Application Note

Siemens Hicom 330E using ECMA QSIG to Cisco Unified Communications Manager 5.0

November 13, 2007

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Introduction

- This is an application note for connectivity of Siemens Hicom 330E Release 3.1 PBX with Cisco Unified Communication Manager (CUCM) Release 5.0 via Cisco 3745 w/ VWIC-2MFT-E1 as MGCP gateway using ECMA QSIG protocol.
- The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified Communication Manager connected to the PBX via Cisco3745 w/ VWIC-2MFT-E1 link as MGCP gateway.
- Connectivity is achieved by using the PRI QSIG E1 protocol type on the MGCP gateway with Cisco Unified Communication Manager Service parameter QSIG variant of ECMA and ECMA1 switch type on the Hicom 330E PBX.
- This Application Note uses the Cisco 3745 w/ VWIC-2MFT-E1 voice gateway, however other Cisco voice gateways are also an option to use since CallManager QSIG implementation does not depend on the physical interface.

Network Topology

Figure 1. Basic Call Setup

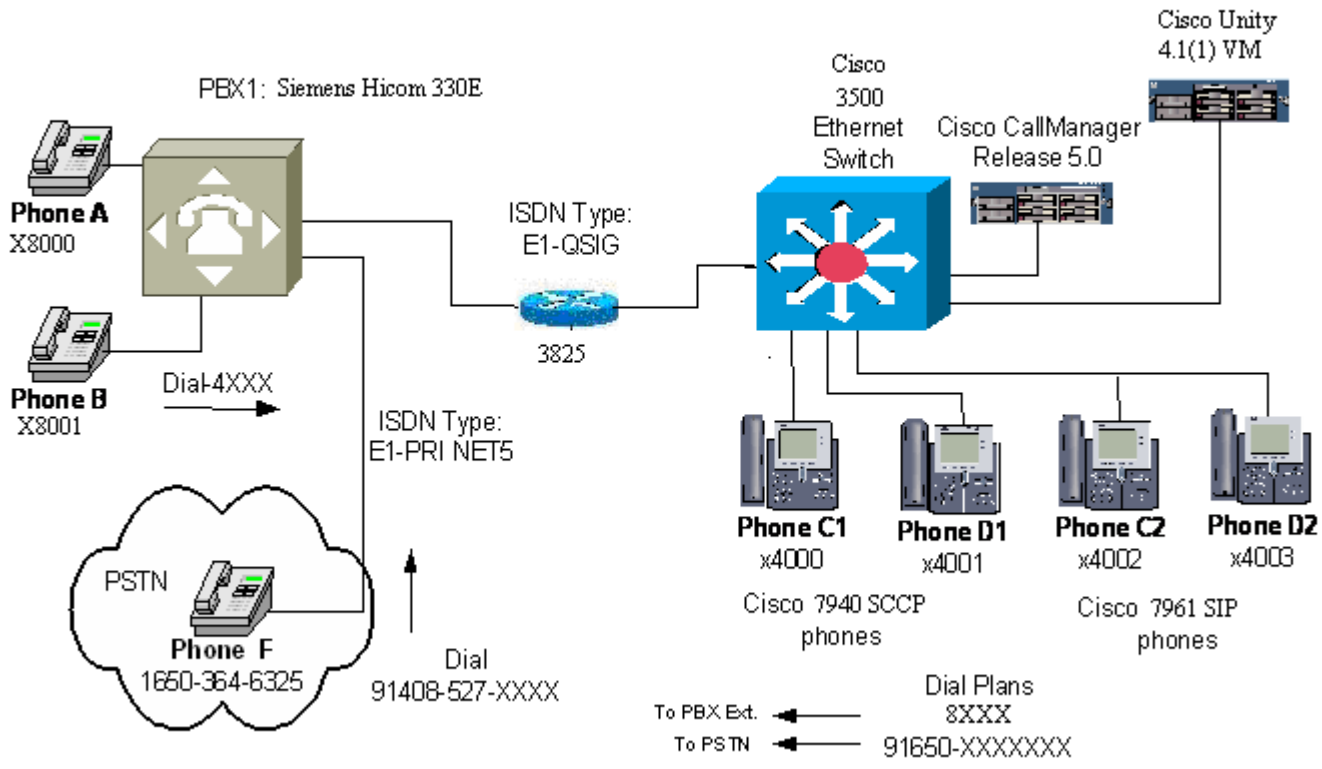
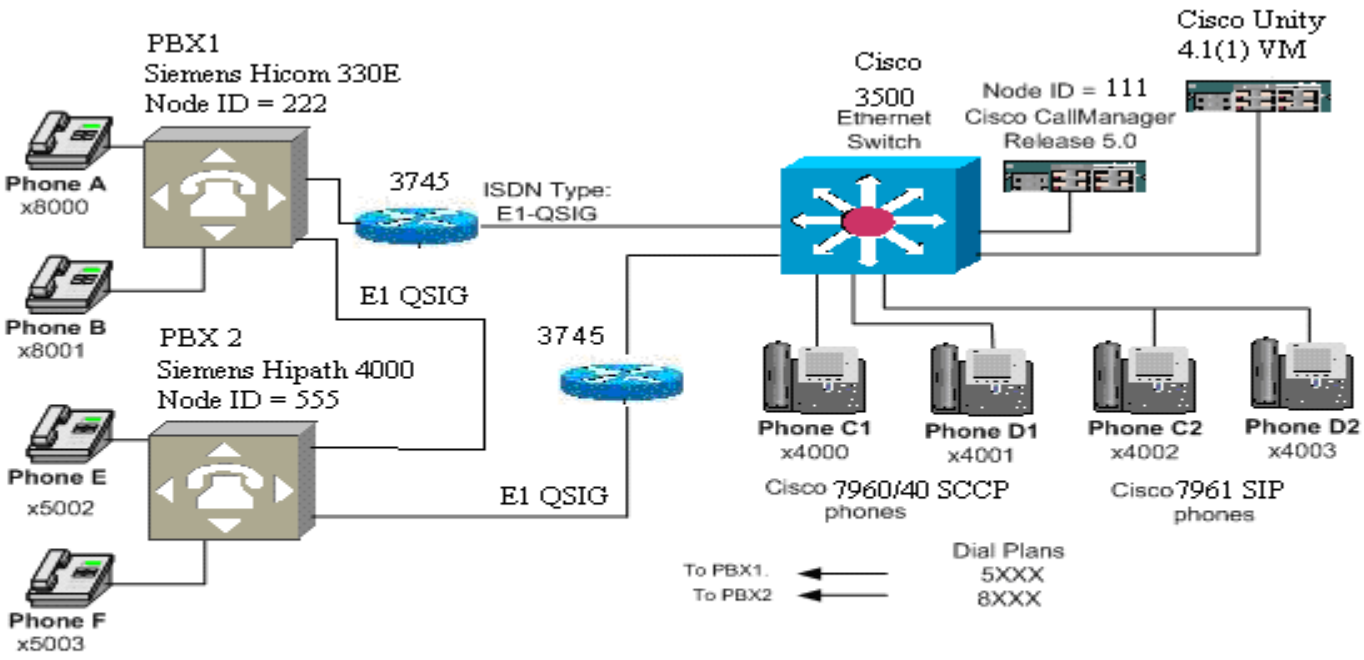


Figure 2. Path Replacement Configuration



As shown in Figure 2 above, PBX1 was connected via an ISDN E1 PRI QSIG link to a Cisco 3745 gateway, which in turn was connected to an Ethernet switch. The interoperability testing involved Layers 1, 2, and 3 on the ISDN PRI QSIG link between a Cisco 3745 and the PBX.

Limitations

B-Channel Mapping

- Siemens Hicom 330E PBX uses timeslot channel numbering (1-15 & 17-31) when QSIG protocol "ECMA1" is selected, therefore the Cisco 3745 Gateway configuration for **Channel IE Type** field should be set to **Timeslot Number.**

Connected Name and Number Restrictions

- Siemens phone displayed dialed number and trunk name when CCM sends Connected Name and Number as restricted.

Additional Network Feature Path Replacement for Call Diversion

- Siemens Hicom 330E PBX does not send Path Replacement proposal for Call Diversion by forward switching.

MWI

- When Cisco Unified CallManager is the Message Center PINX, Siemens Hicom 330E PBX requires the CLI (Calling Line Identification) for Voicemail Message Center in the incoming MWI setup message in order to correctly signal MWI. Current Cisco Unified CallManager Q.SIG MWI implementation however does not send the CLI in the MWI setup message because it's optional in the Q.SIG standard. Since Siemens Hicom 330E Q.SIG MWI implementation requires the CLI as mandatory information, Cisco Unified CallManager will not interoperate with the Hicom 330E PBX.

Overlap Sending

- When CCM is configured for Overlap Sending calls made from SIP Phones C2 or D2 (Fig 1) to Siemens Hipath result in the Name and Number not being updated on the SIP phones (Siemens has been verified to be sending both Alerting Name and Connected Name and Number). This interoperability issue is considered a limitation on Cisco Unified CallManger and an internal corrective action bug fix ticket known internally as DDTS has been generated to resolve this issue in future releases. (DDTS # CSCse36865 Title: Name and Number not updating on SIP Phone when using Overlap sending).

System Components

Hardware Requirements

The following hardware is required:

Cisco Hardware:

- Cisco 3500 switch
- 3745 Gateway
- Cisco Unified CallManager Server

Siemens Hicom 330E PBX Hardware:

- DIU-N2

Software Requirements

The following software is required:

- Cisco Unified CallManager Release 5.0
- Siemens Hicom 330E Release 3.1
- Cisco IOS Release (for the gateway)

Features

Features Supported

- CLIP-Calling Line (Number) Identification Presentation
- CLIR-Calling Line (Number) Identification Restriction
- CNIP-Calling Name Identification Presentation
- CNIR-Calling Name Identification Restriction
- COLP-Connected Line (Number) Identification Presentation
- COLR- Connected Line (Number) Identification Restriction (see limitations section)
- CONP-Connected Name Identification Presentation
- CONR- Connected Name Identification Restriction (see limitations section)

- Sending Alerting Name
- CT-Call Transfer (by join)
- CFU-Call Forwarding Unconditional (by join)
- CFB-Call Forwarding Busy (by join)
- CFNR-Call Forwarding No Reply (by join)
- CFU-Call Forwarding Unconditional (by Reroute)
- CFB-Call Forwarding Busy (by Reroute)
- CFNR-Call Forwarding No Reply (by Reroute)
- CCBS-Call Completion to Busy Subscriber
- CCNR-Call Completion No Reply
- ANF-PR-Additional Network Feature Path Replacement (for Call Transfer by join)
- ANF-PR-Additional Network Feature Path Replacement (for Call Diversion by forward switching) (see limitations section)
- ANF-PR-Additional Network Feature Path Replacement (for Trombone connection)

Features Not Supported

- MWI- Message Waiting Indication (lamp ON, lamp OFF) 1

Configuration

Configuring the Siemens Hicom 330E

1. Add the new access code to Dialing Plans using WABE + LDPLN.
2. Add the new trunk board using BCSU.
3. Configure Class of Trunk using COT.
4. Configure Class of Parameter for device handler using COP.
5. Configure Class of Service using COSSU.
6. Add the new trunk group access code using BUEND.
7. Configure trunk using TDCSU.
8. Configure Reference Clock using REFTA.
9. Configure trunk Least Cost Routing using LDAT + RICHT.
10. Configure LCR Out-dial Rules using LODR.
11. Enable In-Band DTMF signaling for the Digital Stations using SBCSU.
12. Configure Digital Station for MWI application.
13. Configure Message Center's Service Access Number for MWI application.

[1] MWI was tested with CallManager 5.0 as the Message Center PINX (also see Limitations MWI).

14. Configure Digital Station's Class of Service for Mailbox MWI application.

Configuration Menus and Commands for Hicom 330E

DPLN

```
  <dis-wabe:gen;
DIS-WABE:GEN;
H500:  AMO WABE  STARTED
  ------------------------------------------------------------------------------
  | DIGIT INTERPRETATION                  VALID FOR ALL DIAL PLANS             |
  ------------------------------------------------------------------------------
  |                 |    CALL PROGRESS STATE     |  DIGIT   | RESERVED/CONVERT |
  |      CODE       |            1 11111 11112 22| ANALYSIS | DNI/ADD-INFO     |
  |                 |0 12345 67890 12345 67890 12|  RESULT  | *=OWN NODE       |
  ------------------------------------------------------------------------------
  | 001    - 010    |* ..... ..... ..... ..... ..| NETRTE   |                  |
  | 1000            |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  25        |
  |                 |                            |          |DNNO    0-  0- 25 |
  | 11              |. ..... ..... ..... ....* ..| MBKY     |                  |
  | 111             |. .**** ***** **... ..... ..| TIE      |                  |
  | 222             |. .**** ***** **... ..... ..| OWNNODE  |                  |
  | 3000   - 3010   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  33        |
  |                 |                            |          |DNNO    0-  0-333 |
  | 3011   - 3020   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  43        |
  |                 |                            |          |DNNO    0-  0-444 |
  | 3021   - 3030   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  53        |
  |                 |                            |          |DNNO    0-  0-445 |
  ------------------------------------------------------------------------------
  | DIGIT INTERPRETATION                  VALID FOR ALL DIAL PLANS             |
  ------------------------------------------------------------------------------
  |                 |    CALL PROGRESS STATE     |  DIGIT   | RESERVED/CONVERT |
  |      CODE       |            1 11111 11112 22| ANALYSIS | DNI/ADD-INFO     |
  |                 |0 12345 67890 12345 67890 12|  RESULT  | *=OWN NODE       |
  ------------------------------------------------------------------------------
  | 3031   - 3040   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  63        |
  |                 |                            |          |DNNO    0-  0-446 |
  | 3041   - 3050   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  73        |
  |                 |                            |          |DNNO    0-  0-447 |
  | 3051   - 3060   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO  83        |
  |                 |                            |          |DNNO    0-  0-448 |
  | 32              |. .**** ***** **... ..... ..| TIE      |                  |
  | 34     - 36     |. .**** ***** **... ..... ..| TIE      |                  |
  | 39              |. .**** ***** **... ..... ..| TIE      |                  |
  | 4000   - 4050   |. .**** ***** **... ..... ..| STN      |                  |
  |                 |                            |          |DESTNO 111        |
  |                 |                            |          |DNNO    0-  0-111 |
  ------------------------------------------------------------------------------
  | DIGIT INTERPRETATION                  VALID FOR ALL DIAL PLANS             |
  ------------------------------------------------------------------------------
  |                 |    CALL PROGRESS STATE     |  DIGIT   | RESERVED/CONVERT |
  |      CODE       |            1 11111 11112 22| ANALYSIS | DNI/ADD-INFO     |
  |                 |0 12345 67890 12345 67890 12|  RESULT  | *=OWN NODE       |
  ------------------------------------------------------------------------------
  | 4051   - 4599   |. .**** ***** **... ..... ..| STN      | R                |
  |                 |                            |          |DESTNO   0        |
```

			DNNO 0- 0-222*
4700 - 4999	. .**** ***** **...	STN	R
			DESTNO 0
			DNNO 0- 0-222*
5000 - 5009	. .**** ***** **...	STN	
			DESTNO 55
			DNNO 0- 0- 55
5010	. .**** *.*** **...	ATNDIND	R
5011 - 5020	. .**** ***** **...	STN	
			DESTNO 55
			DNNO 0- 0- 55
5021 - 5050	. .**** ***** **...	STN	
			DESTNO 111
			DNNO 0- 0-111
5051	. .**** *.*** **...	ATNDIND	

DIGIT INTERPRETATION	VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE 1 11111 11112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
5500 - 5501	. .**** ***** **...	STN	
			DESTNO 56
			DNNO 0- 0-560
555	. .**** ***** **...	TIE	
560	. .**** ***** **...	TIE	
6000	. .**** ***** **...	STN	
			DESTNO 33
			DNNO 0- 0-333
7000 - 7002	. .**** ***** **...	STN	
			DESTNO 56
			DNNO 0- 0-560
79	. .**** ***** **...	TIE	
8000 - 8019	. .**** ***** **...	STN	
			DESTNO 0
			DNNO 0- 0-222*

DIGIT INTERPRETATION	VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE 1 11111 11112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
8020	. .**** ***** **...	STN	R
			DESTNO 0
			DNNO 0- 0-222*
854	. .**** ***** **...	NETW	R
			DESTNO 2
			DNNO 0- 0- 0
9	. .**** ***** **...	TIE	
*66	. ....*	SIGNON	
*91	. ....* ....*	MBOFF	
#66	. ....*	SIGNOFF	
#91	. ....* ....*	MBON	
##22	. ...* ..	DAKY	
##24	. ...* ..	DSSKY	
##25	. ...* ..	FWDKY	
##26	. ...* ..	HTKY	
##27	. ...* ..	KNOVRKY	
##28	. ...* ..	MBKY	

DIGIT INTERPRETATION	VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE 1 11111 11112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE

```
  ------------------------------------------------------------------------------
  | ##29            |. ..... ..... ..... ....* ..| MSGRKY    |                  |
  | ##35            |. ..... ..... ..... ....* ..| TIMEKY    |                  |
  | ##36            |. ..... ..... ..... ....* ..| VCKY      |                  |
  | ##37            |. ..... ..... ..... ....* ..| VCRKY     |                  |
  | ##38            |. ..... ..... ..... ....* ..| CCKY      |                  |
  | ##39            |. ..... ..... ..... ....* ..| CONFKY    |                  |
  | ##41            |. ..... ..... ..... ....* ..| NAMEKY    |                  |
  | ##42            |. ..... ..... ..... ....* ..| PARKKY    |                  |
  | ##43            |. ..... ..... ..... ....* ..| REMKY     |                  |
  | ##44            |. ..... ..... ..... ....* ..| STKY      |                  |
  | ##45            |. ..... ..... ..... ....* ..| CBKKY     |                  |
  | ##46            |. ..... ..... ..... ....* ..| CONSKY    |                  |
  | ##47            |. ..... ..... ..... ....* ..| DNDKY     |                  |
  | ##48            |. ..... ..... ..... ....* ..| EXHOLDKY  |                  |
  | ##49            |. ..... ..... ..... ....* ..| HOLDKY    |                  |
  | ##50            |. ..... ..... ..... ....* ..| IUSEKY    |                  |
  | ##51            |. ..... ..... ..... ....* ..| LNRKY     |                  |
  ------------------------------------------------------------------------------
  | DIGIT INTERPRETATION                 VALID FOR ALL DIAL PLANS              |
  ------------------------------------------------------------------------------
  |                 |    CALL PROGRESS STATE     |  DIGIT    | RESERVED/CONVERT |
  |      CODE       |            1 11111 11112 22| ANALYSIS  | DNI/ADD-INFO     |
  |                 |0 12345 67890 12345 67890 12|  RESULT   | *=OWN NODE       |
  ------------------------------------------------------------------------------
  | ##52            |. ..... ..... ..... ....* ..| PRIVKY    |                  |
  | ##53            |. ..... ..... ..... ....* ..| RLSKY     |                  |
  | ##54            |. ..... ..... ..... ....* ..| SNRKY     |                  |
  | ##55            |. ..... ..... ..... ....* ..| TRNSKY    |                  |
  | ##56            |. ..... ..... ..... ....* ..| RCTOFFKY  |                  |
  | ##57            |. ..... ..... ..... ....* ..| TOGGLEKY  |                  |
  ------------------------------------------------------------------------------

AMO-WABE -111       DIALLING PLANS, FEATURE ACCESS CODES
DISPLAY COMPLETED;
DIS-WABE:GEN;
H500:  AMO WABE  STARTED
  ------------------------------------------------------------------------------
  | DIGIT INTERPRETATION                 VALID FOR ALL DIAL PLANS              |
  ------------------------------------------------------------------------------
  |                 |    CALL PROGRESS STATE     |  DIGIT    | RESERVED/CONVERT |
  |      CODE       |            1 11111 11112 22| ANALYSIS  | DNI/ADD-INFO     |
  |                 |0 12345 67890 12345 67890 12|  RESULT   | *=OWN NODE       |
  ------------------------------------------------------------------------------
  | 0               |. .**** ..*** **... ..... .*| CO        | R                |
  | 001    - 009    |* ..... ..... ..... ..... ..| NETRTE    |                  |
  | 111             |. .**** ***** **... ..... .*| TIE       |                  |
  | 12              |. .**** ***** **... ..... .*| TIE       | R                |
  | 13     - 14     |. .**** ***** **... ..... .*| TIE       |                  |
  | 21              |. ..... ..... ..... ....* ..| KNOVRKY   |                  |
  | 22              |. ..... ..... ..... ....* ..| DNDKY     |                  |
  | 222             |. .**** ***** **... ..... .*| TIE       |                  |
  | 23              |. ..... ..... ..... ....* ..| FWDKY     |                  |
  | 24              |. ..... ..... ..... ....* ..| MBKY      |                  |
  | 25              |. ..... ..... ..... ....* ..| MSGRKY    |                  |
  | 26              |. ..... ..... ..... ....* ..| DAKY      |                  |
  | 27              |. ..... ..... ..... ....* ..| DSSKY     |                  |
  | 28              |. ..... ..... ..... ....* ..| VCRKY     |                  |
  | 29              |. ..... ..... ..... ....* ..| VCKY      |                  |
  | 30              |. ..... ..... ..... ....* ..| CONFKY    |                  |
  ------------------------------------------------------------------------------
  | DIGIT INTERPRETATION                 VALID FOR ALL DIAL PLANS              |
  ------------------------------------------------------------------------------
  |                 |    CALL PROGRESS STATE     |  DIGIT    | RESERVED/CONVERT |
  |      CODE       |            1 11111 11112 22| ANALYSIS  | DNI/ADD-INFO     |
  |                 |0 12345 67890 12345 67890 12|  RESULT   | *=OWN NODE       |
  ------------------------------------------------------------------------------
```

3000 - 3010	. .**** ***** **... ..... .*	STN	
			DESTNO 30
			DNNO 0- 0-222
3011 - 3020	. .**** ***** **... ..... .*	STN	
			DESTNO 31
			DNNO 0- 0- 31
3021 - 3030	. .**** ***** **... ..... .*	STN	
			DESTNO 32
			DNNO 0- 0- 32
3031 - 3040	. .**** ***** **... ..... .*	STN	
			DESTNO 33
			DNNO 0- 0- 33
3041 - 3050	. .**** ***** **... ..... .*	STN	
			DESTNO 35
			DNNO 0- 0- 35
31	. ...* ..	NAMEKY	
32	. ...* ..	PARKKY	

