                                     | 8000                    | 8000                     | Y           | N              | Y              |
| POLICY-ODR          | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-OLI          | 8000                                     | 8000                    | 8000                     | Y           | N              | Y              |
| POLICY-PERCENT      | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-POP          | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION       | 88000                                    | 88000                   | 88000                    | Y           | N              | Y              |
| POLICY-TOD          | 120000                                   | 120000                  | 120000                   | Y           | N              | Y              |
| POP                 | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE  | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                 | 380                                      | 380                     | 380                      | Y           | N              | N              |

**Table 2-16** Release 4.5 Routeserver Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-CODE           | 800                                      | 800                     | 800                      | Y           | N              | N              |
| REGION-PROFILE        | 800000                                   | 1000000                 | 1000000                  | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 600000                                   | 600000                  | 600000                   | Y           | N              | N              |
| ROUTE-GUIDE           | 80000                                    | 80000                   | 80000                    | Y           | N              | Y              |
| ROUTING-KEY           | 10240                                    | 10240                   | 10240                    | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 400                                      | 400                     | 400                      | Y           | N              | N              |
| SC1D                  | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SC2D                  | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCRIPT                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC            | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                    | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIP-TIMER-PROFILE     | 10                                       | 10                      | 10                       | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS   | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                   | 9000                                     | 9000                    | 9000                     | N           | Y              | N              |
| SLHR                  | 320                                      | 320                     | 320                      | N           | Y              | Y              |
| SLHR-PROFILE          | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA             | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC               | 18000                                    | 18000                   | 18000                    | Y           | N              | N              |
| STATIC-CONTACT        | 450                                      | 450                     | 450                      | Y           | N              | N              |

**Table 2-16** Release 4.5 Routeserver Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SUBSCRIBER                 | 45000                                    | 45000                   | 45000                    | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 270000                                   | 270000                  | 270000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 225000                                   | 225000                  | 225000                   | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 450                                      | 450                     | 450                      | N           | Y              | N              |
| SUBSYSTEM                  | 320                                      | 320                     | 320                      | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| TRUNK                      | 32000                                    | 32000                   | 32000                    | Y           | N              | N              |
| TRUNK-GRP                  | 25000                                    | 25000                   | 25000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 2750                                     | 2750                    | 2750                     | Y           | Y              | N              |
| USER-AUTH                  | 4500                                     | 4500                    | 4500                     | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VSC                        | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                    | 900                                      | 1125                    | 1125                     | Y           | N              | N              |
| ZZZ-CODE                   | 255                                      | 255                     | 255                      | Y           | N              | N              |

## Local Number Portability Database Usage Defaults

[Table 2-17](#) details the predefined defaults for the Database Usage table for an LNP configuration in Release 4.5.

**Table 2-17** Release 4.5 Local Number Portability Database Usage Defaults

| Table Name or Noun | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP     | 26                                       | 26                      | 26                       | N           | Y              | N              |
| ACTIVITY           | 100                                      | 100                     | 100                      | Y           | Y              | Y              |
| AGGR               | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AGGR-PROFILE       | 10                                       | 10                      | 10                       | Y           | N              | N              |
| ANI                | 400000                                   | 400000                  | 400000                   | N           | Y              | N              |
| ANI-SCREENING      | 15000                                    | 18800                   | 18800                    | Y           | N              | N              |

**Table 2-17** Release 4.5 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ANI-SCREENING-PROFILE    | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ANI-WB-LIST              | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK               | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                  | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| APP-SERVER               | 255                                      | 255                     | 255                      | Y           | Y              | N              |
| AUDIO-SEGMENT            | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| AUDIO-SEQ                | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| AUTH-CODE                | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM               | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET             | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 15360                                    | 15360                   | 15360                    | Y           | N              | N              |
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER           | 2250                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE              | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| CIRCUIT-CODE             | 255                                      | 255                     | 255                      | Y           | N              | N              |
| CLLI-CODE                | 255                                      | 255                     | 255                      | N           | N              | N              |
| COS-RESTRICT             | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |

**Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| DIAL-PLAN-PROFILE      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP              | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGMAN                 | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DIGMAN-PROFILE         | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DN2CUST-GRP            | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                  | 5000000                                  | 5000000                 | 5000000                  | N           | N              | Y              |
| DN2SUBSCRIBER          | 225000                                   | 225000                  | 225000                   | Y           | N              | N              |
| DOMAIN2ROUTE           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DPC                    | 7680                                     | 7680                    | 7680                     | Y           | Y              | Y              |
| DS1                    | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST  | 50                                       | 50                      | 50                       | Y           | N              | N              |
| ENUM-CALL-TYPE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ENUM-PROFILE           | 26                                       | 26                      | 26                       | Y           | N              | Y              |
| ESS                    | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE          | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER         | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-SERVER         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| FS-AUDIT-PROFILE       | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| H323-GW                | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM              | 15000                                    | 15000                   | 15000                    | Y           | N              | N              |
| H323-TERM-PROFILE      | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 14063                                    | 14063                   | 14063                    | N           | Y              | N              |
| INTL-DIAL-PLAN         | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST           | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |

**Table 2-17** Release 4.5 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun  | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ISDN-BCHAN          | 36000                                    | 36000                   | 36000                    | Y           | N              | N              |
| ISDN-DCHAN          | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-INTF           | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-TG-PROFILE     | 250                                      | 250                     | 250                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE  | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB             | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                 | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST    | 112500                                   | 141000                  | 141000                   | N           | Y              | N              |
| NDC                 | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST         | 11250                                    | 11250                   | 11250                    | N           | Y              | N              |
| OCB-K-VALUE         | 689                                      | 689                     | 689                      | N           | Y              | N              |
| OCB-PROFILE         | 26                                       | 26                      | 26                       | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                 | 30                                       | 30                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP          | 12500                                    | 12500                   | 12500                    | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION       | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD          | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                 | 255                                      | 255                     | 255                      | Y           | Y              | Y              |

**Table 2-17 Release 4.5 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| PORTED-OFFICE-CODE     | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                    | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| RADIUS-PROFILE         | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-CODE            | 800                                      | 800                     | 800                      | Y           | N              | N              |
| REGION-PROFILE         | 20000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| RELEASE-CAUSE          | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                  | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE            | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY            | 15360                                    | 15360                   | 15360                    | Y           | Y              | Y              |
| RUUDP-BACKHAUL-SESSION | 6000                                     | 6000                    | 6000                     | Y           | N              | N              |
| SC1D                   | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SC2D                   | 1500                                     | 1500                    | 1500                     | N           | Y              | N              |
| SCCP-NW                | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE             | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCRIPT                 | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC             | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE     | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE                | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER       | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER        | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME    | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                 | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                    | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIP-TIMER-PROFILE      | 10                                       | 10                      | 10                       | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS    | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                    | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SLHR                   | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SLHR-PROFILE           | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE      | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE      | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA              | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE    | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE    | 100                                      | 100                     | 100                      | Y           | N              | N              |

**Table 2-17** Release 4.5 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun         | Number of Records Before Split NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|----------------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| SS7-CIC                    | 96000                              | 96000                | 96000                 | Y        | N           | N           |
| STATIC-CONTACT             | 5000                               | 5000                 | 5000                  | Y        | N           | N           |
| SUBSCRIBER                 | 150000                             | 150000               | 125000                | Y        | Y           | N           |
| SUBSCRIBER-FEATURE-DATA    | 900000                             | 900000               | 900000                | N        | Y           | N           |
| SUBSCRIBER-PROFILE         | 2550                               | 2550                 | 2550                  | Y        | Y           | N           |
| SUBSCRIBER-SERVICE-PROFILE | 750000                             | 750000               | 750000                | Y        | Y           | N           |
| SUBSCRIBER-TOD-SCHEDULE    | 1500                               | 1500                 | 1500                  | N        | Y           | N           |
| SUBSYSTEM                  | 480                                | 480                  | 480                   | N        | Y           | Y           |
| SUBSYSTEM-GRP              | 16                                 | 16                   | 16                    | N        | Y           | Y           |
| TECH-PREFIX-GRP            | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| TECH-PREFIX-GRP-PROFILE    | 4                                  | 4                    | 4                     | Y        | N           | N           |
| TERMINATION                | 180000                             | 180000               | 180000                | Y        | N           | N           |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                | 100                  | 100                   | Y        | N           | N           |
| TRUNK                      | 100000                             | 100000               | 100000                | Y        | N           | N           |
| TRUNK-GRP                  | 10000                              | 10000                | 10000                 | Y        | N           | N           |
| TRUNK-GRP-FEATURE-DATA     | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                               | 1100                 | 1100                  | Y        | Y           | N           |
| USER-AUTH                  | 50000                              | 50000                | 50000                 | Y        | N           | N           |
| USER-PART-VARIANT          | 200                                | 200                  | 200                   | Y        | N           | N           |
| VSC                        | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| WIRETAP                    | 3000                               | 3750                 | 3750                  | Y        | N           | N           |
| ZZZ-CODE                   | 255                                | 255                  | 255                   | Y        | N           | N           |

## Local Number Portability Database Usage Defaults - Routing Number

Table 2-18 details the predefined defaults for the Database Usage table for an LNP routing number configuration in Release 4.5. Used for Europe, the Middle East and Africa (EMEA).

**Table 2-18** Release 4.5 Local Number Portability Database Usage Defaults - Routing Number

| Table Name or Noun | Number of Records Before Split NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|--------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| ACTIVITY           | 100                                | 100                  | 100                   | Y        | Y           | Y           |
| ACTIVITY-BASE      | 100                                | 100                  | 100                   | N        | N           | N           |
| AGGR               | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| ANI                | 400000                             | 400000               | 400000                | N        | Y           | N           |

**Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| ANI-WB-LIST              | 25000                                    | 31250                   | 31250                    | N           | N              | Y              |
| ANNC-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ANNC-TRUNK               | 6120                                     | 6120                    | 6120                     | Y           | N              | N              |
| ANNOUNCEMENT             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| AOR2SUB                  | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| AUTH-CODE                | 250000                                   | 250000                  | 250000                   | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM               | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET             | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 15360                                    | 15360                   | 15360                    | Y           | N              | N              |
| CALL-TYPE                | 100                                      | 100                     | 100                      | N           | N              | N              |
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 500                                      | 500                     | 500                      | Y           | Y              | N              |
| CHANGED-NUMBER           | 2250                                     | 3000                    | 3000                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| CIPHERSUITE              | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| CIRCUIT-CODE             | 255                                      | 255                     | 255                      | Y           | N              | N              |
| COS-RESTRICT             | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                     | 500                      | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |

**Table 2-18** Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| DIGMAN-PROFILE         | 2700                                     | 2700                    | 2700                     | Y           | N              | N              |
| DIGMAN                 | 13500                                    | 13500                   | 13500                    | Y           | N              | N              |
| DN2CUST-GRP            | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2SUBSCRIBER          | 225000                                   | 225000                  | 225000                   | Y           | N              | N              |
| DPC                    | 7680                                     | 7680                    | 7680                     | Y           | Y              | Y              |
| DS1                    | 4200                                     | 4200                    | 4200                     | Y           | N              | N              |
| ESS                    | 255                                      | 255                     | 255                      | Y           | N              | N              |
| EXCHANGE-CODE          | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| EXT2SUBSCRIBER         | 25000                                    | 25000                   | 25000                    | Y           | Y              | N              |
| FEATURE                | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-SERVER         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| H323-GW                | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 14063                                    | 14063                   | 14063                    | N           | Y              | N              |
| INTL-DIAL-PLAN         | 3000                                     | 3000                    | 3000                     | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 10                                       | 10                      | 10                       | Y           | N              | N              |
| INTL-WB-LIST           | 112500                                   | 112500                  | 112500                   | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 36000                                    | 36000                   | 36000                    | Y           | N              | N              |
| ISDN-DCHAN             | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-INTF              | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                      | 250                     | 250                      | Y           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP               | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LSA                    | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB                | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                    | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |

**Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| MGW-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                  | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| MLHG-PREF-LIST        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| MLHG-TERMINAL         | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |
| NATIONAL-WB-LIST      | 112500                                   | 141000                  | 141000                   | N           | Y              | N              |
| NDC                   | 50                                       | 50                      | 50                       | Y           | N              | N              |
| NOA                   | 0                                        | 0                       | 0                        | N           | N              | N              |
| NOD                   | 100                                      | 100                     | 100                      | N           | N              | N              |
| NOD-RESTRICT-LIST     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST           | 11250                                    | 11250                   | 11250                    | N           | Y              | N              |
| OFFICE-CODE           | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| OPC                   | 30                                       | 30                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX            | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR            | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI            | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT        | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP            | 12500                                    | 12500                   | 12500                    | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION         | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD            | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                   | 255                                      | 255                     | 255                      | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                   | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-PROFILE        | 20000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE           | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY           | 15360                                    | 15360                   | 15360                    | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 6000                                     | 6000                    | 6000                     | Y           | N              | N              |
| SC1D                  | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SC2D                  | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE            | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                     | 120                      | Y           | Y              | Y              |

**Table 2-18** Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SCTP-ASSOC                 | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SERVICE                    | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER           | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                         | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                        | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SLE                        | 30000                                    | 30000                   | 30000                    | N           | Y              | N              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SLHR                       | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7-CIC                    | 96000                                    | 96000                   | 96000                    | Y           | N              | N              |
| SS7_Q761_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| STATIC-CONTACT             | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |
| SUBSCRIBER                 | 150000                                   | 150000                  | 125000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 900000                                   | 900000                  | 900000                   | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                    | 2550                     | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 1500000                                  | 1500000                 | 1500000                  | Y           | Y              | N              |
| SUBSYSTEM-GRP              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| SUBSYSTEM                  | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION                | 180000                                   | 180000                  | 180000                   | Y           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                      | 50                       | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                     | 100                      | N           | N              | N              |
| TRUNK                      | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| TRUNK-GRP                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                  | 50000                                    | 50000                   | 50000                    | Y           | N              | N              |

**Table 2-18 Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun          | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| USER-PART-VARIANT           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VAR-DEFAULT                 | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| VSC                         | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                     | 3000                                     | 3750                    | 3750                     | Y           | N              | N              |
| ANI-SCREENING               | 15000                                    | 18800                   | 18800                    | Y           | N              | N              |
| LNP-PROFILE                 | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| DN2GN                       | 100                                      | 100                     | 100                      | N           | N              | Y              |
| H323-TERM-PROFILE           | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TERM                   | 15000                                    | 15000                   | 15000                    | Y           | N              | N              |
| ANI-SCREENING-PROFILE       | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| TIMEZONE                    | 400                                      | 400                     | 400                      | N           | N              | N              |
| SCRIPT                      | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| IVR-SCRIPT-PROFILE          | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE                    | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| AUDIO-SEQ                   | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| AUDIO-SEGMENT               | 5000                                     | 5000                    | 5000                     | N           | Y              | Y              |
| FEATURE-CONFIG              | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| OCB-PROFILE                 | 26                                       | 26                      | 26                       | N           | Y              | N              |
| OCB-K-VALUE                 | 689                                      | 689                     | 689                      | N           | Y              | N              |
| ENUM-PROFILE                | 26                                       | 26                      | 26                       | Y           | N              | Y              |
| ENUM-CALL-TYPE              | 100                                      | 100                     | 100                      | Y           | N              | N              |
| DOMAIN2ROUTE                | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| CLLI-CODE                   | 255                                      | 255                     | 255                      | N           | N              | N              |
| SUBSCRIBER-TOD-SCHEDULE     | 1500                                     | 1500                    | 1500                     | N           | Y              | N              |
| EMERGENCY-NUMBER-LIST       | 50                                       | 50                      | 50                       | Y           | N              | N              |
| FS-AUDIT-PROFILE            | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| TRIGGER-NOD-ESCAPE-LIST     | 100                                      | 100                     | 100                      | Y           | N              | N              |
| GTD-PARM-VALUES             | 100                                      | 100                     | 100                      | N           | N              | N              |
| AAA-SERVER-GRP              | 26                                       | 26                      | 26                       | N           | Y              | N              |
| REGION-CODE                 | 800                                      | 800                     | 800                      | Y           | N              | N              |
| ZZZ-CODE                    | 255                                      | 255                     | 255                      | Y           | N              | N              |
| AGGR-PROFILE                | 10                                       | 10                      | 10                       | Y           | N              | N              |

**Table 2-18** Release 4.5 Local Number Portability Database Usage Defaults - Routing Number (continued)

| Table Name or Noun | Number of Records Before Split NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|--------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| CALL-SUBTYPE       | 1000                               | 1000                 | 1000                  | N        | N           | N           |
| CA-CONFIG-BASE     | 1000                               | 1000                 | 1000                  | Y        | Y           | Y           |
| APP-SERVER         | 255                                | 255                  | 255                   | Y        | Y           | N           |
| SIP-TIMER-PROFILE  | 10                                 | 10                   | 10                    | Y        | N           | N           |
| ENUM-ROOT          | 10                                 | 10                   | 10                    | Y        | N           | Y           |
| SUBSYSTEM-PROFILE  | 16                                 | 16                   | 16                    | N        | Y           | Y           |
| CALL-TYPE-PROFILE  | 100                                | 100                  | 100                   | Y        | N           | N           |
| NOA-ROUTE-PROFILE  | 100                                | 100                  | 100                   | Y        | N           | N           |
| NOA-ROUTE          | 100                                | 100                  | 100                   | Y        | N           | N           |
| DN2RN              | 5000000                            | 5000000              | 5000000               | N        | N           | Y           |

## Cable8 Database Usage Defaults

Table 2-19 details the predefined defaults for the Database Usage table for a Cable8 configuration in Release 4.5.

**Table 2-19** Release 4.5 Cable8 Database Usage Defaults

| Table Name or Noun    | Number of Records Before Split NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|-----------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| AAA-SERVER-GRP        | 100                                | 100                  | 100                   | N        | Y           | N           |
| ACTIVITY              | 100                                | 100                  | 100                   | Y        | Y           | Y           |
| AGGR                  | 2100                               | 2100                 | 2100                  | Y        | N           | N           |
| AGGR-PROFILE          | 10                                 | 10                   | 10                    | Y        | N           | N           |
| ANI                   | 400000                             | 400000               | 400000                | N        | Y           | N           |
| ANI-SCREENING         | 15000                              | 18800                | 18800                 | Y        | N           | N           |
| ANI-SCREENING-PROFILE | 1500                               | 1500                 | 1500                  | Y        | N           | N           |
| ANI-WB-LIST           | 25000                              | 31250                | 31250                 | N        | N           | Y           |
| ANNC-TG-PROFILE       | 100                                | 100                  | 100                   | Y        | N           | N           |
| ANNC-TRUNK            | 24000                              | 24000                | 24000                 | Y        | N           | N           |
| ANNOUNCEMENT          | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| AOR2SUB               | 10000                              | 10000                | 10000                 | Y        | N           | N           |
| APP-SERVER            | 1000                               | 1000                 | 1000                  | Y        | Y           | N           |
| AUDIO-SEGMENT         | 5000                               | 5000                 | 5000                  | N        | Y           | Y           |
| AUDIO-SEQ             | 1000                               | 1000                 | 1000                  | N        | Y           | Y           |
| AUTH-CODE             | 250000                             | 250000               | 250000                | N        | Y           | N           |

**Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)**

| Table Name or Noun       | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| AUTH-CODE-GRP            | 25000                                    | 25000                   | 25000                    | N           | Y              | N              |
| AUTH-REALM               | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| BACKHAUL-SET             | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 15360                                    | 15360                   | 15360                    | Y           | N              | N              |
| CARRIER                  | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CASUAL-WB-LIST           | 187500                                   | 187500                  | 187500                   | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| CENTREX-GRP              | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| CHANGED-NUMBER           | 3750                                     | 5000                    | 5000                     | Y           | N              | N              |
| CIPHERSUITE              | 2100                                     | 2100                    | 2100                     | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 2100                                     | 2100                    | 2100                     | N           | N              | N              |
| CIRCUIT-CODE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| CLLI-CODE                | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| COS-RESTRICT             | 187500                                   | 187500                  | 187500                   | N           | Y              | N              |
| CPSG                     | 2000                                     | 2000                    | 2000                     | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 20000                                    | 20000                   | 20000                    | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| DESTINATION              | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                 | 1000000                  | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DIGIT-MAP                | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| DIGMAN                   | 16000                                    | 16000                   | 16000                    | Y           | N              | N              |
| DIGMAN-PROFILE           | 3200                                     | 3200                    | 3200                     | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                  | 250000                   | N           | N              | Y              |
| DN2GN                    | 100                                      | 100                     | 100                      | N           | N              | Y              |
| DN2SUBSCRIBER            | 375000                                   | 375000                  | 375000                   | Y           | N              | N              |
| DOMAIN2ROUTE             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| DPC                      | 7680                                     | 7680                    | 7680                     | Y           | Y              | Y              |
| DS1                      | 5000                                     | 5000                    | 5000                     | Y           | N              | N              |

**Table 2-19** Release 4.5 Cable8 Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| EMERGENCY-NUMBER-LIST  | 50                                       | 50                      | 50                       | Y           | N              | N              |
| ENUM-CALL-TYPE         | 100                                      | 100                     | 100                      | Y           | N              | N              |
| ENUM-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| ESS                    | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| EXCHANGE-CODE          | 64000                                    | 64000                   | 64000                    | Y           | N              | N              |
| EXT2SUBSCRIBER         | 50000                                    | 50000                   | 50000                    | Y           | Y              | N              |
| FEATURE                | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| FEATURE-CONFIG         | 1000                                     | 1000                    | 1000                     | N           | Y              | Y              |
| FEATURE-SERVER         | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| FS-AUDIT-PROFILE       | 10                                       | 10                      | 10                       | N           | Y              | Y              |
| H323-GW                | 4                                        | 4                       | 4                        | Y           | N              | N              |
| H323-GW2GK             | 100                                      | 100                     | 100                      | Y           | N              | N              |
| H323-TERM              | 250                                      | 250                     | 250                      | Y           | N              | N              |
| H323-TERM-PROFILE      | 200                                      | 200                     | 200                      | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                        | 1                       | 1                        | N           | Y              | N              |
| II-RESTRICT-LIST       | 2500                                     | 2500                    | 2500                     | N           | N              | Y              |
| II-WB-LIST             | 23438                                    | 23438                   | 23438                    | N           | Y              | N              |
| INTL-DIAL-PLAN         | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 200                                      | 200                     | 200                      | Y           | N              | N              |
| INTL-WB-LIST           | 187500                                   | 187500                  | 187500                   | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                       | 1                        | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                     | 256                      | Y           | N              | N              |
| IPSEC-POLICY           | 2100                                     | 2100                    | 2100                     | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                     | 256                      | Y           | N              | N              |
| ISDN-BCHAN             | 36000                                    | 36000                   | 36000                    | Y           | N              | N              |
| ISDN-DCHAN             | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-INTF              | 1500                                     | 1500                    | 1500                     | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                      | 250                     | 250                      | Y           | N              | N              |
| IVR-SCRIPT-PROFILE     | 100                                      | 100                     | 100                      | N           | Y              | Y              |
| LANGUAGE               | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| LATA                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | N              |
| LATA-MAP               | 150000                                   | 150000                  | 150000                   | Y           | Y              | N              |
| LNP-PROFILE            | 10                                       | 10                      | 10                       | Y           | Y              | Y              |
| LSA                    | 30000                                    | 30000                   | 30000                    | Y           | N              | N              |

**Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)**

| Table Name or Noun    | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| LSA-PROFILE           | 1000                                     | 1000                    | 1000                     | N           | N              | N              |
| MAC2SUB               | 10000                                    | 10000                   | 10000                    | N           | Y              | N              |
| MGCP-RETCODE-ACTION   | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MGW                   | 210000                                   | 210000                  | 210000                   | Y           | N              | N              |
| MGW-PROFILE           | 100                                      | 100                     | 100                      | Y           | N              | N              |
| MLHG                  | 20000                                    | 20000                   | 20000                    | Y           | Y              | N              |
| MLHG-PREF-LIST        | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| MLHG-TERMINAL         | 100000                                   | 100000                  | 100000                   | Y           | N              | N              |
| NATIONAL-WB-LIST      | 187500                                   | 235000                  | 235000                   | N           | Y              | N              |
| NDC                   | 800                                      | 800                     | 800                      | Y           | N              | N              |
| NOD-RESTRICT-LIST     | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| NOD-WB-LIST           | 18750                                    | 18750                   | 18750                    | N           | Y              | N              |
| OCB-K-VALUE           | 2700                                     | 2700                    | 2700                     | N           | Y              | N              |
| OCB-PROFILE           | 100                                      | 100                     | 100                      | N           | Y              | N              |
| OFFICE-CODE           | 200000                                   | 200000                  | 200000                   | Y           | Y              | N              |
| OPC                   | 30                                       | 30                      | 30                       | Y           | Y              | Y              |
| POLICY-NXX            | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-ODR            | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-OLI            | 100                                      | 100                     | 100                      | Y           | N              | Y              |
| POLICY-PERCENT        | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POLICY-POP            | 25000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                   | 10000                    | Y           | N              | Y              |
| POLICY-REGION         | 1100                                     | 1100                    | 1100                     | Y           | N              | Y              |
| POLICY-TOD            | 400                                      | 400                     | 400                      | Y           | N              | Y              |
| POP                   | 1000                                     | 1000                    | 1000                     | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                  | 640000                   | Y           | N              | N              |
| QOS                   | 2100                                     | 2100                    | 2100                     | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                      | 20                       | Y           | Y              | N              |
| REGION-CODE           | 800                                      | 800                     | 800                      | Y           | N              | N              |
| REGION-PROFILE        | 20000                                    | 25000                   | 25000                    | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| ROUTE                 | 2000                                     | 2000                    | 2000                     | Y           | N              | N              |
| ROUTE-GUIDE           | 1000                                     | 1000                    | 1000                     | Y           | N              | Y              |
| ROUTING-KEY           | 15360                                    | 15360                   | 15360                    | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 6000                                     | 6000                    | 6000                     | Y           | N              | N              |

**Table 2-19 Release 4.5 Cable8 Database Usage Defaults (continued)**

| Table Name or Noun         | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| SC1D                       | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| SC2D                       | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| SCCP-NW                    | 255                                      | 255                     | 255                      | N           | Y              | Y              |
| SCCP-ROUTE                 | 65535                                    | 65535                   | 65535                    | N           | Y              | Y              |
| SCRIPT                     | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SCTP-ASSOC                 | 240                                      | 240                     | 240                      | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE         | 120                                      | 120                     | 120                      | Y           | Y              | Y              |
| SERVICE                    | 2000                                     | 2000                    | 2000                     | N           | Y              | N              |
| SERVICE-PROVIDER           | 10                                       | 10                      | 10                       | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                    | 20000                   | 20000                    | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SG                         | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SG-GRP                     | 20                                       | 20                      | 20                       | Y           | Y              | Y              |
| SGP                        | 40                                       | 40                      | 40                       | Y           | Y              | Y              |
| SIP-TIMER-PROFILE          | 10                                       | 10                      | 10                       | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS        | 200                                      | 200                     | 200                      | Y           | N              | N              |
| SLE                        | 50000                                    | 50000                   | 50000                    | N           | Y              | N              |
| SLHR                       | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                       | 16                      | 16                       | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                     | 100                      | Y           | N              | N              |
| SS7-CIC                    | 60000                                    | 60000                   | 60000                    | Y           | N              | N              |
| STATIC-CONTACT             | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |
| SUBSCRIBER                 | 250000                                   | 250000                  | 250000                   | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 1500000                                  | 1500000                 | 1500000                  | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 10000                                    | 10000                   | 10000                    | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 1250000                                  | 1250000                 | 1250000                  | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 2500                                     | 2500                    | 2500                     | N           | Y              | N              |
| SUBSYSTEM                  | 480                                      | 480                     | 480                      | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                       | 16                      | 16                       | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 10                                       | 10                      | 10                       | Y           | N              | N              |

**Table 2-19** Release 4.5 Cable8 Database Usage Defaults (continued)

| Table Name or Noun        | Number of<br>Records Before<br>Split NPA | Maximum<br>Record Count | Licensed Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------------|------------------------------------------|-------------------------|--------------------------|-------------|----------------|----------------|
| TECH-PREFIX-GRP-PROFILE   | 4                                        | 4                       | 4                        | Y           | N              | N              |
| TERMINATION               | 370000                                   | 370000                  | 370000                   | Y           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST   | 100                                      | 100                     | 100                      | Y           | N              | N              |
| TRUNK                     | 120000                                   | 120000                  | 120000                   | Y           | N              | N              |
| TRUNK-GRP                 | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA    | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE | 1100                                     | 1100                    | 1100                     | Y           | Y              | N              |
| USER-AUTH                 | 10000                                    | 10000                   | 10000                    | Y           | N              | N              |
| USER-PART-VARIANT         | 200                                      | 200                     | 200                      | Y           | N              | N              |
| VSC                       | 1000                                     | 1000                    | 1000                     | N           | Y              | N              |
| WIRETAP                   | 5000                                     | 6250                    | 6250                     | Y           | N              | N              |
| ZZZ-CODE                  | 1000                                     | 1000                    | 1000                     | Y           | N              | N              |

## Release 4.5.1

This section describes the Database Usage tables for small, medium, routeserver, LNP and Cable8 configurations in Release 4.5.1.

## Small Configuration Database Usage Defaults

[Table 2-20](#) details the predefined defaults for the Database Usage table for a small configuration in Release 4.5.1.

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults

| Table Name or Noun    | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP        | 1                                           | 1                          | 1                           | N           | Y              | N              |
| ACTIVITY              | 100                                         | 100                        | 100                         | Y           | Y              | Y              |
| ACTIVITY-BASE         | 100                                         | 100                        | 100                         | N           | N              | N              |
| AGGR                  | 380                                         | 380                        | 380                         | Y           | N              | N              |
| AGGR-PROFILE          | 10                                          | 10                         | 10                          | Y           | N              | N              |
| ANI                   | 100000                                      | 100000                     | 100000                      | N           | Y              | N              |
| ANI-SCREENING         | 1000                                        | 1300                       | 1300                        | Y           | N              | N              |
| ANI-SCREENING-PROFILE | 100                                         | 100                        | 100                         | Y           | N              | N              |

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| ANI-WB-LIST            | 5000                                        | 6250                       | 6250                        | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ANNC-TRUNK             | 240                                         | 240                        | 240                         | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| AOR2SUB                | 22500                                       | 22500                      | 22500                       | Y           | N              | N              |
| APP-SERVER             | 10                                          | 10                         | 10                          | Y           | Y              | N              |
| AUDIO-SEGMENT          | 5000                                        | 5000                       | 5000                        | N           | Y              | Y              |
| AUDIO-SEQ              | 1000                                        | 1000                       | 1000                        | N           | Y              | Y              |
| AUTH-CODE              | 50000                                       | 50000                      | 50000                       | N           | Y              | N              |
| AUTH-CODE-GRP          | 5000                                        | 5000                       | 5000                        | N           | Y              | N              |
| AUTH-REALM             | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| BACKHAUL-SET           | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CA-CONFIG              | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| CA-CONFIG-BASE         | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| CALL-AGENT             | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 4096                                        | 4096                       | 4096                        | Y           | N              | N              |
| CALL-SUBTYPE           | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| CALL-TYPE              | 100                                         | 100                        | 100                         | N           | N              | N              |
| CALL-TYPE-PROFILE      | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CARRIER                | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CASUAL-WB-LIST         | 33750                                       | 33750                      | 33750                       | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CENTREX-GRP            | 100                                         | 100                        | 100                         | Y           | Y              | N              |
| CHANGED-NUMBER         | 675                                         | 1000                       | 1000                        | Y           | N              | N              |
| CIPHERSUITE            | 380                                         | 380                        | 380                         | Y           | N              | N              |
| CIPHERSUITE-PROFILE    | 380                                         | 380                        | 380                         | N           | N              | N              |
| CIRCUIT-CODE           | 10                                          | 10                         | 10                          | Y           | N              | N              |
| CLLI-CODE              | 10                                          | 10                         | 10                          | N           | N              | N              |
| COS-RESTRICT           | 33750                                       | 33750                      | 33750                       | N           | Y              | N              |
| CPSG                   | 200                                         | 200                        | 200                         | Y           | Y              | N              |
| CUST-GRP               | 500                                         | 500                        | 500                         | N           | N              | Y              |

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| CUSTOM-DIAL-PLAN            | 2000                                        | 2000                       | 2000                        | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE    | 100                                         | 100                        | 100                         | N           | N              | N              |
| DB-THRESHOLDS               | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DB-USAGE                    | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DESTINATION                 | 500                                         | 500                        | 500                         | Y           | N              | N              |
| DIAL-PLAN                   | 200000                                      | 200000                     | 200000                      | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 200                                         | 200                        | 200                         | Y           | N              | N              |
| DIGIT-MAP                   | 110                                         | 110                        | 110                         | Y           | N              | N              |
| DIGMAN                      | 2175                                        | 2175                       | 2175                        | Y           | N              | N              |
| DIGMAN-PROFILE              | 435                                         | 435                        | 435                         | Y           | N              | N              |
| DN2CUST-GRP                 | 50000                                       | 50000                      | 50000                       | N           | N              | Y              |
| DN2GN                       | 100                                         | 100                        | 100                         | N           | N              | Y              |
| DN2RN                       | 100                                         | 100                        | 100                         | N           | N              | Y              |
| DN2SUBSCRIBER               | 67500                                       | 67500                      | 67500                       | Y           | N              | N              |
| DOMAIN2ROUTE                | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| DPC                         | 2048                                        | 2048                       | 2048                        | Y           | Y              | Y              |
| DS1                         | 800                                         | 800                        | 800                         | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST       | 50                                          | 50                         | 50                          | Y           | N              | N              |
| ENUM-CALL-TYPE              | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ENUM-PROFILE                | 1                                           | 1                          | 1                           | Y           | N              | Y              |
| ENUM-ROOT                   | 10                                          | 10                         | 10                          | Y           | N              | Y              |
| ESS                         | 10                                          | 10                         | 10                          | Y           | N              | N              |
| EXCHANGE-CODE               | 5000                                        | 5000                       | 5000                        | Y           | N              | N              |
| EXT2SUBSCRIBER              | 5000                                        | 5000                       | 5000                        | Y           | Y              | N              |
| FEATURE                     | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                        | 1000                       | 1000                        | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-SERVER              | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| FS-AUDIT-PROFILE            | 10                                          | 10                         | 10                          | N           | Y              | Y              |
| GTD-PARM-VALUES             | 100                                         | 100                        | 100                         | N           | N              | N              |
| H323-GW                     | 4                                           | 4                          | 4                           | Y           | N              | N              |
| H323-GW2GK                  | 100                                         | 100                        | 100                         | Y           | N              | N              |
| H323-TERM                   | 4500                                        | 4500                       | 4500                        | Y           | N              | N              |

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| H323-TERM-PROFILE      | 200                                         | 200                        | 200                         | Y           | N              | N              |
| H323-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| HTTP-FEATURE-SERVER    | 1                                           | 1                          | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST       | 500                                         | 500                        | 500                         | N           | N              | Y              |
| II-WB-LIST             | 4219                                        | 4219                       | 4219                        | N           | Y              | N              |
| INTL-DIAL-PLAN         | 1200                                        | 1200                       | 1200                        | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 4                                           | 4                          | 4                           | Y           | N              | N              |
| INTL-WB-LIST           | 33750                                       | 33750                      | 33750                       | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                           | 1                          | 1                           | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                         | 256                        | 256                         | Y           | N              | N              |
| IPSEC-POLICY           | 380                                         | 380                        | 380                         | Y           | N              | N              |
| IPSEC-SA               | 256                                         | 256                        | 256                         | Y           | N              | N              |
| ISDN-BCHAN             | 2400                                        | 2400                       | 2400                        | Y           | N              | N              |
| ISDN-DCHAN             | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ISDN-INTF              | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ISDN-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| IVR-SCRIPT-PROFILE     | 100                                         | 100                        | 100                         | N           | Y              | Y              |
| LANGUAGE               | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| LATA                   | 1000                                        | 1000                       | 1000                        | Y           | Y              | N              |
| LATA-MAP               | 150000                                      | 150000                     | 150000                      | Y           | Y              | N              |
| LNP-PROFILE            | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| LSA                    | 30000                                       | 30000                      | 30000                       | Y           | N              | N              |
| LSA-PROFILE            | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| MAC2SUB                | 22500                                       | 22500                      | 22500                       | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| MGW                    | 38000                                       | 38000                      | 38000                       | Y           | N              | N              |
| MGW-PROFILE            | 100                                         | 100                        | 100                         | Y           | N              | N              |
| MLHG                   | 100                                         | 100                        | 100                         | Y           | Y              | N              |
| MLHG-PREF-LIST         | 10                                          | 10                         | 10                          | Y           | N              | N              |
| MLHG-TERMINAL          | 500                                         | 500                        | 500                         | Y           | N              | N              |
| NATIONAL-WB-LIST       | 33750                                       | 43000                      | 43000                       | N           | Y              | N              |
| NDC                    | 50                                          | 50                         | 50                          | Y           | N              | N              |
| NOA                    | 0                                           | 0                          | 0                           | N           | N              | N              |
| NOA-ROUTE              | 100                                         | 100                        | 100                         | Y           | N              | N              |

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| NOA-ROUTE-PROFILE     | 100                                         | 100                        | 100                         | Y           | N              | N              |
| NOD                   | 100                                         | 100                        | 100                         | N           | N              | N              |
| NOD-RESTRICT-LIST     | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| NOD-WB-LIST           | 3375                                        | 3375                       | 3375                        | N           | Y              | N              |
| OCB-K-VALUE           | 27                                          | 27                         | 27                          | N           | Y              | N              |
| OCB-PROFILE           | 1                                           | 1                          | 1                           | N           | Y              | N              |
| OFFICE-CODE           | 50000                                       | 50000                      | 50000                       | Y           | Y              | N              |
| OPC                   | 8                                           | 8                          | 30                          | Y           | Y              | Y              |
| POLICY-NXX            | 100                                         | 100                        | 100                         | Y           | N              | Y              |
| POLICY-ODR            | 2500                                        | 2500                       | 2500                        | Y           | N              | Y              |
| POLICY-OLI            | 25                                          | 25                         | 25                          | Y           | N              | Y              |
| POLICY-PERCENT        | 100                                         | 100                        | 100                         | Y           | N              | Y              |
| POLICY-POP            | 125                                         | 125                        | 125                         | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                       | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-REGION         | 275                                         | 275                        | 275                         | Y           | N              | Y              |
| POLICY-TOD            | 100                                         | 100                        | 100                         | Y           | N              | Y              |
| POP                   | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 120000                                      | 120000                     | 120000                      | Y           | N              | N              |
| QOS                   | 380                                         | 380                        | 380                         | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                          | 20                         | 20                          | Y           | Y              | N              |
| REGION-CODE           | 800                                         | 800                        | 800                         | Y           | N              | N              |
| REGION-PROFILE        | 5000                                        | 7000                       | 7000                        | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| ROUTE                 | 250                                         | 250                        | 250                         | Y           | N              | N              |
| ROUTE-GUIDE           | 250                                         | 250                        | 250                         | Y           | N              | Y              |
| ROUTING-KEY           | 4096                                        | 4096                       | 4096                        | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 400                                         | 400                        | 400                         | Y           | N              | N              |
| SC1D                  | 9000                                        | 9000                       | 9000                        | N           | Y              | N              |
| SC2D                  | 9000                                        | 9000                       | 9000                        | N           | Y              | N              |
| SCCP-NW               | 255                                         | 255                        | 255                         | N           | Y              | Y              |
| SCCP-ROUTE            | 65535                                       | 65535                      | 65535                       | N           | Y              | Y              |
| SCRIPT                | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| SCTP-ASSOC            | 240                                         | 240                        | 240                         | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                         | 120                        | 120                         | Y           | Y              | Y              |

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| SERVICE                    | 2000                                        | 2000                       | 2000                        | N           | Y              | N              |
| SERVICE-PROVIDER           | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                       | 20000                      | 20000                       | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| SG                         | 20                                          | 20                         | 20                          | Y           | Y              | Y              |
| SG-GRP                     | 20                                          | 20                         | 20                          | Y           | Y              | Y              |
| SGP                        | 40                                          | 40                         | 40                          | Y           | Y              | Y              |
| SIP-TIMER-PROFILE          | 10                                          | 10                         | 10                          | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS        | 200                                         | 200                        | 200                         | Y           | N              | N              |
| SLE                        | 9000                                        | 9000                       | 9000                        | N           | Y              | N              |
| SLHR                       | 128                                         | 128                        | 128                         | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                          | 16                         | 16                          | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                        | 1100                       | 1100                        | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7-CIC                    | 18000                                       | 18000                      | 18000                       | Y           | N              | N              |
| STATIC-CONTACT             | 2250                                        | 2250                       | 2250                        | Y           | N              | N              |
| SUBSCRIBER                 | 45000                                       | 45000                      | 45000                       | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 270000                                      | 270000                     | 270000                      | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 100                                         | 100                        | 100                         | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 225000                                      | 225000                     | 225000                      | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 450                                         | 450                        | 450                         | N           | Y              | N              |
| SUBSYSTEM                  | 128                                         | 128                        | 128                         | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                          | 16                         | 16                          | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                          | 16                         | 16                          | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 110                                         | 110                        | 110                         | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                           | 4                          | 4                           | Y           | N              | N              |
| TERMINATION                | 60000                                       | 60000                      | 60000                       | Y           | N              | N              |
| TIMEZONE                   | 400                                         | 400                        | 400                         | N           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                          | 50                         | 50                          | N           | N              | N              |
| TRIGGER-ID                 | 100                                         | 100                        | 100                         | N           | N              | N              |

**Table 2-20** Release 4.5.1 Small Configuration Database Usage Defaults (continued)

| Table Name or Noun        | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| TRIGGER-NOD-ESCAPE-LIST   | 100                                         | 100                        | 100                         | Y           | N              | N              |
| TRUNK                     | 24000                                       | 24000                      | 24000                       | Y           | N              | N              |
| TRUNK-GRP                 | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA    | 100                                         | 100                        | 100                         | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE | 110                                         | 110                        | 110                         | Y           | Y              | N              |
| USER-AUTH                 | 22500                                       | 22500                      | 22500                       | Y           | N              | N              |
| USER-PART-VARIANT         | 200                                         | 200                        | 200                         | Y           | N              | N              |
| VAR-DEFAULT               | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| VSC                       | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| WIRETAP                   | 900                                         | 1125                       | 1125                        | Y           | N              | N              |
| ZZZ-CODE                  | 10                                          | 10                         | 10                          | Y           | N              | N              |

## Medium Configuration Database Usage Defaults

[Table 2-21](#) details the predefined defaults for the Database Usage table for a medium configuration in Release 4.5.1.

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults

| Table Name or Noun    | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP        | 50                                          | 50                         | 50                          | N           | Y              | N              |
| ACTIVITY              | 100                                         | 100                        | 100                         | Y           | Y              | Y              |
| ACTIVITY-BASE         | 100                                         | 100                        | 100                         | N           | N              | N              |
| AGGR                  | 3000                                        | 3000                       | 3000                        | Y           | N              | N              |
| AGGR-PROFILE          | 10                                          | 10                         | 10                          | Y           | N              | N              |
| ANI                   | 400000                                      | 400000                     | 400000                      | N           | Y              | N              |
| ANI-SCREENING         | 15000                                       | 18800                      | 18800                       | Y           | N              | N              |
| ANI-SCREENING-PROFILE | 1500                                        | 1500                       | 1500                        | Y           | N              | N              |
| ANI-WB-LIST           | 25000                                       | 31250                      | 31250                       | N           | N              | Y              |
| ANNC-TG-PROFILE       | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ANNC-TRUNK            | 12000                                       | 12000                      | 12000                       | Y           | N              | N              |
| ANNOUNCEMENT          | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| AOR2SUB               | 50000                                       | 50000                      | 50000                       | Y           | N              | N              |

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| APP-SERVER               | 500                                         | 500                        | 500                         | Y           | Y              | N              |
| AUDIO-SEGMENT            | 5000                                        | 5000                       | 5000                        | N           | Y              | Y              |
| AUDIO-SEQ                | 1000                                        | 1000                       | 1000                        | N           | Y              | Y              |
| AUTH-CODE                | 250000                                      | 250000                     | 250000                      | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                       | 25000                      | 25000                       | N           | Y              | N              |
| AUTH-REALM               | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| BACKHAUL-SET             | 2500                                        | 2500                       | 2500                        | Y           | N              | N              |
| CA-CONFIG                | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| CA-CONFIG-BASE           | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| CALL-AGENT               | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 15360                                       | 15360                      | 15360                       | Y           | N              | N              |
| CALL-SUBTYPE             | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| CALL-TYPE                | 100                                         | 100                        | 100                         | N           | N              | N              |
| CALL-TYPE-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CARRIER                  | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CASUAL-WB-LIST           | 112500                                      | 112500                     | 112500                      | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CENTREX-GRP              | 500                                         | 500                        | 500                         | Y           | Y              | N              |
| CHANGED-NUMBER           | 2250                                        | 3000                       | 3000                        | Y           | N              | N              |
| CIPHERSUITE              | 3000                                        | 3000                       | 3000                        | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 3000                                        | 3000                       | 3000                        | N           | N              | N              |
| CIRCUIT-CODE             | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| CLLI-CODE                | 500                                         | 500                        | 500                         | N           | N              | N              |
| COS-RESTRICT             | 112500                                      | 112500                     | 112500                      | N           | Y              | N              |
| CPSG                     | 1000                                        | 1000                       | 1000                        | Y           | Y              | N              |
| CUST-GRP                 | 2500                                        | 2500                       | 2500                        | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                       | 10000                      | 10000                       | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                         | 500                        | 500                         | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DB-USAGE                 | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DESTINATION              | 5000                                        | 5000                       | 5000                        | Y           | N              | N              |

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| DIAL-PLAN                   | 1000000                                     | 1000000                    | 1000000                     | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| DIGIT-MAP                   | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| DIGMAN                      | 13500                                       | 13500                      | 13500                       | Y           | N              | N              |
| DIGMAN-PROFILE              | 2700                                        | 2700                       | 2700                        | Y           | N              | N              |
| DN2CUST-GRP                 | 250000                                      | 250000                     | 250000                      | N           | N              | Y              |
| DN2GN                       | 100                                         | 100                        | 100                         | N           | N              | Y              |
| DN2RN                       | 100                                         | 100                        | 100                         | N           | N              | Y              |
| DN2SUBSCRIBER               | 225000                                      | 225000                     | 225000                      | Y           | N              | N              |
| DOMAIN2ROUTE                | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| DPC                         | 7680                                        | 7680                       | 7680                        | Y           | Y              | Y              |
| DS1                         | 4200                                        | 4200                       | 4200                        | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST       | 50                                          | 50                         | 50                          | Y           | N              | N              |
| ENUM-CALL-TYPE              | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ENUM-PROFILE                | 50                                          | 50                         | 50                          | Y           | N              | Y              |
| ENUM-ROOT                   | 10                                          | 10                         | 10                          | Y           | N              | Y              |
| ESS                         | 500                                         | 500                        | 500                         | Y           | N              | N              |
| EXCHANGE-CODE               | 50000                                       | 50000                      | 50000                       | Y           | N              | N              |
| EXT2SUBSCRIBER              | 25000                                       | 25000                      | 25000                       | Y           | Y              | N              |
| FEATURE                     | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                        | 1000                       | 1000                        | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-SERVER              | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| FS-AUDIT-PROFILE            | 10                                          | 10                         | 10                          | N           | Y              | Y              |
| GTD-PARM-VALUES             | 100                                         | 100                        | 100                         | N           | N              | N              |
| H323-GW                     | 4                                           | 4                          | 4                           | Y           | N              | N              |
| H323-GW2GK                  | 100                                         | 100                        | 100                         | Y           | N              | N              |
| H323-TERM                   | 15000                                       | 15000                      | 15000                       | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                         | 200                        | 200                         | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                         | 100                        | 100                         | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                           | 1                          | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                        | 2500                       | 2500                        | N           | N              | Y              |
| II-WB-LIST                  | 14063                                       | 14063                      | 14063                       | N           | Y              | N              |