DIGIT INTERPRETATION	VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE 1 11111 11112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
33	. ...* ..	CCKY	
34	. ...* ..	HTKY	
35	. ...* ..	STKY	
36	. ...* ..	REMKY	
36 - 37	. .**** ..*** **... ..... .*	CO	
38	. ...* ..	TIMEKY	
39	. .**** ***** **... ..... .*	TIE	
4000 - 4050	. .**** ***** **... ..... .*	STN	
			DESTNO 111
			DNNO 0- 0-111
4051 - 4566	. .**** ***** **... ..... .*	STN	
			DESTNO 222
			DNNO 0- 0-222
4567	. .**** ***** **... ..... .*	STN	
			DESTNO 34
			DNNO 0- 0-200

DIGIT INTERPRETATION	VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE 1 11111 11112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
4568 - 4999	. .**** ***** **... ..... .*	STN	
			DESTNO 222
			DNNO 0- 0-222
5000 - 5040	. .**** ***** **... ..... .*	STN	
			DESTNO 0
			DNNO 0- 0-555*
5500 - 5501	. .**** ***** **... ..... .*	STN	
			DESTNO 56
			DNNO 0- 0-560
555	. .**** ***** **... ..... .*	OWNNODE	
560	. .**** ***** **... ..... .*	TIE	
59	. .**** ***** **... ..... .*	TIE	
6000 - 6009	. .**** ***** **... ..... .*	STN	R
			DESTNO 0
			DNNO 0- 0-555*

DIGIT INTERPRETATION	VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE 1 11111 11112 22	DIGIT ANALYSIS	RESERVED/CONVERT DNI/ADD-INFO

```
|                |0 12345 67890 12345 67890 12|  RESULT   | *=OWN NODE       |
-------------------------------------------------------------------------------
| 7000   - 7002  |. .**** ***** **... ..... .*| STN       |                  |
|                |                            |           |DESTNO  56        |
|                |                            |           |DNNO    0-  0-560 |
| 8000   - 8050  |. .**** ***** **... ..... .*| STN       |                  |
|                |                            |           |DESTNO 222        |
|                |                            |           |DNNO    0-  0-222 |
| 8060           |. .**** ***** **... ..... .*| TIE       |                  |
| 8070           |. .**** ***** **... ..... .*| TIE       |                  |
| 83             |. .**** ..*** **... ..... .*| SPDC1     |                  |
| 84             |. .**** ..*** **... ..... .*| SPDC2     |                  |
| 88             |. ..... ..*.. ..... ..... .*| SCONSI    | R                |
| 89             |. ..... ...*. ..... ..... ..| SCONSCO   | R                |
| 9              |. .**** ***** **... ..... .*| TIE       |                  |
| *13            |. ....* ..... ..... ..... ..| AHTVCE    |                  |
| *15            |. *.... ..**. ..... ..... .*| SPLIT     |                  |
| *16            |. ....* ..... ....* ..... ..| AREM      |                  |
| *17            |. *.... ..**. ..... ..... ..| TRACE     |                  |
-------------------------------------------------------------------------------
| DIGIT INTERPRETATION                  VALID FOR ALL DIAL PLANS               |
-------------------------------------------------------------------------------
|                |    CALL PROGRESS STATE     |  DIGIT    | RESERVED/CONVERT |
|      CODE      |            1 11111 11112 22| ANALYSIS  | DNI/ADD-INFO     |
|                |0 12345 67890 12345 67890 12|  RESULT   | *=OWN NODE       |
-------------------------------------------------------------------------------
| *18            |. ....* ..... ..... ..... ..| ACOSX     |                  |
| *19            |. *.... ..... ..... ..... ..| KNOVR     |                  |
| *20            |. ....* ..... ..... ..... ..| ADND      |                  |
| *25            |. ....* ..... ..... ..... ..| FWDTERM   |                  |
| *29            |. ....* ..... ....* ..... ..| AFFWDVCE  |                  |
-------------------------------------------------------------------------------

AMO-WABE -111       DIALLING PLANS, FEATURE ACCESS CODES
DISPLAY COMPLETED;
```

Enbloc Sending Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP,LDPNO=4;
DISPLAY-LDPLN:TYPE=LDP,LDPNO=4;
H500:  AMO LDPLN STARTED
   +--------------+-----------------------------------------+
   |              |                                         |
   | LDPNO :   38 | LDP : 111-X                             |
   |              | SPC : 22                                |
   +--------------+------+------+------++------+------+------+
   |              | DPLN | LRTE | LAUTH|| DPLN | LRTE | LAUTH|
   |              +------+------+------++------+------+------+
   |              |   0  |  111 |   1  ||   8  |  111 |   1  |
   |              |   1  |  111 |   1  ||   9  |  111 |   1  |
   |              |   2  |  111 |   1  ||  10  |  111 |   1  |
   |              |   3  |  111 |   1  ||  11  |  111 |   1  |
   |              |   4  |  111 |   1  ||  12  |  111 |   1  |
   |              |   5  |  111 |   1  ||  13  |  111 |   1  |
   |              |   6  |  111 |   1  ||  14  |  111 |   1  |
   |              |   7  |  111 |   1  ||  15  |  111 |   1  |
   +--------------+-----------------------------------------+

AMO-LDPLN-111       ADMINISTRATION LCR DIALPLAN
DISPLAY COMPLETED;
```

Access code for Overlap Sending Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP,LDPNO=36-X;
DISPLAY-LDPLN:TYPE=LDP,LDPNO=12;
H500:  AMO LDPLN STARTED
   +--------------+-----------------------------------------+
   |              |                                         |
   | LDPNO :   33 | LDP : 36-X                              |
   |              | SPC : 22                                |
   +--------------+------+------+------++------+------+------+
   |              | DPLN | LRTE | LAUTH|| DPLN | LRTE | LAUTH|
   |              +------+------+------++------+------+------+
   |              |   0  |   36 |   1  ||   8  |      |      |
   |              |   1  |      |      ||   9  |      |      |
   |              |   2  |      |      ||  10  |      |      |
   |              |   3  |      |      ||  11  |      |      |
   |              |   4  |      |      ||  12  |      |      |
   |              |   5  |      |      ||  13  |      |      |
   |              |   6  |      |      ||  14  |      |      |
   |              |   7  |      |      ||  15  |      |      |
   +--------------+------+------+------++------+------+------+

AMO-LDPLN-111       ADMINISTRATION LCR DIALPLAN
DISPLAY COMPLETED;
```

PSTN Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP,LDPNO=34;
DISPLAY-LDPLN:TYPE=LDP,LDPNO=5;
H500:  AMO LDPLN STARTED
   +--------------+-----------------------------------------+
   |              |                                         |
   | LDPNO :   34 | LDP : 9-1650-XXXXXXX                    |
   |              | SPC : 22                                |
   +--------------+------+------+------++------+------+------+
   |              | DPLN | LRTE | LAUTH|| DPLN | LRTE | LAUTH|
   |              +------+------+------++------+------+------+
   |              |   0  |  916 |   1  ||   8  |      |      |
   |              |   1  |      |      ||   9  |      |      |
   |              |   2  |      |      ||  10  |      |      |
   |              |   3  |      |      ||  11  |      |      |
   |              |   4  |      |      ||  12  |      |      |
   |              |   5  |      |      ||  13  |      |      |
   |              |   6  |      |      ||  14  |      |      |
   |              |   7  |      |      ||  15  |      |      |
   +--------------+------+------+------++------+------+------+

AMO-LDPLN-111       ADMINISTRATION LCR DIALPLAN
DISPLAY COMPLETED;
```

BCSU

PRI Board

```
<DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=3,SLOT=73;
DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=3,SLOT=25;
H500:  AMO BCSU  STARTED

 ADDRESS :  LTG  1   LTU 3    SOURCE GROUP 1
-----+-----------+---------+---+---+-+------------+-----+--------+------------+
     | ASSIGNED  | MODULE  |FCT|HWY| | INSERTED   |     |        | MODULE     |
 PEN | MODULE    | TYPE    |ID |BDL| | MODULE     |STATE| HW-INFO| STATUS     |
-----+-----------+---------+---+---+-+------------+-----+--------+------------+
  73 | Q2196-X     DIU-N2     1  A | | Q2196-X    |  1  | -04 -  | READY      |

AMO-BCSU -111       BOARD CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;
  <
```

PSTN board

```
<DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=2,SLOT=79;
DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=2,SLOT=79;
H500:  AMO BCSU  STARTED

 ADDRESS :  LTG  1   LTU 2    SOURCE GROUP 1
-----+-----------+---------+---+---+-+------------+-----+--------+------------+
     | ASSIGNED  | MODULE  |FCT|HWY| | INSERTED   |     |        | MODULE     |
 PEN | MODULE    | TYPE    |ID |BDL| | MODULE     |STATE| HW-INFO| STATUS     |
-----+-----------+---------+---+---+-+------------+-----+--------+------------+
  79 | Q2196-X     DIU-N2     1  A | | Q2196-X    |  1  | -06 -  | READY      |

AMO-BCSU -111       BOARD CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;
```

Class of Trunk, COT

```
  <dis-cot:4;
DIS-COT:4;
H500:  AMO COT   STARTED

   COT:   4  INFO: 4:Q931 EXTERNAL
   DEVICE: INDEP        SOURCE: DB
   PARAMETER:
        PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE              PRI
        RECALL IF USER HANGS UP IN CONSULTATION CALL                 RCL
        TRUNK CALL TRANSFER                                          XFER
        TRUNK SIGNALING ANSWER                                       ANS
        CHANGEOVER FROM HOLD TO RING TONE                            CHRT
        KNOCKING OVERRIDE POSSIBLE                                   KNOR
        CALL EXTEND FOR BUSY, RING OR CALL STATE                     CEBC
        NETWORKWIDE AUTOMATIC CALLBACK ON BUSY                       CBBN
        NETWORKWIDE AUTOMATIC CALLBACK ON FREE                       CBFN
        DON'T RELEASE CALL TO BUSY HUNT GROUP                        BSHT
        SEND NO NODE NUMBER TO PARTNER                               LWNC
        CONNECTION TO ROUTE OPTIMIZATION NODE                        ROPT
        INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR                     NLCR
        TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)           TSCS
        INCOMING CDR BY ZONE OR FROM LINE                            ICZL
        INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR (DATA)              NLRD
        INTERWORKING CALLBACK - NO ANSWER AND MAILBOX CALLBACK       IWCB
        AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ    AOCC
        LINE WITH IMPLICIT NUMBERS                                   LINO
        CONTROLLED TRUNK AND LINE SELECTION                          CTLS
        NO TONE                                                      NTON
```

```
AMO-COT  -111       CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
  <dis-cot:5;
DIS-COT:5;
H500:  AMO COT   STARTED

   COT:   5  INFO: 5:ECMA1 V2.0
   DEVICE: INDEP        SOURCE: DB
   PARAMETER:
        PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE              PRI
        RECALL IF USER HANGS UP IN CONSULTATION CALL                 RCL
        TRUNK CALL TRANSFER                                          XFER
        TRUNK SIGNALING ANSWER                                       ANS
        CHANGEOVER FROM HOLD TO RING TONE                            CHRT
        KNOCKING OVERRIDE POSSIBLE                                   KNOR
        CALL EXTEND FOR BUSY, RING OR CALL STATE                     CEBC
        NETWORKWIDE AUTOMATIC CALLBACK ON BUSY                       CBBN
        NETWORKWIDE AUTOMATIC CALLBACK ON FREE                       CBFN
        DON'T RELEASE CALL TO BUSY HUNT GROUP                        BSHT
        CONNECTION TO ROUTE OPTIMIZATION NODE                        ROPT
        TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)           TSCS
        INCOMING CDR BY ZONE OR FROM LINE                            ICZL
        AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ    AOCC
        LINE WITH IMPLICIT NUMBERS                                   LINO
        NO TONE                                                      NTON

AMO-COT  -111       CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
```

For Call Forwarding by Reroute need to add FNAN and FWDN to COT4 and 5
For Path Replacement need to add ROPT to COT 4 and 5 on the Hicom 330E.

```
<CHANGE-COT:COTNO=4,COTTYPE=COTADD,PAR=FNAN&FWDN&ROPT;
CHANGE-COT:COTNO=4,COTTYPE=COTDEL,PAR=FNAN&FWDN&ROPT;
H500:  AMO COT   STARTED
H07: CHANGED COT STILL LINKED WITH FOLLOWING TRUNKS:
   COT   TRUNK         BCGR  DEVICE
   ----------------------------------
     4   1- 1- 79-  0  1     S2CONN
         1- 1- 79-  1  1     S2CONN
         1- 2- 25-  0  1     S2CONN
         1- 2- 25-  1  1     S2CONN
         1- 2- 31-  0  1     S2CONN
         1- 2- 31-  1  1     S2CONN
         1- 1- 85-  2        S0CONN
         1- 1- 85-  3        S0CONN
         1- 1- 85-  6        S0CONN
         1- 1- 85-  7        S0CONN
         1- 1- 73-  0  1     S2CONN
         1- 1- 73-  1  1     S2CONN
   ----------------------------------
H06: COT 4 CHANGED

AMO-COT  -111       CLASS OF TRUNK FOR CALL PROCESSING
CHANGE COMPLETED;

<CHANGE-COT:COTNO=5,COTTYPE=COTADD,PAR=FNAN&FWDN&ROPT;
CHANGE-COT:COTNO=5,COTTYPE=COTDEL,PAR=FNAN&FWDN&ROPT;
H500:  AMO COT   STARTED
H07: CHANGED COT STILL LINKED WITH FOLLOWING TRUNKS:
   COT   TRUNK         BCGR  DEVICE
   ----------------------------------
     5   1- 1- 79-  0  1     S2CONN
         1- 2- 25-  0  1     S2CONN
         1- 2- 25-  1  1     S2CONN
```

```
         1- 2- 31-  0  1     S2CONN
         1- 2- 31-  1  1     S2CONN
         1- 1-103-  0  1     CDGCONN
         1- 1-103-  1  1     CDGCONN
         1- 1- 73-  0  1     S2CONN
   -----------------------------------
H06: COT 5 CHANGED

AMO-COT  -111       CLASS OF TRUNK FOR CALL PROCESSING
CHANGE COMPLETED;

  <dis-cot:4;
DIS-COT:4;
H500:  AMO COT   STARTED

   COT:   4  INFO: 4:Q931 EXTERNAL
   DEVICE: INDEP        SOURCE: DB
   PARAMETER:
        PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE              PRI
        RECALL IF USER HANGS UP IN CONSULTATION CALL                 RCL
        TRUNK CALL TRANSFER                                          XFER
        TRUNK SIGNALING ANSWER                                       ANS
        CHANGEOVER FROM HOLD TO RING TONE                            CHRT
        KNOCKING OVERRIDE POSSIBLE                                   KNOR
        CALL EXTEND FOR BUSY, RING OR CALL STATE                     CEBC
        NETWORKWIDE AUTOMATIC CALLBACK ON BUSY                       CBBN
        NETWORKWIDE AUTOMATIC CALLBACK ON FREE                       CBFN
        NETWORKWIDE CALL FORWARDING PERMITTED                        FWDN
        NETWORKWIDE FORWARDING NO-ANSWER                             FNAN
        DON'T RELEASE CALL TO BUSY HUNT GROUP                        BSHT
        SEND NO NODE NUMBER TO PARTNER                               LWNC
        CONNECTION TO ROUTE OPTIMIZATION NODE                        ROPT
        INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR                     NLCR
        TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)           TSCS
        INCOMING CDR BY ZONE OR FROM LINE                            ICZL
        INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR (DATA)              NLRD
        INTERWORKING CALLBACK - NO ANSWER AND MAILBOX CALLBACK       IWCB
        AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ    AOCC
        LINE WITH IMPLICIT NUMBERS                                   LINO
        CONTROLLED TRUNK AND LINE SELECTION                          CTLS
        NO TONE                                                      NTON

AMO-COT  -111       CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
  <dis-cot:5;
DIS-COT:5;
H500:  AMO COT   STARTED

   COT:   5  INFO: 5:ECMA1 V2.0
   DEVICE: INDEP        SOURCE: DB
   PARAMETER:
        PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE              PRI
        RECALL IF USER HANGS UP IN CONSULTATION CALL                 RCL
        TRUNK CALL TRANSFER                                          XFER
        TRUNK SIGNALING ANSWER                                       ANS
        CHANGEOVER FROM HOLD TO RING TONE                            CHRT
        KNOCKING OVERRIDE POSSIBLE                                   KNOR
        CALL EXTEND FOR BUSY, RING OR CALL STATE                     CEBC
        NETWORKWIDE AUTOMATIC CALLBACK ON BUSY                       CBBN
        NETWORKWIDE AUTOMATIC CALLBACK ON FREE                       CBFN
```

```
        NETWORKWIDE CALL FORWARDING PERMITTED                          FWDN
        NETWORKWIDE FORWARDING NO-ANSWER                               FNAN
        DON'T RELEASE CALL TO BUSY HUNT GROUP                          BSHT
        CONNECTION TO ROUTE OPTIMIZATION NODE                          ROPT
        TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)             TSCS
        INCOMING CDR BY ZONE OR FROM LINE                              ICZL
        AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ      AOCC
        LINE WITH IMPLICIT NUMBERS                                     LINO
        NO TONE                                                        NTON

AMO-COT  -111       CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
  <
```

Class of Parameter for Device Handler, COP

```
  <DISPLAY-COP:COPNO=4;
DISPLAY-COP:COPNO=4;
H500:  AMO COP   STARTED

   COP:   4  INFO: 4:Q931
   DEVICE: INDEP        SOURCE: DB
   PARAMETER:
        LINE WITH END-OF-DIAL                                  EOD
        SPECIAL MODE                                           SFRM
        CODE CALLING RELEASE AFTER EVERY TASK                  CCR
        REGISTRATION OF LAYER 3 ADVISORIES                     L3AR

AMO-COP  -111       CLASS OF PARAMETER FOR DEVICE HANDLER
DISPLAY COMPLETED;
```

Class of Service, COSSU

```
  <DISPLAY-COSSU:TYPE=COS,COS=32;
DISPLAY-COSSU:TYPE=COS,COS=32;
H500:  AMO COSSU STARTED
   +------+----------+---------+---------+---------+----------+
   | COS  |  VOICE   |   FAX   |   TTX   |   VTX   |    DTE   |
   +------+----------+---------+---------+---------+----------+
   |   32 |>32:TRUNKS                                          |
   |      |      TA  |   NOCO  |   NOCO  |   NOCO  |      TA  |
   |      |  TNOTCR  |  NOTIE  |  NOTIE  |  NOTIE  |  TNOTCR  |
   |      |          |         |         |         |   BASIC  |
   |      |          |         |         |         |     MSN  |
   |      |          |         |         |         |  CDRINT  |
   |      |          |         |         |         |  MULTRA  |
   |      |          |         |         |         |          |
   +------+----------+---------+---------+---------+----------+
AMO-COSSU-111       CLASSES OF SERVICE, SWITCHING UNIT
DISPLAY COMPLETED;
  <DISPLAY-COSSU:TYPE=LCOSV,LCOSV=32;
DISPLAY-COSSU:TYPE=LCOSV,LCOSV=32;
H500:  AMO COSSU STARTED
   +----+-------------------------------------------------------------------+-----+
   |LCOS|                            LAUTH                                  | LCR |
   |  V |         1         2         3         4         5         6    |OPTS=|
   |    |12345678901234567890123456789012345678901234567890123456789012345|LCRET|
   |    |>SERVICE INFORMATION                                               | LCR |
   +----+----+----|----+----|----+----|----+----|----+----|----+----|----+-----+
   |  32|XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX|  .  |
   |    |>32:TRUNKS                                                         |
   +----+-------------------------------------------------------------------+-----+
```

```
AMO-COSSU-111       CLASSES OF SERVICE, SWITCHING UNIT
DISPLAY COMPLETED;
```

Trunk Group Access Code, BUEND

```
  <DISPLAY-BUEND:TGRP=37,FORMAT=L;
DISPLAY-BUEND:TGRP=37,FORMAT=L;
H500:  AMO BUEND STARTED

+------------------------------ FORMAT = L ----------------------------------+
|  TGRP NUMBER :    37   TGRP NAME   : PRI TEST           MAXIMUM NO.   :   30 |
|                        CHARCON     : NEUTRAL                                |
|  SUBGROUP NO.:    10   DEVICE TYPE : S2CONN             TRACENO       :    0 |
|  RESERVED    :     N   SEARCH MODE : CIRCULAR           ACD THRESHOLD :    * |
|  NUMBER OF ASSOCIATED ROUTES       :   5                PRIORITY      :    2 |
|  THE FOLLOWING TRUNKS (LTG-LTU-SLOT-CCT) HAVE BEEN ALLOCATED:                |
+------------------------------------------------------------------------------+
|   1- 1- 73-0   B-CHL:  1 |  1- 1- 73-0   B-CHL:  2 |  1- 1- 73-0   B-CHL:  3 |
|   1- 1- 73-0   B-CHL:  4 |  1- 1- 73-0   B-CHL:  5 |  1- 1- 73-0   B-CHL:  6 |
|   1- 1- 73-0   B-CHL:  7 |  1- 1- 73-0   B-CHL:  8 |  1- 1- 73-0   B-CHL:  9 |
|   1- 1- 73-0   B-CHL: 10 |  1- 1- 73-0   B-CHL: 11 |  1- 1- 73-0   B-CHL: 12 |
|   1- 1- 73-0   B-CHL: 13 |  1- 1- 73-0   B-CHL: 14 |  1- 1- 73-0   B-CHL: 15 |
|   1- 1- 73-0   B-CHL: 16 |  1- 1- 73-0   B-CHL: 17 |  1- 1- 73-0   B-CHL: 18 |
|   1- 1- 73-0   B-CHL: 19 |  1- 1- 73-0   B-CHL: 20 |  1- 1- 73-0   B-CHL: 21 |
|   1- 1- 73-0   B-CHL: 22 |  1- 1- 73-0   B-CHL: 23 |  1- 1- 73-0   B-CHL: 24 |
|   1- 1- 73-0   B-CHL: 25 |  1- 1- 73-0   B-CHL: 26 |  1- 1- 73-0   B-CHL: 27 |
|   1- 1- 73-0   B-CHL: 28 |  1- 1- 73-0   B-CHL: 29 |  1- 1- 73-0   B-CHL: 30 |
+------------------------------------------------------------------------------+

AMO-BUEND-111       TRUNK GROUP
DISPLAY COMPLETED;


  <DISPLAY-BUEND:TGRP=38,FORMAT=L;
DISPLAY-BUEND:TGRP=38,FORMAT=L;
H500:  AMO BUEND STARTED

+------------------------------ FORMAT = L ----------------------------------+
|  TGRP NUMBER :    38   TGRP NAME   : ETSI CCM           MAXIMUM NO.   :   30 |
|                        CHARCON     : NEUTRAL                                |
|  SUBGROUP NO.:     9   DEVICE TYPE : S2CONN             TRACENO       :    0 |
|  RESERVED    :     N   SEARCH MODE : CIRCULAR           ACD THRESHOLD :    * |
|  NUMBER OF ASSOCIATED ROUTES       :   5                PRIORITY      :    2 |
|  THE FOLLOWING TRUNKS (LTG-LTU-SLOT-CCT) HAVE BEEN ALLOCATED:                |
+------------------------------------------------------------------------------+
|   1- 1- 73-1   B-CHL:  1 |  1- 1- 73-1   B-CHL:  2 |  1- 1- 73-1   B-CHL:  3 |
|   1- 1- 73-1   B-CHL:  4 |  1- 1- 73-1   B-CHL:  5 |  1- 1- 73-1   B-CHL:  6 |
|   1- 1- 73-1   B-CHL:  7 |  1- 1- 73-1   B-CHL:  8 |  1- 1- 73-1   B-CHL:  9 |
|   1- 1- 73-1   B-CHL: 10 |  1- 1- 73-1   B-CHL: 11 |  1- 1- 73-1   B-CHL: 12 |
|   1- 1- 73-1   B-CHL: 13 |  1- 1- 73-1   B-CHL: 14 |  1- 1- 73-1   B-CHL: 15 |
|   1- 1- 73-1   B-CHL: 16 |  1- 1- 73-1   B-CHL: 17 |  1- 1- 73-1   B-CHL: 18 |
|   1- 1- 73-1   B-CHL: 19 |  1- 1- 73-1   B-CHL: 20 |  1- 1- 73-1   B-CHL: 21 |
|   1- 1- 73-1   B-CHL: 22 |  1- 1- 73-1   B-CHL: 23 |  1- 1- 73-1   B-CHL: 24 |
|   1- 1- 73-1   B-CHL: 25 |  1- 1- 73-1   B-CHL: 26 |  1- 1- 73-1   B-CHL: 27 |
|   1- 1- 73-1   B-CHL: 28 |  1- 1- 73-1   B-CHL: 29 |  1- 1- 73-1   B-CHL: 30 |
+------------------------------------------------------------------------------+

AMO-BUEND-111       TRUNK GROUP
DISPLAY COMPLETED;
```

Trunk Configuration, TDCSU

For Master-side Configuration

```
  <DISPLAY-TDCSU:PEN1=1-1-73-0;
DISPLAY-TDCSU:PEN1=1-1-73-0;
H500:  AMO TDCSU STARTED
  +------------------------ DIGITAL TRUNK (FORMAT=L) -------------------------+
  |             DEV = S2CONN                   PEN =  1-01-073-0              |
  |-------------------------------------------------------------------------- |
  | COTNO    = 5             COPNO    = 4             DPLN     = 0            |
  | ITR      = 0             COS      = 32            LCOSV    = 32           |
  | LCOSD    = 32            CCT      =               DESTNO   = 55           |
  | PROTVAR  = ECMA1         SEGMENT  = 1             TCHARG   = N            |
  | SUPPRESS = 0             DGTPR    =               CHIMAP   = N            |
  | ISDNCC   =               ISDNAC   =               ISDNLC   =              |
  | ISDNIP   =               ISDNNP   =                                       |
  | PNPL2C   =               PNPL1C   =               PNPLC    =              |
  | PNPL2P   =               PNPL1P   =               PNPAC    =              |
  | TRACOUNT = 31            SATCOUNT = MANY          NNO      = 55           |
  | ALARMNO  = 0             FIDX     = 1             CARRIER  = 1            |
  | ZONE     = EMPTY         COTX     = 4             FWDX     = 10           |
  | DOMTYPE  =               DOMAINNO =               TPROFNO  =              |
  | INIGHT   =                                                               |
  | CCHDL    =               UUSCCX   = 16            UUSCCY   = 8            |
  |-------------------------------------------------------------------------- |
  | TGRP     = 37            SRCHMODE = CIR           BCNEG    = N            |
  | BCGR     = 1             INS      = Y             LWPAR    = 2            |
  | LWPP     = 0             LWLT     = 0             LWPS     = 0            |
  | LWR1     = 0             LWR2     = 0                                     |
  | BCHAN    1 && 30                                                         |
  |                                                                          |
  +--------------------------------------------------------------------------+
  AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111       DIGITAL TRUNKS
DISPLAY COMPLETED;
```

```
  <DISPLAY-LWPAR:FORMAT=L,BLNO=2,TYPE=DIUS2;
DISPLAY-LWPAR:FORMAT=L,BLNO=1,TYPE=DIUS2;
H500:  AMO LWPAR STARTED

   +-------------------------------------------------------------------------+
   | LOADWARE PARAMETERS     CIRCUIT TYPE: DIUS2  SOURCE:DB    BLOCK:    2 |
   +-------------------------------------------------------------------------+
   | LNTYPE   = COPPER         VERSION  = S2           QUAL     =  ON       |
   | MASTER   = Y              DCHAN1   = 16           DCHAN2   = 0         |
   | PATTERN  = D5H            QUAL1    =  10 SEC.     QUAL2    =  10 MIN.  |
   | SMD      = Y              PERMACT  = Y            FCBAB    = DFH       |
   | CDG      = N              FIXEDTEI = 0            CNTRNR   = 255       |
   | TEIVERIF = N              CRC4REP  = N                                  |
   | DEV      = INDEP                                                        |
   | INFO     = 2:COPPER-MASTER CLOCK.(CORNET)                               |
   +-------------------------------------------------------------------------+

AMO-LWPAR-111       LOADWARE PARAMETERS FOR NETWORKING MODULES
DISPLAY COMPLETED;
```

For Slave-side Configuration

```
  <DISPLAY-TDCSU:PEN1=1-1-73-1;
DISPLAY-TDCSU:PEN1=1-1-73-1;
H500:  AMO TDCSU STARTED
  +------------------------ DIGITAL TRUNK (FORMAT=L) -------------------------+
  |             DEV = S2CONN                   PEN =  1-01-073-1              |
  |-------------------------------------------------------------------------- |
  | COTNO    = 4             COPNO    = 4             DPLN     = 0            |
  | ITR      = 0             COS      = 32            LCOSV    = 32           |
  | LCOSD    = 32            CCT      = HIPATH S2     DESTNO   = 111          |
  | PROTVAR  = ECMA1         SEGMENT  = 1             TCHARG   = N            |
  | SUPPRESS = 0             DGTPR    =               CHIMAP   = N            |
  | ISDNCC   =               ISDNAC   =               ISDNLC   =              |
  | ISDNIP   =               ISDNNP   =                                       |
  | PNPL2C   =               PNPL1C   =               PNPLC    =              |
  | PNPL2P   =               PNPL1P   =               PNPAC    =              |
  | TRACOUNT = 31            SATCOUNT = MANY          NNO      = 111          |
  | ALARMNO  = 0             FIDX     = 1             CARRIER  = 1            |
  | ZONE     = EMPTY         COTX     = 4             FWDX     = 10           |
  | DOMTYPE  =               DOMAINNO =               TPROFNO  =              |
  | INIGHT   =                                                               |
  | CCHDL    =               UUSCCX   = 16            UUSCCY   = 8            |
  |-------------------------------------------------------------------------- |
  | TGRP     = 38            SRCHMODE = CIR           BCNEG    = Y            |
  | BCGR     = 1             INS      = Y             LWPAR    = 3            |
  | LWPP     = 0             LWLT     = 0             LWPS     = 0            |
  | LWR1     = 0             LWR2     = 0                                     |
  | BCHAN    1 && 30                                                         |
  |                                                                          |
  +--------------------------------------------------------------------------+
  AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111       DIGITAL TRUNKS
DISPLAY COMPLETED;

<DISPLAY-LWPAR:FORMAT=L,BLNO=0,TYPE=DIUS2;
DISPLAY-LWPAR:FORMAT=L,BLNO=0,TYPE=DIUS2;
H500:  AMO LWPAR STARTED

   +-------------------------------------------------------------------------+
   | LOADWARE PARAMETERS     CIRCUIT TYPE: DIUS2  SOURCE:DB    BLOCK:    3 |
   +-------------------------------------------------------------------------+
   | LNTYPE   = COPPER         VERSION  = S2           QUAL     =  ON        |
   | MASTER   = N              DCHAN1   = 16           DCHAN2   = 0          |
   | PATTERN  = D5H            QUAL1    =  10 SEC.     QUAL2    =  10 MIN.  |
   | SMD      = N              PERMACT  = Y            FCBAB    = DFH        |
   | CDG      = N              FIXEDTEI = 0            CNTRNR   = 255        |
   | TEIVERIF = N              CRC4REP  = N                                  |
   | DEV      = INDEP                                                        |
   | INFO     = 3:COPPER-DERIVE CLOCK(CORNET)                                |
   +-------------------------------------------------------------------------+

AMO-LWPAR-111       LOADWARE PARAMETERS FOR NETWORKING MODULES
DISPLAY COMPLETED;
```

PSTN Trunk Configuration, TDCSU

```
<DISPLAY-TDCSU:PEN1=1-1-79-1;
DISPLAY-TDCSU:PEN1=1-1-79-1;
H500:  AMO TDCSU STARTED
  +------------------------ DIGITAL TRUNK (FORMAT=L) -------------------------+
  |             DEV = S2CONN                   PEN =  1-01-079-1              |
  |-------------------------------------------------------------------------- |
  | COTNO    = 4             COPNO    = 4             DPLN     = 0            |
  | ITR      = 0             COS      = 32            LCOSV    = 32           |
  | LCOSD    = 32            CCT      =               DESTNO   = 55           |
  | PROTVAR  = ETSI          SEGMENT  = 1             TCHARG   = N            |
  | SUPPRESS = 0             DGTPR    =               CHIMAP   = N            |
  | ISDNCC   =               ISDNAC   =               ISDNLC   =              |
  | ISDNIP   =               ISDNNP   =                                       |
  | PNPL2C   =               PNPL1C   =               PNPLC    =              |
  | PNPL2P   =               PNPL1P   =               PNPAC    =              |
  | TRACOUNT = 31            SATCOUNT = MANY          NNO      = 55           |
  | ALARMNO  = 0             FIDX     = 1             CARRIER  = 1            |
  | ZONE     = EMPTY         COTX     = 4             FWDX     = 10           |
  | DOMTYPE  =               DOMAINNO =               TPROFNO  =              |
  | INIGHT   =                                                               |
  | CCHDL    =               UUSCCX   = 16            UUSCCY   = 8            |
  |-------------------------------------------------------------------------- |
  | TGRP     = 71            SRCHMODE = CIR           BCNEG    = N            |
  | BCGR     = 1             INS      = N             LWPAR    = 2            |
  | LWPP     = 0             LWLT     = 0             LWPS     = 0            |
  | LWR1     = 0             LWR2     = 0                                     |
  | BCHAN    1 && 30                                                         |
  |                                                                          |
  +--------------------------------------------------------------------------+
  AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111       DIGITAL TRUNKS
DISPLAY COMPLETED;
```

Trunk Configuration to HIPATH node, TDCSU

```
<DISPLAY-TDCSU:PEN1=1-1-73-0;
DISPLAY-TDCSU:PEN1=1-1-73-0;
H500:  AMO TDCSU STARTED
  +------------------------ DIGITAL TRUNK (FORMAT=L) -------------------------+
  |             DEV = S2CONN                   PEN =  1-01-073-0              |
  |-------------------------------------------------------------------------- |
  | COTNO    = 5             COPNO    = 4             DPLN     = 0            |
  | ITR      = 0             COS      = 32            LCOSV    = 32           |
  | LCOSD    = 32            CCT      =               DESTNO   = 55           |
  | PROTVAR  = ECMA1         SEGMENT  = 1             TCHARG   = N            |
  | SUPPRESS = 0             DGTPR    =               CHIMAP   = N            |
  | ISDNCC   =               ISDNAC   =               ISDNLC   =              |
  | ISDNIP   =               ISDNNP   =                                       |
  | PNPL2C   =               PNPL1C   =               PNPLC    =              |
  | PNPL2P   =               PNPL1P   =               PNPAC    =              |
  | TRACOUNT = 31            SATCOUNT = MANY          NNO      = 55           |
  | ALARMNO  = 0             FIDX     = 1             CARRIER  = 1            |
  | ZONE     = EMPTY         COTX     = 4             FWDX     = 10           |
  | DOMTYPE  =               DOMAINNO =               TPROFNO  =              |
```

```
  | INIGHT   =                                                              |
  | CCHDL    =              UUSCCX   = 16           UUSCCY   = 8            |
  |-------------------------------------------------------------------------|
  | TGRP     = 37           SRCHMODE = CIR          BCNEG    = N            |
  | BCGR     = 1            INS      = Y            LWPAR    = 3            |
  | LWPP     = 0            LWLT     = 0            LWPS     = 0            |
  | LWR1     = 0            LWR2     = 0                                    |
  | BCHAN    1 && 30                                                        |
  |                                                                         |
  +-------------------------------------------------------------------------+
  AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111       DIGITAL TRUNKS
DISPLAY COMPLETED;
```

Reference Clock Configuration, REFTA

For Master-side Configuration

```
<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-0;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-0;
H500:  AMO REFTA STARTED
   +-------------------------------------------------------------------------+
   |          R E F E R E N C E   C L O C K   C I R C U I T S                 |
   +--------------+---------+-----------+------+--------+------+--------+-----+
   | PEN          | MODULE  | DEVICE    | PRI  | ERROR  |BLOCK | SUPP.  |READY|
   |              |         |           |      |        |      |        |BUT  |
   |              |         |           |      |        |      |        |ASYN.|
   +--------------+---------+-----------+------+--------+------+--------+-----+
   |  1- 1- 73- 0 | DIU-N2  | S2CONN    |    0 |      0 |    N |        |  N  |
   +--------------+---------+-----------+------+--------+------+--------+-----+

AMO-REFTA-111       REFERENCE CLOCK TABLE
DISPLAY COMPLETED;
```

For Slave-side Configuration

```
<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
H500:  AMO REFTA STARTED
   +-------------------------------------------------------------------------+
   |          R E F E R E N C E   C L O C K   C I R C U I T S                 |
   +--------------+---------+-----------+------+--------+------+--------+-----+
   | PEN          | MODULE  | DEVICE    | PRI  | ERROR  |BLOCK | SUPP.  |READY|
   |              |         |           |      |        |      |        |BUT  |
   |              |         |           |      |        |      |        |ASYN.|
   +--------------+---------+-----------+------+--------+------+--------+-----+
   |  1- 1- 73- 1 | DIU-N2  | S2CONN    |   11 |      0 |    N |        |  N  |
   +--------------+---------+-----------+------+--------+------+--------+-----+

AMO-REFTA-111       REFERENCE CLOCK TABLE
DISPLAY COMPLETED;
```

LDAT

```
  <DISPLAY-LDAT:TYPE=LCR,LROUTE=111;
DISPLAY-LDAT:TYPE=LCR,LROUTE=111;
H500:  AMO LDAT  STARTED
   +------------------------------------------------------------------------+
   | LROUTE = 111   LDPLN      NAME = ROPT CCM                SERVICE =  ALL |
   | TYPE = LCR                                  DNNO OF ROUTE  =        111 |
   | SERVICE INFO =                                                         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |       |       |       |     |     | SCHEDULE | CARRIER    |BAND|         |
   | LRTEL |  LVAL |  TGRP | ODR |LAUTH| ABCDEFGH |       ZONE |WDTH|   LATTR |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |     1 |     1 |    38 |   4 |   1 | ******** | 1    EMPTY |  1 |    NONE |
   |       | DNNO =        111                                      |         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+

AMO-LDAT -111       LCR-DIRECTIONS
DISPLAY COMPLETED;

<DISPLAY-LDAT:TYPE=LCR,LROUTE=555;
DISPLAY-LDAT:TYPE=LCR,LROUTE=555;
H500:  AMO LDAT  STARTED
   +------------------------------------------------------------------------+
   | LROUTE = 555   LDPLN      NAME = ROPT HIPATH             SERVICE =  ALL |
   | TYPE = LCR                                  DNNO OF ROUTE  =        55  |
   | SERVICE INFO =                                                         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |       |       |       |     |     | SCHEDULE | CARRIER    |BAND|         |
   | LRTEL |  LVAL |  TGRP | ODR |LAUTH| ABCDEFGH |       ZONE |WDTH|   LATTR |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |     1 |     1 |    37 |   4 |   1 | ******** | 1    EMPTY |  1 |    NONE |
   |       | DNNO =        55                                       |         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+

AMO-LDAT -111       LCR-DIRECTIONS
DISPLAY COMPLETED;
 <

<DISPLAY-LDAT:TYPE=LCR,LROUTE=37;
DISPLAY-LDAT:TYPE=LCR,LROUTE=37;
H500:  AMO LDAT  STARTED
   +------------------------------------------------------------------------+
   | LROUTE = 37    LDPLN      NAME = PRI TEST                SERVICE =  ALL |
   | TYPE = LCR                                  DNNO OF ROUTE  =        222 |
   | SERVICE INFO =                                                         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |       |       |       |     |     | SCHEDULE | CARRIER    |BAND|         |
   | LRTEL |  LVAL |  TGRP | ODR |LAUTH| ABCDEFGH |       ZONE |WDTH|   LATTR |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |     1 |     1 |    37 |   1 |   1 | ******** | 1    EMPTY |  1 |    NONE |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+

AMO-LDAT -111       LCR-DIRECTIONS
DISPLAY COMPLETED;
```

```
    <DISPLAY-LDAT:TYPE=LCR,LROUTE=38;
DISPLAY-LDAT:TYPE=LCR,LROUTE=38;
H500:  AMO LDAT  STARTED
   +------------------------------------------------------------------------+
   | LROUTE = 38    LDPLN      NAME = PRI                      SERVICE =  ALL |
   | TYPE = LCR                                  DNNO OF ROUTE  =        111 |
   | SERVICE INFO =                                                         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |       |       |       |     |     | SCHEDULE | CARRIER    |BAND|         |
   | LRTEL |  LVAL |  TGRP | ODR |LAUTH| ABCDEFGH |       ZONE |WDTH|   LATTR |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |     1 |     1 |    38 |   1 |   1 | ******** | 1    EMPTY |  1 |    NONE |
   |       | DNNO = 1 -1  -999                                      |         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+

AMO-LDAT -111       LCR-DIRECTIONS
DISPLAY COMPLETED;

<DISPLAY-LDAT:TYPE=LCR,LROUTE=916;
DISPLAY-LDAT:TYPE=LCR,LROUTE=916;
H500:  AMO LDAT  STARTED
   +------------------------------------------------------------------------+
   | LROUTE = 916   LDPLN      NAME = 91650 PSTN               SERVICE =  ALL |
   | TYPE = LCR                                  DNNO OF ROUTE  =        59  |
   | SERVICE INFO =                                                         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |       |       |       |     |     | SCHEDULE | CARRIER    |BAND|         |
   | LRTEL |  LVAL |  TGRP | ODR |LAUTH| ABCDEFGH |       ZONE |WDTH|   LATTR |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+
   |     1 |     1 |    71 |   6 |   1 | ******** | 1    EMPTY |  1 |    NONE |
   |       | DNNO =        99                                       |         |
   +-------+-------+-------+-----+-----+----------+------------+----+---------+

AMO-LDAT -111       LCR-DIRECTIONS
DISPLAY COMPLETED;
```

RICHT

```
<DISPLAY-RICHT:MODE=LRTE,LRTE=111;
DISPLAY-RICHT:MODE=LRTE,LRTE=111;
H500:  AMO RICHT STARTED
+----------------------------------------------------------------+
| LRTE = 111    NAME = ROPT CCM         (NEUTRAL)  SRVC = ALL    |
| DNNO =        111  DESTNO = 111                                |
| ROUTOPT = YES    REROUT = YES   PLB = NO     FWDBL = NO        |
| MFV: CNV=FIX     DSP=WITHOUT TEXT=               PULS=PP300  |
| ROUTENO =    15 BUGS = LIN  ROUTATT = NO       MAINGRP =   15 |
| INFO =                                                         |
+----------------------------------------------------------------+
| TGRP =  38 LDAT ETSI CCM           (NEUTRAL)  SUBGROUP =    9 |
+----------------------------------------------------------------+

AMO-RICHT-111       TRUNK ROUTING
DISPLAY COMPLETED;

<DISPLAY-RICHT:MODE=LRTE,LRTE=555;
DISPLAY-RICHT:MODE=LRTE,LRTE=555;
H500:  AMO RICHT STARTED
+----------------------------------------------------------------+
| LRTE = 555    NAME = ROPT HIPATH      (NEUTRAL)  SRVC = ALL    |
| DNNO =        55   DESTNO =  55                                |
| ROUTOPT = YES    REROUT = YES   PLB = NO     FWDBL = NO        |
| MFV: CNV=FIX     DSP=WITHOUT TEXT=               PULS=PP300  |
| ROUTENO =    14 BUGS = LIN  ROUTATT = NO       MAINGRP =   14 |
| INFO =                                                         |
+----------------------------------------------------------------+
| TGRP =  37 LDAT PRI TEST           (NEUTRAL)  SUBGROUP =   10 |
+----------------------------------------------------------------+

AMO-RICHT-111       TRUNK ROUTING
DISPLAY COMPLETED;

<DISPLAY-RICHT:MODE=LRTE,LRTE=37;
DISPLAY-RICHT:MODE=LRTE,LRTE=37;
H500:  AMO RICHT STARTED
+----------------------------------------------------------------+
| LRTE = 37     NAME = PRI TEST         (NEUTRAL)  SRVC = ALL    |
| DNNO =        222                                              |
| ROUTOPT = YES    REROUT = YES   PLB = NO     FWDBL = NO        |
| MFV: CNV=FIX     DSP=WITHOUT TEXT=               PULS=PP300  |
| ROUTENO =    11 BUGS = LIN  ROUTATT = NO       MAINGRP =   11 |
| INFO =                                                         |
+----------------------------------------------------------------+
| TGRP =  37 LDAT PRI TEST           (NEUTRAL)  SUBGROUP =   10 |
+----------------------------------------------------------------+

AMO-RICHT-111       TRUNK ROUTING
DISPLAY COMPLETED;
```

```
<DISPLAY-RICHT:MODE=LRTE,LRTE=38;
DISPLAY-RICHT:MODE=LRTE,LRTE=38;
H500:  AMO RICHT STARTED
+------------------------------------------------------------+
| LRTE = 38     NAME = PRI              (NEUTRAL)  SRVC = ALL  |
| DNNO =        111                                          |
| ROUTOPT = YES    REROUT = YES   PLB = NO     FWDBL = NO    |
| MFV: CNV=FIX     DSP=WITHOUT TEXT=               PULS=PP300 |
| ROUTENO =     8 BUGS = LIN  ROUTATT = NO       MAINGRP =    8 |
| INFO =                                                     |
+------------------------------------------------------------+
| TGRP =  38 LDAT ETSI CCM           (NEUTRAL)  SUBGROUP =    9 |
+------------------------------------------------------------+