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| INTL-DIAL-PLAN         | 60000                                       | 60000                      | 60000                       | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 200                                         | 200                        | 200                         | Y           | N              | N              |
| INTL-WB-LIST           | 112500                                      | 112500                     | 112500                      | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                           | 1                          | 1                           | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                         | 256                        | 256                         | Y           | N              | N              |
| IPSEC-POLICY           | 3000                                        | 3000                       | 3000                        | Y           | N              | N              |
| IPSEC-SA               | 256                                         | 256                        | 256                         | Y           | N              | N              |
| ISDN-BCHAN             | 60000                                       | 60000                      | 60000                       | Y           | N              | N              |
| ISDN-DCHAN             | 2500                                        | 2500                       | 2500                        | Y           | N              | N              |
| ISDN-INTF              | 2500                                        | 2500                       | 2500                        | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                         | 250                        | 250                         | Y           | N              | N              |
| IVR-SCRIPT-PROFILE     | 100                                         | 100                        | 100                         | N           | Y              | Y              |
| LANGUAGE               | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| LATA                   | 1000                                        | 1000                       | 1000                        | Y           | Y              | N              |
| LATA-MAP               | 150000                                      | 150000                     | 150000                      | Y           | Y              | N              |
| LNP-PROFILE            | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| LSA                    | 30000                                       | 30000                      | 30000                       | Y           | N              | N              |
| LSA-PROFILE            | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| MAC2SUB                | 50000                                       | 50000                      | 50000                       | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| MGW                    | 150000                                      | 150000                     | 150000                      | Y           | N              | N              |
| MGW-PROFILE            | 100                                         | 100                        | 100                         | Y           | N              | N              |
| MLHG                   | 20000                                       | 20000                      | 20000                       | Y           | Y              | N              |
| MLHG-PREF-LIST         | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| MLHG-TERMINAL          | 100000                                      | 100000                     | 100000                      | Y           | N              | N              |
| NATIONAL-WB-LIST       | 112500                                      | 141000                     | 141000                      | N           | Y              | N              |
| NDC                    | 800                                         | 800                        | 800                         | Y           | N              | N              |
| NOA                    | 0                                           | 0                          | 0                           | N           | N              | N              |
| NOA-ROUTE              | 100                                         | 100                        | 100                         | Y           | N              | N              |
| NOA-ROUTE-PROFILE      | 100                                         | 100                        | 100                         | Y           | N              | N              |
| NOD                    | 100                                         | 100                        | 100                         | N           | N              | N              |
| NOD-RESTRICT-LIST      | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| NOD-WB-LIST            | 11250                                       | 11250                      | 11250                       | N           | Y              | N              |
| OCB-K-VALUE            | 1350                                        | 1350                       | 1350                        | N           | Y              | N              |

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun     | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|------------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| OCB-PROFILE            | 50                                 | 50                   | 50                    | N        | Y           | N           |
| OFFICE-CODE            | 50000                              | 50000                | 50000                 | Y        | Y           | N           |
| OPC                    | 30                                 | 30                   | 30                    | Y        | Y           | Y           |
| POLICY-NXX             | 400                                | 400                  | 400                   | Y        | N           | Y           |
| POLICY-ODR             | 10000                              | 10000                | 10000                 | Y        | N           | Y           |
| POLICY-OLI             | 100                                | 100                  | 100                   | Y        | N           | Y           |
| POLICY-PERCENT         | 400                                | 400                  | 400                   | Y        | N           | Y           |
| POLICY-POP             | 12500                              | 12500                | 12500                 | Y        | N           | Y           |
| POLICY-PREFIX          | 10000                              | 10000                | 10000                 | Y        | N           | Y           |
| POLICY-REGION          | 1100                               | 1100                 | 1100                  | Y        | N           | Y           |
| POLICY-TOD             | 400                                | 400                  | 400                   | Y        | N           | Y           |
| POP                    | 500                                | 500                  | 500                   | Y        | Y           | Y           |
| PORTED-OFFICE-CODE     | 640000                             | 640000               | 640000                | Y        | N           | N           |
| QOS                    | 3000                               | 3000                 | 3000                  | Y        | N           | N           |
| RADIUS-PROFILE         | 20                                 | 20                   | 20                    | Y        | Y           | N           |
| REGION-CODE            | 800                                | 800                  | 800                   | Y        | N           | N           |
| REGION-PROFILE         | 20000                              | 25000                | 25000                 | Y        | N           | Y           |
| RELEASE-CAUSE          | 10000                              | 10000                | 10000                 | Y        | N           | N           |
| ROUTE                  | 2000                               | 2000                 | 2000                  | Y        | N           | N           |
| ROUTE-GUIDE            | 1000                               | 1000                 | 1000                  | Y        | N           | Y           |
| ROUTING-KEY            | 15360                              | 15360                | 15360                 | Y        | Y           | Y           |
| RUDDP-BACKHAUL-SESSION | 6000                               | 6000                 | 6000                  | Y        | N           | N           |
| SC1D                   | 30000                              | 30000                | 30000                 | N        | Y           | N           |
| SC2D                   | 30000                              | 30000                | 30000                 | N        | Y           | N           |
| SCCP-NW                | 255                                | 255                  | 255                   | N        | Y           | Y           |
| SCCP-ROUTE             | 65535                              | 65535                | 65535                 | N        | Y           | Y           |
| SCRIPT                 | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| SCTP-ASSOC             | 240                                | 240                  | 240                   | Y        | Y           | Y           |
| SCTP-ASSOC-PROFILE     | 120                                | 120                  | 120                   | Y        | Y           | Y           |
| SERVICE                | 2000                               | 2000                 | 2000                  | N        | Y           | N           |
| SERVICE-PROVIDER       | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| SERVICE-TRIGGER        | 20000                              | 20000                | 20000                 | Y        | N           | N           |
| SERVING-DOMAIN-NAME    | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| SG                     | 20                                 | 20                   | 20                    | Y        | Y           | Y           |

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| SG-GRP                     | 20                                          | 20                         | 20                          | Y           | Y              | Y              |
| SGP                        | 40                                          | 40                         | 40                          | Y           | Y              | Y              |
| SIP-TIMER-PROFILE          | 10                                          | 10                         | 10                          | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS        | 200                                         | 200                        | 200                         | Y           | N              | N              |
| SLE                        | 30000                                       | 30000                      | 30000                       | N           | Y              | N              |
| SLHR                       | 480                                         | 480                        | 480                         | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                          | 16                         | 16                          | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                        | 1100                       | 1100                        | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7-CIC                    | 96000                                       | 96000                      | 96000                       | Y           | N              | N              |
| STATIC-CONTACT             | 5000                                        | 5000                       | 5000                        | Y           | N              | N              |
| SUBSCRIBER                 | 150000                                      | 150000                     | 125000                      | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 900000                                      | 900000                     | 900000                      | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 5000                                        | 5000                       | 5000                        | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 1500000                                     | 1500000                    | 1500000                     | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 1500                                        | 1500                       | 1500                        | N           | Y              | N              |
| SUBSYSTEM                  | 480                                         | 480                        | 480                         | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                          | 16                         | 16                          | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                          | 16                         | 16                          | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                           | 4                          | 4                           | Y           | N              | N              |
| TERMINATION                | 180000                                      | 180000                     | 180000                      | Y           | N              | N              |
| TIMEZONE                   | 400                                         | 400                        | 400                         | N           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                          | 50                         | 50                          | N           | N              | N              |
| TRIGGER-ID                 | 100                                         | 100                        | 100                         | N           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                         | 100                        | 100                         | Y           | N              | N              |
| TRUNK                      | 100000                                      | 100000                     | 100000                      | Y           | N              | N              |
| TRUNK-GRP                  | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                                        | 1100                       | 1100                        | Y           | Y              | N              |

**Table 2-21** Release 4.5.1 Medium Configuration Database Usage Defaults (continued)

| Table Name or Noun | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|--------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| USER-AUTH          | 50000                              | 50000                | 50000                 | Y        | N           | N           |
| USER-PART-VARIANT  | 200                                | 200                  | 200                   | Y        | N           | N           |
| VAR-DEFAULT        | 1000                               | 1000                 | 1000                  | N        | N           | N           |
| VSC                | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| WIRETAP            | 3000                               | 3750                 | 3750                  | Y        | N           | N           |
| ZZZ-CODE           | 1000                               | 1000                 | 1000                  | Y        | N           | N           |

## Medium Configuration Database Usage Defaults - Generic Routing

Table 2-22 details the predefined defaults for the Database Usage table for a medium configuration - generic routing in Release 4.5.1.

**Table 2-22** Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing

| Table Name or Noun    | Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTCS | Route FSAIN |
|-----------------------|--------------------------|----------------------|-----------------------|----------|--------------|-------------|
| AAA-SERVER-GRP        | 50                       | 50                   | 50                    | N        | Y            | N           |
| ACTIVITY              | 100                      | 100                  | 100                   | Y        | Y            | Y           |
| ACTIVITY-BASE         | 100                      | 100                  | 100                   | N        | N            | N           |
| AGGR                  | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| AGGR-PROFILE          | 10                       | 10                   | 10                    | Y        | N            | N           |
| ANI                   | 400000                   | 400000               | 400000                | N        | Y            | N           |
| ANI-SCREENING         | 15000                    | 18800                | 18800                 | Y        | N            | N           |
| ANI-SCREENING-PROFILE | 1500                     | 1500                 | 1500                  | Y        | N            | N           |
| ANI-WB-LIST           | 25000                    | 31250                | 31250                 | N        | N            | Y           |
| ANNC-TG-PROFILE       | 100                      | 100                  | 100                   | Y        | N            | N           |
| ANNC-TRUNK            | 12000                    | 12000                | 12000                 | Y        | N            | N           |
| ANNOUNCEMENT          | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| AOR2SUB               | 33000                    | 33000                | 33000                 | Y        | N            | N           |
| APP-SERVER            | 500                      | 500                  | 500                   | Y        | Y            | N           |
| AUDIO-SEGMENT         | 5000                     | 5000                 | 5000                  | N        | Y            | Y           |
| AUDIO-SEQ             | 1000                     | 1000                 | 1000                  | N        | Y            | Y           |
| AUTH-CODE             | 250000                   | 250000               | 250000                | N        | Y            | N           |
| AUTH-CODE-GRP         | 25000                    | 25000                | 25000                 | N        | Y            | N           |
| AUTH-REALM            | 1000                     | 1000                 | 1000                  | Y        | N            | N           |

**Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)**

| Table Name or Noun       | Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTCS | Route FSAIN |
|--------------------------|--------------------------|----------------------|-----------------------|----------|--------------|-------------|
| BACKHAUL-SET             | 1500                     | 1500                 | 1500                  | Y        | N            | N           |
| CA-CONFIG                | 1000                     | 1000                 | 1000                  | Y        | Y            | Y           |
| CA-CONFIG-BASE           | 1000                     | 1000                 | 1000                  | Y        | Y            | Y           |
| CALL-AGENT               | 10                       | 10                   | 10                    | Y        | Y            | Y           |
| CALL-AGENT-PROFILE       | 10                       | 10                   | 10                    | Y        | Y            | Y           |
| CALL-CTRL-ROUTE          | 15360                    | 15360                | 15360                 | Y        | N            | N           |
| CALL-SUBTYPE             | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| CALL-TYPE                | 100                      | 100                  | 100                   | N        | N            | N           |
| CALL-TYPE-PROFILE        | 100                      | 100                  | 100                   | Y        | N            | N           |
| CARRIER                  | 10000                    | 10000                | 10000                 | Y        | N            | N           |
| CAS-TG-PROFILE           | 100                      | 100                  | 100                   | Y        | N            | N           |
| CASUAL-WB-LIST           | 75000                    | 75000                | 75000                 | N        | Y            | N           |
| CAUSE-CODE-MAP           | 2000                     | 2000                 | 2000                  | Y        | N            | N           |
| CAUSE-CODE-MAP-PROFILE   | 100                      | 100                  | 100                   | Y        | N            | N           |
| CENTREX-GRP              | 500                      | 500                  | 500                   | Y        | Y            | N           |
| CHANGED-NUMBER           | 1500                     | 2000                 | 2000                  | Y        | N            | N           |
| CIPHERSUITE              | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| CIPHERSUITE-PROFILE      | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| CIRCUIT-CODE             | 500                      | 500                  | 500                   | Y        | N            | N           |
| CLLI-CODE                | 500                      | 500                  | 500                   | N        | N            | N           |
| COS-RESTRICT             | 75000                    | 75000                | 75000                 | N        | Y            | N           |
| CPSG                     | 1000                     | 1000                 | 1000                  | Y        | Y            | N           |
| CUST-GRP                 | 2500                     | 2500                 | 2500                  | N        | N            | Y           |
| CUSTOM-DIAL-PLAN         | 10000                    | 10000                | 10000                 | N        | Y            | N           |
| CUSTOM-DIAL-PLAN-PROFILE | 500                      | 500                  | 500                   | N        | N            | N           |
| DB-THRESHOLDS            | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| DB-USAGE                 | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| DESTINATION              | 5000                     | 5000                 | 5000                  | Y        | N            | N           |
| DIAL-PLAN                | 1000000                  | 1000000              | 1000000               | Y        | N            | N           |
| DIAL-PLAN-PROFILE        | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| DIGIT-MAP                | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| DIGMAN                   | 13500                    | 13500                | 13500                 | Y        | N            | N           |
| DIGMAN-PROFILE           | 2700                     | 2700                 | 2700                  | Y        | N            | N           |
| DN2CUST-GRP              | 250000                   | 250000               | 250000                | N        | N            | Y           |
| DN2GN                    | 100                      | 100                  | 100                   | N        | N            | Y           |

**Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)**

| Table Name or Noun          | Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTCS | Route FSAIN |
|-----------------------------|--------------------------|----------------------|-----------------------|----------|--------------|-------------|
| DN2RN                       | 100                      | 100                  | 100                   | N        | N            | Y           |
| DN2SUBSCRIBER               | 150000                   | 150000               | 150000                | Y        | N            | N           |
| DOMAIN2ROUTE                | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| DPC                         | 7680                     | 7680                 | 7680                  | Y        | Y            | Y           |
| DS1                         | 4200                     | 4200                 | 4200                  | Y        | N            | N           |
| EMERGENCY-NUMBER-LIST       | 50                       | 50                   | 50                    | Y        | N            | N           |
| ENUM-CALL-TYPE              | 100                      | 100                  | 100                   | Y        | N            | N           |
| ENUM-PROFILE                | 50                       | 50                   | 50                    | Y        | N            | Y           |
| ENUM-ROOT                   | 10                       | 10                   | 10                    | Y        | N            | Y           |
| ESS                         | 500                      | 500                  | 500                   | Y        | N            | N           |
| EXCHANGE-CODE               | 50000                    | 50000                | 50000                 | Y        | N            | N           |
| EXT2SUBSCRIBER              | 25000                    | 25000                | 25000                 | Y        | Y            | N           |
| FEATURE                     | 1000                     | 1000                 | 1000                  | N        | Y            | N           |
| FEATURE-CONFIG              | 1000                     | 1000                 | 1000                  | N        | Y            | Y           |
| FEATURE-CONFIG-BASE         | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| FEATURE-SERVER              | 10                       | 10                   | 10                    | Y        | Y            | Y           |
| FS-AUDIT-PROFILE            | 10                       | 10                   | 10                    | N        | Y            | Y           |
| GTD-PARM-VALUES             | 100                      | 100                  | 100                   | N        | N            | N           |
| H323-GW                     | 4                        | 4                    | 4                     | Y        | N            | N           |
| H323-GW2GK                  | 100                      | 100                  | 100                   | Y        | N            | N           |
| H323-TERM                   | 10000                    | 10000                | 10000                 | Y        | N            | N           |
| H323-TERM-PROFILE           | 200                      | 200                  | 200                   | Y        | N            | N           |
| H323-TG-PROFILE             | 100                      | 100                  | 100                   | Y        | N            | N           |
| HTTP-FEATURE-SERVER         | 1                        | 1                    | 1                     | N        | Y            | N           |
| II-RESTRICT-LIST            | 2500                     | 2500                 | 2500                  | N        | N            | Y           |
| II-WB-LIST                  | 9375                     | 9375                 | 9375                  | N        | Y            | N           |
| INTL-DIAL-PLAN              | 60000                    | 60000                | 60000                 | Y        | N            | N           |
| INTL-DIAL-PLAN-PROFILE      | 200                      | 200                  | 200                   | Y        | N            | N           |
| INTL-WB-LIST                | 75000                    | 75000                | 75000                 | N        | Y            | N           |
| IPSEC-KERBEROS              | 1                        | 1                    | 1                     | Y        | N            | N           |
| IPSEC-KERBEROS-KEYS         | 256                      | 256                  | 256                   | Y        | N            | N           |
| IPSEC-POLICY                | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| IPSEC-SA                    | 256                      | 256                  | 256                   | Y        | N            | N           |
| ISDN-BCHAN                  | 36000                    | 36000                | 36000                 | Y        | N            | N           |

**Table 2-22** Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun  | Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTCS | Route FSAIN |
|---------------------|--------------------------|----------------------|-----------------------|----------|--------------|-------------|
| ISDN-DCHAN          | 1500                     | 1500                 | 1500                  | Y        | N            | N           |
| ISDN-INTF           | 1500                     | 1500                 | 1500                  | Y        | N            | N           |
| ISDN-TG-PROFILE     | 250                      | 250                  | 250                   | Y        | N            | N           |
| IVR-SCRIPT-PROFILE  | 100                      | 100                  | 100                   | N        | Y            | Y           |
| LANGUAGE            | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| LATA                | 1000                     | 1000                 | 1000                  | Y        | Y            | N           |
| LATA-MAP            | 150000                   | 150000               | 150000                | Y        | Y            | N           |
| LNP-PROFILE         | 10                       | 10                   | 10                    | Y        | Y            | Y           |
| LSA                 | 30000                    | 30000                | 30000                 | Y        | N            | N           |
| LSA-PROFILE         | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| MAC2SUB             | 33000                    | 33000                | 33000                 | N        | Y            | N           |
| MGCP-RETCODE-ACTION | 2000                     | 2000                 | 2000                  | Y        | N            | N           |
| MGW                 | 100000                   | 100000               | 100000                | Y        | N            | N           |
| MGW-PROFILE         | 100                      | 100                  | 100                   | Y        | N            | N           |
| MLHG                | 20000                    | 20000                | 20000                 | Y        | Y            | N           |
| MLHG-PREF-LIST      | 2000                     | 2000                 | 2000                  | Y        | N            | N           |
| MLHG-TERMINAL       | 100000                   | 100000               | 100000                | Y        | N            | N           |
| NATIONAL-WB-LIST    | 75000                    | 94000                | 94000                 | N        | Y            | N           |
| NDC                 | 800                      | 800                  | 800                   | Y        | N            | N           |
| NOA                 | 0                        | 0                    | 0                     | N        | N            | N           |
| NOA-ROUTE           | 100                      | 100                  | 100                   | Y        | N            | N           |
| NOA-ROUTE-PROFILE   | 100                      | 100                  | 100                   | Y        | N            | N           |
| NOD                 | 100                      | 100                  | 100                   | N        | N            | N           |
| NOD-RESTRICT-LIST   | 1000                     | 1000                 | 1000                  | N        | Y            | N           |
| NOD-WB-LIST         | 7500                     | 7500                 | 7500                  | N        | Y            | N           |
| OCB-K-VALUE         | 1350                     | 1350                 | 1350                  | N        | Y            | N           |
| OCB-PROFILE         | 50                       | 50                   | 50                    | N        | Y            | N           |
| OFFICE-CODE         | 50000                    | 50000                | 50000                 | Y        | Y            | N           |
| OPC                 | 30                       | 30                   | 30                    | Y        | Y            | Y           |
| POLICY-NXX          | 400                      | 400                  | 400                   | Y        | N            | Y           |
| POLICY-ODR          | 10000                    | 10000                | 10000                 | Y        | N            | Y           |
| POLICY-OLI          | 100                      | 100                  | 100                   | Y        | N            | Y           |
| POLICY-PERCENT      | 400                      | 400                  | 400                   | Y        | N            | Y           |
| POLICY-POP          | 12500                    | 12500                | 12500                 | Y        | N            | Y           |
| POLICY-PREFIX       | 10000                    | 10000                | 10000                 | Y        | N            | Y           |

**Table 2-22 Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)**

| Table Name or Noun    | Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTCS | Route FSAIN |
|-----------------------|--------------------------|----------------------|-----------------------|----------|--------------|-------------|
| POLICY-REGION         | 1100                     | 1100                 | 1100                  | Y        | N            | Y           |
| POLICY-TOD            | 400                      | 400                  | 400                   | Y        | N            | Y           |
| POP                   | 500                      | 500                  | 500                   | Y        | Y            | Y           |
| PORTED-OFFICE-CODE    | 640000                   | 640000               | 640000                | Y        | N            | N           |
| QOS                   | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| RADIUS-PROFILE        | 20                       | 20                   | 20                    | Y        | Y            | N           |
| REGION-CODE           | 800                      | 800                  | 800                   | Y        | N            | N           |
| REGION-PROFILE        | 20000                    | 25000                | 25000                 | Y        | N            | Y           |
| RELEASE-CAUSE         | 10000                    | 10000                | 10000                 | Y        | N            | N           |
| ROUTE                 | 2000                     | 2000                 | 2000                  | Y        | N            | N           |
| ROUTE-GUIDE           | 1000                     | 1000                 | 1000                  | Y        | N            | Y           |
| ROUTING-KEY           | 15360                    | 15360                | 15360                 | Y        | Y            | Y           |
| RUDP-BACKHAUL-SESSION | 6000                     | 6000                 | 6000                  | Y        | N            | N           |
| SC1D                  | 20000                    | 20000                | 20000                 | N        | Y            | N           |
| SC2D                  | 20000                    | 20000                | 20000                 | N        | Y            | N           |
| SCCP-NW               | 255                      | 255                  | 255                   | N        | Y            | Y           |
| SCCP-ROUTE            | 65535                    | 65535                | 65535                 | N        | Y            | Y           |
| SCRIPT                | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| SCTP-ASSOC            | 240                      | 240                  | 240                   | Y        | Y            | Y           |
| SCTP-ASSOC-PROFILE    | 120                      | 120                  | 120                   | Y        | Y            | Y           |
| SERVICE               | 2000                     | 2000                 | 2000                  | N        | Y            | N           |
| SERVICE-PROVIDER      | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| SERVICE-TRIGGER       | 20000                    | 20000                | 20000                 | Y        | N            | N           |
| SERVING-DOMAIN-NAME   | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| SG                    | 20                       | 20                   | 20                    | Y        | Y            | Y           |
| SG-GRP                | 20                       | 20                   | 20                    | Y        | Y            | Y           |
| SGP                   | 40                       | 40                   | 40                    | Y        | Y            | Y           |
| SIP-TIMER-PROFILE     | 10                       | 10                   | 10                    | Y        | N            | N           |
| SIPT-ISUP-VER-ALIAS   | 200                      | 200                  | 200                   | Y        | N            | N           |
| SLE                   | 20000                    | 20000                | 20000                 | N        | Y            | N           |
| SLHR                  | 480                      | 480                  | 480                   | N        | Y            | Y           |
| SLHR-PROFILE          | 16                       | 16                   | 16                    | N        | N            | N           |
| SOFTSW-TG-PROFILE     | 100                      | 100                  | 100                   | Y        | N            | N           |
| SPECIAL-CALL-TYPE     | 100                      | 100                  | 100                   | Y        | N            | N           |
| SPLIT-NPA             | 1100                     | 1100                 | 1100                  | Y        | Y            | N           |

**Table 2-22** Release 4.5.1 Medium Configuration Database Usage Defaults - Generic Routing (continued)

| Table Name or Noun         | Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTCS | Route FSAIN |
|----------------------------|--------------------------|----------------------|-----------------------|----------|--------------|-------------|
| SS7_Q761_TG_PROFILE        | 100                      | 100                  | 100                   | Y        | N            | N           |
| SS7_Q767_TG_PROFILE        | 100                      | 100                  | 100                   | Y        | N            | N           |
| SS7-ANSI-TG-PROFILE        | 100                      | 100                  | 100                   | Y        | N            | N           |
| SS7-CIC                    | 96000                    | 96000                | 96000                 | Y        | N            | N           |
| STATIC-CONTACT             | 3300                     | 3300                 | 3300                  | Y        | N            | N           |
| SUBSCRIBER                 | 100000                   | 100000               | 100000                | Y        | Y            | N           |
| SUBSCRIBER-FEATURE-DATA    | 600000                   | 600000               | 600000                | N        | Y            | N           |
| SUBSCRIBER-PROFILE         | 5000                     | 5000                 | 5000                  | Y        | Y            | N           |
| SUBSCRIBER-SERVICE-PROFILE | 1000000                  | 1000000              | 1000000               | Y        | Y            | N           |
| SUBSCRIBER-TOD-SCHEDULE    | 1000                     | 1000                 | 1000                  | N        | Y            | N           |
| SUBSYSTEM                  | 480                      | 480                  | 480                   | N        | Y            | Y           |
| SUBSYSTEM-GRP              | 16                       | 16                   | 16                    | N        | Y            | Y           |
| SUBSYSTEM-PROFILE          | 16                       | 16                   | 16                    | N        | Y            | Y           |
| TECH-PREFIX-GRP            | 1000                     | 1000                 | 1000                  | Y        | N            | N           |
| TECH-PREFIX-GRP-PROFILE    | 4                        | 4                    | 4                     | Y        | N            | N           |
| TERMINATION                | 180000                   | 180000               | 180000                | Y        | N            | N           |
| TIMEZONE                   | 400                      | 400                  | 400                   | N        | N            | N           |
| TRIGGER-DETECTION-POINT    | 50                       | 50                   | 50                    | N        | N            | N           |
| TRIGGER-ID                 | 100                      | 100                  | 100                   | N        | N            | N           |
| TRIGGER-NOD-ESCAPE-LIST    | 100                      | 100                  | 100                   | Y        | N            | N           |
| TRUNK                      | 100000                   | 100000               | 100000                | Y        | N            | N           |
| TRUNK-GRP                  | 10000                    | 10000                | 10000                 | Y        | N            | N           |
| TRUNK-GRP-FEATURE-DATA     | 1000                     | 1000                 | 1000                  | N        | Y            | N           |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                     | 1100                 | 1100                  | Y        | Y            | N           |
| USER-AUTH                  | 33000                    | 33000                | 33000                 | Y        | N            | N           |
| USER-PART-VARIANT          | 200                      | 200                  | 200                   | Y        | N            | N           |
| VAR-DEFAULT                | 1000                     | 1000                 | 1000                  | N        | N            | N           |
| VSC                        | 1000                     | 1000                 | 1000                  | N        | Y            | N           |
| WIRETAP                    | 2000                     | 2500                 | 2500                  | Y        | N            | N           |
| ZZZ-CODE                   | 500                      | 500                  | 500                   | Y        | N            | N           |

## Routeserver Configuration Database Usage Defaults

Table 2-19 details the predefined defaults for the Database Usage table for a routeserver configuration in Release 4.5.1.

**Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults**

| Table Name or Noun     | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|------------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| AAA-SERVER-GRP         | 26                                 | 26                   | 26                    | N        | Y           | N           |
| ACTIVITY               | 100                                | 100                  | 100                   | Y        | Y           | Y           |
| ACTIVITY-BASE          | 100                                | 100                  | 100                   | N        | N           | N           |
| AGGR                   | 380                                | 380                  | 380                   | Y        | N           | N           |
| AGGR-PROFILE           | 10                                 | 10                   | 10                    | Y        | N           | N           |
| ANI                    | 400000                             | 400000               | 400000                | N        | Y           | N           |
| ANI-SCREENING          | 25000                              | 31300                | 31300                 | Y        | N           | N           |
| ANI-SCREENING-PROFILE  | 2500                               | 2500                 | 2500                  | Y        | N           | N           |
| ANI-WB-LIST            | 25000                              | 31250                | 31250                 | N        | N           | Y           |
| ANNC-TG-PROFILE        | 100                                | 100                  | 100                   | Y        | N           | N           |
| ANNC-TRUNK             | 6120                               | 6120                 | 6120                  | Y        | N           | N           |
| ANNOUNCEMENT           | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| AOR2SUB                | 4500                               | 4500                 | 4500                  | Y        | N           | N           |
| APP-SERVER             | 255                                | 255                  | 255                   | Y        | Y           | N           |
| AUDIO-SEGMENT          | 5000                               | 5000                 | 5000                  | N        | Y           | Y           |
| AUDIO-SEQ              | 1000                               | 1000                 | 1000                  | N        | Y           | Y           |
| AUTH-CODE              | 250000                             | 250000               | 250000                | N        | Y           | N           |
| AUTH-CODE-GRP          | 25000                              | 25000                | 25000                 | N        | Y           | N           |
| AUTH-REALM             | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| BACKHAUL-SET           | 100                                | 100                  | 100                   | Y        | N           | N           |
| CA-CONFIG              | 1000                               | 1000                 | 1000                  | Y        | Y           | Y           |
| CA-CONFIG-BASE         | 1000                               | 1000                 | 1000                  | Y        | Y           | Y           |
| CALL-AGENT             | 10                                 | 10                   | 10                    | Y        | Y           | Y           |
| CALL-AGENT-PROFILE     | 10                                 | 10                   | 10                    | Y        | Y           | Y           |
| CALL-CTRL-ROUTE        | 10240                              | 10240                | 10240                 | Y        | N           | N           |
| CALL-SUBTYPE           | 1000                               | 1000                 | 1000                  | N        | N           | N           |
| CALL-TYPE              | 100                                | 100                  | 100                   | N        | N           | N           |
| CALL-TYPE-PROFILE      | 100                                | 100                  | 100                   | Y        | N           | N           |
| CARRIER                | 10000                              | 10000                | 10000                 | Y        | N           | N           |
| CAS-TG-PROFILE         | 100                                | 100                  | 100                   | Y        | N           | N           |
| CASUAL-WB-LIST         | 33750                              | 33750                | 33750                 | N        | Y           | N           |
| CAUSE-CODE-MAP         | 2000                               | 2000                 | 2000                  | Y        | N           | N           |
| CAUSE-CODE-MAP-PROFILE | 100                                | 100                  | 100                   | Y        | N           | N           |
| CENTREX-GRP            | 100                                | 100                  | 100                   | Y        | Y           | N           |

**Table 2-23** Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

| Table Name or Noun       | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| CHANGED-NUMBER           | 675                                      | 1000                       | 1000                        | Y           | N              | N              |
| CIPHERSUITE              | 380                                      | 380                        | 380                         | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 380                                      | 380                        | 380                         | N           | N              | N              |
| CIRCUIT-CODE             | 255                                      | 255                        | 255                         | Y           | N              | N              |
| CLLI-CODE                | 255                                      | 255                        | 255                         | N           | N              | N              |
| COS-RESTRICT             | 33750                                    | 33750                      | 33750                       | N           | Y              | N              |
| CPSG                     | 200                                      | 200                        | 200                         | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                       | 2500                        | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 2000                                     | 2000                       | 2000                        | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 100                                      | 100                        | 100                         | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| DESTINATION              | 1000000                                  | 1000000                    | 1000000                     | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                    | 1000000                     | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DIGMAN                   | 25000                                    | 25000                      | 25000                       | Y           | N              | N              |
| DIGMAN-PROFILE           | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                     | 250000                      | N           | N              | Y              |
| DN2GN                    | 10000                                    | 10000                      | 10000                       | N           | N              | Y              |
| DN2RN                    | 100                                      | 100                        | 100                         | N           | N              | Y              |
| DN2SUBSCRIBER            | 67500                                    | 67500                      | 67500                       | Y           | N              | N              |
| DOMAIN2ROUTE             | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DPC                      | 5120                                     | 5120                       | 5120                        | Y           | Y              | Y              |
| DS1                      | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST    | 50                                       | 50                         | 50                          | Y           | N              | N              |
| ENUM-CALL-TYPE           | 100                                      | 100                        | 100                         | Y           | N              | N              |
| ENUM-PROFILE             | 26                                       | 26                         | 26                          | Y           | N              | Y              |
| ENUM-ROOT                | 10                                       | 10                         | 10                          | Y           | N              | Y              |
| ESS                      | 255                                      | 255                        | 255                         | Y           | N              | N              |
| EXCHANGE-CODE            | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| EXT2SUBSCRIBER           | 5000                                     | 5000                       | 5000                        | Y           | Y              | N              |
| FEATURE                  | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| FEATURE-CONFIG           | 1000                                     | 1000                       | 1000                        | N           | Y              | Y              |
| FEATURE-CONFIG-BASE      | 1000                                     | 1000                       | 1000                        | N           | N              | N              |

**Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)**

| Table Name or Noun          | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| FS-AUDIT-PROFILE            | 10                                       | 10                         | 10                          | N           | Y              | Y              |
| GTD-PARM-VALUES             | 100                                      | 100                        | 100                         | N           | N              | N              |
| H323-GW                     | 4                                        | 4                          | 4                           | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                        | 100                         | Y           | N              | N              |
| H323-TERM                   | 4500                                     | 4500                       | 4500                        | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                        | 200                         | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                        | 100                         | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                          | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                     | 2500                       | 2500                        | N           | N              | Y              |
| II-WB-LIST                  | 4219                                     | 4219                       | 4219                        | N           | Y              | N              |
| INTL-DIAL-PLAN              | 3000                                     | 3000                       | 3000                        | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 10                                       | 10                         | 10                          | Y           | N              | N              |
| INTL-WB-LIST                | 33750                                    | 33750                      | 33750                       | N           | Y              | N              |
| IPSEC-KERBEROS              | 1                                        | 1                          | 1                           | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS         | 256                                      | 256                        | 256                         | Y           | N              | N              |
| IPSEC-POLICY                | 380                                      | 380                        | 380                         | Y           | N              | N              |
| IPSEC-SA                    | 256                                      | 256                        | 256                         | Y           | N              | N              |
| ISDN-BCHAN                  | 2400                                     | 2400                       | 2400                        | Y           | N              | N              |
| ISDN-DCHAN                  | 100                                      | 100                        | 100                         | Y           | N              | N              |
| ISDN-INTF                   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| ISDN-TG-PROFILE             | 100                                      | 100                        | 100                         | Y           | N              | N              |
| IVR-SCRIPT-PROFILE          | 100                                      | 100                        | 100                         | N           | Y              | Y              |
| LANGUAGE                    | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| LATA                        | 1000                                     | 1000                       | 1000                        | Y           | Y              | N              |
| LATA-MAP                    | 150000                                   | 150000                     | 150000                      | Y           | Y              | N              |
| LNP-PROFILE                 | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| LSA                         | 30000                                    | 30000                      | 30000                       | Y           | N              | N              |
| LSA-PROFILE                 | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| MAC2SUB                     | 4500                                     | 4500                       | 4500                        | N           | Y              | N              |
| MGCP-RETCODE-ACTION         | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| MGW                         | 38000                                    | 38000                      | 38000                       | Y           | N              | N              |
| MGW-PROFILE                 | 100                                      | 100                        | 100                         | Y           | N              | N              |
| MLHG                        | 100                                      | 100                        | 100                         | Y           | Y              | N              |

**Table 2-23** Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| MLHG-PREF-LIST        | 10                                       | 10                         | 10                          | Y           | N              | N              |
| MLHG-TERMINAL         | 500                                      | 500                        | 500                         | Y           | N              | N              |
| NATIONAL-WB-LIST      | 33750                                    | 43000                      | 43000                       | N           | Y              | N              |
| NDC                   | 800                                      | 800                        | 800                         | Y           | N              | N              |
| NOA                   | 0                                        | 0                          | 0                           | N           | N              | N              |
| NOA-ROUTE             | 100                                      | 100                        | 100                         | Y           | N              | N              |
| NOA-ROUTE-PROFILE     | 100                                      | 100                        | 100                         | Y           | N              | N              |
| NOD                   | 100                                      | 100                        | 100                         | N           | N              | N              |
| NOD-RESTRICT-LIST     | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| NOD-WB-LIST           | 3375                                     | 3375                       | 3375                        | N           | Y              | N              |
| OCB-K-VALUE           | 689                                      | 689                        | 689                         | N           | Y              | N              |
| OCB-PROFILE           | 26                                       | 26                         | 26                          | N           | Y              | N              |
| OFFICE-CODE           | 50000                                    | 50000                      | 50000                       | Y           | Y              | N              |
| OPC                   | 20                                       | 20                         | 30                          | Y           | Y              | Y              |
| POLICY-NXX            | 8000                                     | 8000                       | 8000                        | Y           | N              | Y              |
| POLICY-ODR            | 80000                                    | 80000                      | 80000                       | Y           | N              | Y              |
| POLICY-OLI            | 8000                                     | 8000                       | 8000                        | Y           | N              | Y              |
| POLICY-PERCENT        | 80000                                    | 80000                      | 80000                       | Y           | N              | Y              |
| POLICY-POP            | 80000                                    | 80000                      | 80000                       | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-REGION         | 88000                                    | 88000                      | 88000                       | Y           | N              | Y              |
| POLICY-TOD            | 120000                                   | 120000                     | 120000                      | Y           | N              | Y              |
| POP                   | 255                                      | 255                        | 255                         | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                     | 640000                      | Y           | N              | N              |
| QOS                   | 380                                      | 380                        | 380                         | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                         | 20                          | Y           | Y              | N              |
| REGION-CODE           | 800                                      | 800                        | 800                         | Y           | N              | N              |
| REGION-PROFILE        | 800000                                   | 1000000                    | 1000000                     | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                      | 10000                       | Y           | N              | N              |
| ROUTE                 | 600000                                   | 600000                     | 600000                      | Y           | N              | N              |
| ROUTE-GUIDE           | 80000                                    | 80000                      | 80000                       | Y           | N              | Y              |
| ROUTING-KEY           | 10240                                    | 10240                      | 10240                       | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 400                                      | 400                        | 400                         | Y           | N              | N              |
| SC1D                  | 9000                                     | 9000                       | 9000                        | N           | Y              | N              |
| SC2D                  | 9000                                     | 9000                       | 9000                        | N           | Y              | N              |

**Table 2-23 Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)**

| Table Name or Noun         | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|----------------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| SCCP-NW                    | 255                                | 255                  | 255                   | N        | Y           | Y           |
| SCCP-ROUTE                 | 65535                              | 65535                | 65535                 | N        | Y           | Y           |
| SCRIPT                     | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| SCTP-ASSOC                 | 240                                | 240                  | 240                   | Y        | Y           | Y           |
| SCTP-ASSOC-PROFILE         | 120                                | 120                  | 120                   | Y        | Y           | Y           |
| SERVICE                    | 2000                               | 2000                 | 2000                  | N        | Y           | N           |
| SERVICE-PROVIDER           | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| SERVICE-TRIGGER            | 20000                              | 20000                | 20000                 | Y        | N           | N           |
| SERVING-DOMAIN-NAME        | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| SG                         | 20                                 | 20                   | 20                    | Y        | Y           | Y           |
| SG-GRP                     | 20                                 | 20                   | 20                    | Y        | Y           | Y           |
| SGP                        | 40                                 | 40                   | 40                    | Y        | Y           | Y           |
| SIP-TIMER-PROFILE          | 10                                 | 10                   | 10                    | Y        | N           | N           |
| SIPT-ISUP-VER-ALIAS        | 200                                | 200                  | 200                   | Y        | N           | N           |
| SLE                        | 9000                               | 9000                 | 9000                  | N        | Y           | N           |
| SLHR                       | 320                                | 320                  | 320                   | N        | Y           | Y           |
| SLHR-PROFILE               | 16                                 | 16                   | 16                    | N        | N           | N           |
| SOFTSW-TG-PROFILE          | 100                                | 100                  | 100                   | Y        | N           | N           |
| SPECIAL-CALL-TYPE          | 100                                | 100                  | 100                   | Y        | N           | N           |
| SPLIT-NPA                  | 1100                               | 1100                 | 1100                  | Y        | Y           | N           |
| SS7_Q761_TG_PROFILE        | 100                                | 100                  | 100                   | Y        | N           | N           |
| SS7_Q767_TG_PROFILE        | 100                                | 100                  | 100                   | Y        | N           | N           |
| SS7-ANSI-TG-PROFILE        | 100                                | 100                  | 100                   | Y        | N           | N           |
| SS7-CIC                    | 18000                              | 18000                | 18000                 | Y        | N           | N           |
| STATIC-CONTACT             | 450                                | 450                  | 450                   | Y        | N           | N           |
| SUBSCRIBER                 | 45000                              | 45000                | 45000                 | Y        | Y           | N           |
| SUBSCRIBER-FEATURE-DATA    | 270000                             | 270000               | 270000                | N        | Y           | N           |
| SUBSCRIBER-PROFILE         | 2550                               | 2550                 | 2550                  | Y        | Y           | N           |
| SUBSCRIBER-SERVICE-PROFILE | 225000                             | 225000               | 225000                | Y        | Y           | N           |
| SUBSCRIBER-TOD-SCHEDULE    | 450                                | 450                  | 450                   | N        | Y           | N           |
| SUBSYSTEM                  | 320                                | 320                  | 320                   | N        | Y           | Y           |
| SUBSYSTEM-GRP              | 16                                 | 16                   | 16                    | N        | Y           | Y           |
| SUBSYSTEM-PROFILE          | 16                                 | 16                   | 16                    | N        | Y           | Y           |
| TECH-PREFIX-GRP            | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| TECH-PREFIX-GRP-PROFILE    | 4                                  | 4                    | 4                     | Y        | N           | N           |

**Table 2-23** Release 4.5.1 Routeserver Configuration Database Usage Defaults (continued)

| Table Name or Noun        | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|---------------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| TERMINATION               | 60000                              | 60000                | 60000                 | Y        | N           | N           |
| TIMEZONE                  | 400                                | 400                  | 400                   | N        | N           | N           |
| TRIGGER-DETECTION-POINT   | 50                                 | 50                   | 50                    | N        | N           | N           |
| TRIGGER-ID                | 100                                | 100                  | 100                   | N        | N           | N           |
| TRIGGER-NOD-ESCAPE-LIST   | 100                                | 100                  | 100                   | Y        | N           | N           |
| TRUNK                     | 32000                              | 32000                | 32000                 | Y        | N           | N           |
| TRUNK-GRP                 | 25000                              | 25000                | 25000                 | Y        | N           | N           |
| TRUNK-GRP-FEATURE-DATA    | 2500                               | 2500                 | 2500                  | N        | Y           | N           |
| TRUNK-GRP-SERVICE-PROFILE | 2750                               | 2750                 | 2750                  | Y        | Y           | N           |
| USER-AUTH                 | 4500                               | 4500                 | 4500                  | Y        | N           | N           |
| USER-PART-VARIANT         | 200                                | 200                  | 200                   | Y        | N           | N           |
| VAR-DEFAULT               | 1000                               | 1000                 | 1000                  | N        | N           | N           |
| VSC                       | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| WIRETAP                   | 900                                | 1125                 | 1125                  | Y        | N           | N           |
| ZZZ-CODE                  | 255                                | 255                  | 255                   | Y        | N           | N           |

## Local Number Portability Database Usage Defaults

Table 2-24 details the predefined defaults for the Database Usage table for Local Number Portability in Release 4.5.1.