AMO-RICHT-111       TRUNK ROUTING
DISPLAY COMPLETED;
```

PSTN RICHT

```
  <DISPLAY-RICHT:MODE=LRTE,LRTE=916;
DISPLAY-RICHT:MODE=LRTE,LRTE=916;
H500:  AMO RICHT STARTED
+------------------------------------------------------------+
| LRTE = 916    NAME = 91650 PSTN       (NEUTRAL)  SRVC = ALL  |
| DNNO =        59   DESTNO =  59                            |
| ROUTOPT = YES    REROUT = YES   PLB = NO     FWDBL = NO    |
| MFV: CNV=FIX     DSP=WITHOUT TEXT=               PULS=PP300 |
| ROUTENO =    20 BUGS = LIN  ROUTATT = NO       MAINGRP =   20 |
| INFO =                                                     |
+------------------------------------------------------------+
| TGRP =  71 LDAT CLOSED NUMBER E1   (NEUTRAL)  SUBGROUP =   19 |
+------------------------------------------------------------+

AMO-RICHT-111       TRUNK ROUTING
DISPLAY COMPLETED;
  <
```

LCR Out-dial Rules, LODR

```
<DISPLAY-LODR:ODR=4;
DISPLAY-LODR:ODR=4;
H500:  AMO LODR  STARTED
   +-------------------------------------------------+
   |  ODR     POSITION  CMD         PARAMETER        |
   +--------+----------------------------------------+
   |    4   |      1    ECHO        1                |
   |        |      2    ECHO        2                |
   |        |      3    END                          |
   +--------+----------------------------------------+
H03: THE NEXT FREE ODR IS 7

AMO-LODR -111       ADMINISTRATION OF LCR OUTDIAL RULES
DISPLAY COMPLETED;
```

```
<DISPLAY-LODR:ODR=1;
DISPLAY-LODR:ODR=1;
H500:  AMO LODR  STARTED
   +-------------------------------------------------------+
   |  ODR     POSITION  CMD         PARAMETER              |
   +--------+----------------------------------------------+
   |    1   |      1    ECHO        2                      |
   |        |      2    END                                |
   +--------+----------------------------------------------+
   |INFO:PSTN                                              |
   +-------------------------------------------------------+
H03: THE NEXT FREE ODR IS 7

AMO-LODR -111       ADMINISTRATION OF LCR OUTDIAL RULES
DISPLAY COMPLETED;

<DISPLAY-LODR:ODR=6;
DISPLAY-LODR:ODR=6;
H500:  AMO LODR  STARTED
   +-------------------------------------------------------+
   |  ODR     POSITION  CMD         PARAMETER              |
   +--------+----------------------------------------------+
   |    6   |      1    ECHO        2                      |
   |        |      2    ECHO        3                      |
   |        |      3    END                                |
   +--------+----------------------------------------------+
H03: THE NEXT FREE ODR IS 7

AMO-LODR -111       ADMINISTRATION OF LCR OUTDIAL RULES
DISPLAY COMPLETED;
```

Name and Number Restrictions:

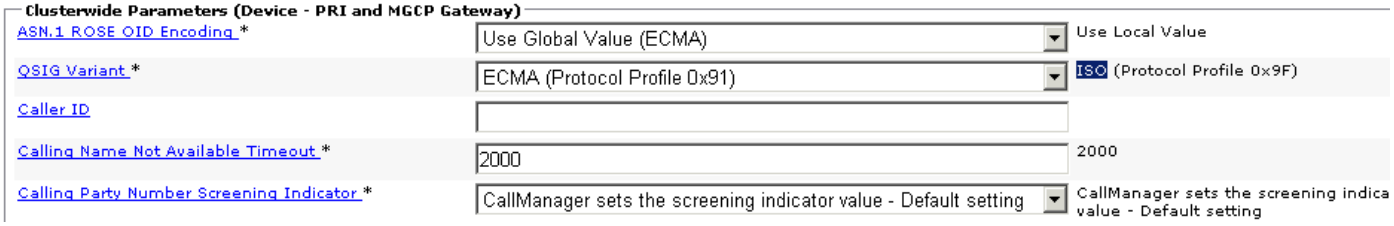
To use Name and Number Restrictions, the station configuration should be changed so that the parameter SSTNO=Y, (Secret Station Number must be set to Yes).

```
<DISPLAY-SBCSU:STNO=8000;
DISPLAY-SBCSU:STNO=8000;
H500:  AMO SBCSU STARTED

  -------------------------------- USER DATA -----------------------------------
  STNO    =8000    OPT     =OPTI    COS1   =7     DPLN   =0        SPDI   =Y
  MAINO   =8000    CONN    =DIR     COS2   =7     ITR    =0        SPDC1  =0
  PEN     = 1- 1- 55-  1           LCOSV1 =31    COSX   =0        SPDC2  =1
  INS     =Y       STD     =3       LCOSV2 =31    SERVID =0        CBKBMAX=5
                   SECR    =N       LCOSD1 =31    DSSTNA =N        RCBKB  =N
  SSTNO   =Y       DIGNODIS=N       LCOSD2 =31    DSSTNB =Y        RCBKNA =N
  TRACE   =N       HFREE   =        ASYNCT =500   PERMACT=         CBKNAMB=Y
  ALARMNO =0       HMUSIC  =0       API    =N     TEXTSEL=ENGLISH
  EXTBUS  =        REP     =0       OPTICOM=N     OPTISPA:0        DLAUT  =
  CALLOG  =NONE    IDCR    =N       OPTICA =0     OPTIS0A:0        DLMAN  =
                   HEADSET =N       OPTIDA =0     OPTIABA:0        PRIO   =
                   HSKEY   =NORMAL  ATMADDR=                       VPI    =
                   DFSVCANA=        TFAGRP =      PATTERN=         VCI    =
  DVCFIG  =OPTISET TSI     =1       SOPTIDX=      SPROT  =
                                    DOPTIDX=      DPROT  =
                                    FOPTIDX=      FPROT  =
                                    TOPTIDX=      TPROT  =
                                    VOPTIDX=      VPROT  =
  ------------------ ACTIVATION IDENTIFIERS FOR FEATURES ---------------------
```

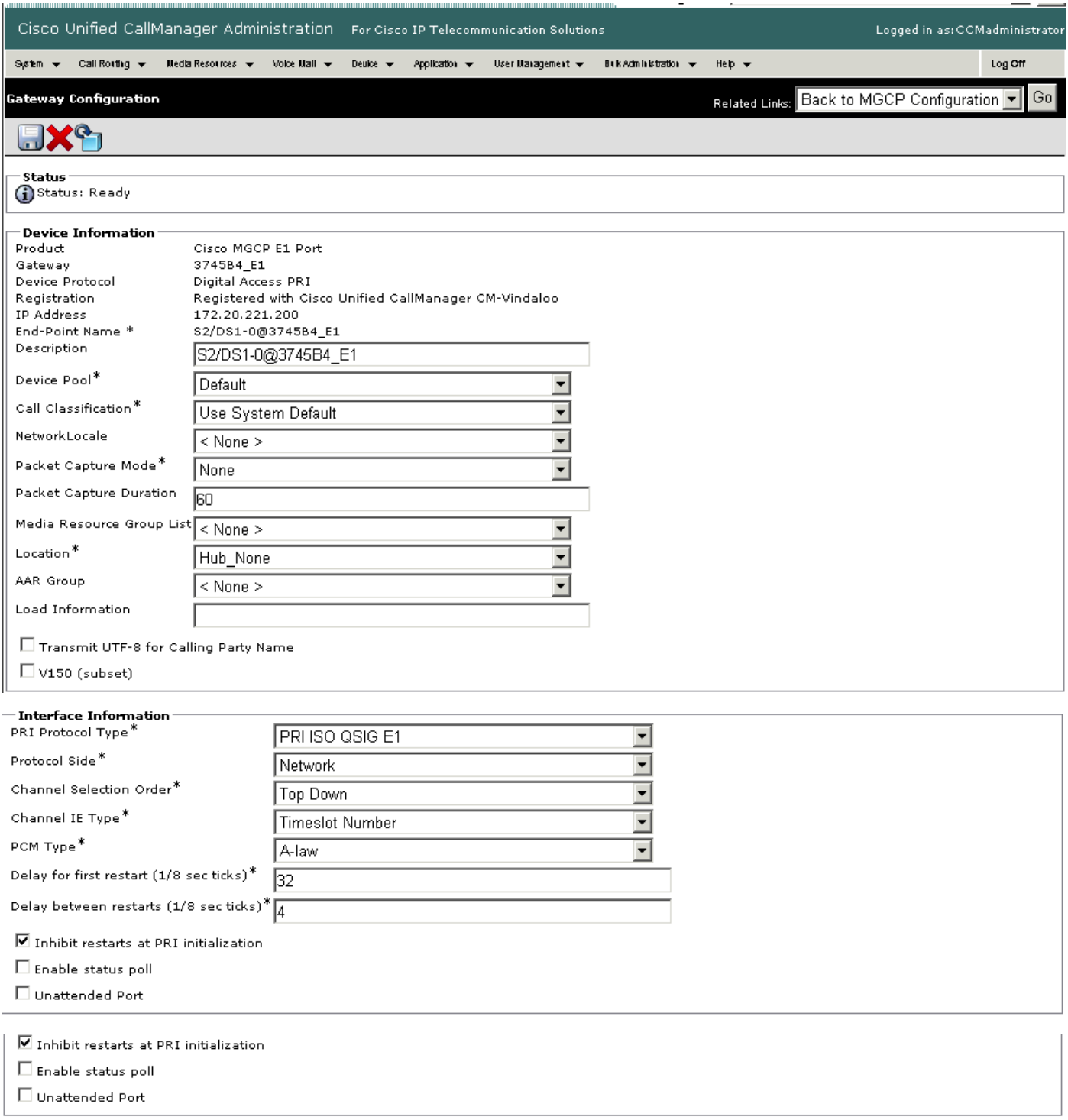
```
  FWDS    :N       FWDT    :N       FWDV    :N     FWDF    :N        FWDD    :N
  HTOS    :N       HTOT    :N       HTOV    :N     HTOF    :N        HTOD    :N
  DND     :N       VCP     :Y       CWT     :N                       TCLOGIN:N
  --------------------- FEATURES AND GROUP MEMBERSHIPS -----------------------
  ESSTN   :
  PUGR    :        HUNTING GROUP    : N
  KEYSYS  :N       NIGHT OPTION     : N       ASSOCIATED  STN           : N
  --------------------- SUBSCRIBER ATTRIBUTES (AMO SDAT) ---------------------
  NONE
  --------------------------------------------------------------------------

AMO-SBCSU-111       STATION AND S0-BUS CONFIGURATION OF SWITCHING UNIT
DISPLAY COMPLETED;
  <
```

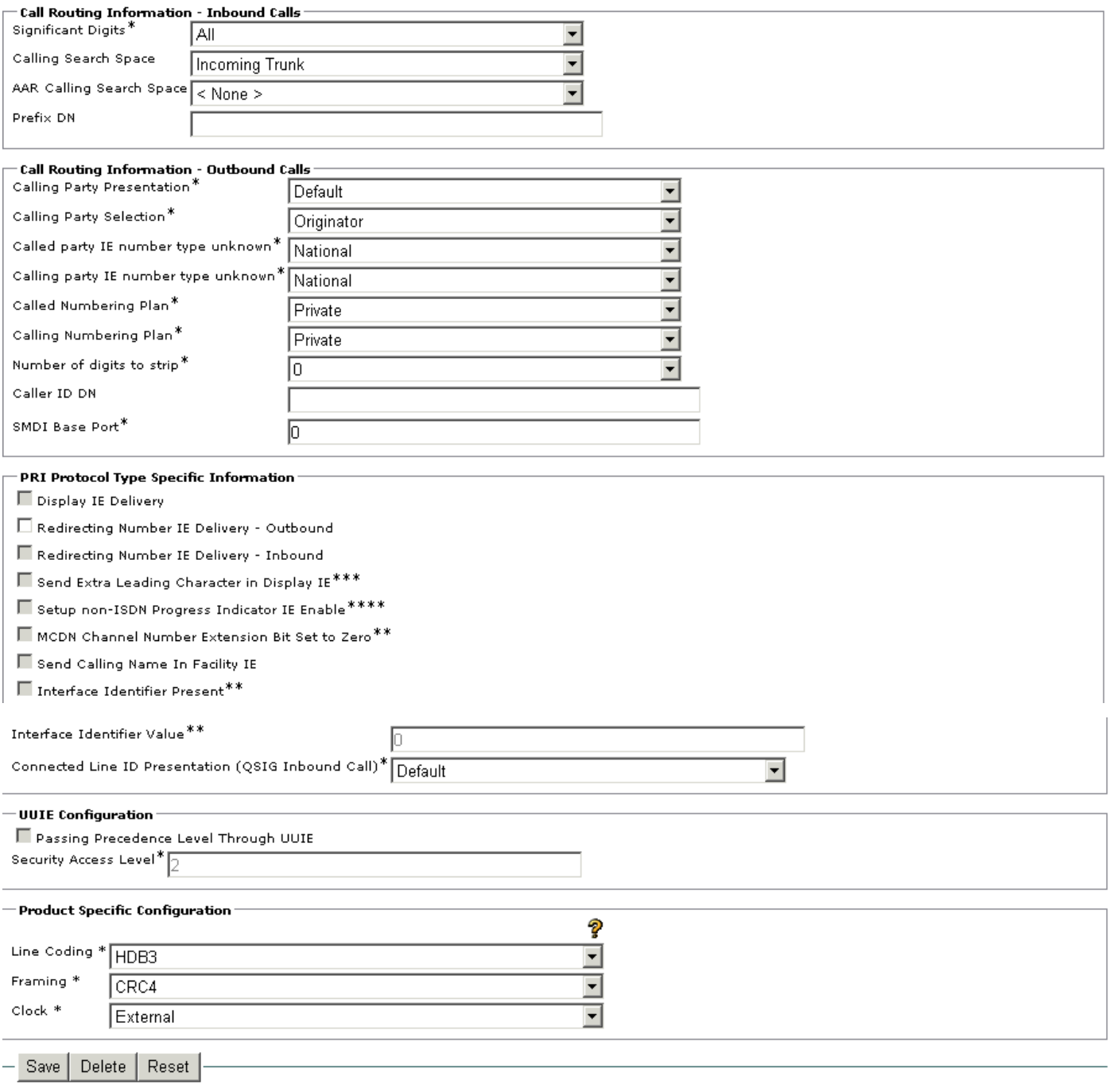
Configuring the Cisco Unified CallManager

CUCM ECMA Service Parameter Configuration.

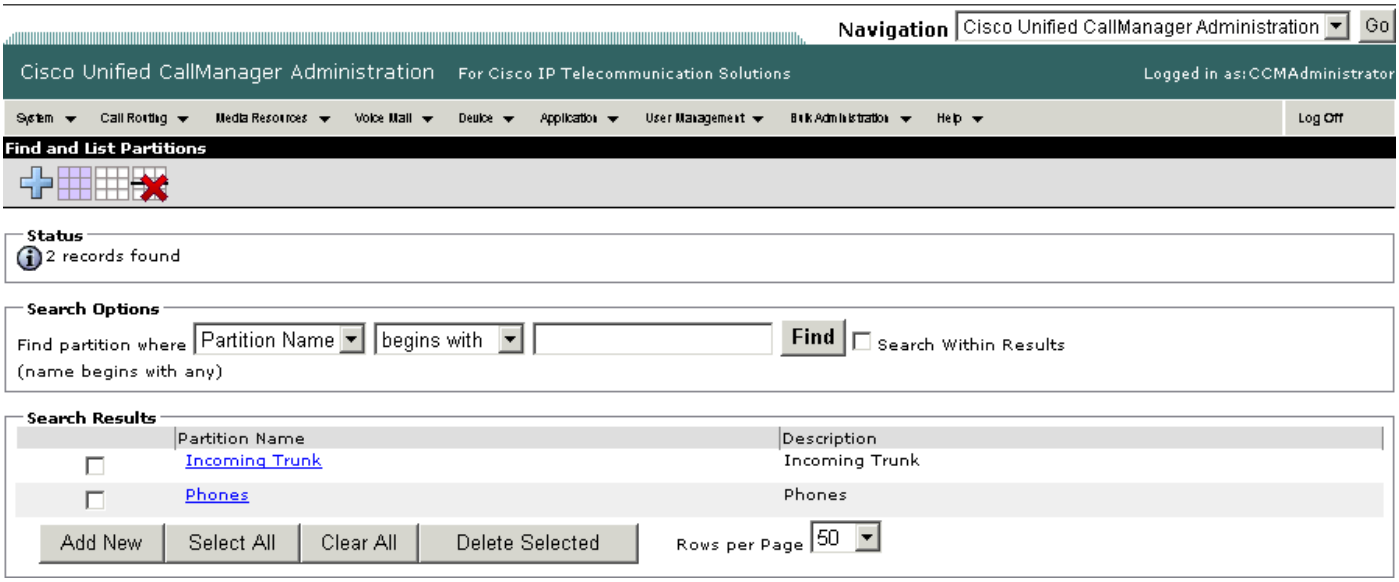


3745 Gateway Configuration

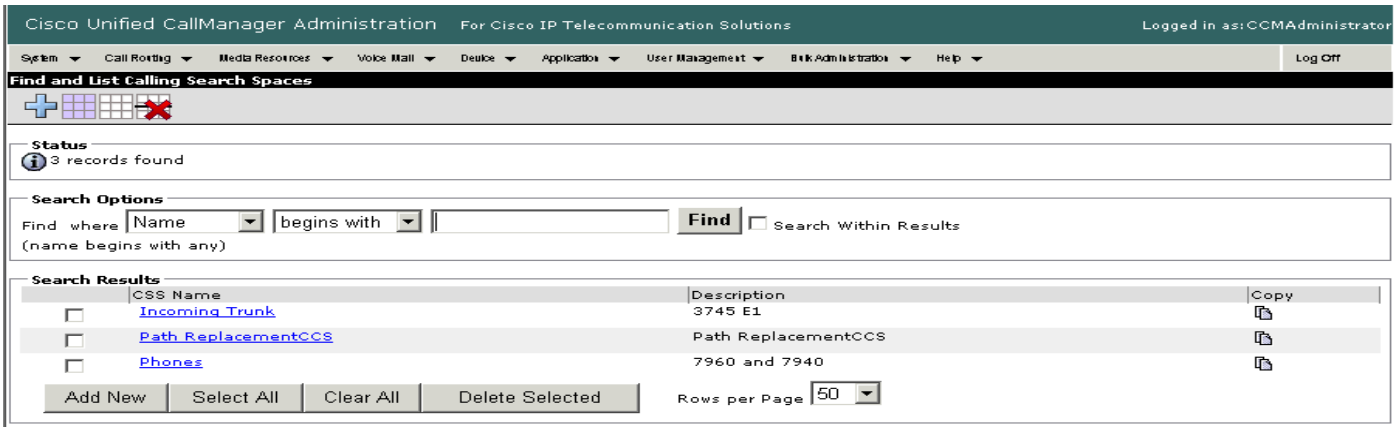


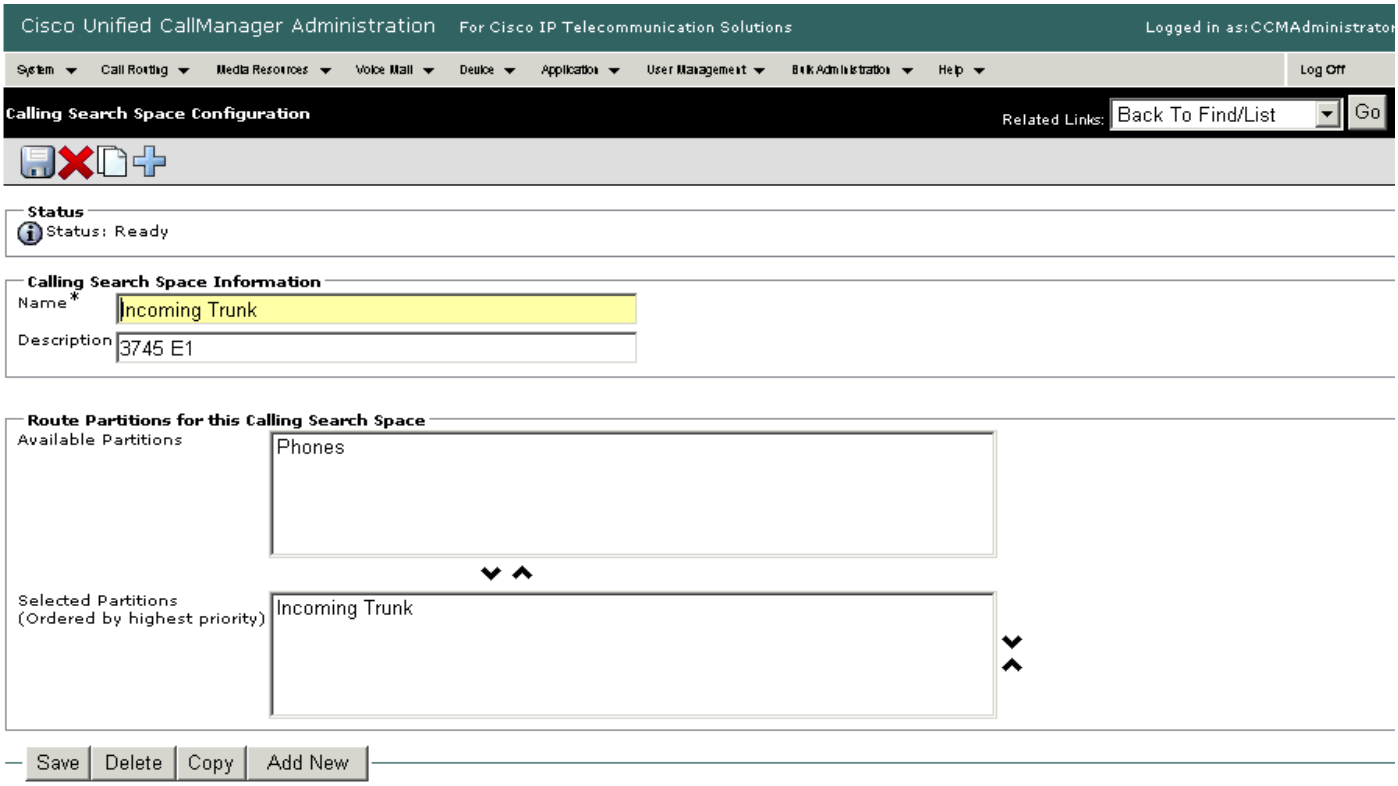


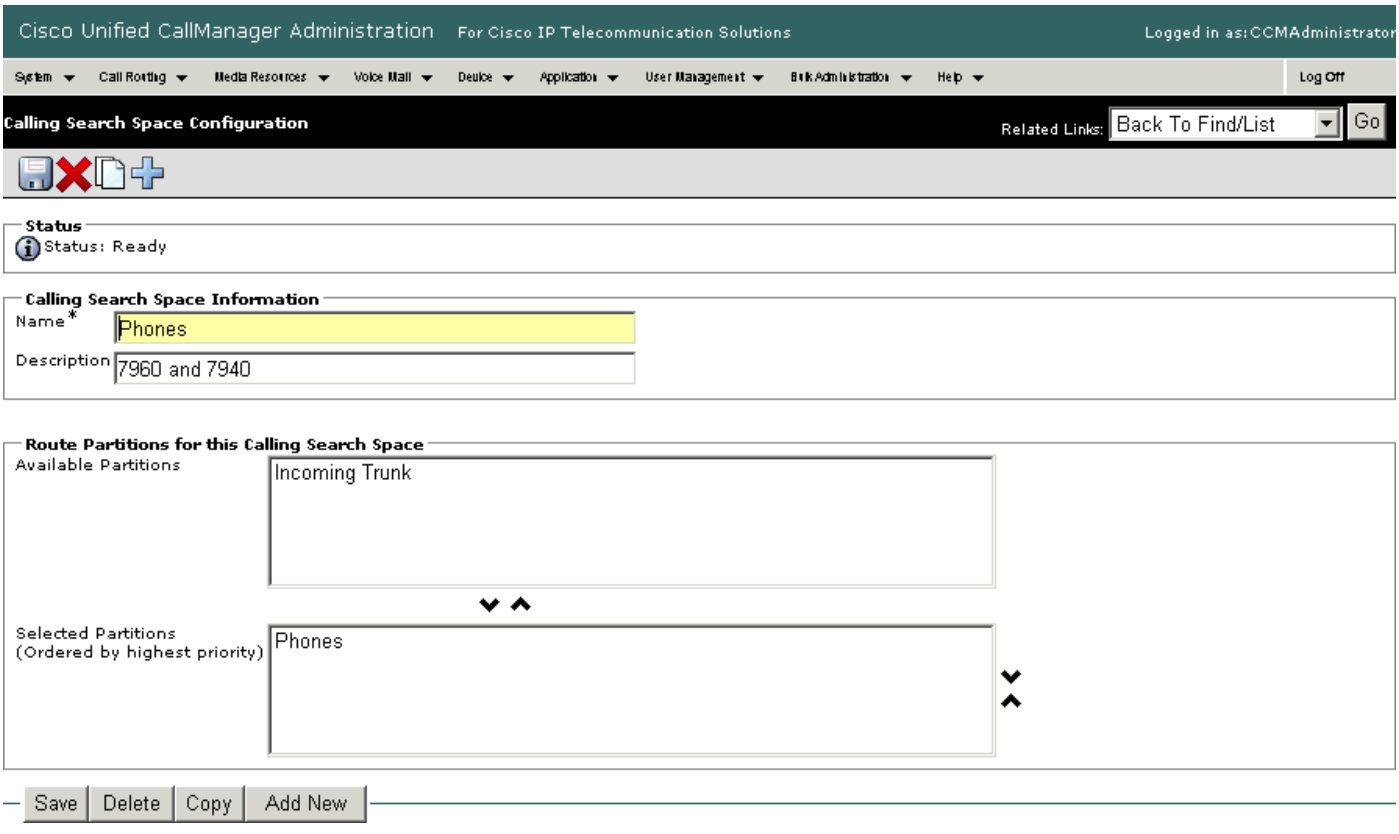
Partition Configuration

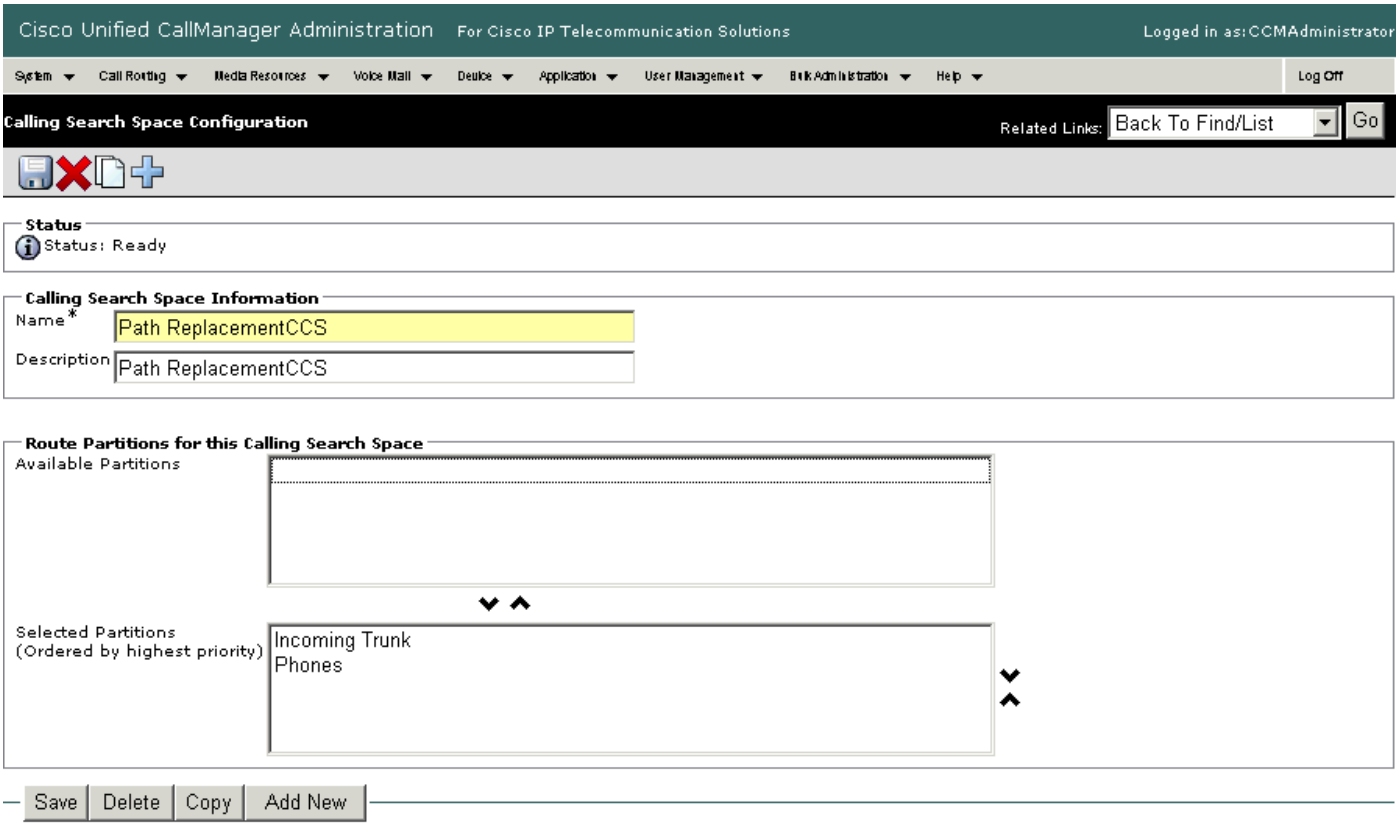


Calling Search Space

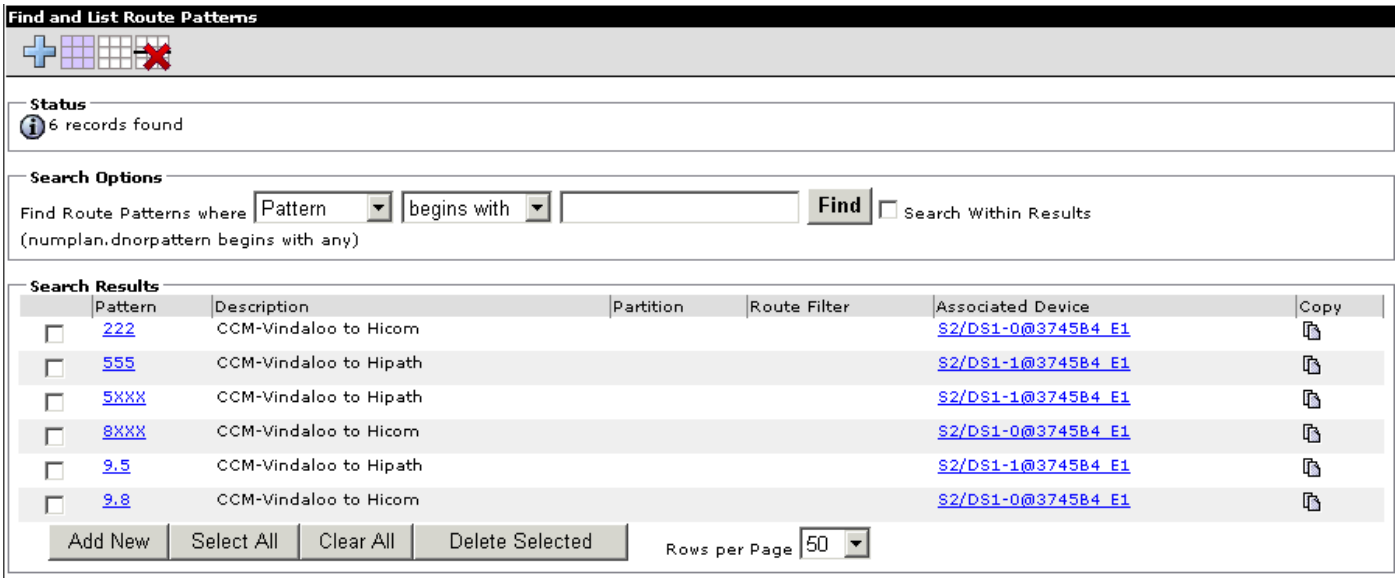


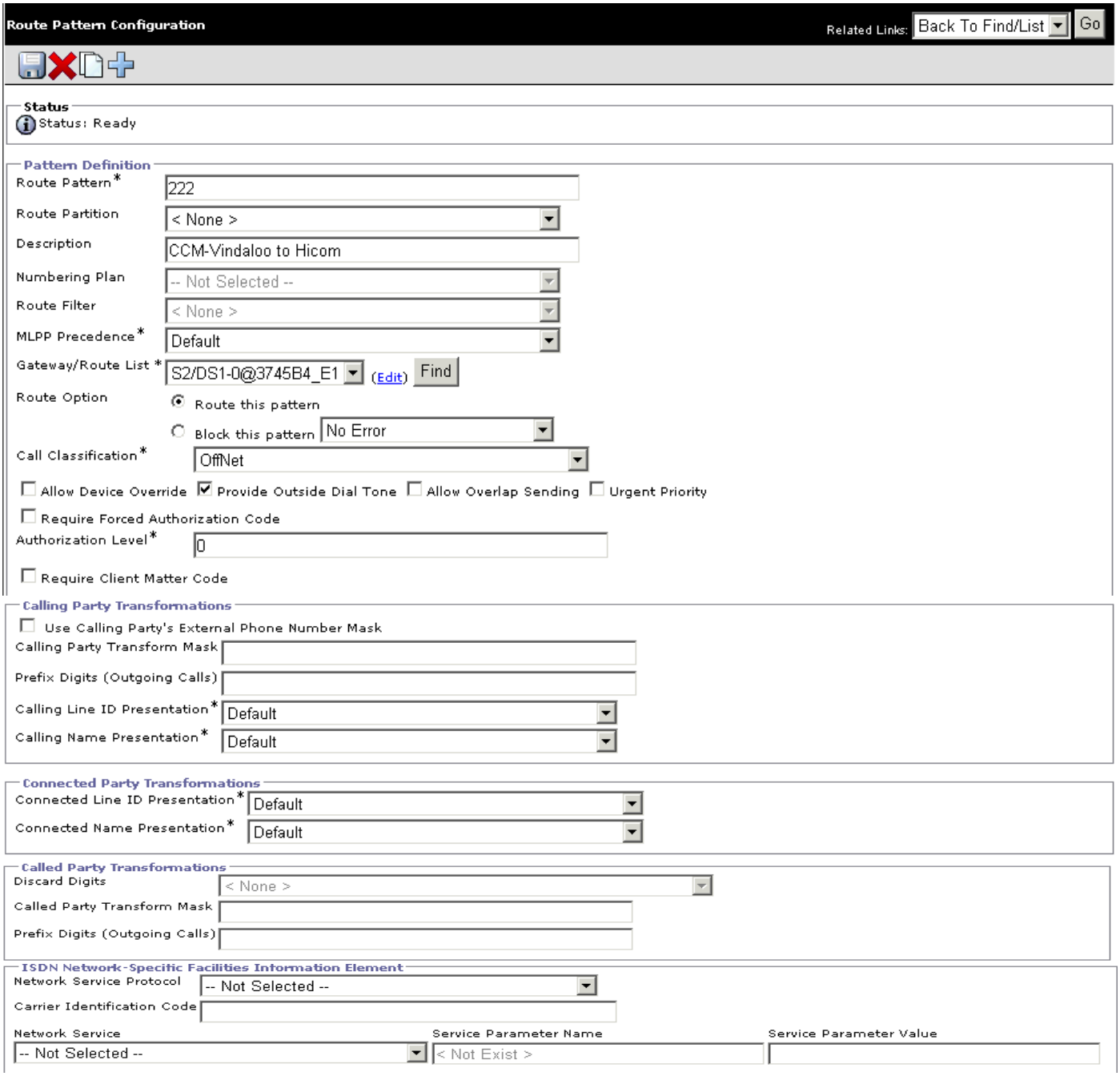


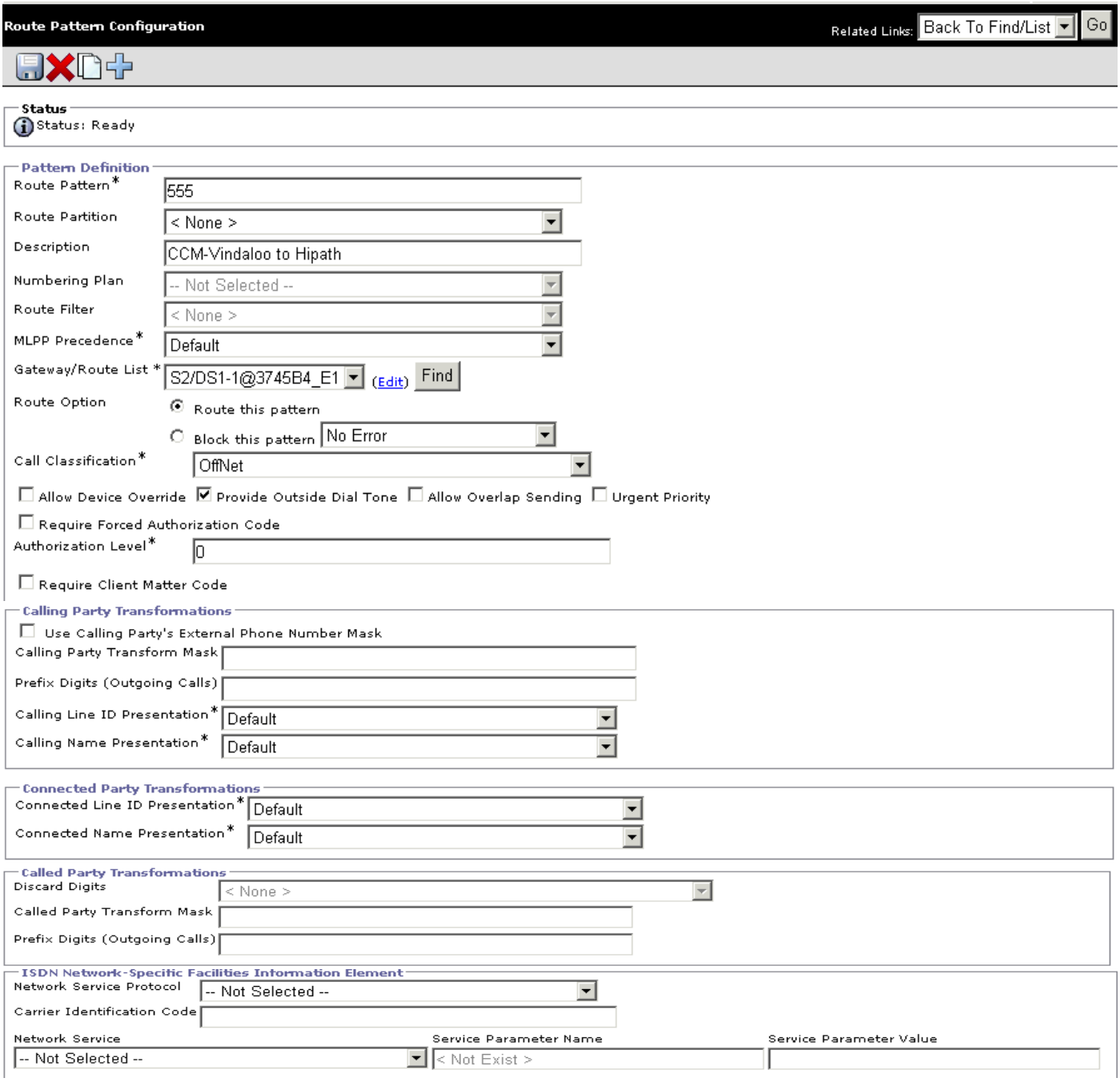


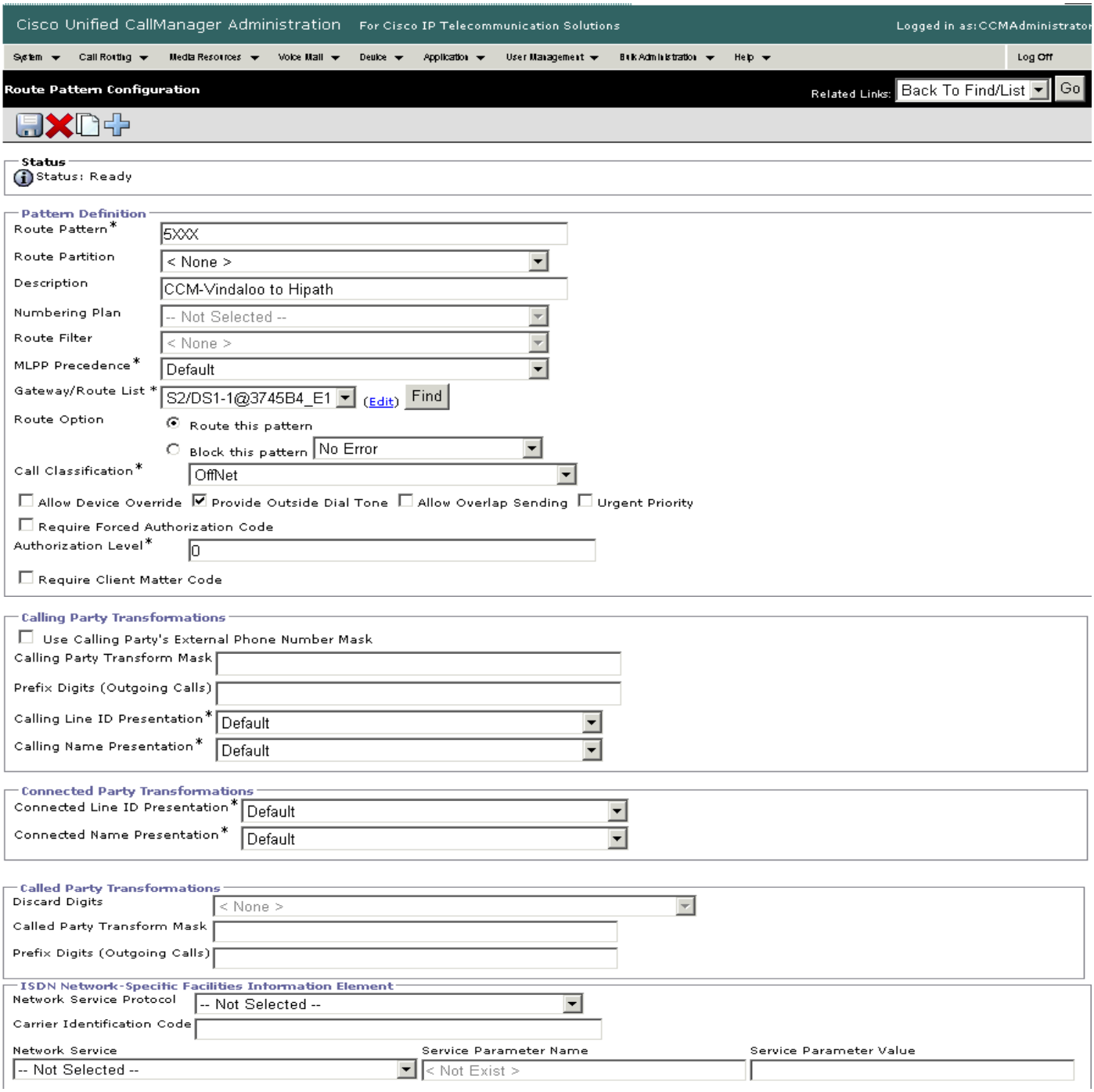


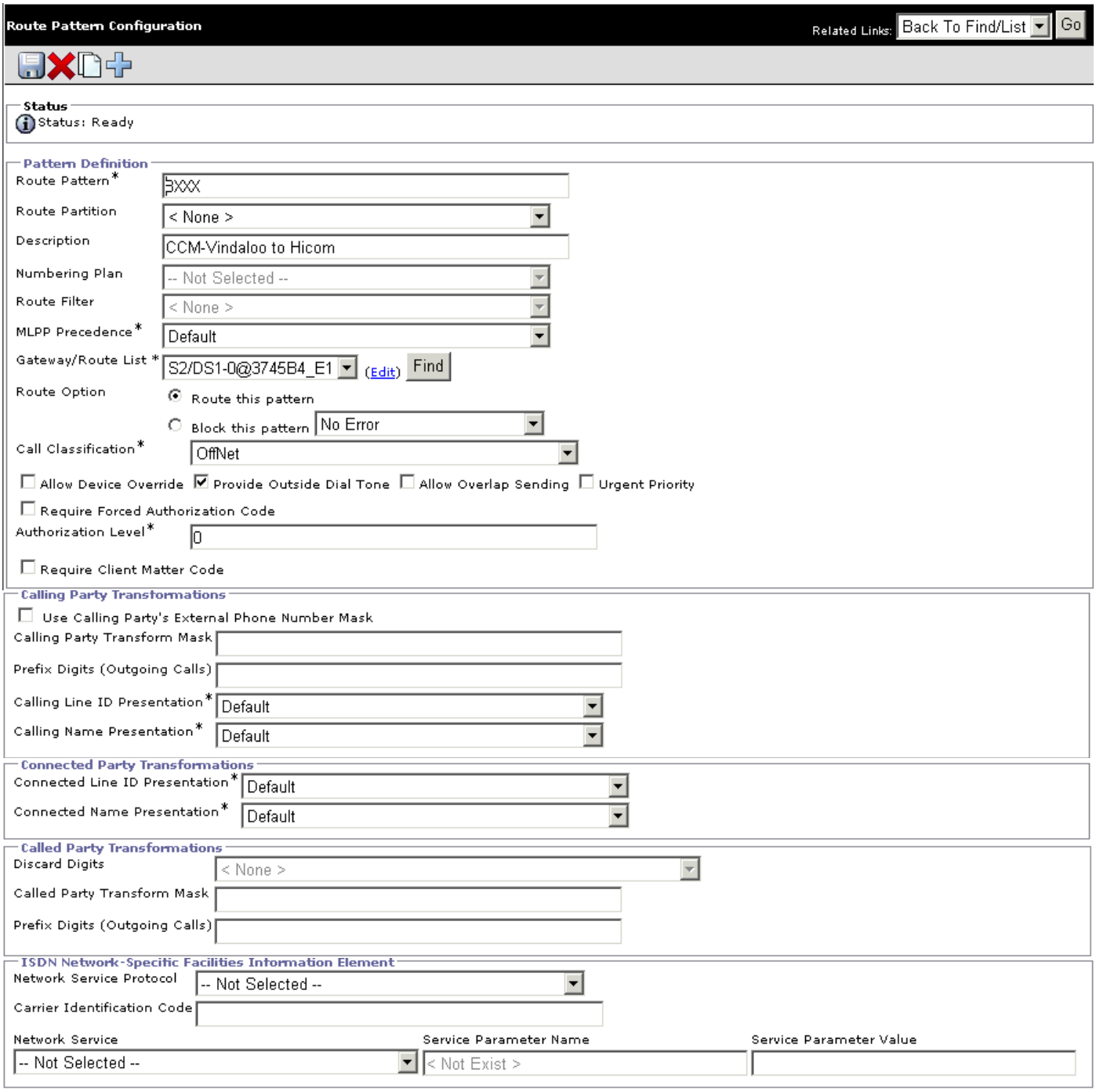
Enbloc Route Configuration



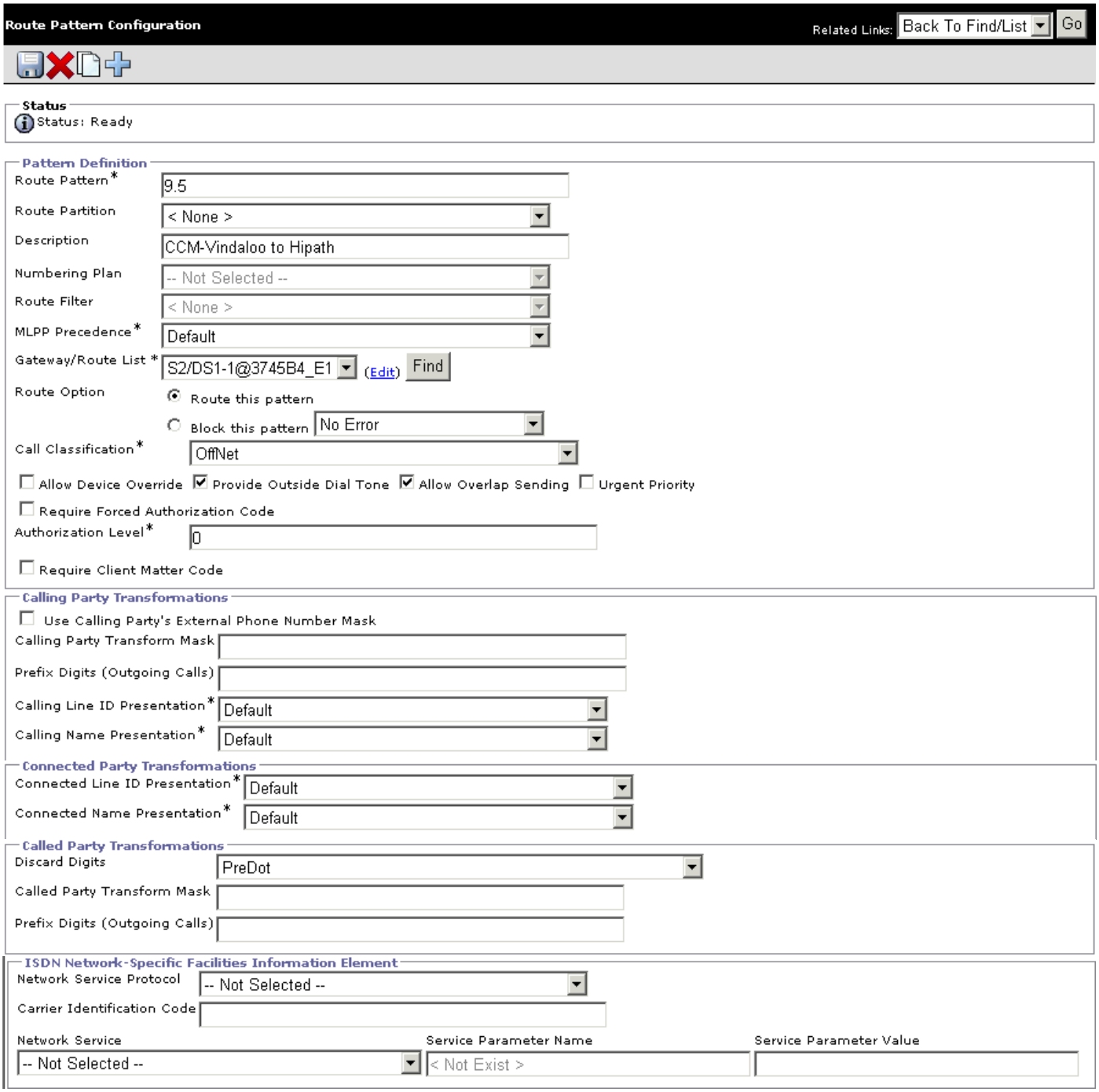


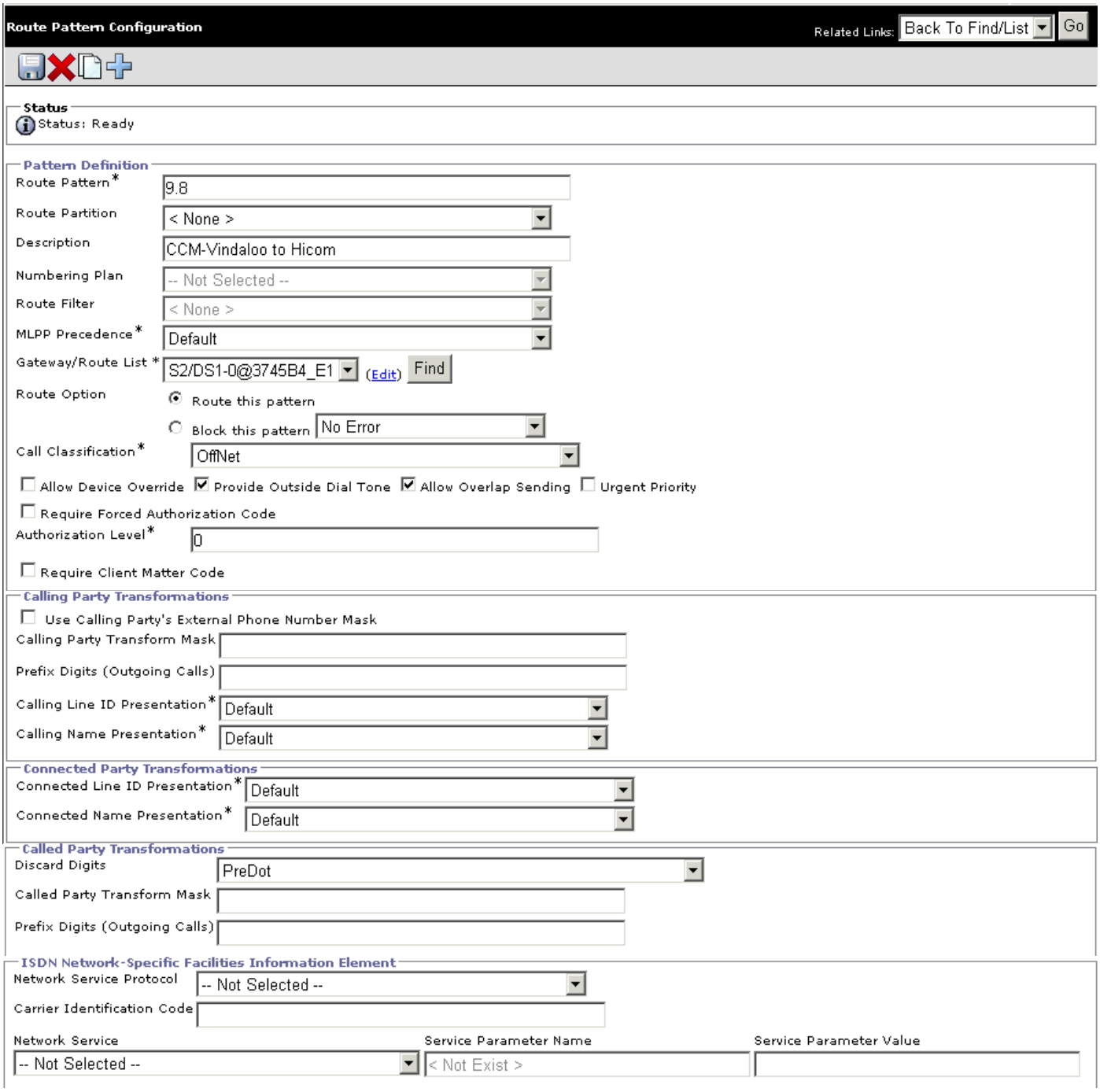




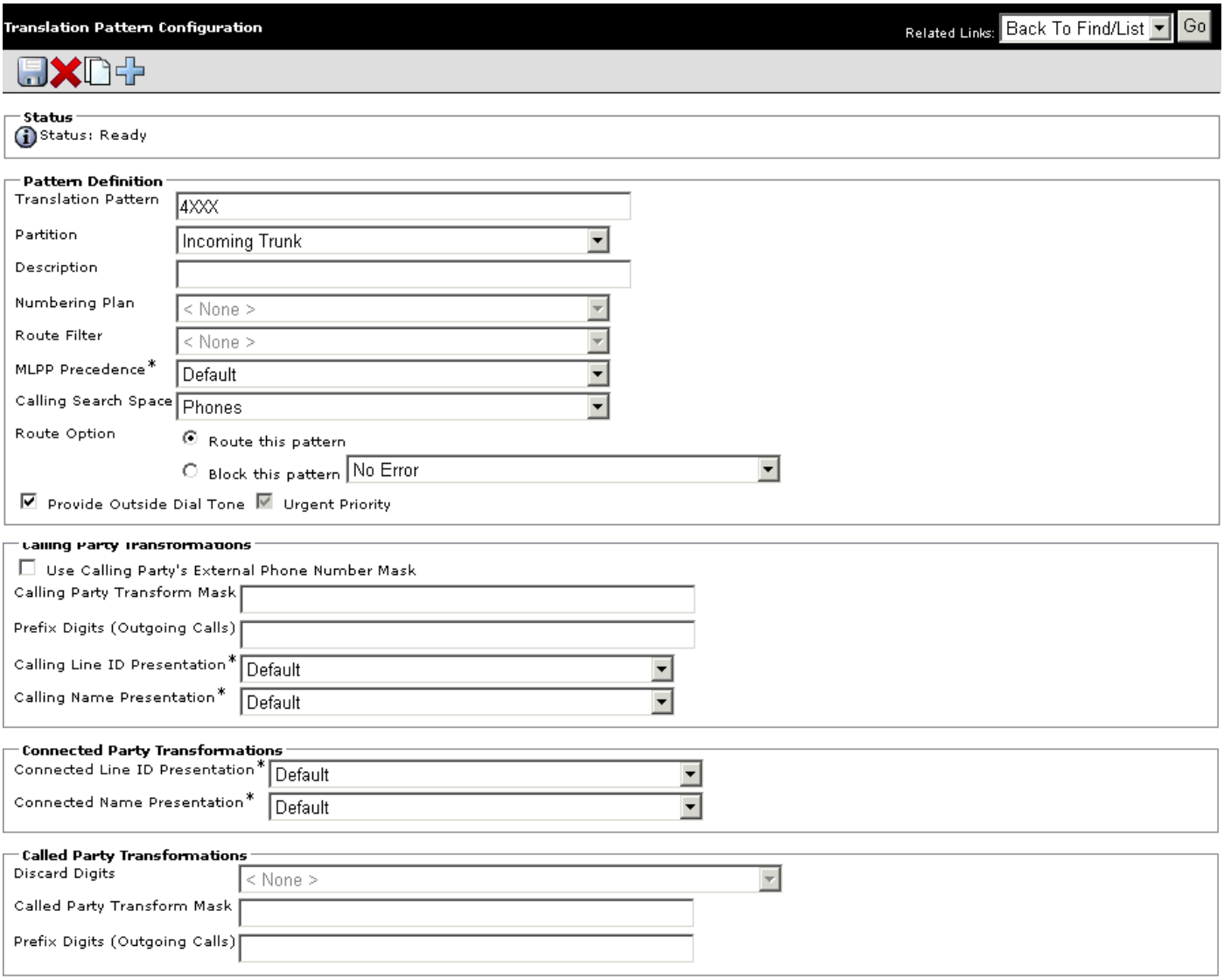


Overlap Sending Route Pattern Configuration

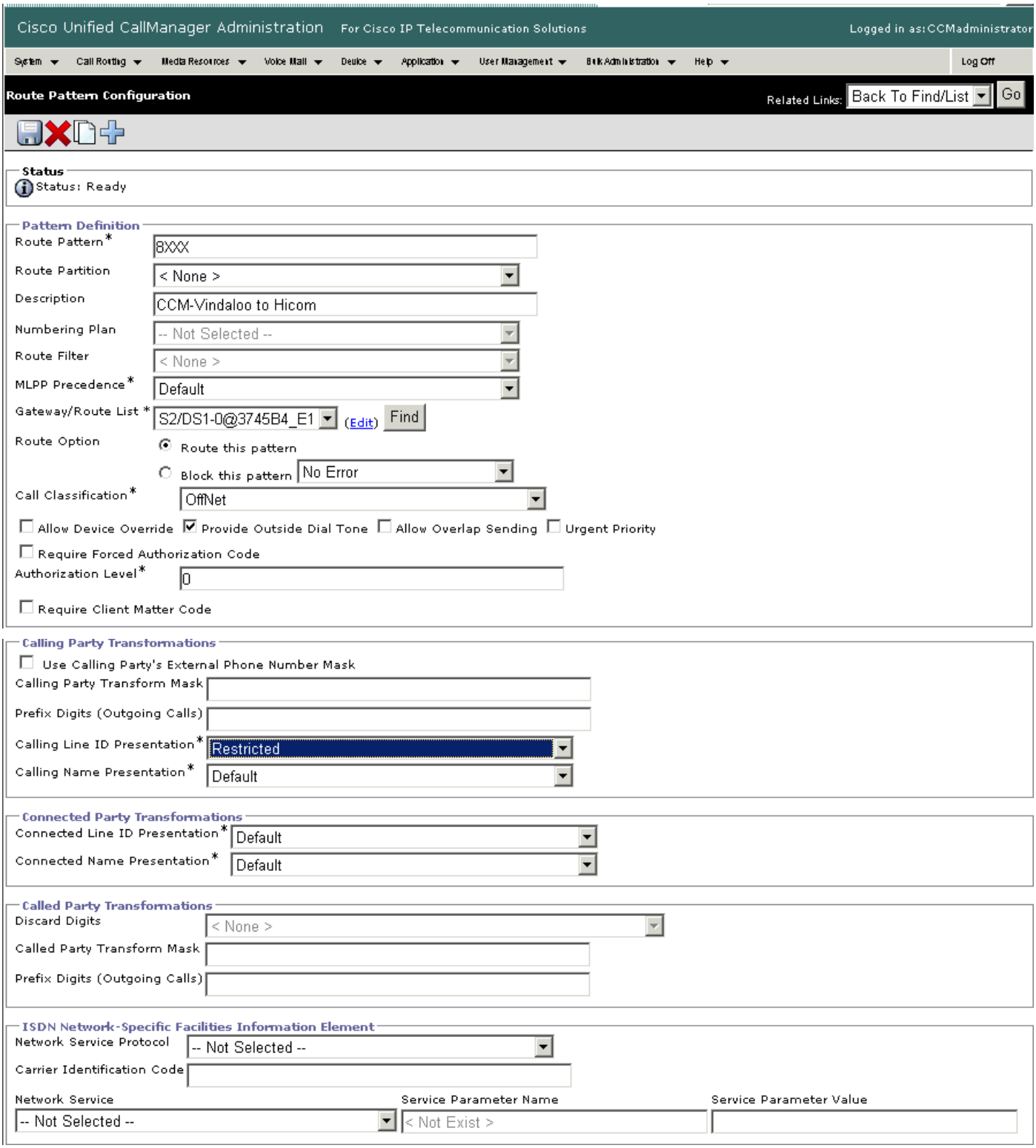




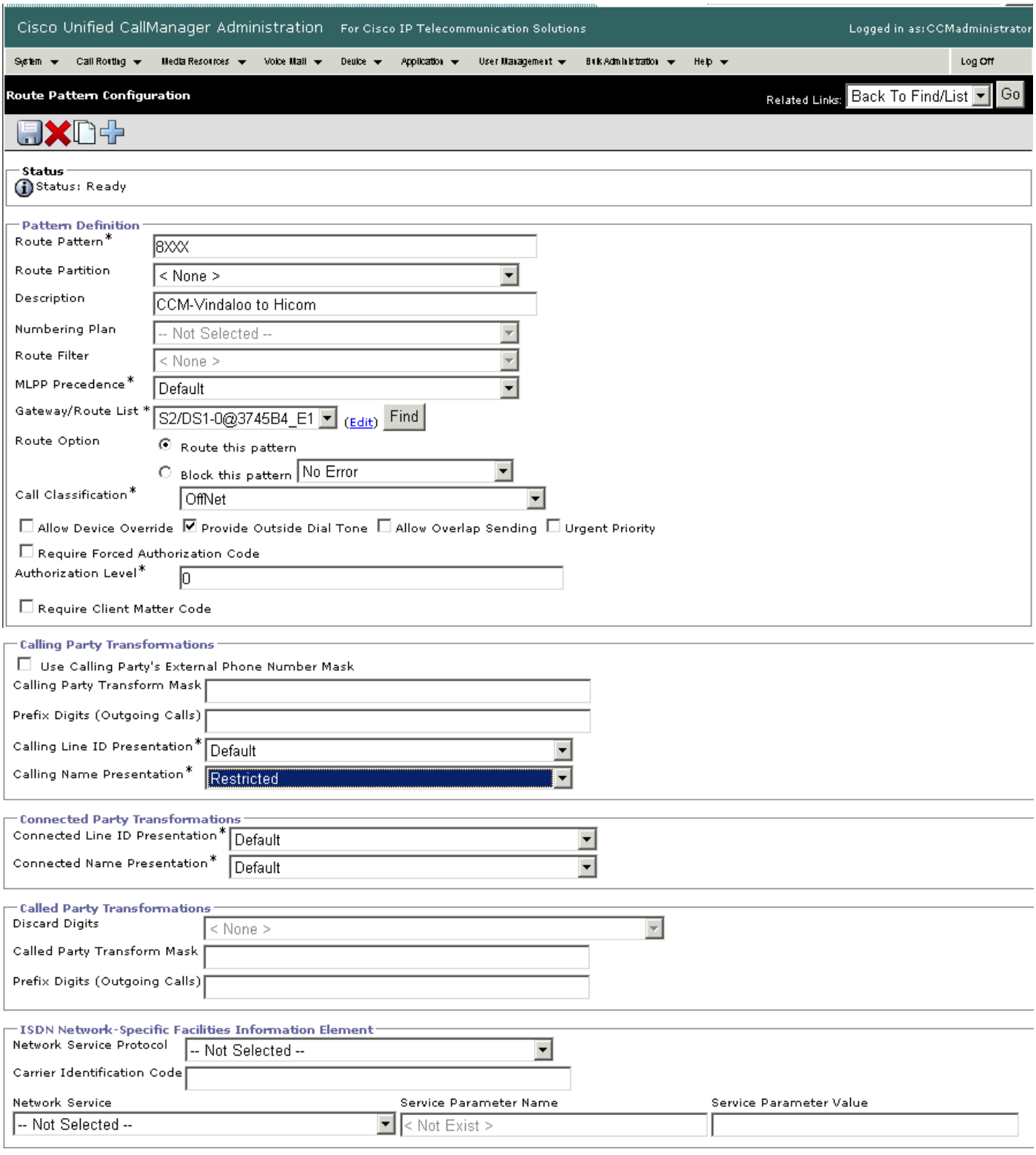
Translation Pattern for Incoming Calls



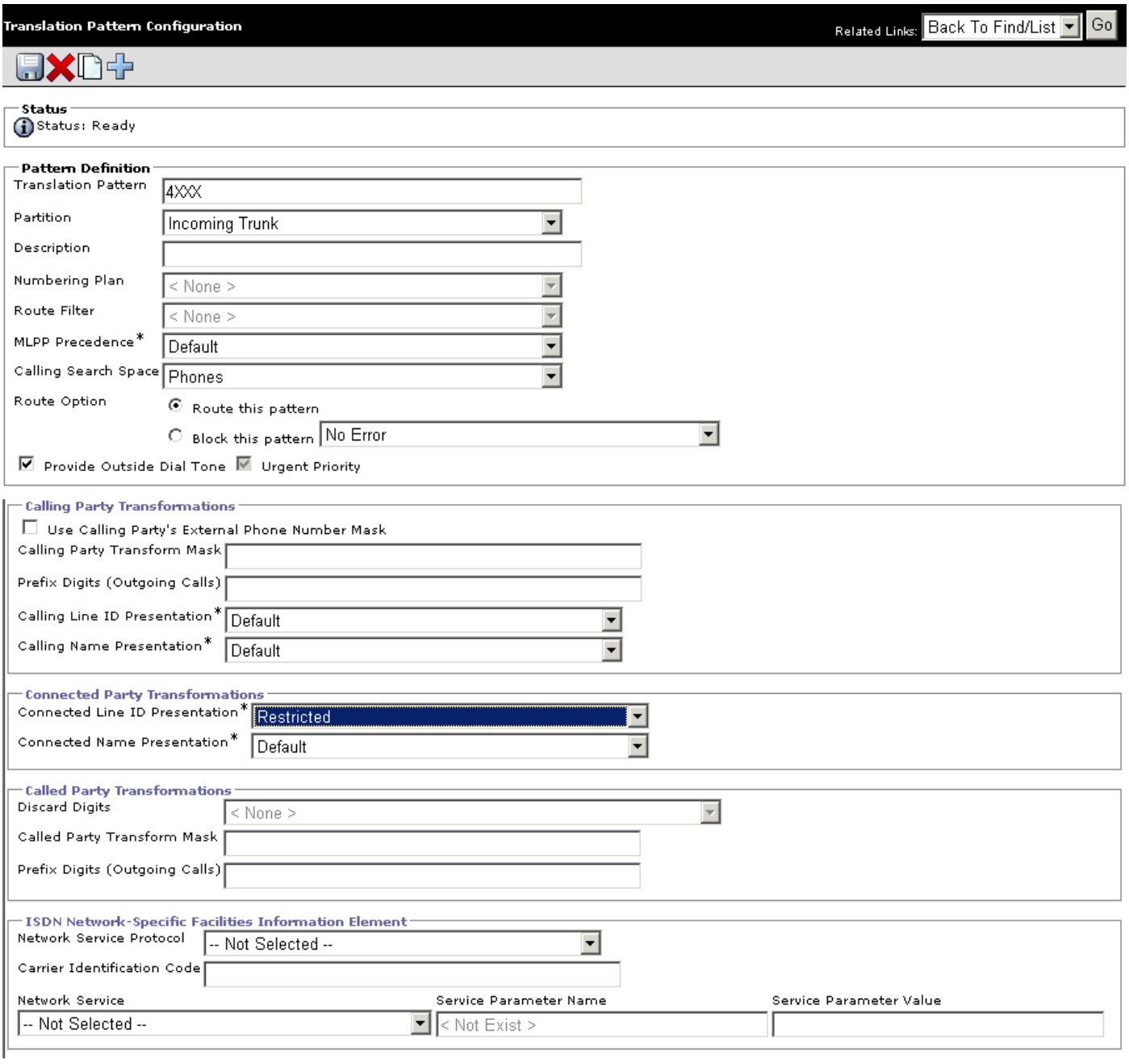
CLIR Route Pattern Configuration



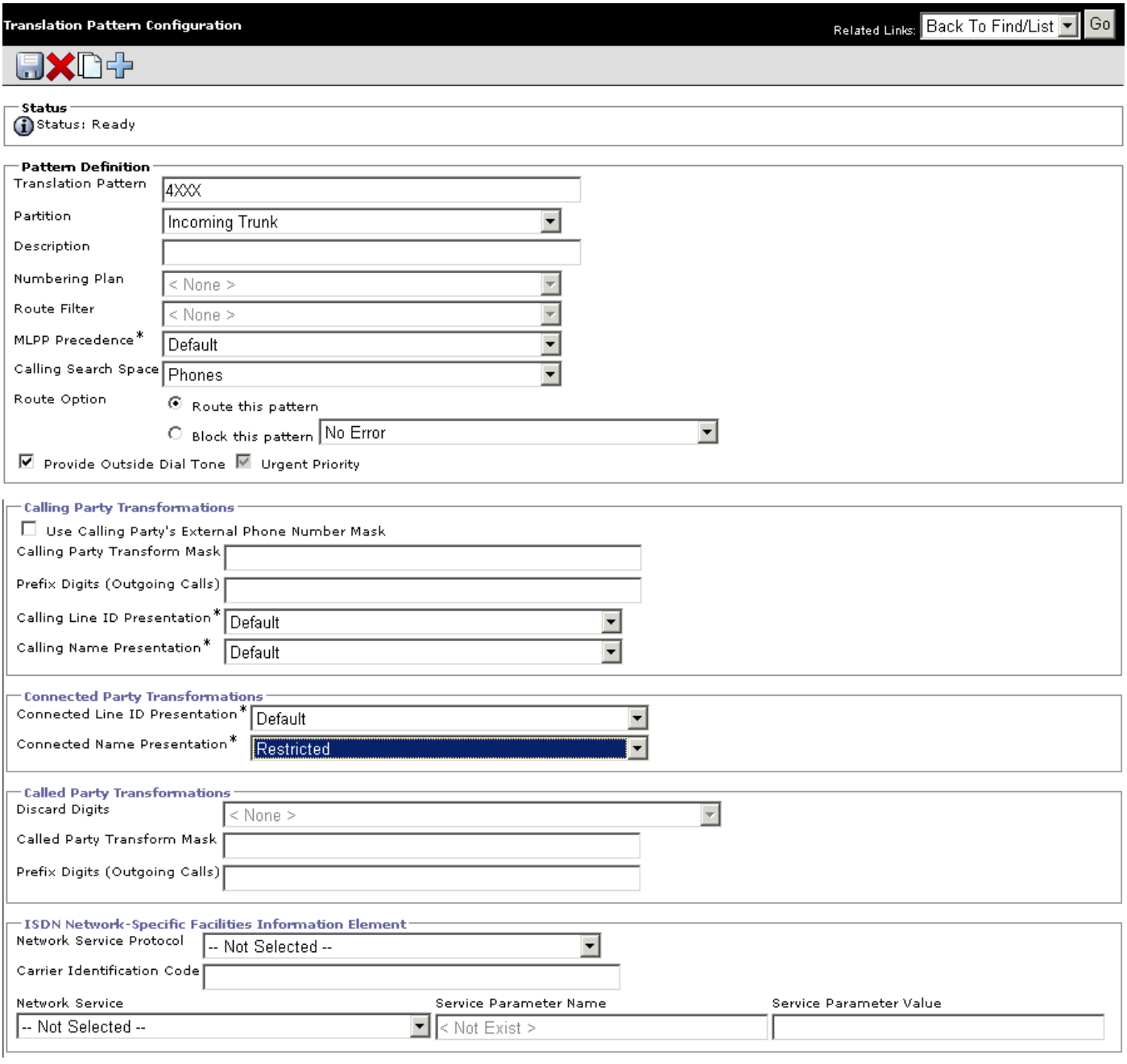
CNIR Route Pattern Configuration



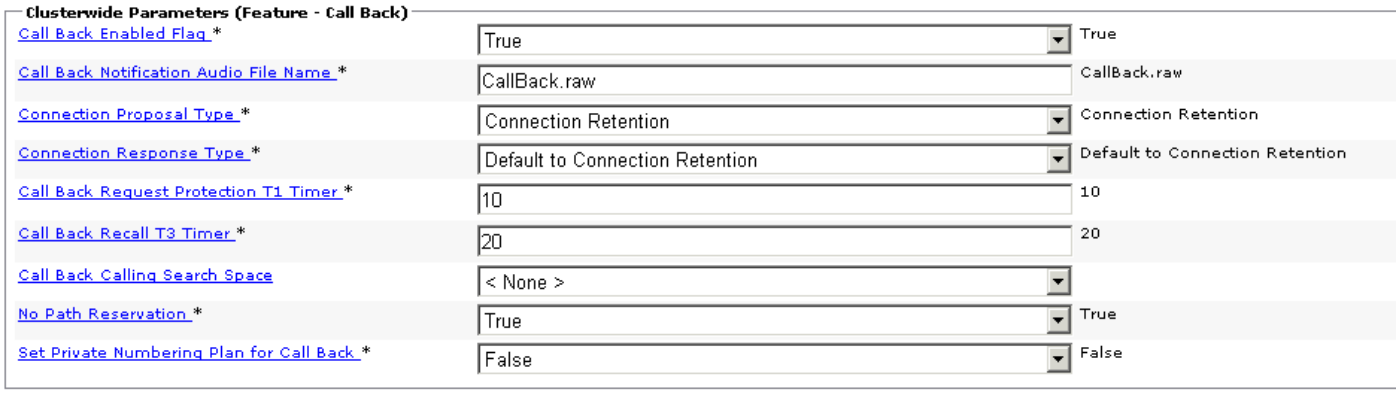
COLR Translation Pattern Configuration



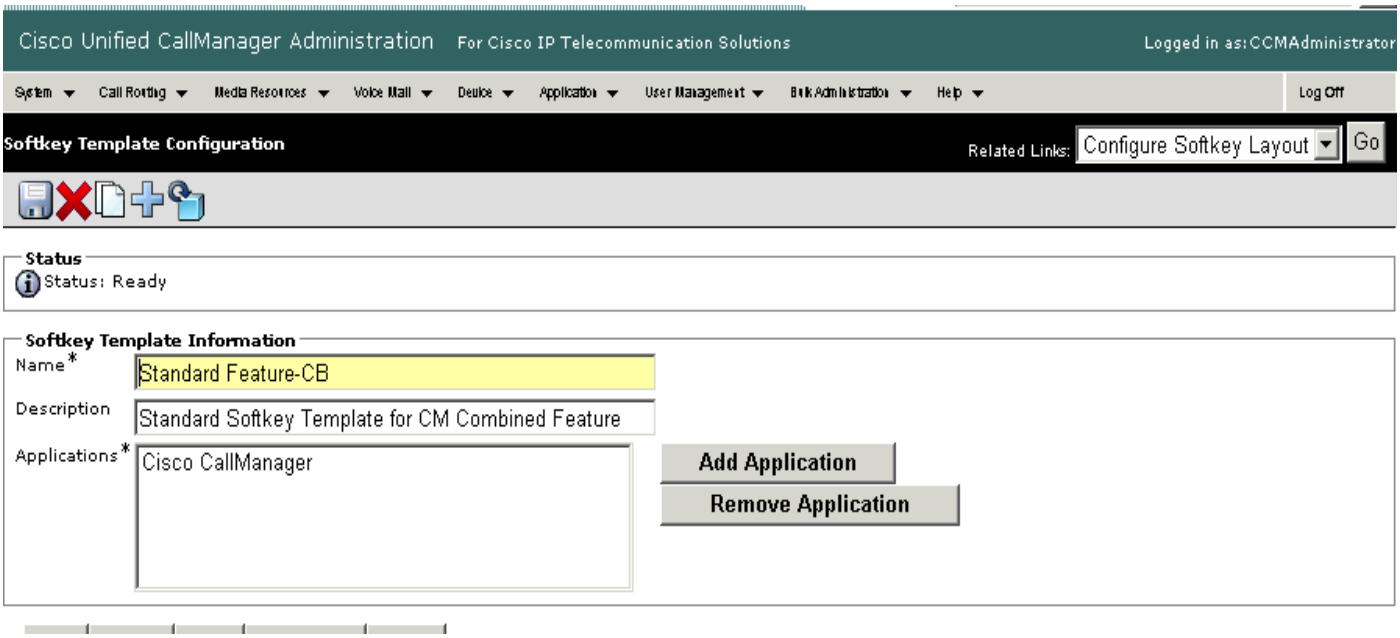
CONR Translation Pattern Configuration

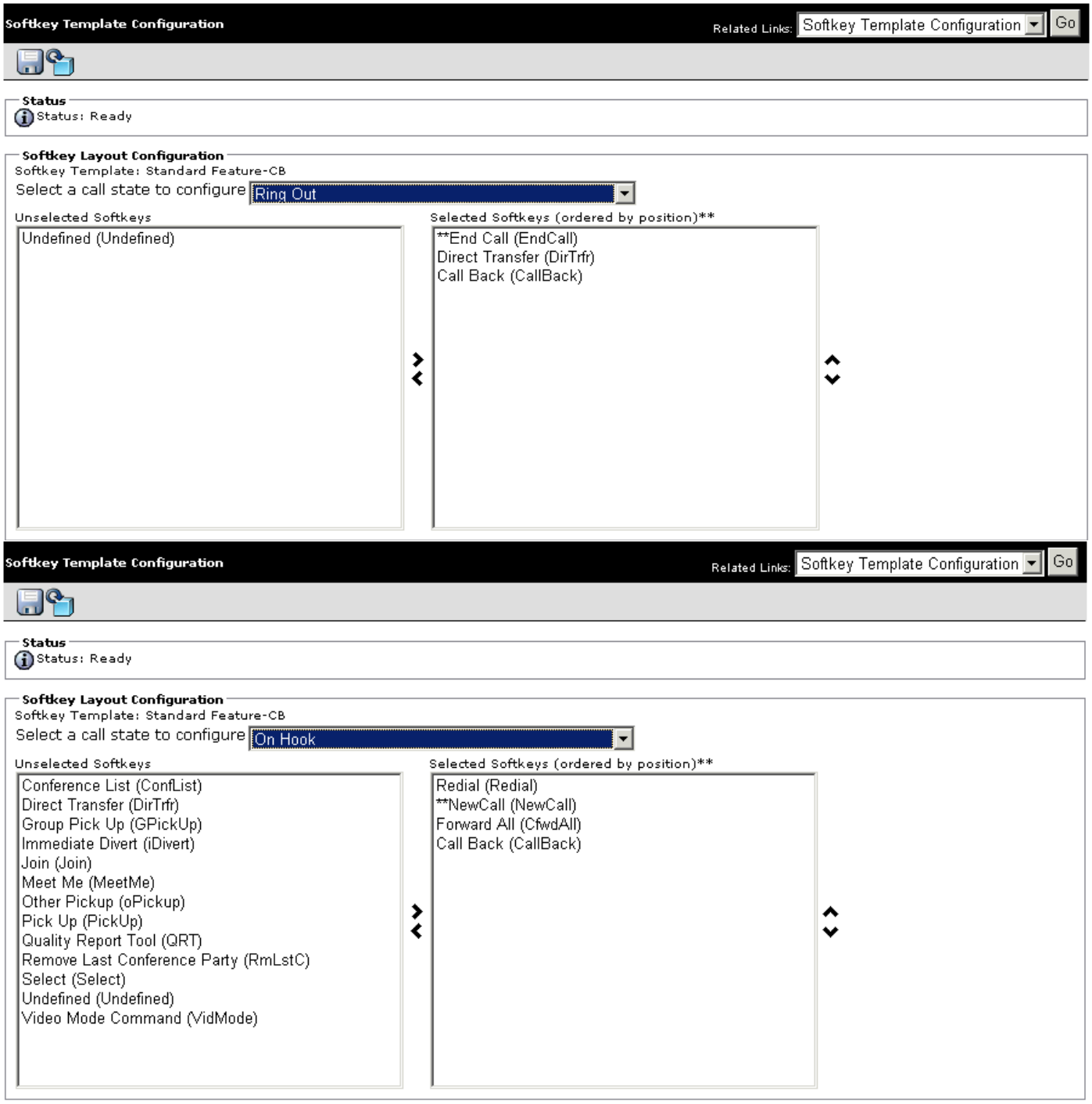


CallBack Service Parameters



CallBack Softkey Configuration





Path Replacement Service Parameters