**Table 2-24** Release 4.5.1 Local Number Portability Database Usage Defaults

| Table Name or Noun    | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|-----------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| AAA-SERVER-GRP        | 26                                 | 26                   | 26                    | N        | Y           | N           |
| ACTIVITY              | 100                                | 100                  | 100                   | Y        | Y           | Y           |
| ACTIVITY-BASE         | 100                                | 100                  | 100                   | N        | N           | N           |
| AGGR                  | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| AGGR-PROFILE          | 10                                 | 10                   | 10                    | Y        | N           | N           |
| ANI                   | 400000                             | 400000               | 400000                | N        | Y           | N           |
| ANI-SCREENING         | 15000                              | 18800                | 18800                 | Y        | N           | N           |
| ANI-SCREENING-PROFILE | 1500                               | 1500                 | 1500                  | Y        | N           | N           |
| ANI-WB-LIST           | 25000                              | 31250                | 31250                 | N        | N           | Y           |
| ANNC-TG-PROFILE       | 100                                | 100                  | 100                   | Y        | N           | N           |
| ANNC-TRUNK            | 6120                               | 6120                 | 6120                  | Y        | N           | N           |

**Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun       | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| ANNOUNCEMENT             | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| AOR2SUB                  | 50000                                    | 50000                      | 50000                       | Y           | N              | N              |
| APP-SERVER               | 255                                      | 255                        | 255                         | Y           | Y              | N              |
| AUDIO-SEGMENT            | 5000                                     | 5000                       | 5000                        | N           | Y              | Y              |
| AUDIO-SEQ                | 1000                                     | 1000                       | 1000                        | N           | Y              | Y              |
| AUTH-CODE                | 250000                                   | 250000                     | 250000                      | N           | Y              | N              |
| AUTH-CODE-GRP            | 25000                                    | 25000                      | 25000                       | N           | Y              | N              |
| AUTH-REALM               | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| BACKHAUL-SET             | 1500                                     | 1500                       | 1500                        | Y           | N              | N              |
| CA-CONFIG                | 1000                                     | 1000                       | 1000                        | Y           | Y              | Y              |
| CA-CONFIG-BASE           | 1000                                     | 1000                       | 1000                        | Y           | Y              | Y              |
| CALL-AGENT               | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| CALL-AGENT-PROFILE       | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 15360                                    | 15360                      | 15360                       | Y           | N              | N              |
| CALL-SUBTYPE             | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| CALL-TYPE                | 100                                      | 100                        | 100                         | N           | N              | N              |
| CALL-TYPE-PROFILE        | 100                                      | 100                        | 100                         | Y           | N              | N              |
| CARRIER                  | 10000                                    | 10000                      | 10000                       | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                        | 100                         | Y           | N              | N              |
| CASUAL-WB-LIST           | 112500                                   | 112500                     | 112500                      | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| CENTREX-GRP              | 500                                      | 500                        | 500                         | Y           | Y              | N              |
| CHANGED-NUMBER           | 2250                                     | 3000                       | 3000                        | Y           | N              | N              |
| CIPHERSUITE              | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| CIRCUIT-CODE             | 255                                      | 255                        | 255                         | Y           | N              | N              |
| CLLI-CODE                | 255                                      | 255                        | 255                         | N           | N              | N              |
| COS-RESTRICT             | 112500                                   | 112500                     | 112500                      | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                       | 1000                        | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                       | 2500                        | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                      | 10000                       | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                        | 500                         | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                       | 1000                        | N           | N              | N              |

**Table 2-24** Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| DESTINATION                 | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| DIAL-PLAN                   | 1000000                                  | 1000000                    | 1000000                     | Y           | N              | N              |
| DIAL-PLAN-PROFILE           | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DIGIT-MAP                   | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DIGMAN                      | 13500                                    | 13500                      | 13500                       | Y           | N              | N              |
| DIGMAN-PROFILE              | 2700                                     | 2700                       | 2700                        | Y           | N              | N              |
| DN2CUST-GRP                 | 250000                                   | 250000                     | 250000                      | N           | N              | Y              |
| DN2GN                       | 5000000                                  | 5000000                    | 5000000                     | N           | N              | Y              |
| DN2RN                       | 100                                      | 100                        | 100                         | N           | N              | Y              |
| DN2SUBSCRIBER               | 225000                                   | 225000                     | 225000                      | Y           | N              | N              |
| DOMAIN2ROUTE                | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DPC                         | 7680                                     | 7680                       | 7680                        | Y           | Y              | Y              |
| DS1                         | 4200                                     | 4200                       | 4200                        | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST       | 50                                       | 50                         | 50                          | Y           | N              | N              |
| ENUM-CALL-TYPE              | 100                                      | 100                        | 100                         | Y           | N              | N              |
| ENUM-PROFILE                | 26                                       | 26                         | 26                          | Y           | N              | Y              |
| ENUM-ROOT                   | 10                                       | 10                         | 10                          | Y           | N              | Y              |
| ESS                         | 255                                      | 255                        | 255                         | Y           | N              | N              |
| EXCHANGE-CODE               | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| EXT2SUBSCRIBER              | 25000                                    | 25000                      | 25000                       | Y           | Y              | N              |
| FEATURE                     | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                     | 1000                       | 1000                        | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| FS-AUDIT-PROFILE            | 10                                       | 10                         | 10                          | N           | Y              | Y              |
| GTD-PARM-VALUES             | 100                                      | 100                        | 100                         | N           | N              | N              |
| H323-GW                     | 4                                        | 4                          | 4                           | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                        | 100                         | Y           | N              | N              |
| H323-TERM                   | 15000                                    | 15000                      | 15000                       | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                        | 200                         | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                        | 100                         | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                          | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                     | 2500                       | 2500                        | N           | N              | Y              |
| II-WB-LIST                  | 14063                                    | 14063                      | 14063                       | N           | Y              | N              |

**Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun     | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| INTL-DIAL-PLAN         | 3000                                     | 3000                       | 3000                        | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE | 10                                       | 10                         | 10                          | Y           | N              | N              |
| INTL-WB-LIST           | 112500                                   | 112500                     | 112500                      | N           | Y              | N              |
| IPSEC-KERBEROS         | 1                                        | 1                          | 1                           | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS    | 256                                      | 256                        | 256                         | Y           | N              | N              |
| IPSEC-POLICY           | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| IPSEC-SA               | 256                                      | 256                        | 256                         | Y           | N              | N              |
| ISDN-BCHAN             | 36000                                    | 36000                      | 36000                       | Y           | N              | N              |
| ISDN-DCHAN             | 1500                                     | 1500                       | 1500                        | Y           | N              | N              |
| ISDN-INTF              | 1500                                     | 1500                       | 1500                        | Y           | N              | N              |
| ISDN-TG-PROFILE        | 250                                      | 250                        | 250                         | Y           | N              | N              |
| IVR-SCRIPT-PROFILE     | 100                                      | 100                        | 100                         | N           | Y              | Y              |
| LANGUAGE               | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| LATA                   | 1000                                     | 1000                       | 1000                        | Y           | Y              | N              |
| LATA-MAP               | 150000                                   | 150000                     | 150000                      | Y           | Y              | N              |
| LNP-PROFILE            | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| LSA                    | 30000                                    | 30000                      | 30000                       | Y           | N              | N              |
| LSA-PROFILE            | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| MAC2SUB                | 50000                                    | 50000                      | 50000                       | N           | Y              | N              |
| MGCP-RETCODE-ACTION    | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| MGW                    | 100000                                   | 100000                     | 100000                      | Y           | N              | N              |
| MGW-PROFILE            | 100                                      | 100                        | 100                         | Y           | N              | N              |
| MLHG                   | 10000                                    | 10000                      | 10000                       | Y           | Y              | N              |
| MLHG-PREF-LIST         | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| MLHG-TERMINAL          | 50000                                    | 50000                      | 50000                       | Y           | N              | N              |
| NATIONAL-WB-LIST       | 112500                                   | 141000                     | 141000                      | N           | Y              | N              |
| NDC                    | 50                                       | 50                         | 50                          | Y           | N              | N              |
| NOA                    | 0                                        | 0                          | 0                           | N           | N              | N              |
| NOA-ROUTE              | 100                                      | 100                        | 100                         | Y           | N              | N              |
| NOA-ROUTE-PROFILE      | 100                                      | 100                        | 100                         | Y           | N              | N              |
| NOD                    | 100                                      | 100                        | 100                         | N           | N              | N              |
| NOD-RESTRICT-LIST      | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| NOD-WB-LIST            | 11250                                    | 11250                      | 11250                       | N           | Y              | N              |
| OCB-K-VALUE            | 689                                      | 689                        | 689                         | N           | Y              | N              |
| OCB-PROFILE            | 26                                       | 26                         | 26                          | N           | Y              | N              |

**Table 2-24** Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun    | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| OFFICE-CODE           | 50000                                    | 50000                      | 50000                       | Y           | Y              | N              |
| OPC                   | 30                                       | 30                         | 30                          | Y           | Y              | Y              |
| POLICY-NXX            | 400                                      | 400                        | 400                         | Y           | N              | Y              |
| POLICY-ODR            | 10000                                    | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-OLI            | 100                                      | 100                        | 100                         | Y           | N              | Y              |
| POLICY-PERCENT        | 400                                      | 400                        | 400                         | Y           | N              | Y              |
| POLICY-POP            | 12500                                    | 12500                      | 12500                       | Y           | N              | Y              |
| POLICY-PREFIX         | 10000                                    | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-REGION         | 1100                                     | 1100                       | 1100                        | Y           | N              | Y              |
| POLICY-TOD            | 400                                      | 400                        | 400                         | Y           | N              | Y              |
| POP                   | 255                                      | 255                        | 255                         | Y           | Y              | Y              |
| PORTED-OFFICE-CODE    | 640000                                   | 640000                     | 640000                      | Y           | N              | N              |
| QOS                   | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                         | 20                          | Y           | Y              | N              |
| REGION-CODE           | 800                                      | 800                        | 800                         | Y           | N              | N              |
| REGION-PROFILE        | 20000                                    | 25000                      | 25000                       | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                      | 10000                       | Y           | N              | N              |
| ROUTE                 | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| ROUTE-GUIDE           | 1000                                     | 1000                       | 1000                        | Y           | N              | Y              |
| ROUTING-KEY           | 15360                                    | 15360                      | 15360                       | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 6000                                     | 6000                       | 6000                        | Y           | N              | N              |
| SC1D                  | 30000                                    | 30000                      | 30000                       | N           | Y              | N              |
| SC2D                  | 30000                                    | 30000                      | 30000                       | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                        | 255                         | N           | Y              | Y              |
| SCCP-ROUTE            | 65535                                    | 65535                      | 65535                       | N           | Y              | Y              |
| SCRIPT                | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| SCTP-ASSOC            | 240                                      | 240                        | 240                         | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                        | 120                         | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                       | 2000                        | N           | Y              | N              |
| SERVICE-PROVIDER      | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                      | 20000                       | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| SG                    | 20                                       | 20                         | 20                          | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                         | 20                          | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                         | 40                          | Y           | Y              | Y              |

**Table 2-24** Release 4.5.1 Local Number Portability Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| SIP-TIMER-PROFILE          | 10                                       | 10                         | 10                          | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS        | 200                                      | 200                        | 200                         | Y           | N              | N              |
| SLE                        | 30000                                    | 30000                      | 30000                       | N           | Y              | N              |
| SLHR                       | 480                                      | 480                        | 480                         | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                       | 16                         | 16                          | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                     | 1100                       | 1100                        | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SS7-CIC                    | 96000                                    | 96000                      | 96000                       | Y           | N              | N              |
| STATIC-CONTACT             | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| SUBSCRIBER                 | 150000                                   | 150000                     | 125000                      | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 900000                                   | 900000                     | 900000                      | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 2550                                     | 2550                       | 2550                        | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 1500000                                  | 1500000                    | 1500000                     | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 1500                                     | 1500                       | 1500                        | N           | Y              | N              |
| SUBSYSTEM                  | 480                                      | 480                        | 480                         | N           | Y              | Y              |
| SUBSYSTEM-GRP              | 16                                       | 16                         | 16                          | N           | Y              | Y              |
| SUBSYSTEM-PROFILE          | 16                                       | 16                         | 16                          | N           | Y              | Y              |
| TECH-PREFIX-GRP            | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE    | 4                                        | 4                          | 4                           | Y           | N              | N              |
| TERMINATION                | 180000                                   | 180000                     | 180000                      | Y           | N              | N              |
| TIMEZONE                   | 400                                      | 400                        | 400                         | N           | N              | N              |
| TRIGGER-DETECTION-POINT    | 50                                       | 50                         | 50                          | N           | N              | N              |
| TRIGGER-ID                 | 100                                      | 100                        | 100                         | N           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                      | 100                        | 100                         | Y           | N              | N              |
| TRUNK                      | 100000                                   | 100000                     | 100000                      | Y           | N              | N              |
| TRUNK-GRP                  | 10000                                    | 10000                      | 10000                       | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA     | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                                     | 1100                       | 1100                        | Y           | Y              | N              |
| USER-AUTH                  | 50000                                    | 50000                      | 50000                       | Y           | N              | N              |
| USER-PART-VARIANT          | 200                                      | 200                        | 200                         | Y           | N              | N              |
| VAR-DEFAULT                | 1000                                     | 1000                       | 1000                        | N           | N              | N              |

**Table 2-24 Release 4.5.1 Local Number Portability Database Usage Defaults (continued)**

| Table Name or Noun | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|--------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| VSC                | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| WIRETAP            | 3000                               | 3750                 | 3750                  | Y        | N           | N           |
| ZZZ-CODE           | 255                                | 255                  | 255                   | Y        | N           | N           |

## Local Number Portability Database Usage Defaults - Routing Number

[Table 2-25](#) details the predefined defaults for the Database Usage table for Local Number Portability - Routing Number in Release 4.5.1.

**Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number**

| Table Name or Noun    | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|-----------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| AAA-SERVER-GRP        | 26                                 | 26                   | 26                    | N        | Y           | N           |
| ACTIVITY              | 100                                | 100                  | 100                   | Y        | Y           | Y           |
| ACTIVITY-BASE         | 100                                | 100                  | 100                   | N        | N           | N           |
| AGGR                  | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| AGGR-PROFILE          | 10                                 | 10                   | 10                    | Y        | N           | N           |
| ANI                   | 400000                             | 400000               | 400000                | N        | Y           | N           |
| ANI-SCREENING         | 15000                              | 18800                | 18800                 | Y        | N           | N           |
| ANI-SCREENING-PROFILE | 1500                               | 1500                 | 1500                  | Y        | N           | N           |
| ANI-WB-LIST           | 25000                              | 31250                | 31250                 | N        | N           | Y           |
| ANNC-TG-PROFILE       | 100                                | 100                  | 100                   | Y        | N           | N           |
| ANNC-TRUNK            | 6120                               | 6120                 | 6120                  | Y        | N           | N           |
| ANNOUNCEMENT          | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| AOR2SUB               | 50000                              | 50000                | 50000                 | Y        | N           | N           |
| APP-SERVER            | 255                                | 255                  | 255                   | Y        | Y           | N           |
| AUDIO-SEGMENT         | 5000                               | 5000                 | 5000                  | N        | Y           | Y           |
| AUDIO-SEQ             | 1000                               | 1000                 | 1000                  | N        | Y           | Y           |
| AUTH-CODE             | 250000                             | 250000               | 250000                | N        | Y           | N           |
| AUTH-CODE-GRP         | 25000                              | 25000                | 25000                 | N        | Y           | N           |
| AUTH-REALM            | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| BACKHAUL-SET          | 1500                               | 1500                 | 1500                  | Y        | N           | N           |
| CA-CONFIG             | 1000                               | 1000                 | 1000                  | Y        | Y           | Y           |
| CA-CONFIG-BASE        | 1000                               | 1000                 | 1000                  | Y        | Y           | Y           |
| CALL-AGENT            | 10                                 | 10                   | 10                    | Y        | Y           | Y           |

**Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun       | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| CALL-AGENT-PROFILE       | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| CALL-CTRL-ROUTE          | 15360                                    | 15360                      | 15360                       | Y           | N              | N              |
| CALL-SUBTYPE             | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| CALL-TYPE                | 100                                      | 100                        | 100                         | N           | N              | N              |
| CALL-TYPE-PROFILE        | 100                                      | 100                        | 100                         | Y           | N              | N              |
| CARRIER                  | 10000                                    | 10000                      | 10000                       | Y           | N              | N              |
| CAS-TG-PROFILE           | 100                                      | 100                        | 100                         | Y           | N              | N              |
| CASUAL-WB-LIST           | 112500                                   | 112500                     | 112500                      | N           | Y              | N              |
| CAUSE-CODE-MAP           | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| CENTREX-GRP              | 500                                      | 500                        | 500                         | Y           | Y              | N              |
| CHANGED-NUMBER           | 2250                                     | 3000                       | 3000                        | Y           | N              | N              |
| CIPHERSUITE              | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| CIRCUIT-CODE             | 255                                      | 255                        | 255                         | Y           | N              | N              |
| CLLI-CODE                | 255                                      | 255                        | 255                         | N           | N              | N              |
| COS-RESTRICT             | 112500                                   | 112500                     | 112500                      | N           | Y              | N              |
| CPSG                     | 1000                                     | 1000                       | 1000                        | Y           | Y              | N              |
| CUST-GRP                 | 2500                                     | 2500                       | 2500                        | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 10000                                    | 10000                      | 10000                       | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 500                                      | 500                        | 500                         | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| DB-USAGE                 | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| DESTINATION              | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                  | 1000000                    | 1000000                     | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DIGIT-MAP                | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DIGMAN                   | 13500                                    | 13500                      | 13500                       | Y           | N              | N              |
| DIGMAN-PROFILE           | 2700                                     | 2700                       | 2700                        | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                   | 250000                     | 250000                      | N           | N              | Y              |
| DN2GN                    | 100                                      | 100                        | 100                         | N           | N              | Y              |
| DN2RN                    | 5000000                                  | 5000000                    | 5000000                     | N           | N              | Y              |
| DN2SUBSCRIBER            | 225000                                   | 225000                     | 225000                      | Y           | N              | N              |
| DOMAIN2ROUTE             | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| DPC                      | 7680                                     | 7680                       | 7680                        | Y           | Y              | Y              |

**Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun          | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| DS1                         | 4200                                     | 4200                       | 4200                        | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST       | 50                                       | 50                         | 50                          | Y           | N              | N              |
| ENUM-CALL-TYPE              | 100                                      | 100                        | 100                         | Y           | N              | N              |
| ENUM-PROFILE                | 26                                       | 26                         | 26                          | Y           | N              | Y              |
| ENUM-ROOT                   | 10                                       | 10                         | 10                          | Y           | N              | Y              |
| ESS                         | 255                                      | 255                        | 255                         | Y           | N              | N              |
| EXCHANGE-CODE               | 5000                                     | 5000                       | 5000                        | Y           | N              | N              |
| EXT2SUBSCRIBER              | 25000                                    | 25000                      | 25000                       | Y           | Y              | N              |
| FEATURE                     | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| FEATURE-CONFIG              | 1000                                     | 1000                       | 1000                        | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-SERVER              | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| FS-AUDIT-PROFILE            | 10                                       | 10                         | 10                          | N           | Y              | Y              |
| GTD-PARM-VALUES             | 100                                      | 100                        | 100                         | N           | N              | N              |
| H323-GW                     | 4                                        | 4                          | 4                           | Y           | N              | N              |
| H323-GW2GK                  | 100                                      | 100                        | 100                         | Y           | N              | N              |
| H323-TERM                   | 15000                                    | 15000                      | 15000                       | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                      | 200                        | 200                         | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                      | 100                        | 100                         | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                        | 1                          | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                     | 2500                       | 2500                        | N           | N              | Y              |
| II-WB-LIST                  | 14063                                    | 14063                      | 14063                       | N           | Y              | N              |
| INTL-DIAL-PLAN              | 3000                                     | 3000                       | 3000                        | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 10                                       | 10                         | 10                          | Y           | N              | N              |
| INTL-WB-LIST                | 112500                                   | 112500                     | 112500                      | N           | Y              | N              |
| IPSEC-KERBEROS              | 1                                        | 1                          | 1                           | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS         | 256                                      | 256                        | 256                         | Y           | N              | N              |
| IPSEC-POLICY                | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| IPSEC-SA                    | 256                                      | 256                        | 256                         | Y           | N              | N              |
| ISDN-BCHAN                  | 36000                                    | 36000                      | 36000                       | Y           | N              | N              |
| ISDN-DCHAN                  | 1500                                     | 1500                       | 1500                        | Y           | N              | N              |
| ISDN-INTF                   | 1500                                     | 1500                       | 1500                        | Y           | N              | N              |
| ISDN-TG-PROFILE             | 250                                      | 250                        | 250                         | Y           | N              | N              |
| IVR-SCRIPT-PROFILE          | 100                                      | 100                        | 100                         | N           | Y              | Y              |

**Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun  | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| LANGUAGE            | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| LATA                | 1000                                     | 1000                       | 1000                        | Y           | Y              | N              |
| LATA-MAP            | 150000                                   | 150000                     | 150000                      | Y           | Y              | N              |
| LNP-PROFILE         | 10                                       | 10                         | 10                          | Y           | Y              | Y              |
| LSA                 | 30000                                    | 30000                      | 30000                       | Y           | N              | N              |
| LSA-PROFILE         | 1000                                     | 1000                       | 1000                        | N           | N              | N              |
| MAC2SUB             | 50000                                    | 50000                      | 50000                       | N           | Y              | N              |
| MGCP-RETCODE-ACTION | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| MGW                 | 100000                                   | 100000                     | 100000                      | Y           | N              | N              |
| MGW-PROFILE         | 100                                      | 100                        | 100                         | Y           | N              | N              |
| MLHG                | 10000                                    | 10000                      | 10000                       | Y           | Y              | N              |
| MLHG-PREF-LIST      | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| MLHG-TERMINAL       | 50000                                    | 50000                      | 50000                       | Y           | N              | N              |
| NATIONAL-WB-LIST    | 112500                                   | 141000                     | 141000                      | N           | Y              | N              |
| NDC                 | 50                                       | 50                         | 50                          | Y           | N              | N              |
| NOA                 | 0                                        | 0                          | 0                           | N           | N              | N              |
| NOA-ROUTE           | 100                                      | 100                        | 100                         | Y           | N              | N              |
| NOA-ROUTE-PROFILE   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| NOD                 | 100                                      | 100                        | 100                         | N           | N              | N              |
| NOD-RESTRICT-LIST   | 1000                                     | 1000                       | 1000                        | N           | Y              | N              |
| NOD-WB-LIST         | 11250                                    | 11250                      | 11250                       | N           | Y              | N              |
| OCB-K-VALUE         | 689                                      | 689                        | 689                         | N           | Y              | N              |
| OCB-PROFILE         | 26                                       | 26                         | 26                          | N           | Y              | N              |
| OFFICE-CODE         | 50000                                    | 50000                      | 50000                       | Y           | Y              | N              |
| OPC                 | 30                                       | 30                         | 30                          | Y           | Y              | Y              |
| POLICY-NXX          | 400                                      | 400                        | 400                         | Y           | N              | Y              |
| POLICY-ODR          | 10000                                    | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-OLI          | 100                                      | 100                        | 100                         | Y           | N              | Y              |
| POLICY-PERCENT      | 400                                      | 400                        | 400                         | Y           | N              | Y              |
| POLICY-POP          | 12500                                    | 12500                      | 12500                       | Y           | N              | Y              |
| POLICY-PREFIX       | 10000                                    | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-REGION       | 1100                                     | 1100                       | 1100                        | Y           | N              | Y              |
| POLICY-TOD          | 400                                      | 400                        | 400                         | Y           | N              | Y              |
| POP                 | 255                                      | 255                        | 255                         | Y           | Y              | Y              |
| PORTED-OFFICE-CODE  | 640000                                   | 640000                     | 640000                      | Y           | N              | N              |

**Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun    | Number of<br>Records Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------|------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| QOS                   | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| RADIUS-PROFILE        | 20                                       | 20                         | 20                          | Y           | Y              | N              |
| REGION-CODE           | 800                                      | 800                        | 800                         | Y           | N              | N              |
| REGION-PROFILE        | 20000                                    | 25000                      | 25000                       | Y           | N              | Y              |
| RELEASE-CAUSE         | 10000                                    | 10000                      | 10000                       | Y           | N              | N              |
| ROUTE                 | 2000                                     | 2000                       | 2000                        | Y           | N              | N              |
| ROUTE-GUIDE           | 1000                                     | 1000                       | 1000                        | Y           | N              | Y              |
| ROUTING-KEY           | 15360                                    | 15360                      | 15360                       | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION | 6000                                     | 6000                       | 6000                        | Y           | N              | N              |
| SC1D                  | 30000                                    | 30000                      | 30000                       | N           | Y              | N              |
| SC2D                  | 30000                                    | 30000                      | 30000                       | N           | Y              | N              |
| SCCP-NW               | 255                                      | 255                        | 255                         | N           | Y              | Y              |
| SCCP-ROUTE            | 65535                                    | 65535                      | 65535                       | N           | Y              | Y              |
| SCRIPT                | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| SCTP-ASSOC            | 240                                      | 240                        | 240                         | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE    | 120                                      | 120                        | 120                         | Y           | Y              | Y              |
| SERVICE               | 2000                                     | 2000                       | 2000                        | N           | Y              | N              |
| SERVICE-PROVIDER      | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| SERVICE-TRIGGER       | 20000                                    | 20000                      | 20000                       | Y           | N              | N              |
| SERVING-DOMAIN-NAME   | 1000                                     | 1000                       | 1000                        | Y           | N              | N              |
| SG                    | 20                                       | 20                         | 20                          | Y           | Y              | Y              |
| SG-GRP                | 20                                       | 20                         | 20                          | Y           | Y              | Y              |
| SGP                   | 40                                       | 40                         | 40                          | Y           | Y              | Y              |
| SIP-TIMER-PROFILE     | 10                                       | 10                         | 10                          | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS   | 200                                      | 200                        | 200                         | Y           | N              | N              |
| SLE                   | 30000                                    | 30000                      | 30000                       | N           | Y              | N              |
| SLHR                  | 480                                      | 480                        | 480                         | N           | Y              | Y              |
| SLHR-PROFILE          | 16                                       | 16                         | 16                          | N           | N              | N              |
| SOFTSW-TG-PROFILE     | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SPECIAL-CALL-TYPE     | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SPLIT-NPA             | 1100                                     | 1100                       | 1100                        | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SS7_Q767_TG_PROFILE   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE   | 100                                      | 100                        | 100                         | Y           | N              | N              |
| SS7-CIC               | 96000                                    | 96000                      | 96000                       | Y           | N              | N              |

**Table 2-25 Release 4.5.1 Local Number Portability Database Usage Defaults - Routing Number (continued)**

| Table Name or Noun         | Number of Records Before Split-NPA | Maximum Record Count | Licensed Record Count | Route CA | Route FSPTC | Route FSAIN |
|----------------------------|------------------------------------|----------------------|-----------------------|----------|-------------|-------------|
| STATIC-CONTACT             | 5000                               | 5000                 | 5000                  | Y        | N           | N           |
| SUBSCRIBER                 | 150000                             | 150000               | 125000                | Y        | Y           | N           |
| SUBSCRIBER-FEATURE-DATA    | 900000                             | 900000               | 900000                | N        | Y           | N           |
| SUBSCRIBER-PROFILE         | 2550                               | 2550                 | 2550                  | Y        | Y           | N           |
| SUBSCRIBER-SERVICE-PROFILE | 1500000                            | 1500000              | 1500000               | Y        | Y           | N           |
| SUBSCRIBER-TOD-SCHEDULE    | 1500                               | 1500                 | 1500                  | N        | Y           | N           |
| SUBSYSTEM                  | 480                                | 480                  | 480                   | N        | Y           | Y           |
| SUBSYSTEM-GRP              | 16                                 | 16                   | 16                    | N        | Y           | Y           |
| SUBSYSTEM-PROFILE          | 16                                 | 16                   | 16                    | N        | Y           | Y           |
| TECH-PREFIX-GRP            | 1000                               | 1000                 | 1000                  | Y        | N           | N           |
| TECH-PREFIX-GRP-PROFILE    | 4                                  | 4                    | 4                     | Y        | N           | N           |
| TERMINATION                | 180000                             | 180000               | 180000                | Y        | N           | N           |
| TIMEZONE                   | 400                                | 400                  | 400                   | N        | N           | N           |
| TRIGGER-DETECTION-POINT    | 50                                 | 50                   | 50                    | N        | N           | N           |
| TRIGGER-ID                 | 100                                | 100                  | 100                   | N        | N           | N           |
| TRIGGER-NOD-ESCAPE-LIST    | 100                                | 100                  | 100                   | Y        | N           | N           |
| TRUNK                      | 100000                             | 100000               | 100000                | Y        | N           | N           |
| TRUNK-GRP                  | 10000                              | 10000                | 10000                 | Y        | N           | N           |
| TRUNK-GRP-FEATURE-DATA     | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| TRUNK-GRP-SERVICE-PROFILE  | 1100                               | 1100                 | 1100                  | Y        | Y           | N           |
| USER-AUTH                  | 50000                              | 50000                | 50000                 | Y        | N           | N           |
| USER-PART-VARIANT          | 200                                | 200                  | 200                   | Y        | N           | N           |
| VAR-DEFAULT                | 1000                               | 1000                 | 1000                  | N        | N           | N           |
| VSC                        | 1000                               | 1000                 | 1000                  | N        | Y           | N           |
| WIRETAP                    | 3000                               | 3750                 | 3750                  | Y        | N           | N           |
| ZZZ-CODE                   | 255                                | 255                  | 255                   | Y        | N           | N           |

## Cable8 Database Usage Defaults

Table 2-26 details the predefined defaults for the Database Usage table for Cable 8 in Release 4.5.1.