Clusterwide Parameters (Feature - Path Replacement)

Path Replacement Enabled *	True	False
Path Replacement on Tromboned Calls *	True	True
Start Path Replacement Minimum Delay Time *	2	0
Start Path Replacement Maximum Delay Time *	10	0
Path Replacement T1 Timer *	30	30
Path Replacement T2 Timer *	15	15
Path Replacement PINX ID	111	
Path Replacement Calling Search Space	Path ReplacementCCS	

Call Pick Up Group

Call Pickup Group Information

Call Pickup Group Name *	QSIG PINX ID
Call Pickup Group Number *	111
Description	QSIG PINX ID
Partition	< None >

Associated Call Pickup Group Information

Find Pickup Numbers by Numbers/Partition

Partition	< None >
Call Pickup Group Numbers Contain	Find
Available Call Pickup Groups	(No Matches Found)

Add to Associated Call Pickup Groups

Current Associated Call Pickup Groups

Reverse Order of Selected Numbers

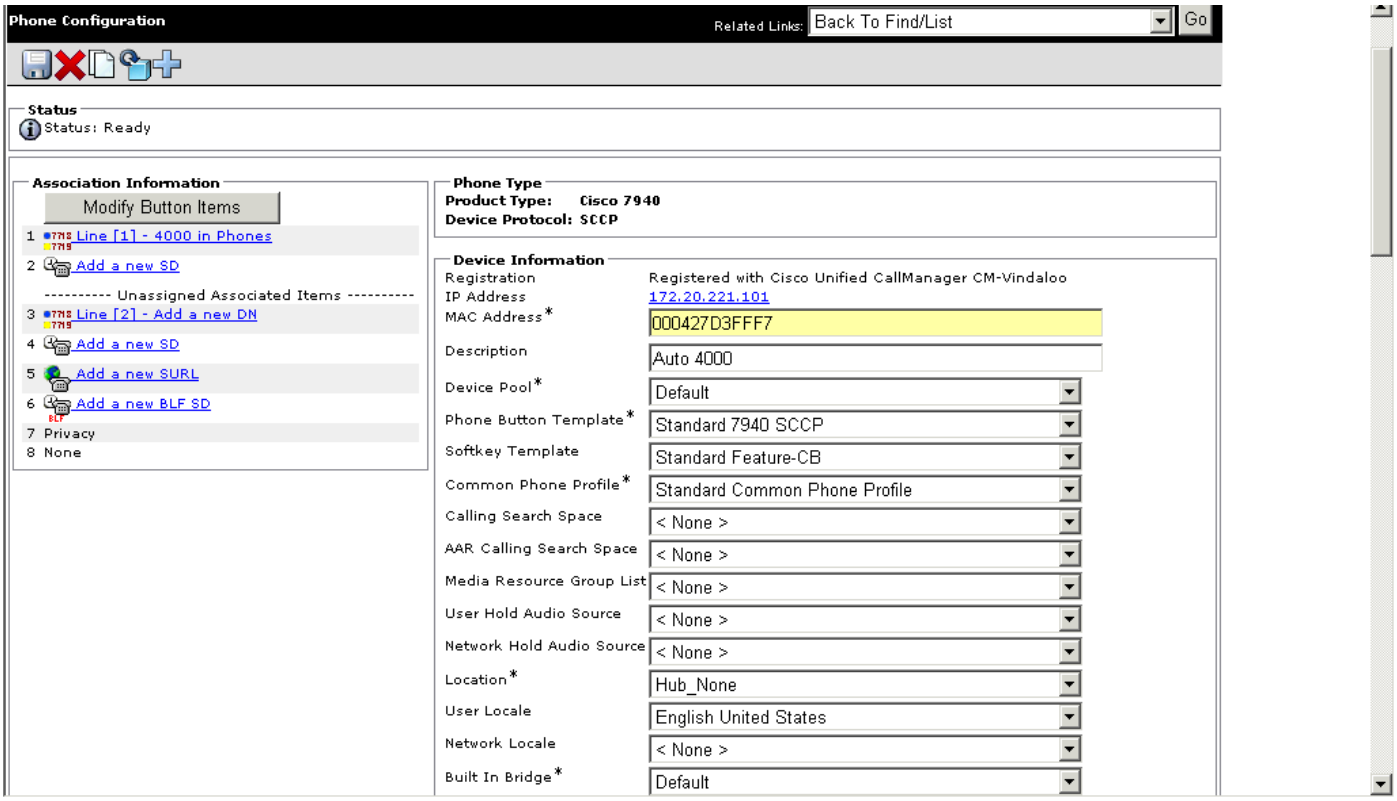
Selected Call Pickup Groups	111
Removed Call Pickup Groups (to be removed when you click Save)	

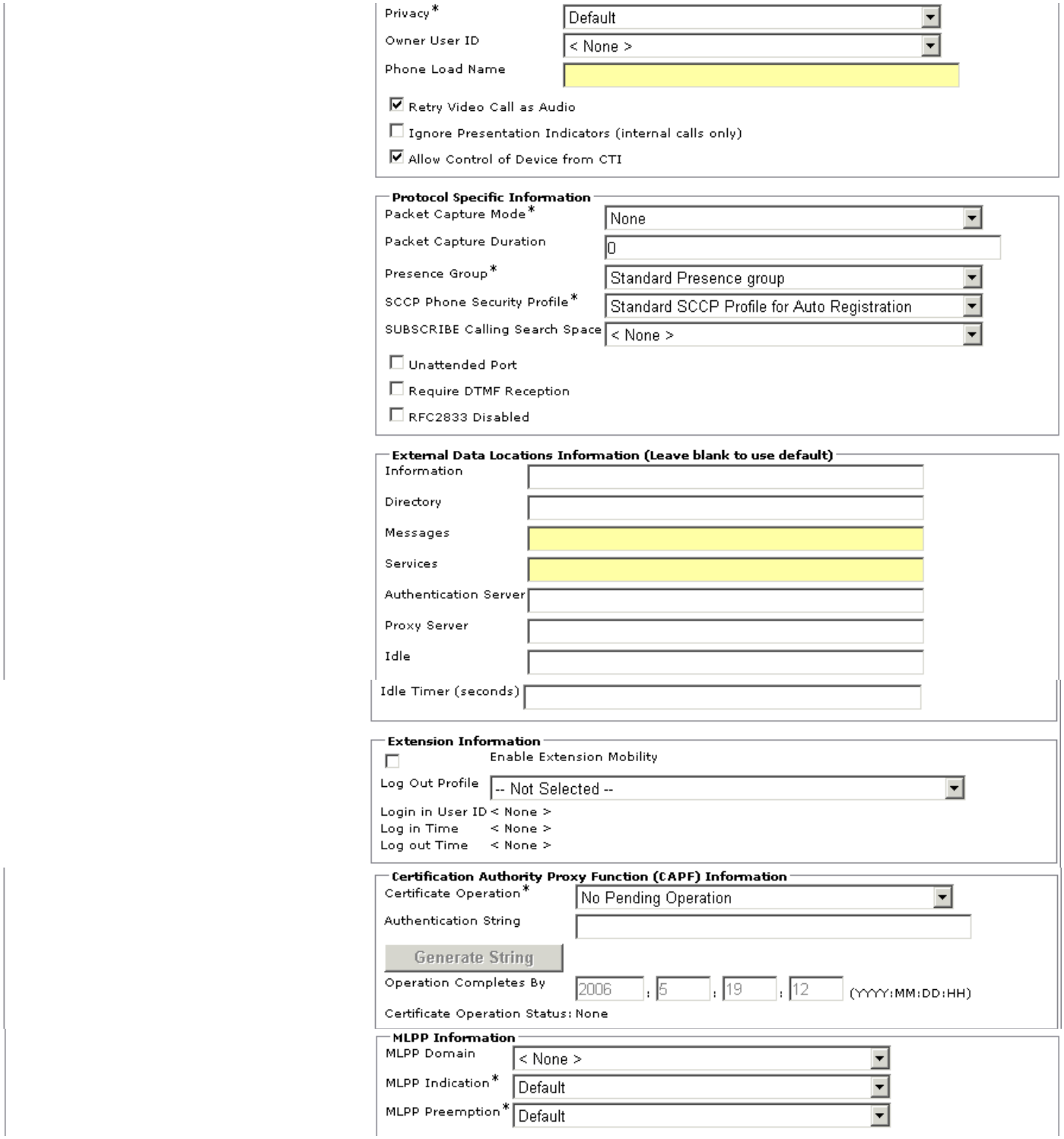
Forward by Reroute Service Parameter

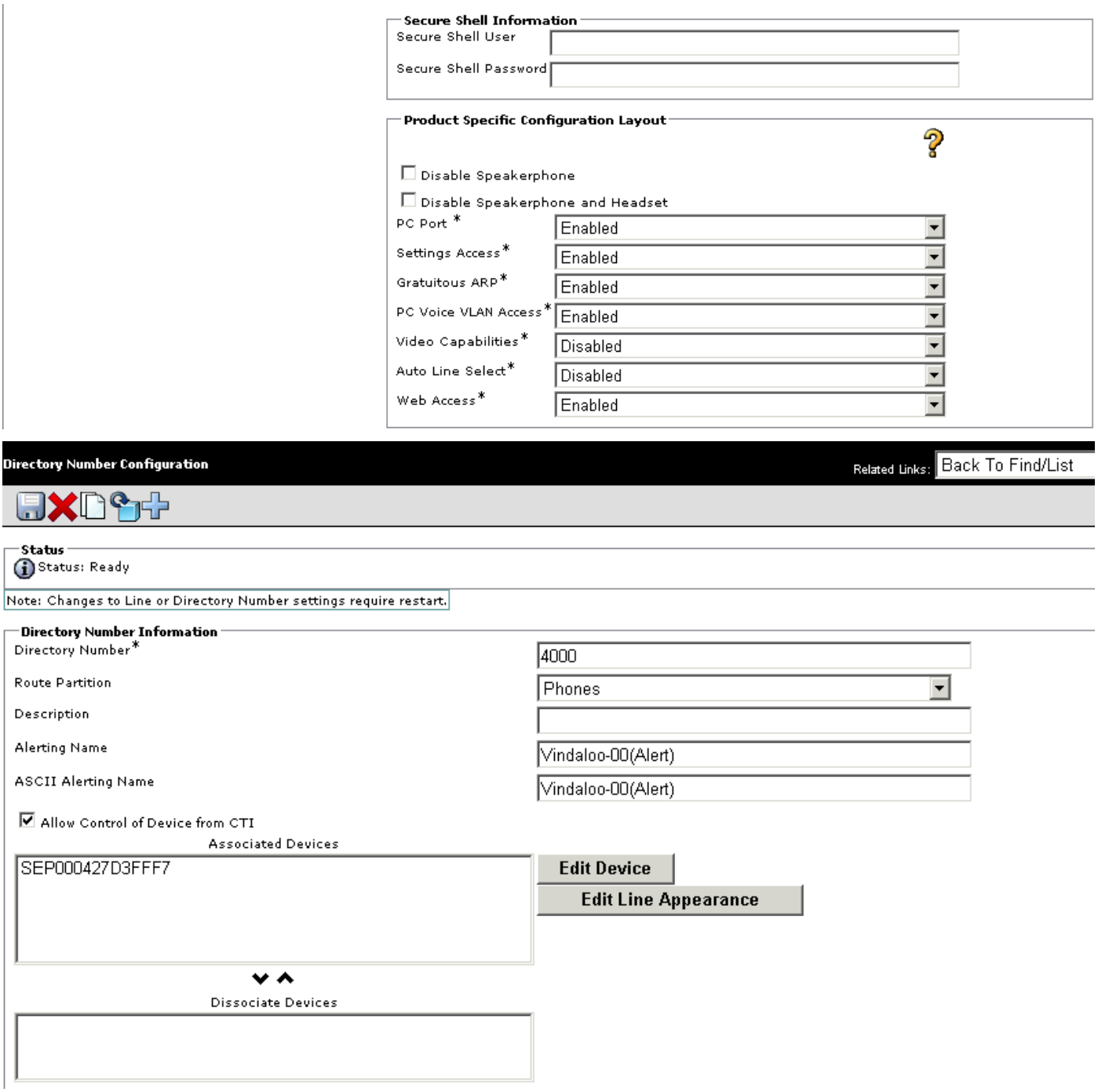
Clusterwide Parameters (Feature - Forward)

Forward Maximum Hop Count *	12	12
Forward No Answer Timer *	12	12
Max Forward Hops to DN *	12	12
Retain Forward Information *	False	False
Forward By Reroute Enabled *	False	False
Transform Forward by Reroute Destination *	True	True
Include Voice Mailbox Address in QSIG Call Diversion APDUs *	False	False
Always Forward Switch Voice Mail Calls *	True	True