**Table 2-26** Release 4.5.1 Cable8 Database Usage Defaults

| Table Name or Noun     | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| AAA-SERVER-GRP         | 100                                         | 100                        | 100                         | N           | Y              | N              |
| ACTIVITY               | 100                                         | 100                        | 100                         | Y           | Y              | Y              |
| ACTIVITY-BASE          | 100                                         | 100                        | 100                         | N           | N              | N              |
| AGGR                   | 2100                                        | 2100                       | 2100                        | Y           | N              | N              |
| AGGR-PROFILE           | 10                                          | 10                         | 10                          | Y           | N              | N              |
| ANI                    | 400000                                      | 400000                     | 400000                      | N           | Y              | N              |
| ANI-SCREENING          | 15000                                       | 18800                      | 18800                       | Y           | N              | N              |
| ANI-SCREENING-PROFILE  | 1500                                        | 1500                       | 1500                        | Y           | N              | N              |
| ANI-WB-LIST            | 25000                                       | 31250                      | 31250                       | N           | N              | Y              |
| ANNC-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ANNC-TRUNK             | 24000                                       | 24000                      | 24000                       | Y           | N              | N              |
| ANNOUNCEMENT           | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| AOR2SUB                | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| APP-SERVER             | 1000                                        | 1000                       | 1000                        | Y           | Y              | N              |
| AUDIO-SEGMENT          | 5000                                        | 5000                       | 5000                        | N           | Y              | Y              |
| AUDIO-SEQ              | 1000                                        | 1000                       | 1000                        | N           | Y              | Y              |
| AUTH-CODE              | 250000                                      | 250000                     | 250000                      | N           | Y              | N              |
| AUTH-CODE-GRP          | 25000                                       | 25000                      | 25000                       | N           | Y              | N              |
| AUTH-REALM             | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| BACKHAUL-SET           | 1500                                        | 1500                       | 1500                        | Y           | N              | N              |
| CA-CONFIG              | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| CA-CONFIG-BASE         | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| CALL-AGENT             | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| CALL-AGENT-PROFILE     | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| CALL-CTRL-ROUTE        | 15360                                       | 15360                      | 15360                       | Y           | N              | N              |
| CALL-SUBTYPE           | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| CALL-TYPE              | 100                                         | 100                        | 100                         | N           | N              | N              |
| CALL-TYPE-PROFILE      | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CARRIER                | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| CAS-TG-PROFILE         | 100                                         | 100                        | 100                         | Y           | N              | N              |
| CASUAL-WB-LIST         | 187500                                      | 187500                     | 187500                      | N           | Y              | N              |
| CAUSE-CODE-MAP         | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| CAUSE-CODE-MAP-PROFILE | 100                                         | 100                        | 100                         | Y           | N              | N              |

**Table 2-26 Release 4.5.1 Cable8 Database Usage Defaults (continued)**

| Table Name or Noun       | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| CENTREX-GRP              | 1000                                        | 1000                       | 1000                        | Y           | Y              | N              |
| CHANGED-NUMBER           | 3750                                        | 5000                       | 5000                        | Y           | N              | N              |
| CIPHERSUITE              | 2100                                        | 2100                       | 2100                        | Y           | N              | N              |
| CIPHERSUITE-PROFILE      | 2100                                        | 2100                       | 2100                        | N           | N              | N              |
| CIRCUIT-CODE             | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| CLLI-CODE                | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| COS-RESTRICT             | 187500                                      | 187500                     | 187500                      | N           | Y              | N              |
| CPSG                     | 2000                                        | 2000                       | 2000                        | Y           | Y              | N              |
| CUST-GRP                 | 2500                                        | 2500                       | 2500                        | N           | N              | Y              |
| CUSTOM-DIAL-PLAN         | 20000                                       | 20000                      | 20000                       | N           | Y              | N              |
| CUSTOM-DIAL-PLAN-PROFILE | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DB-THRESHOLDS            | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DB-USAGE                 | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| DESTINATION              | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| DIAL-PLAN                | 1000000                                     | 1000000                    | 1000000                     | Y           | N              | N              |
| DIAL-PLAN-PROFILE        | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| DIGIT-MAP                | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| DIGMAN                   | 16000                                       | 16000                      | 16000                       | Y           | N              | N              |
| DIGMAN-PROFILE           | 3200                                        | 3200                       | 3200                        | Y           | N              | N              |
| DN2CUST-GRP              | 250000                                      | 250000                     | 250000                      | N           | N              | Y              |
| DN2GN                    | 100                                         | 100                        | 100                         | N           | N              | Y              |
| DN2RN                    | 100                                         | 100                        | 100                         | N           | N              | Y              |
| DN2SUBSCRIBER            | 375000                                      | 375000                     | 375000                      | Y           | N              | N              |
| DOMAIN2ROUTE             | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| DPC                      | 7680                                        | 7680                       | 7680                        | Y           | Y              | Y              |
| DS1                      | 5000                                        | 5000                       | 5000                        | Y           | N              | N              |
| EMERGENCY-NUMBER-LIST    | 50                                          | 50                         | 50                          | Y           | N              | N              |
| ENUM-CALL-TYPE           | 100                                         | 100                        | 100                         | Y           | N              | N              |
| ENUM-PROFILE             | 100                                         | 100                        | 100                         | Y           | N              | Y              |
| ENUM-ROOT                | 10                                          | 10                         | 10                          | Y           | N              | Y              |
| ESS                      | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| EXCHANGE-CODE            | 64000                                       | 64000                      | 64000                       | Y           | N              | N              |
| EXT2SUBSCRIBER           | 50000                                       | 50000                      | 50000                       | Y           | Y              | N              |
| FEATURE                  | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |

**Table 2-26** Release 4.5.1 Cable8 Database Usage Defaults (continued)

| Table Name or Noun          | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|-----------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| FEATURE-CONFIG              | 1000                                        | 1000                       | 1000                        | N           | Y              | Y              |
| FEATURE-CONFIG-BASE         | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-CONFIG-BASE-POS-VAL | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| FEATURE-SERVER              | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| FS-AUDIT-PROFILE            | 10                                          | 10                         | 10                          | N           | Y              | Y              |
| GTD-PARM-VALUES             | 100                                         | 100                        | 100                         | N           | N              | N              |
| H323-GW                     | 4                                           | 4                          | 4                           | Y           | N              | N              |
| H323-GW2GK                  | 100                                         | 100                        | 100                         | Y           | N              | N              |
| H323-TERM                   | 250                                         | 250                        | 250                         | Y           | N              | N              |
| H323-TERM-PROFILE           | 200                                         | 200                        | 200                         | Y           | N              | N              |
| H323-TG-PROFILE             | 100                                         | 100                        | 100                         | Y           | N              | N              |
| HTTP-FEATURE-SERVER         | 1                                           | 1                          | 1                           | N           | Y              | N              |
| II-RESTRICT-LIST            | 2500                                        | 2500                       | 2500                        | N           | N              | Y              |
| II-WB-LIST                  | 23438                                       | 23438                      | 23438                       | N           | Y              | N              |
| INTL-DIAL-PLAN              | 60000                                       | 60000                      | 60000                       | Y           | N              | N              |
| INTL-DIAL-PLAN-PROFILE      | 200                                         | 200                        | 200                         | Y           | N              | N              |
| INTL-WB-LIST                | 187500                                      | 187500                     | 187500                      | N           | Y              | N              |
| IPSEC-KERBEROS              | 1                                           | 1                          | 1                           | Y           | N              | N              |
| IPSEC-KERBEROS-KEYS         | 256                                         | 256                        | 256                         | Y           | N              | N              |
| IPSEC-POLICY                | 2100                                        | 2100                       | 2100                        | Y           | N              | N              |
| IPSEC-SA                    | 256                                         | 256                        | 256                         | Y           | N              | N              |
| ISDN-BCHAN                  | 36000                                       | 36000                      | 36000                       | Y           | N              | N              |
| ISDN-DCHAN                  | 1500                                        | 1500                       | 1500                        | Y           | N              | N              |
| ISDN-INTF                   | 1500                                        | 1500                       | 1500                        | Y           | N              | N              |
| ISDN-TG-PROFILE             | 250                                         | 250                        | 250                         | Y           | N              | N              |
| IVR-SCRIPT-PROFILE          | 100                                         | 100                        | 100                         | N           | Y              | Y              |
| LANGUAGE                    | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| LATA                        | 1000                                        | 1000                       | 1000                        | Y           | Y              | N              |
| LATA-MAP                    | 150000                                      | 150000                     | 150000                      | Y           | Y              | N              |
| LNP-PROFILE                 | 10                                          | 10                         | 10                          | Y           | Y              | Y              |
| LSA                         | 30000                                       | 30000                      | 30000                       | Y           | N              | N              |
| LSA-PROFILE                 | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| MAC2SUB                     | 10000                                       | 10000                      | 10000                       | N           | Y              | N              |
| MGCP-RETCODE-ACTION         | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |

**Table 2-26** Release 4.5.1 Cable8 Database Usage Defaults (continued)

| Table Name or Noun | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|--------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| MGW                | 210000                                      | 210000                     | 210000                      | Y           | N              | N              |
| MGW-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| MLHG               | 30000                                       | 30000                      | 30000                       | Y           | Y              | N              |
| MLHG-PREF-LIST     | 3000                                        | 3000                       | 3000                        | Y           | N              | N              |
| MLHG-TERMINAL      | 150000                                      | 150000                     | 150000                      | Y           | N              | N              |
| NATIONAL-WB-LIST   | 187500                                      | 235000                     | 235000                      | N           | Y              | N              |
| NDC                | 800                                         | 800                        | 800                         | Y           | N              | N              |
| NOA                | 0                                           | 0                          | 0                           | N           | N              | N              |
| NOA-ROUTE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| NOA-ROUTE-PROFILE  | 100                                         | 100                        | 100                         | Y           | N              | N              |
| NOD                | 100                                         | 100                        | 100                         | N           | N              | N              |
| NOD-RESTRICT-LIST  | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| NOD-WB-LIST        | 18750                                       | 18750                      | 18750                       | N           | Y              | N              |
| OCB-K-VALUE        | 2700                                        | 2700                       | 2700                        | N           | Y              | N              |
| OCB-PROFILE        | 100                                         | 100                        | 100                         | N           | Y              | N              |
| OFFICE-CODE        | 200000                                      | 200000                     | 200000                      | Y           | Y              | N              |
| OPC                | 30                                          | 30                         | 30                          | Y           | Y              | Y              |
| POLICY-NXX         | 400                                         | 400                        | 400                         | Y           | N              | Y              |
| POLICY-ODR         | 10000                                       | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-OLI         | 100                                         | 100                        | 100                         | Y           | N              | Y              |
| POLICY-PERCENT     | 400                                         | 400                        | 400                         | Y           | N              | Y              |
| POLICY-POP         | 25000                                       | 25000                      | 25000                       | Y           | N              | Y              |
| POLICY-PREFIX      | 10000                                       | 10000                      | 10000                       | Y           | N              | Y              |
| POLICY-REGION      | 1100                                        | 1100                       | 1100                        | Y           | N              | Y              |
| POLICY-TOD         | 400                                         | 400                        | 400                         | Y           | N              | Y              |
| POP                | 1000                                        | 1000                       | 1000                        | Y           | Y              | Y              |
| PORTED-OFFICE-CODE | 640000                                      | 640000                     | 640000                      | Y           | N              | N              |
| QOS                | 2100                                        | 2100                       | 2100                        | Y           | N              | N              |
| RADIUS-PROFILE     | 20                                          | 20                         | 20                          | Y           | Y              | N              |
| REGION-CODE        | 800                                         | 800                        | 800                         | Y           | N              | N              |
| REGION-PROFILE     | 20000                                       | 25000                      | 25000                       | Y           | N              | Y              |
| RELEASE-CAUSE      | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| ROUTE              | 2000                                        | 2000                       | 2000                        | Y           | N              | N              |
| ROUTE-GUIDE        | 1000                                        | 1000                       | 1000                        | Y           | N              | Y              |

**Table 2-26** Release 4.5.1 Cable8 Database Usage Defaults (continued)

| Table Name or Noun         | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|----------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| ROUTING-KEY                | 15360                                       | 15360                      | 15360                       | Y           | Y              | Y              |
| RUDP-BACKHAUL-SESSION      | 6000                                        | 6000                       | 6000                        | Y           | N              | N              |
| SC1D                       | 50000                                       | 50000                      | 50000                       | N           | Y              | N              |
| SC2D                       | 50000                                       | 50000                      | 50000                       | N           | Y              | N              |
| SCCP-NW                    | 255                                         | 255                        | 255                         | N           | Y              | Y              |
| SCCP-ROUTE                 | 65535                                       | 65535                      | 65535                       | N           | Y              | Y              |
| SCRIPT                     | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| SCTP-ASSOC                 | 240                                         | 240                        | 240                         | Y           | Y              | Y              |
| SCTP-ASSOC-PROFILE         | 120                                         | 120                        | 120                         | Y           | Y              | Y              |
| SERVICE                    | 2000                                        | 2000                       | 2000                        | N           | Y              | N              |
| SERVICE-PROVIDER           | 10                                          | 10                         | 10                          | Y           | N              | N              |
| SERVICE-TRIGGER            | 20000                                       | 20000                      | 20000                       | Y           | N              | N              |
| SERVING-DOMAIN-NAME        | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| SG                         | 20                                          | 20                         | 20                          | Y           | Y              | Y              |
| SG-GRP                     | 20                                          | 20                         | 20                          | Y           | Y              | Y              |
| SGP                        | 40                                          | 40                         | 40                          | Y           | Y              | Y              |
| SIP-TIMER-PROFILE          | 10                                          | 10                         | 10                          | Y           | N              | N              |
| SIPT-ISUP-VER-ALIAS        | 200                                         | 200                        | 200                         | Y           | N              | N              |
| SLE                        | 50000                                       | 50000                      | 50000                       | N           | Y              | N              |
| SLHR                       | 480                                         | 480                        | 480                         | N           | Y              | Y              |
| SLHR-PROFILE               | 16                                          | 16                         | 16                          | N           | N              | N              |
| SOFTSW-TG-PROFILE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SPECIAL-CALL-TYPE          | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SPLIT-NPA                  | 1100                                        | 1100                       | 1100                        | Y           | Y              | N              |
| SS7_Q761_TG_PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7_Q767_TG_PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7-ANSI-TG-PROFILE        | 100                                         | 100                        | 100                         | Y           | N              | N              |
| SS7-CIC                    | 60000                                       | 60000                      | 60000                       | Y           | N              | N              |
| STATIC-CONTACT             | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |
| SUBSCRIBER                 | 250000                                      | 250000                     | 250000                      | Y           | Y              | N              |
| SUBSCRIBER-FEATURE-DATA    | 1500000                                     | 1500000                    | 1500000                     | N           | Y              | N              |
| SUBSCRIBER-PROFILE         | 10000                                       | 10000                      | 10000                       | Y           | Y              | N              |
| SUBSCRIBER-SERVICE-PROFILE | 2500000                                     | 2500000                    | 2500000                     | Y           | Y              | N              |
| SUBSCRIBER-TOD-SCHEDULE    | 2500                                        | 2500                       | 2500                        | N           | Y              | N              |

**Table 2-26** Release 4.5.1 Cable8 Database Usage Defaults (continued)

| Table Name or Noun        | Number of<br>Records<br>Before<br>Split-NPA | Maximum<br>Record<br>Count | Licensed<br>Record<br>Count | Route<br>CA | Route<br>FSPTC | Route<br>FSAIN |
|---------------------------|---------------------------------------------|----------------------------|-----------------------------|-------------|----------------|----------------|
| SUBSYSTEM                 | 480                                         | 480                        | 480                         | N           | Y              | Y              |
| SUBSYSTEM-GRP             | 16                                          | 16                         | 16                          | N           | Y              | Y              |
| SUBSYSTEM-PROFILE         | 16                                          | 16                         | 16                          | N           | Y              | Y              |
| TECH-PREFIX-GRP           | 10                                          | 10                         | 10                          | Y           | N              | N              |
| TECH-PREFIX-GRP-PROFILE   | 4                                           | 4                          | 4                           | Y           | N              | N              |
| TERMINATION               | 370000                                      | 370000                     | 370000                      | Y           | N              | N              |
| TIMEZONE                  | 400                                         | 400                        | 400                         | N           | N              | N              |
| TRIGGER-DETECTION-POINT   | 50                                          | 50                         | 50                          | N           | N              | N              |
| TRIGGER-ID                | 100                                         | 100                        | 100                         | N           | N              | N              |
| TRIGGER-NOD-ESCAPE-LIST   | 100                                         | 100                        | 100                         | Y           | N              | N              |
| TRUNK                     | 120000                                      | 120000                     | 120000                      | Y           | N              | N              |
| TRUNK-GRP                 | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| TRUNK-GRP-FEATURE-DATA    | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| TRUNK-GRP-SERVICE-PROFILE | 1100                                        | 1100                       | 1100                        | Y           | Y              | N              |
| USER-AUTH                 | 10000                                       | 10000                      | 10000                       | Y           | N              | N              |
| USER-PART-VARIANT         | 200                                         | 200                        | 200                         | Y           | N              | N              |
| VAR-DEFAULT               | 1000                                        | 1000                       | 1000                        | N           | N              | N              |
| VSC                       | 1000                                        | 1000                       | 1000                        | N           | Y              | N              |
| WIRETAP                   | 5000                                        | 6250                       | 6250                        | Y           | N              | N              |
| ZZZ-CODE                  | 1000                                        | 1000                       | 1000                        | Y           | N              | N              |



# APPENDIX 3

## ISUP Message Counters (Release 4.4.1)

Revised: July 24, 2009, OL-3743-42

Table 3-1 illustrates which message counters are applicable to a given ISUP variant.



ISUPs for Chile and Australia are not supported.

**Table 3-1** *ISUP Message Counters*

| Message | ANSI | China | Mexico | Thailand | Hong Kong | Chile | Australia | Israel | ETSIv2 | Hungary |
|---------|------|-------|--------|----------|-----------|-------|-----------|--------|--------|---------|
| ACM     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| ANM     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| ARR     |      |       |        | X        |           |       |           |        |        |         |
| BLA     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| BLO     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CCL     |      | X     | X      |          |           |       | X         | X      | X      |         |
| CCR     | X    | X     | X      | X        |           | X     | X         | X      | X      | X       |
| CFN     | X    |       | X      | X        | X         |       |           |        |        | X       |
| CGB     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CGBA    | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CGU     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CGUA    | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CON     |      | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| COT     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CPG     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| CQM     | X    |       | X      | X        |           |       |           |        |        |         |
| CQR     | X    |       | X      | X        |           |       |           |        |        |         |
| CRA     | X    |       |        |          |           |       |           |        |        |         |
| CRM     | X    |       |        |          |           |       |           |        |        |         |
| CRG     |      |       |        |          |           | X     |           |        |        |         |

**Table 3-1** *ISUP Message Counters (continued)*

| Message | ANSI | China | Mexico | Thailand | Hong Kong | Chile | Australia | Israel | ETSIv2 | Hungary |
|---------|------|-------|--------|----------|-----------|-------|-----------|--------|--------|---------|
| CVR     | X    |       |        |          |           |       |           |        |        |         |
| CVT     | X    |       |        |          |           |       |           |        |        |         |
| EXM     | X    |       |        |          |           |       |           |        |        |         |
| FAA     |      |       |        |          |           |       |           |        | X      | X       |
| FAC     | X    |       |        |          | X         |       |           |        |        | X       |
| FAR     |      |       |        |          |           | X     |           |        |        |         |
| FOT     | X    |       |        |          |           |       |           |        |        |         |
| FRJ     |      |       |        |          |           | X     |           |        |        |         |
| FWT     |      |       |        |          |           | X     |           |        |        |         |
| GRA     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| GRS     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| IAM     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| IDR     |      |       |        |          |           | X     |           |        |        | X       |
| INF     | X    |       | X      | X        | X         | X     |           |        |        | X       |
| INR     |      |       | X      | X        | X         | X     |           |        |        | X       |
| IRS     |      |       |        |          |           | X     |           |        |        | X       |
| ITX     |      |       |        |          |           |       |           |        |        |         |
| LPA     | X    |       |        |          |           |       |           |        |        |         |
| LPM     |      |       |        |          |           | X     |           |        |        |         |
| NRM     |      |       |        |          | X         | X     |           |        |        |         |
| OLM     |      |       |        |          |           |       |           |        |        | X       |
| OPR     |      |       |        |          |           |       | X         | X      | X      |         |
| PAM     | X    |       |        |          | X         | X     |           |        |        |         |
| PRI     |      |       |        |          |           | X     |           |        |        |         |
| REL     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| RES     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| RLC     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| RSC     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| SAM     |      | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| SGM     |      | X     |        |          | X         | X     | X         | X      | X      | X       |
| SUS     | X    | X     | X      | X        | X         | X     | X         | X      | X      | X       |
| TXA     |      |       |        |          |           |       |           |        |        |         |
| UBA     | X    | X     |        | X        | X         | X     | X         | X      | X      | X       |
| UBL     | X    | X     | X      | X        |           | X     | X         | X      | X      | X       |
| UCIC    | X    |       | X      | X        |           | X     |           |        |        |         |
| UPA     |      |       |        |          |           |       |           |        |        | X       |

**Table 3-1**      *ISUP Message Counters (continued)*

| Message | ANSI | China | Mexico | Thailand | Hong Kong | Chile | Australia | Israel | ETSIv2 | Hungary |
|---------|------|-------|--------|----------|-----------|-------|-----------|--------|--------|---------|
| UPT     |      |       |        |          |           |       |           |        |        | X       |
| USR     | X    |       |        |          |           | X     |           |        |        | X       |





## ISUP Measurement Counters (Release 4.5/4.5.1)

Revised: July 24, 2009, OL-3743-42

This appendix illustrates which message counters are applicable to a given ISUP variant. The total message, abnormal release, unexpected and unrecognized message counter are applicable to all variants. These counters are used as display values in the [Measurements](#) chapter. ISUPs for Israel, Chile and Australia are not supported.