Forward By Reroute T1 Timer *	10	10
Include Original Called Info for Q.SIG Call Diversions *	Only after the first diversion	Only after the first diversion

IP phone Configuration







Directory Number Settings

Voice Mail Profile	< None > (Choose <None> to use system default)
Calling Search Space	Phones
Presence Group*	Standard Presence group
AAR Group	< None >
User Hold Audio Source	< None >
Network Hold Audio Source	< None >
Auto Answer*	Auto Answer Off

Call Forward and Call Pickup Settings

	Voice Mail Destination	Calling Search Space
Forward All	☐ or	Phones
Secondary Calling Search Space for Forward All		< None > Find
Forward Busy Internal	☐ or	Phones
Forward Busy External	☐ or	Phones
Forward No Answer Internal	☐ or	Phones
Forward No Answer External	☐ or	Phones
Forward No Coverage Internal	☐ or	< None >
Forward No Coverage External	☐ or	< None >
Forward on CTI Failure	☐ or	< None >
No Answer Ring Duration (seconds)		
Call Pickup Group	< None >	

MLPP Alternate Party Settings

Target (Destination)	
MLPP Calling Search Space	Phones
MLPP No Answer Ring Duration (seconds)	

Line 1 on Device SEP000427D3FFF7

Display (Internal Caller ID)	Vindaloo-00 Display text for a line appearance is intended for displaying text such as a name inste
	number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.
ASCII Display (Internal Caller ID)	Vindaloo-00
Line Text Label	Vindaloo-00
ASCII Line Text Label	Vindaloo-00
External Phone Number Mask	
Message Waiting Lamp Policy*	Use System Policy
Ring Setting (Phone Idle)*	Ring