**Table 4-1** *ISUP Measurement Counters by Variant*

| Message | ANSI | China | Mexico | Thailand | Hong Kong | ETSIv2 | Hungary | France (Release 4.5.1) | Poland (Release 4.5.1) | Columbia (Release 4.5.1) |
|---------|------|-------|--------|----------|-----------|--------|---------|------------------------|------------------------|--------------------------|
| ACM     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| ANM     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| ARR     |      |       |        | X        |           |        |         |                        |                        |                          |
| BLA     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| BLO     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CCL     |      | X     | X      |          |           | X      |         |                        |                        |                          |
| CCR     | X    | X     | X      | X        |           | X      | X       | X                      |                        |                          |
| CFN     | X    |       | X      | X        | X         |        | X       | X                      |                        | X                        |
| CGB     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CGBA    | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CGU     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CGUA    | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CON     |      | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| COT     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CPG     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| CQM     | X    |       | X      | X        |           |        |         |                        |                        |                          |
| CQR     | X    |       | X      | X        |           |        |         |                        |                        |                          |
| CRA     | X    |       |        |          |           |        |         |                        |                        |                          |
| CRM     | X    |       |        |          |           |        |         |                        |                        |                          |

**Table 4-1** *ISUP Measurement Counters by Variant*

| Message | ANSI | China | Mexico | Thailand | Hong Kong | ETSIv2 | Hungary | France (Release 4.5.1) | Poland (Release 4.5.1) | Columbia (Release 4.5.1) |
|---------|------|-------|--------|----------|-----------|--------|---------|------------------------|------------------------|--------------------------|
| CRG     |      |       |        |          |           |        |         |                        |                        | X                        |
| CVR     | X    |       |        |          |           |        |         |                        |                        |                          |
| CVT     | X    |       |        |          |           |        |         |                        |                        |                          |
| EXM     | X    |       |        |          |           |        |         |                        |                        |                          |
| FAA     |      |       |        |          |           | X      | X       | X                      | X                      | X                        |
| FAC     | X    |       |        |          | X         |        | X       | X                      | X                      |                          |
| FAR     |      |       |        |          |           |        |         |                        |                        | X                        |
| FOT     | X    |       |        |          |           |        |         |                        |                        |                          |
| FRJ     |      |       |        |          |           |        |         |                        |                        | X                        |
| FWT     |      |       |        |          |           |        |         |                        |                        |                          |
| GRA     | X    | X     | X      | X        | X         | X      | X       |                        |                        | X                        |
| GRS     | X    | X     | X      | X        | X         | X      | X       |                        |                        | X                        |
| IAM     | X    | X     | X      | X        | X         | X      | X       |                        |                        | X                        |
| IDR     |      |       |        |          |           |        | X       |                        |                        |                          |
| INF     | X    |       | X      | X        | X         |        | X       |                        |                        | X                        |
| INR     |      |       | X      | X        | X         |        | X       |                        |                        | X                        |
| IRS     |      |       |        |          |           |        | X       |                        |                        |                          |
| ITX     |      |       |        |          |           |        |         | X                      | X                      |                          |
| LPA     | X    |       |        |          |           |        |         |                        |                        |                          |
| LPM     |      |       |        |          |           |        |         |                        |                        |                          |
| NRM     |      |       |        |          | X         |        |         |                        |                        |                          |
| OLM     |      |       |        |          |           |        | X       | X                      | X                      |                          |
| OPR     |      | X     |        |          |           | X      |         |                        |                        |                          |
| PAM     | X    |       |        |          | X         |        |         |                        |                        |                          |
| PRI     |      |       |        |          |           |        |         |                        |                        |                          |
| REL     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| RES     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| RLC     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| RSC     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| SAM     |      | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| SGM     |      | X     |        |          | X         | X      | X       | X                      | X                      |                          |
| SUS     | X    | X     | X      | X        | X         | X      | X       | X                      | X                      | X                        |
| UBA     | X    | X     |        | X        | X         | X      | X       | X                      | X                      | X                        |
| UBL     | X    | X     | X      | X        |           | X      | X       | X                      | X                      | X                        |
| UCIC    | X    |       | X      | X        |           |        |         |                        |                        | X                        |

**Table 4-1**      *ISUP Measurement Counters by Variant*

| Message | ANSI | China | Mexico | Thailand | Hong Kong | ETSIv2 | Hungary | France (Release 4.5.1) | Poland (Release 4.5.1) | Columbia (Release 4.5.1) |
|---------|------|-------|--------|----------|-----------|--------|---------|------------------------|------------------------|--------------------------|
| UPA     |      |       |        |          |           |        | X       | X                      | X                      |                          |
| UPT     |      |       |        |          |           |        | X       | X                      | X                      |                          |
| USR     | X    |       |        |          |           |        | X       | X                      | X                      | X                        |





# Glossary

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Revised: July 24, 2009, OL-3743-42

The following glossary terms and acronyms may be used in this document.

## A

|                  |                                               |
|------------------|-----------------------------------------------|
| <b>AAA</b>       | authentication, authorization, and accounting |
| <b>AAL</b>       | ATM adaptation layer                          |
| <b>AAL1</b>      | ATM adaption layer 1                          |
| <b>AAL2</b>      | ATM adaption layer 2                          |
| <b>AAL3/4</b>    | ATM adaption layer 3 and 4                    |
| <b>AAL5</b>      | ATM adaption layer 5                          |
| <b>ABM</b>       | Asynchronous Balanced Mode                    |
| <b>AC</b>        | automatic callback                            |
| <b>AC_ACT</b>    | Automatic callback activation                 |
| <b>AC_DEACT</b>  | Automatic callback deactivation               |
| <b>ACL</b>       | automatic congestion level                    |
| <b>ACR</b>       | Anonymous call rejection                      |
| <b>ACR_ACT</b>   | ACR activation code                           |
| <b>ACR_DEACT</b> | ACR deactivation code                         |
| <b>ADI</b>       | activation, deactivation and interrogation    |
| <b>ADM</b>       | Administration, Diagnostics, and Maintenance  |
| <b>AIN</b>       | Advanced Intelligent Network                  |
| <b>Airlines</b>  | airlines information and reservation          |
| <b>AMA</b>       | Automated Message Accounting                  |
| <b>ANI</b>       | automatic number identification               |
| <b>ANNC</b>      | announcement                                  |

|                   |                                                                                                                                                                                                 |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Annex E</b>    | Connection Over UDP—Relates to sending signaling over UDP (User Data Protocol) for quicker call establishment. UDP does not replace TCP/IP. Annex E optimizes the gatekeeper-routed call model. |
| <b>Annex F</b>    | Inter-Domain Communications—A domain is several zones grouped together. Inter-domain communications focuses on address resolution between domains.                                              |
| <b>ANS</b>        | announcement server                                                                                                                                                                             |
| <b>APP</b>        | application                                                                                                                                                                                     |
| <b>AR</b>         | automatic recall                                                                                                                                                                                |
| <b>AR_ACT</b>     | Automatic recall activation                                                                                                                                                                     |
| <b>AR_DEACT</b>   | Automatic recall deactivation                                                                                                                                                                   |
| <b>ASPC</b>       | analog stored program control switch                                                                                                                                                            |
| <b>AT</b>         | access tandem                                                                                                                                                                                   |
| <b>ATM</b>        | Asynchronous Transfer Mode                                                                                                                                                                      |
| <b>AUEP</b>       | Audit Endpoint                                                                                                                                                                                  |
| <b>B</b>          |                                                                                                                                                                                                 |
| <b>B Channel</b>  | bearer channel                                                                                                                                                                                  |
| <b>BAF</b>        | Bellcore AMA Format                                                                                                                                                                             |
| <b>BCID</b>       | billing correlation identifier                                                                                                                                                                  |
| <b>BCM</b>        | Basic Call Module                                                                                                                                                                               |
| <b>BDMS</b>       | Bulk Data Management System of the Cisco BTS 10200 Softswitch.                                                                                                                                  |
| <b>BE</b>         | best effort                                                                                                                                                                                     |
| <b>BEC</b>        | Backward Error Correction                                                                                                                                                                       |
| <b>Bit</b>        | binary digit                                                                                                                                                                                    |
| <b>Block-DA</b>   | Block Directory Assistance.                                                                                                                                                                     |
| <b>Block-INTL</b> | Block International Operator Assistance                                                                                                                                                         |
| <b>Block-TW</b>   | Block Time and Weather                                                                                                                                                                          |
| <b>BLV</b>        | Busy Line Verification                                                                                                                                                                          |
| <b>BOC</b>        | Bell Operating Company                                                                                                                                                                          |
| <b>BRI</b>        | Basic Rate Interface                                                                                                                                                                            |
| <b>BTS</b>        | Broadband Telephony Services                                                                                                                                                                    |

## C

|                  |                                                          |
|------------------|----------------------------------------------------------|
| <b>CA</b>        | Call Agent. Component of the Cisco BTS 10200 Softswitch. |
| <b>CA-Config</b> | Call Agent configuration                                 |
| <b>CALEA</b>     | Communications Assistance for Law Enforcement Act        |
| <b>CALLp</b>     | call processing                                          |
| <b>CAP</b>       | competitive access provider                              |
| <b>CAS</b>       | channel-associated signaling                             |
| <b>CAS-TG</b>    | channel-associated signaling trunk group                 |
| <b>CAT</b>       | customer access treatment                                |
| <b>CBLK</b>      | Call block—reject caller                                 |
| <b>CBR</b>       | constant bit rate                                        |
| <b>CC</b>        | country code or courtesy call                            |
| <b>CCC</b>       | call content channel                                     |
| <b>CCM</b>       | Cisco CallManager                                        |
| <b>CC-NN</b>     | country code—national number                             |
| <b>CCR</b>       | continuity check request message                         |
| <b>CCSS7</b>     | Common Channel Signaling System 7                        |
| <b>CCT</b>       | circuit                                                  |
| <b>CCW</b>       | Cancel call waiting                                      |
| <b>CDB</b>       | call detail block                                        |
| <b>CDC</b>       | call data channel                                        |
| <b>CDP</b>       | Customize dial plan                                      |
| <b>CDR</b>       | call detail record                                       |
| <b>Centrex</b>   | Central Office Exchange                                  |
| <b>CFB</b>       | call forwarding busy                                     |
| <b>CFBI</b>      | Call forwarding busy interrogation                       |
| <b>CFBVA</b>     | Call forwarding busy activation                          |
| <b>CFBVD</b>     | Call forwarding busy deactivation                        |
| <b>CFC</b>       | Call forwarding combination                              |

|                        |                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CFC_ACT</b>         | Call forwarding combination activation                                                                                                                                         |
| <b>CFC_DEACT</b>       | Call forwarding combination deactivation                                                                                                                                       |
| <b>CFC_DN_CHG_ACT</b>  | Call forwarding combination DN change with activation                                                                                                                          |
| <b>CFCI</b>            | CFC interrogation with DN verification                                                                                                                                         |
| <b>CFCI_NO_DN_VRFY</b> | CFC interrogation with no DN verification                                                                                                                                      |
| <b>CFN</b>             | confusion message                                                                                                                                                              |
| <b>CFNA</b>            | call forwarding no answer                                                                                                                                                      |
| <b>CFNA</b>            | Call forwarding no answer                                                                                                                                                      |
| <b>CFNAI</b>           | CFNA variable interrogation                                                                                                                                                    |
| <b>CFNAVA</b>          | CFNA variable activation                                                                                                                                                       |
| <b>CFNAVD</b>          | CFNA variable deactivation                                                                                                                                                     |
| <b>CFU</b>             | call forwarding unconditional                                                                                                                                                  |
| <b>CFUA</b>            | CFU activation                                                                                                                                                                 |
| <b>CFUD</b>            | CFU deactivation                                                                                                                                                               |
| <b>CFUI</b>            | CFU interrogation                                                                                                                                                              |
| <b>CFVABBG</b>         | Call forwarding variable activation for business groups                                                                                                                        |
| <b>CHD</b>             | Call hold                                                                                                                                                                      |
| <b>CIC</b>             | Circuit Identification Code                                                                                                                                                    |
| <b>CIC</b>             | Carrier Identification Code. A unique 3- or 4-digit access identification code assigned by Telcordia (formerly Bellcore). It identifies the long-distance carrier of a caller. |
| <b>CIDCW</b>           | call identity with call waiting                                                                                                                                                |
| <b>CIDCW</b>           | Caller ID with call waiting                                                                                                                                                    |
| <b>CIDS</b>            | Calling identity delivery and suppression per call                                                                                                                             |
| <b>CIDSD</b>           | Calling identity delivery and suppression, delivery part per call                                                                                                              |
| <b>CIDSS</b>           | Calling identity delivery and suppression, suppression part per call                                                                                                           |
| <b>CIP</b>             | carrier information parameter                                                                                                                                                  |
| <b>Cisco BTS 10200</b> | Cisco System's Broadband Telephony Services Softswitch 10200                                                                                                                   |
| <b>CLEC</b>            | competitive local exchange carrier                                                                                                                                             |
| <b>CLH</b>             | circular line hunt                                                                                                                                                             |

|                 |                                                                                                       |
|-----------------|-------------------------------------------------------------------------------------------------------|
| <b>CLI</b>      | command-line interface                                                                                |
| <b>CLIP</b>     | calling line information presentation                                                                 |
| <b>CLIP</b>     | Calling line identity presentation                                                                    |
| <b>CLIR</b>     | calling line information restriction                                                                  |
| <b>CLIR</b>     | Calling line identity restriction                                                                     |
| <b>CLLI</b>     | Common Language Location Identifier. An 11-character descriptor field assigned to a class 4/5 switch. |
| <b>CM</b>       | cable modem                                                                                           |
| <b>CMS</b>      | call management system                                                                                |
| <b>CMTS</b>     | Cable Modem Termination System                                                                        |
| <b>CNAB</b>     | calling name delivery blocking                                                                        |
| <b>CNAB</b>     | Calling name delivery blocking                                                                        |
| <b>CNAM</b>     | Calling name                                                                                          |
| <b>CND</b>      | Calling number delivery                                                                               |
| <b>CNDB</b>     | calling number delivery blocking                                                                      |
| <b>CNM</b>      | Connection Manager                                                                                    |
| <b>CO</b>       | Central Office                                                                                        |
| <b>CONFIG</b>   | configuration                                                                                         |
| <b>COPS</b>     | Common Open Policy Service                                                                            |
| <b>COS</b>      | Class of service screening                                                                            |
| <b>COT</b>      | continuity test                                                                                       |
| <b>COT</b>      | Customer-originated trace                                                                             |
| <b>CPL</b>      | Command Privilege Level                                                                               |
| <b>CPOL</b>     | Cisco Patent On-line                                                                                  |
| <b>CPRK</b>     | Call park access code                                                                                 |
| <b>CPRK_RET</b> | Call park retrieval access code                                                                       |
| <b>CPSG-ID</b>  | call park subscriber group identification                                                             |
| <b>CPU</b>      | central processing unit                                                                               |
| <b>CRA</b>      | circuit reservation acknowledgement                                                                   |
| <b>CRCX</b>     | MGCP create connection message type                                                                   |

|                     |                                                                |
|---------------------|----------------------------------------------------------------|
| <b>CRG</b>          | charge information (message)                                   |
| <b>CRM</b>          | circuit reservation message                                    |
| <b>CRMCRA</b>       | circuit reservation message/circuit reservation acknowledgment |
| <b>CT</b>           | call transfer                                                  |
| <b>CVR</b>          | circuit validation response                                    |
| <b>CVT</b>          | circuit validation test                                        |
| <b>CW</b>           | call waiting                                                   |
| <b>CWD</b>          | call waiting deluxe                                            |
| <b>D</b>            |                                                                |
| <b>D Channel</b>    | data channel                                                   |
| <b>DA</b>           | directory assistance                                           |
| <b>DACWI</b>        | distinctive alerting/call waiting on incoming on DID calls     |
| <b>DA-CWI</b>       | distinctive alerting/call waiting on incoming                  |
| <b>DA-Toll</b>      | 1+411, 1+NPA-555-1212 calls.                                   |
| <b>DChan-Port</b>   | D-Channel Port Number                                          |
| <b>DChan-Slot</b>   | D-Channel Slot                                                 |
| <b>DHCP</b>         | Dynamic Host Control Protocol                                  |
| <b>DID</b>          | direct inward dialing                                          |
| <b>DID/DNIS</b>     | direct inward dialing/Dialed Number Identification Service     |
| <b>DLCX</b>         | MGCP delete connection message type                            |
| <b>DN</b>           | directory number                                               |
| <b>DND</b>          | do not disturb                                                 |
| <b>DND_ACT</b>      | do not disturb activation                                      |
| <b>DND_DEACT</b>    | do not disturb deactivation                                    |
| <b>DNIS Pattern</b> | Dialed Number ID Service                                       |
| <b>DNS</b>          | Domain Name Server                                             |
| <b>DOCSIS</b>       | Data Over Cable System Interface Specification                 |
| <b>DOW</b>          | day of week                                                    |
| <b>DOY</b>          | date of year                                                   |

|                         |                                                                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DP</b>               | detection point                                                                                                                                                                                    |
| <b>DPC</b>              | destination point code                                                                                                                                                                             |
| <b>DPN</b>              | directed call pickup with barge-in                                                                                                                                                                 |
| <b>DPU</b>              | directed call pickup                                                                                                                                                                               |
| <b>DQOS</b>             | dynamic quality of service                                                                                                                                                                         |
| <b>DRCW</b>             | distinctive ringing call waiting                                                                                                                                                                   |
| <b>DRCW_ACT</b>         | DRCW activation code                                                                                                                                                                               |
| <b>DSCP</b>             | DiffServ Code Point                                                                                                                                                                                |
| <b>DSPC</b>             | Digital Stored Program Control Switch                                                                                                                                                              |
| <b>DTMF</b>             | dual tone multifrequency. Tones that are generated when a button on a touch-tone phone is pressed. When the tone is generated, it is compressed, transported to the other party, and decompressed. |
| <b>DTMF-Groundstart</b> | dual tone multifrequency Ground Start                                                                                                                                                              |
| <b>DTMF-IMStart</b>     | dual tone multifrequency Immediate Start                                                                                                                                                           |
| <b>DTMF-Loopstart</b>   | dual tone multifrequency Loop Start                                                                                                                                                                |
| <b>DTMF-Winkstart</b>   | dual tone multifrequency Wink Start                                                                                                                                                                |
| <b>DUP-Records</b>      | duplicate records                                                                                                                                                                                  |
| <b>E</b>                |                                                                                                                                                                                                    |
| <b>E Channel</b>        | echo channel                                                                                                                                                                                       |
| <b>E&amp;M</b>          | recEive and transMit                                                                                                                                                                               |
| <b>EM</b>               | event message                                                                                                                                                                                      |
| <b>E.164</b>            | The ITU-T international public telecommunications numbering plan standard                                                                                                                          |
| <b>EAEA</b>             | Equal Access Exchange Area                                                                                                                                                                         |
| <b>EAEO</b>             | Equal Access End Office                                                                                                                                                                            |
| <b>EAIN</b>             | Bellcore FGD Exchange Access International Signaling                                                                                                                                               |
| <b>EANA</b>             | Bellcore FGD Exchange Access North American Signaling                                                                                                                                              |
| <b>EC</b>               | echo cancellation                                                                                                                                                                                  |
| <b>ECD</b>              | Echo Control Device (normally an echo suppressor or echo canceller)                                                                                                                                |
| <b>E-ISUP</b>           | extended-ISUP                                                                                                                                                                                      |
| <b>EM</b>               | Event Message or Messaging                                                                                                                                                                         |

|                 |                                                                                                        |
|-----------------|--------------------------------------------------------------------------------------------------------|
| <b>EMA</b>      | Event Message Adapter                                                                                  |
| <b>EMG</b>      | Emergency (911) Call                                                                                   |
| <b>EMS</b>      | Element Management System                                                                              |
| <b>EMTA</b>     | Embedded Media Terminal Adapter                                                                        |
| <b>ENUM</b>     | Electronic Number Mapping                                                                              |
| <b>EO</b>       | end office                                                                                             |
| <b>ESA</b>      | Electronic Surveillance Adapter                                                                        |
| <b>EXM</b>      | exit message                                                                                           |
| <b>EXT</b>      | extension                                                                                              |
| <b>F</b>        |                                                                                                        |
| <b>FAIL-CNT</b> | failure count                                                                                          |
| <b>FCLI</b>     | Functional Command Line Interface                                                                      |
| <b>FCP</b>      | Feature Control Protocol                                                                               |
| <b>FDT</b>      | final dial tone                                                                                        |
| <b>FEID</b>     | Financial Entity Identifier                                                                            |
| <b>FGD</b>      | Feature Group D                                                                                        |
| <b>FIM</b>      | feature interaction manager                                                                            |
| <b>FName</b>    | feature name                                                                                           |
| <b>FQDN</b>     | Fully Qualified Domain Name                                                                            |
| <b>FS</b>       | Feature Server in the Cisco BTS 10200 Softswitch                                                       |
| <b>FSAIN</b>    | AIN Feature Server                                                                                     |
| <b>SFPTC</b>    | POTS, Tandem, Centrex Feature Server                                                                   |
| <b>FTP</b>      | File Transfer Protocol                                                                                 |
| <b>G</b>        |                                                                                                        |
| <b>G</b>        | guaranteed                                                                                             |
| <b>GAP</b>      | generic address parameter                                                                              |
| <b>GC</b>       | gate controller                                                                                        |
| <b>GK</b>       | gatekeeper—A device that does E.164 to IP address resolution, bandwidth management and load balancing. |

|                 |                                                                                                                                                                                                     |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GN</b>       | generic name                                                                                                                                                                                        |
| <b>GN</b>       | gateway number (Hong Kong)                                                                                                                                                                          |
| <b>GPRS</b>     | general packet radio service                                                                                                                                                                        |
| <b>GRE</b>      | generic routing encapsulation                                                                                                                                                                       |
| <b>GSC1D</b>    | 1-digit group speed calling                                                                                                                                                                         |
| <b>GSC2D</b>    | 2-digit group speed calling                                                                                                                                                                         |
| <b>GTD</b>      | Generic Transport Descriptor—ASCII based encoding scheme used to pass signaling information end-to-end.                                                                                             |
| <b>GTP</b>      | GPRS tunneling protocol                                                                                                                                                                             |
| <b>GW</b>       | gateway                                                                                                                                                                                             |
| <b>H</b>        |                                                                                                                                                                                                     |
| <b>H.225</b>    | The call signaling protocol of H.323. H.225 uses messages similar to messages defined in Q.931 ITU-T Recommendation.                                                                                |
| <b>H.245</b>    | The resource exchange protocol of H.323. H.245 is used to help the two peers determine the master-slave relationship, the exchange of capabilities, and the opening or closing of logical channels. |
| <b>H.323</b>    | ITU-T recommendation adopted by the VoIP Forum as the call signaling protocol over a LAN                                                                                                            |
| <b>H3A</b>      | The H.323 signaling adapter subsystem of the Cisco BTS 10200 Softswitch                                                                                                                             |
| <b>HFC</b>      | hybrid fiber coaxial                                                                                                                                                                                |
| <b>HMAC</b>     | hash-based message authentication code                                                                                                                                                              |
| <b>HMAC-MD5</b> | hashed message authentication code with MD5 (RFC 2104)                                                                                                                                              |
| <b>HMN</b>      | hardware monitor                                                                                                                                                                                    |
| <b>HOTLINE</b>  | hotline                                                                                                                                                                                             |
| <b>HOTV</b>     | hotline variable                                                                                                                                                                                    |
| <b>HOTVA</b>    | hotline variable activation                                                                                                                                                                         |
| <b>HOTVD</b>    | hotline variable deactivation                                                                                                                                                                       |
| <b>HOTVI</b>    | hotline variable interrogation                                                                                                                                                                      |
| <b>HPTIME</b>   | higher packetization time                                                                                                                                                                           |
| <b>I</b>        |                                                                                                                                                                                                     |
| <b>IAD</b>      | integrated access device                                                                                                                                                                            |
| <b>IC</b>       | Interexchange Carrier                                                                                                                                                                               |

|                  |                                                                  |
|------------------|------------------------------------------------------------------|
| <b>ICMP</b>      | Internet Control Message Protocol                                |
| <b>IDEA</b>      | International Data Encryption Algorithm                          |
| <b>IETF</b>      | Internet Engineering Task Force                                  |
| <b>IKE</b>       | Internet Key Exchange                                            |
| <b>ILEC</b>      | Incumbent local exchange carrier                                 |
| <b>IMAP</b>      | Internet Message Access Protocol                                 |
| <b>INAP</b>      | Intelligent Network Application Part                             |
| <b>INFO</b>      | Information services calls                                       |
| <b>INS</b>       | In-Service                                                       |
| <b>ISFG</b>      | incoming SFG for Centrex                                         |
|                  |                                                                  |
| <b>INTERLATA</b> | Calls that cross LATA boundaries                                 |
| <b>INTL</b>      | international                                                    |
| <b>INTL-OPR</b>  | international operator                                           |
| <b>INTRALATA</b> | Calls that occur within a single LATA                            |
| <b>IP</b>        | Internet Protocol                                                |
| <b>IPsec</b>     | IP Security standard from IETF.                                  |
|                  |                                                                  |
| <b>ISDN</b>      | Integrated Services Digital Network                              |
| <b>ISUP</b>      | ISDN User Part                                                   |
| <b>ITP</b>       | IP transfer point                                                |
| <b>ITP</b>       | intraLATA toll presubscription                                   |
| <b>ITU-T</b>     | International Telecommunication Union - Telecommunication Sector |
| <b>IVR</b>       | Interactive Voice Response                                       |
| <b>IXC</b>       | Interexchange Carrier                                            |
| <b>J</b>         |                                                                  |
| <b>JIP</b>       | jurisdiction information parameter                               |
| <b>K</b>         |                                                                  |
| <b>KDC</b>       | Kerberos Domain Controller                                       |

## L

|                 |                                       |
|-----------------|---------------------------------------|
| <b>LATA</b>     | local access transport area           |
| <b>LB-TEST</b>  | loopback test call (108 test line)    |
| <b>LCADS</b>    | Local Calling Area Data Source        |
| <b>LCD</b>      | limited call duration                 |
| <b>LCR</b>      | least cost routing                    |
| <b>LDAP</b>     | Lightweight Directory Access Protocol |
| <b>LEC</b>      | local exchange carrier                |
| <b>LERG</b>     | Local Exchange Routing Guide          |
| <b>LIDB</b>     | line information database             |
| <b>LNP</b>      | local number portability              |
| <b>LNP</b>      | local number portability              |
| <b>LOCAL</b>    | local call                            |
| <b>LOCK-OUT</b> | lockout                               |
| <b>LPTime</b>   | lower packetization time              |
| <b>LRN</b>      | local routing number                  |
| <b>LSA</b>      | local service area                    |

## M

|                     |                                     |
|---------------------|-------------------------------------|
| <b>MAC</b>          | media access control                |
| <b>MAX-Digits</b>   | maximum number of digits            |
| <b>MCF</b>          | multiple call forwarding            |
| <b>MD5</b>          | message digest 5                    |
| <b>MDCX</b>         | MGCP modify connection message type |
| <b>MDL</b>          | Message Definition Language         |
| <b>MDN</b>          | multiple directory numbers          |
| <b>MDO</b>          | message definition object           |
| <b>MF-IMStart</b>   | multifrequency Immediate Start      |
| <b>MF-Winkstart</b> | multifrequency Wink Start           |
| <b>MIB</b>          | Management Information Base         |

|                   |                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MG/MGW</b>     | media gateway                                                                                                                                                             |
| <b>MGA</b>        | media gateway adapter                                                                                                                                                     |
| <b>MGC</b>        | MGCP Media Gateway Controller                                                                                                                                             |
| <b>MGCP</b>       | Media Gateway Control Protocol, used by the Cisco BTS 10200 Softswitch for controlling the bearer path on the media gateway                                               |
| <b>MGW</b>        | Media Gateway. The main functionality of MGW is to packetize voice PCM stream from IMT in to RTP stream and vice-versa. The Call Agent controls MGWs using MGCP commands. |
| <b>MIN-Digits</b> | minimum number of digits                                                                                                                                                  |
| <b>MLHG</b>       | Multiline hunt group                                                                                                                                                      |
| <b>MSN</b>        | Microsoft Network                                                                                                                                                         |
| <b>MTA</b>        | Media Terminal Adapter                                                                                                                                                    |
| <b>Mu-law</b>     | PCM voice-coding and compounding standard                                                                                                                                 |
| <b>MWI-On</b>     | Message Waiting Indicator On                                                                                                                                              |
| <b>N</b>          |                                                                                                                                                                           |
| <b>NANP</b>       | North American Numbering Plan                                                                                                                                             |
| <b>NANPA</b>      | North American Numbering Plan Administration                                                                                                                              |
| <b>NAS</b>        | network access server                                                                                                                                                     |
| <b>NCA</b>        | no circuit available                                                                                                                                                      |
| <b>NCS</b>        | network-based call signaling                                                                                                                                              |
| <b>NEW-DN</b>     | new subscriber directory number                                                                                                                                           |
| <b>NFAS</b>       | nonfacility associated signaling                                                                                                                                          |
| <b>NLB</b>        | network loopback                                                                                                                                                          |
| <b>NMS</b>        | network management system                                                                                                                                                 |
| <b>NOA</b>        | nature of address                                                                                                                                                         |
| <b>NOD</b>        | nature of dial                                                                                                                                                            |
| <b>NON-EMG</b>    | non emergency calls; 311 calls                                                                                                                                            |
| <b>Noun</b>       | The name of a table in the BTS 10200 database                                                                                                                             |
| <b>NPA</b>        | Numbering Plan Area (area code)                                                                                                                                           |
| <b>NRUF</b>       | Numbering Resource Utilization and Forecast                                                                                                                               |

|                    |                                                                                                                                                                  |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NSA</b>         | no solicitation announcement                                                                                                                                     |
| <b>NSA_ACT</b>     | NSA management                                                                                                                                                   |
| <b>NTE</b>         | named telephony event. An event such as DTMF digits that must be encoded and transported in an RTP packet. RFC 2833 specifies the format of the RTP NTE payload. |
| <b>NTF</b>         | no trouble found                                                                                                                                                 |
| <b>NTP</b>         | Network Time Protocol                                                                                                                                            |
| <b>NXX</b>         | Office Code or Prefix with a first digit of 2-9                                                                                                                  |
| <b>O</b>           |                                                                                                                                                                  |
| <b>O-</b>          | Originating- such as CMS and MGC                                                                                                                                 |
| <b>OAMP</b>        | operations, administration, maintenance provisioning                                                                                                             |
| <b>OCB</b>         | outgoing call barring                                                                                                                                            |
| <b>OCB_ACT</b>     | outgoing call barring activation                                                                                                                                 |
| <b>OCB_ADI</b>     | outgoing call barring—activation, deactivation and interrogation. See OCB and ADI.                                                                               |
| <b>OCB_DEACT</b>   | outgoing call barring deactivation                                                                                                                               |
| <b>OCB_INT</b>     | outgoing call barring interrogation                                                                                                                              |
| <b>OCBA</b>        | Outgoing call barring activation                                                                                                                                 |
| <b>OCBD</b>        | Outgoing call barring deactivation                                                                                                                               |
| <b>OCBI</b>        | Outgoing call barring interrogation                                                                                                                              |
| <b>OCLLI</b>       | CLLI of the originating trunk group                                                                                                                              |
| <b>OCN</b>         | Original Called Number Information Element                                                                                                                       |
| <b>OLD-DN</b>      | Old Subscriber Directory Number                                                                                                                                  |
| <b>OLI</b>         | Originating Line Information                                                                                                                                     |
| <b>OOB</b>         | out of band                                                                                                                                                      |
| <b>OOS</b>         | out of service                                                                                                                                                   |
| <b>OPC</b>         | originating or origination point code                                                                                                                            |
| <b>OPER-Status</b> | Operational Status                                                                                                                                               |
| <b>OSFG</b>        | Outgoing SFG feature for Centrex                                                                                                                                 |
| <b>OSI</b>         | open switch interval or open system interconnection                                                                                                              |
| <b>OSS</b>         | Operations Support System                                                                                                                                        |

|                  |                                                                                 |
|------------------|---------------------------------------------------------------------------------|
| <b>OSSS</b>      | operator services signaling system                                              |
| <b>P</b>         |                                                                                 |
| <b>P1</b>        | Priority Level 1                                                                |
| <b>P2</b>        | Priority Level 2                                                                |
| <b>P3</b>        | Priority Level 3                                                                |
| <b>P4</b>        | Priority Level 4                                                                |
| <b>PHB</b>       | per-hop behavior                                                                |
| <b>PBX</b>       | private branch exchange                                                         |
| <b>PCM</b>       | pulse code modulation                                                           |
| <b>PCS</b>       | personal communications service                                                 |
| <b>PDP</b>       | Policy Decision Point                                                           |
| <b>PEP</b>       | Policy Enforcement Point                                                        |
| <b>PIC</b>       | preferred interLATA carrier or point in call                                    |
| <b>PIN</b>       | private identification number                                                   |
| <b>PIN-LEN</b>   | pin length                                                                      |
| <b>PKT</b>       | packet                                                                          |
| <b>PKT-CBL</b>   | PacketCable                                                                     |
| <b>POP</b>       | point of presence                                                               |
| <b>POTS</b>      | plain old telephone service                                                     |
| <b>PRD</b>       | Product Requirement Document                                                    |
| <b>PREMIUM</b>   | service access code 900, use carrier to route the call                          |
| <b>PS</b>        | privacy screening                                                               |
| <b>PS_MANAGE</b> | privacy screening management                                                    |
| <b>PS_O</b>      | privacy screening assigned to the incoming trunk from the PS application server |
| <b>PSTN</b>      | public switched telephone network.                                              |
| <b>PTC</b>       | Plain Old Telephone Service (POTS), Tandem, Centrex                             |
| <b>PVC</b>       | permanent virtual circuit                                                       |
| <b>Q</b>         |                                                                                 |
| <b>Q.931</b>     | Call-signaling protocol for setup and termination of calls                      |

|                 |                                                                                                                                                                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Q.Sig</b>    | Q signaling—a PBX signaling protocol                                                                                                                                                                                            |
| <b>QAM</b>      | Queuing and Audit Manager                                                                                                                                                                                                       |
| <b>QoS</b>      | quality of service                                                                                                                                                                                                              |
| <b>QVT</b>      | query verification tool                                                                                                                                                                                                         |
| <b>R</b>        |                                                                                                                                                                                                                                 |
| <b>RAC</b>      | Resource Availability Confirmation message                                                                                                                                                                                      |
| <b>RACF</b>     | remote activation of call forwarding                                                                                                                                                                                            |
| <b>RACF_PIN</b> | RACF PIN change                                                                                                                                                                                                                 |
| <b>RADIUS</b>   | Remote Authentication Dial-In User Service                                                                                                                                                                                      |
| <b>RAI</b>      | Resource Availability Indication RAS message                                                                                                                                                                                    |
| <b>RAS</b>      | Registration, Admission, and Status Protocol. RAS is defined in the H.225 ITU-T Recommendation. RAS is used to communicate between gateways, endpoints and gatekeeper. RAS is also used to communicate between two gatekeepers. |
| <b>RBOC</b>     | Regional Bell Operating Company                                                                                                                                                                                                 |
| <b>RCF</b>      | Remote call forwarding                                                                                                                                                                                                          |
| <b>RCF</b>      | Registration Confirmation message                                                                                                                                                                                               |
| <b>RDN</b>      | Redirecting Number Information Element                                                                                                                                                                                          |
| <b>REFER</b>    | refer capability                                                                                                                                                                                                                |
| <b>RFC</b>      | Request for comments document series                                                                                                                                                                                            |
| <b>RGW</b>      | residential gateway                                                                                                                                                                                                             |
| <b>RIP</b>      | Request In Progress message                                                                                                                                                                                                     |
| <b>RKS</b>      | Record Keeping Server; Record Keeping System                                                                                                                                                                                    |
| <b>ROH</b>      | receiver off hook                                                                                                                                                                                                               |
| <b>ROTL</b>     | remote office test line                                                                                                                                                                                                         |
| <b>RR</b>       | ring reminder                                                                                                                                                                                                                   |
| <b>RRJ</b>      | Registration Reject message                                                                                                                                                                                                     |
| <b>RRQ</b>      | Registration Request message                                                                                                                                                                                                    |
| <b>RSIP</b>     | Restart In Progress                                                                                                                                                                                                             |
| <b>RSUP</b>     | Reliable SAP Update Protocol                                                                                                                                                                                                    |

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| <b>RSVP</b>     | Resource Reservation Protocol. An IETF protocol for providing integrated services and reserving resources in an IP-based internet.                                                                                                                                                                                                                                                                                                |
| <b>RTP</b>      | Real-time Transport Protocol—A protocol for transporting multimedia over IP; see RFC 1889, <i>RTP: A Transport Protocol for Real-Time Applications</i> .                                                                                                                                                                                                                                                                          |
| <b>RUDP</b>     | Reliable User Data Protocol (UDP) Protocol.                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>S</b>        |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>S7A</b>      | SS7 ISUP signaling adapter                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>SAP</b>      | Session Announcement Protocol                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>SC1D</b>     | 1-digit speed calling                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SC1D_ACT</b> | 1-digit speed calling activation code                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SC2D</b>     | 2-digit speed calling                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SC2D_ACT</b> | 2-digit speed calling activation code                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SCA</b>      | Selective call acceptance                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>SCA_ACT</b>  | SCA activation code ACA_ACT provides access to an IVR server for activation, screening list setup and editing, and deactivation of SCA                                                                                                                                                                                                                                                                                            |
| <b>SCCP</b>     | Signal Connection Control Part                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>SCF</b>      | Selective call forwarding                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>SCF_ACT</b>  | Selective call forwarding activation                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>SCP</b>      | Service Control Point                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SCR</b>      | Selective call rejection                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>SCR_ACT</b>  | Selective call rejection activation SCR_ACT provides access to an IVR server for the activation, screening list setup and editing, and deactivation of SCR                                                                                                                                                                                                                                                                        |
| <b>SCTP</b>     | Stream Control Transmission Protocol                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>SDP</b>      | Session Description Protocol. A protocol for defining information needed to establish multimedia transport over IP. SDP transmits information such as session announcement, session invitation, transport addresses, and media types. For example, in a SIP call, SDP messages indicates if NTE is used, which events to send using NTE, and the NTE payload type value. See RFC 2327, <i>SDP: Session Description Protocol</i> . |
| <b>SDT</b>      | second dial tone                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Send-ATP</b> | Send Access Transport Parameter                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Send-CIP</b> | Send Carrier Information Parameter                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Send-CN</b>  | Send Charge Number                                                                                                                                                                                                                                                                                                                                                                                                                |

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| <b>Send-CPN</b> | Send Calling Party Number                                                                                                                                                                                                                                                     |
| <b>Send-CSP</b> | Send Carrier Selection Parameter                                                                                                                                                                                                                                              |
| <b>Send-GAP</b> | Send Generic Address Parameter                                                                                                                                                                                                                                                |
| <b>Send-GN</b>  | Send Generic Name                                                                                                                                                                                                                                                             |
| <b>Send-OCN</b> | Send Original Called Number                                                                                                                                                                                                                                                   |
| <b>SFD</b>      | Subscriber-Feature-Data. A record stored on a per-subscriber/per-feature basis in the Cisco BTS 10200 Softswitch.                                                                                                                                                             |
| <b>SFG</b>      | simulated facility group                                                                                                                                                                                                                                                      |
| <b>SG4.0</b>    | Signaling Gateway 4.0 Release                                                                                                                                                                                                                                                 |
| <b>SGCP</b>     | Simple Gateway Control Protocol                                                                                                                                                                                                                                               |
| <b>SHA</b>      | secure hash algorithm                                                                                                                                                                                                                                                         |
| <b>SI</b>       | service indicator                                                                                                                                                                                                                                                             |
| <b>SIM</b>      | Service Interaction Module                                                                                                                                                                                                                                                    |
| <b>SIP</b>      | Session Initiation Protocol. A protocol for transporting multimedia that is independent of the underlying packet control layer, such as the User Datagram Protocol (UDP), and is based on client/server architecture. See RFC 2543, <i>SIP: Session Initiation Protocol</i> . |
| <b>SK</b>       | Service Key                                                                                                                                                                                                                                                                   |
| <b>SMG</b>      | Session Manager                                                                                                                                                                                                                                                               |
| <b>SNMP</b>     | Simple Network Management Protocol                                                                                                                                                                                                                                            |
| <b>SPCS</b>     | stored program control switch                                                                                                                                                                                                                                                 |
| <b>SPVC</b>     | soft permanent virtual circuit                                                                                                                                                                                                                                                |
| <b>SQL</b>      | Structured Query Language                                                                                                                                                                                                                                                     |
| <b>SS7</b>      | Signaling System 7                                                                                                                                                                                                                                                            |
| <b>SSF</b>      | service switching function                                                                                                                                                                                                                                                    |
| <b>SSH</b>      | secure shell                                                                                                                                                                                                                                                                  |
| <b>SSN</b>      | subsystem number                                                                                                                                                                                                                                                              |
| <b>SSP</b>      | service switching point                                                                                                                                                                                                                                                       |
| <b>ST</b>       | Signaling Transport                                                                                                                                                                                                                                                           |
| <b>SVC</b>      | switched virtual circuits                                                                                                                                                                                                                                                     |
| <b>T</b>        |                                                                                                                                                                                                                                                                               |

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|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T-</b>                | Terminating- such as CMS and MGC                                                                                                                                                                                               |
| <b>Table</b>             | A database entity containing customer-provisioned data                                                                                                                                                                         |
| <b>TAC</b>               | Technical Assistance Center                                                                                                                                                                                                    |
| <b>TCAP</b>              | Transaction Capabilities Application Part                                                                                                                                                                                      |
| <b>TCCLI</b>             | CLLI of the terminating trunk group                                                                                                                                                                                            |
| <b>TCL</b>               | Tool command language                                                                                                                                                                                                          |
| <b>TCP</b>               | Transmission Control Protocol                                                                                                                                                                                                  |
| <b>TCP/IP</b>            | Transmission Control Protocol/Internet Protocol                                                                                                                                                                                |
| <b>TDP</b>               | Trigger Detection Point                                                                                                                                                                                                        |
| <b>Technology Prefix</b> | A number used in the gateway and gatekeeper RAS communication to indicate to the gatekeeper the type of service this gateway is capable of handling. Examples of the type of service are voice mail, fax server, and so forth. |
| <b>TFC</b>               | Transfer Controlled                                                                                                                                                                                                            |
| <b>TG</b>                | trunk group                                                                                                                                                                                                                    |
| <b>TGCP</b>              | Trunking Gateway Control Protocol                                                                                                                                                                                              |
| <b>TGW</b>               | trunking gateway (SS7/PSTN)                                                                                                                                                                                                    |
| <b>TID</b>               | trigger ID                                                                                                                                                                                                                     |
| <b>TMN</b>               | Telecommunication Management Network                                                                                                                                                                                           |
| <b>TNS</b>               | Transit Network Selection                                                                                                                                                                                                      |
| <b>TO</b>                | timeout                                                                                                                                                                                                                        |
| <b>TOD</b>               | time of day                                                                                                                                                                                                                    |
| <b>TOS</b>               | type of service                                                                                                                                                                                                                |
| <b>Translated DN</b>     | translated directory number                                                                                                                                                                                                    |
| <b>TRS</b>               | Telecommunications Relay Services                                                                                                                                                                                              |
| <b>TS</b>                | tandem switch                                                                                                                                                                                                                  |
| <b>TSA</b>               | TCAP Signaling Adapter                                                                                                                                                                                                         |
| <b>TSAP</b>              | Transport Service Access Point                                                                                                                                                                                                 |
| <b>T-Stamp</b>           | time stamp                                                                                                                                                                                                                     |
| <b>TType</b>             | trigger type                                                                                                                                                                                                                   |

|                   |                                        |
|-------------------|----------------------------------------|
| <b>TUP</b>        | Telephone User Part                    |
| <b>TUT</b>        | trunk under test                       |
| <b>TVT</b>        | translation verification tool          |
| <b>TW</b>         | time and weather                       |
| <b>TWC</b>        | three-way call                         |
| <b>TWCD</b>       | three-way calling deluxe               |
| <b>U</b>          |                                        |
| <b>UAC</b>        | user agent client                      |
| <b>UAN</b>        | universal access number                |
| <b>UBR</b>        | unspecified bit rate                   |
| <b>UCD</b>        | Uniform Call Distribution              |
| <b>UDP</b>        | User Datagram Protocol                 |
| <b>UPA</b>        | user part available                    |
| <b>UPU</b>        | user part unavailable                  |
| <b>Update-ANI</b> | Update Automatic Number Identification |
| <b>UPL</b>        | user privilege level                   |
| <b>URL</b>        | uniform resource locator               |
| <b>V</b>          |                                        |
| <b>VACANT</b>     | vacant code                            |
| <b>VBR</b>        | variable bit rate                      |
| <b>VISM</b>       | Voice Interworking Service Module      |
| <b>VM</b>         | voice mail                             |
| <b>VM_ACCESS</b>  | voice mail access                      |
| <b>VM_ACT</b>     | voice mail activation feature          |
| <b>VM_DEACT</b>   | voice mail deactivation feature        |
| <b>VMA</b>        | voice mail always                      |
| <b>VMA_ACT (</b>  | voice mail always activation feature   |
| <b>VMA_DEACT</b>  | voice mail always deactivation feature |

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|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>VoIP</b> | Voice over IP. The ability to carry normal telephony-style voice over an IP-based internet with POTS-like functionality, reliability, and voice quality. VoIP is a blanket term which generally refers to Cisco's standards-based (for example, H.323) approach to IP voice traffic. |
| <b>VoP</b>  | Voice over packet                                                                                                                                                                                                                                                                    |