Ring Setting (Phone Active)	Use System Default Applies to this line when any line on the phone has a call in progress.

Multiple Call/Call Waiting Settings on Device SEP000427D3FFF7

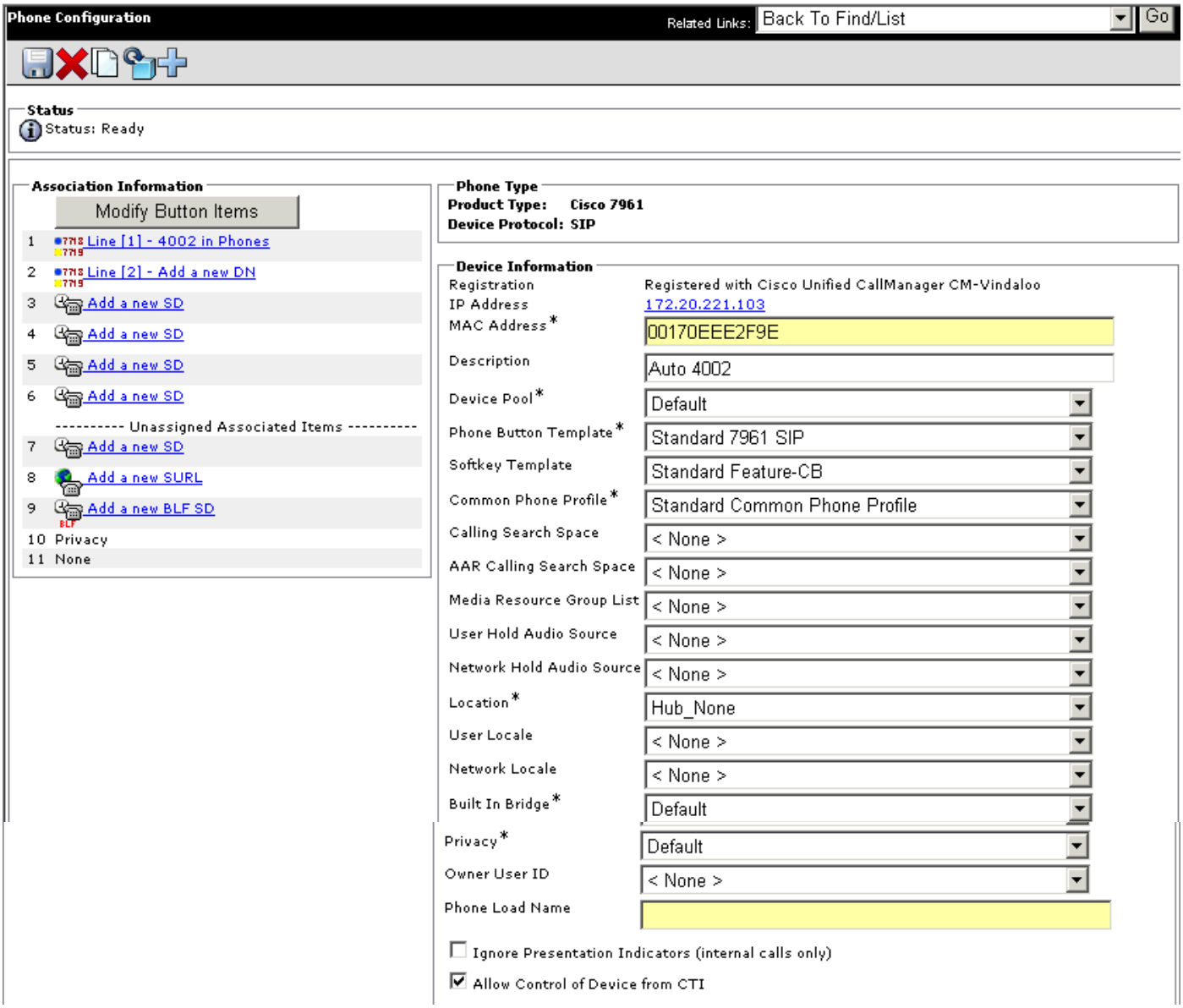
Note:The range to select the Max Number of calls is: 1-200

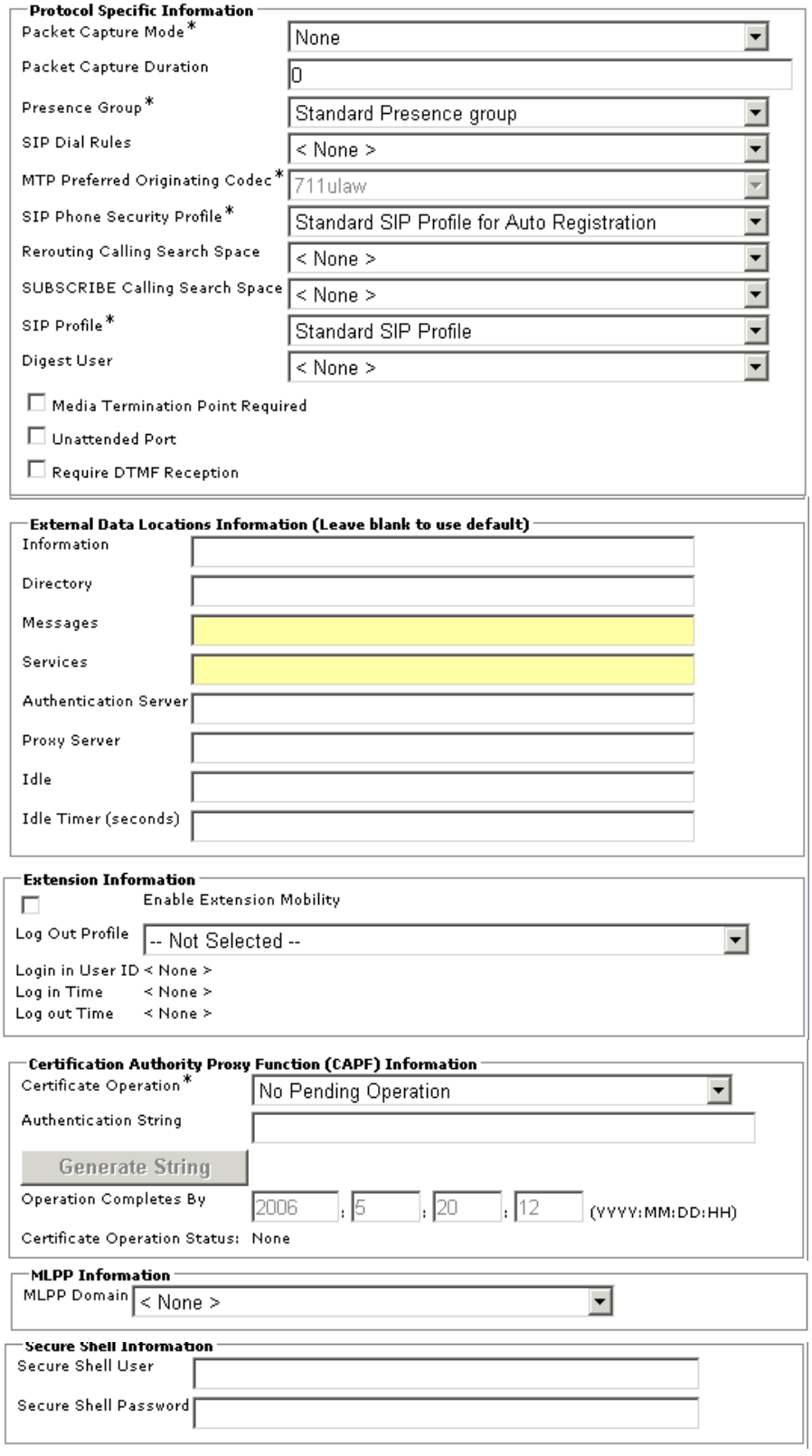
Maximum Number of Calls*	4
Busy Trigger*	2 (Less than or equal to Max. Calls)

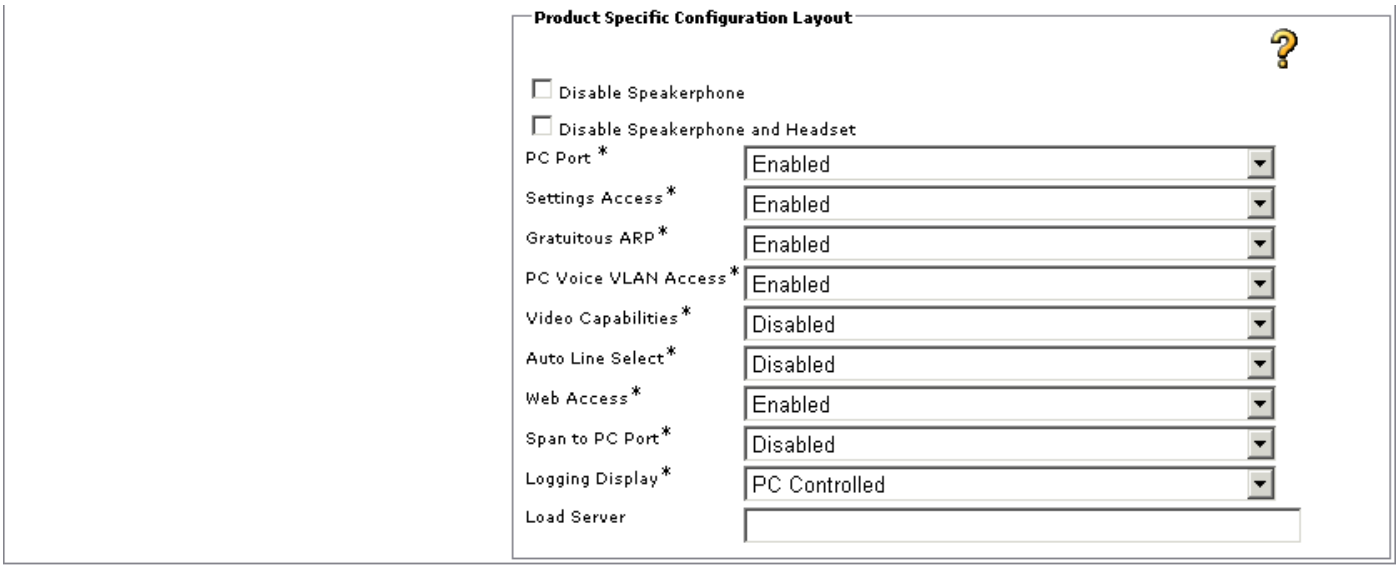
Forwarded Call Information Display on Device SEP000427D3FFF7

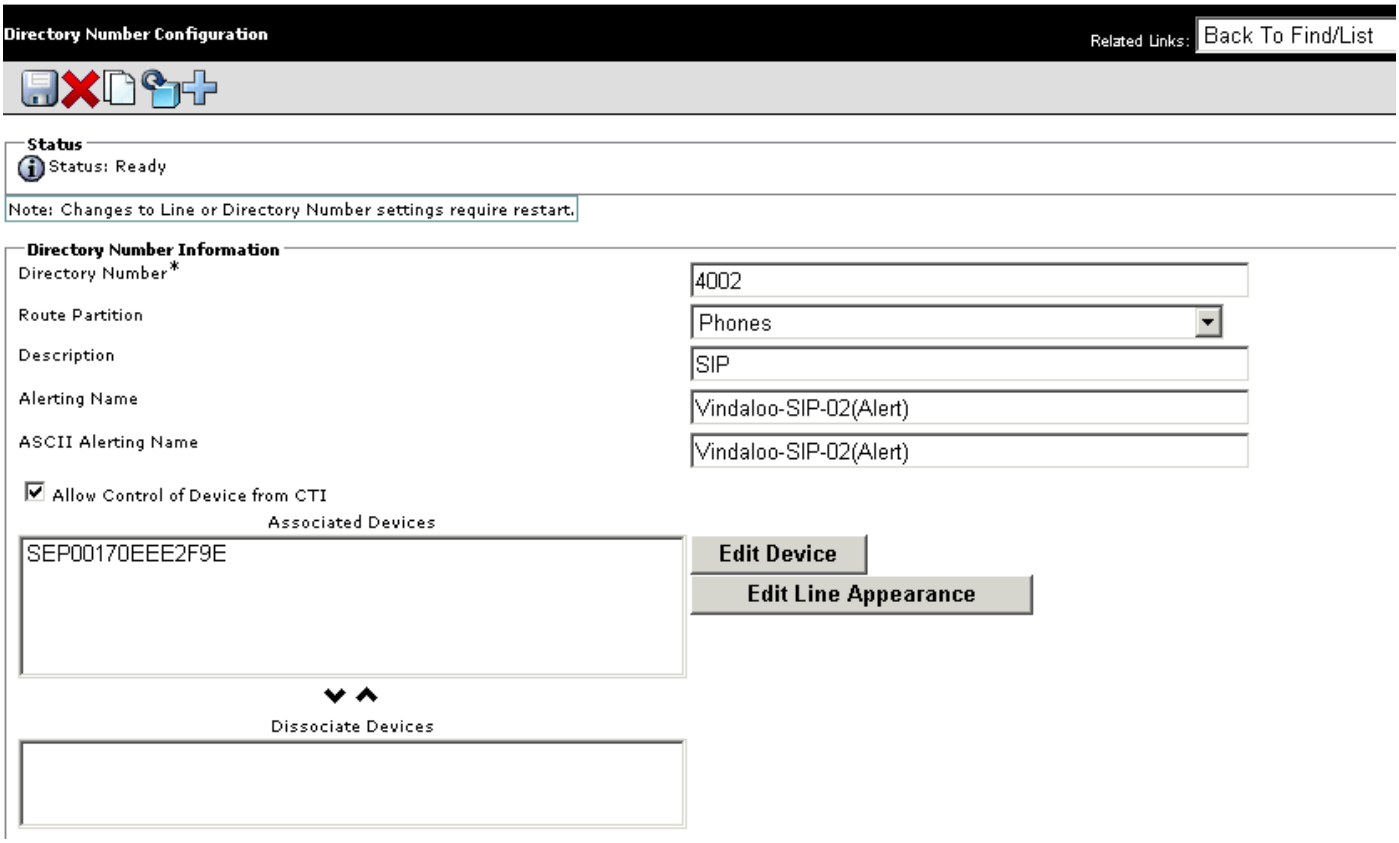
- [x] Caller Name
- [ ] Caller Number
- [ ] Redirected Number
- [x] Dialed Number

SIP phone Configuration









Directory Number Settings

Voice Mail Profile	< None > (Choose <None> to use system default)
Calling Search Space	Phones
Presence Group*	Standard Presence group
AAR Group	< None >
User Hold Audio Source	< None >
Network Hold Audio Source	< None >
Auto Answer*	Auto Answer Off

Call Forward and Call Pickup Settings

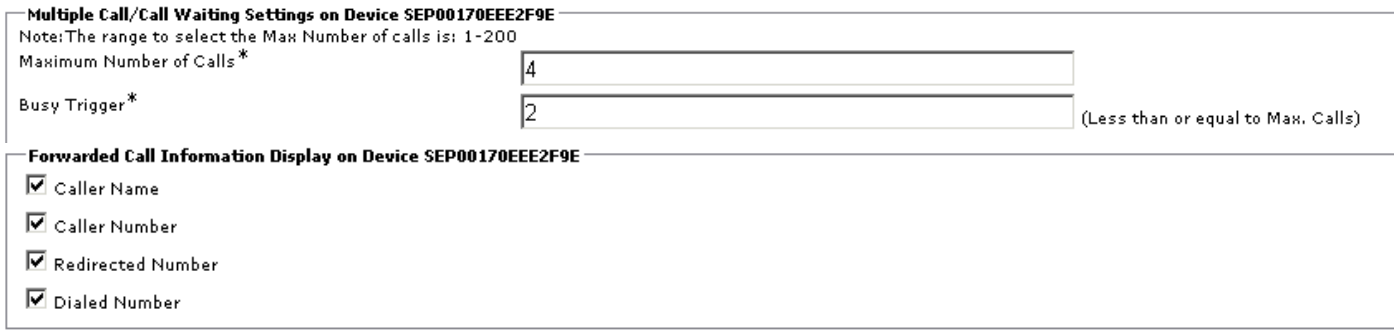
	Voice Mail Destination	Calling Search Space
Forward All	☐ or	Phones
Secondary Calling Search Space for Forward All		< None > Find
Forward Busy Internal	☐ or	Phones
Forward Busy External	☐ or	Phones
Forward No Answer Internal	☐ or	Phones
Forward No Answer External	☐ or	Phones
Forward No Coverage Internal	☐ or	< None >
Forward No Coverage External	☐ or	< None >
Forward on CTI Failure	☐ or	< None >
No Answer Ring Duration (seconds)		
Call Pickup Group	< None >	

MLPP Alternate Party Settings

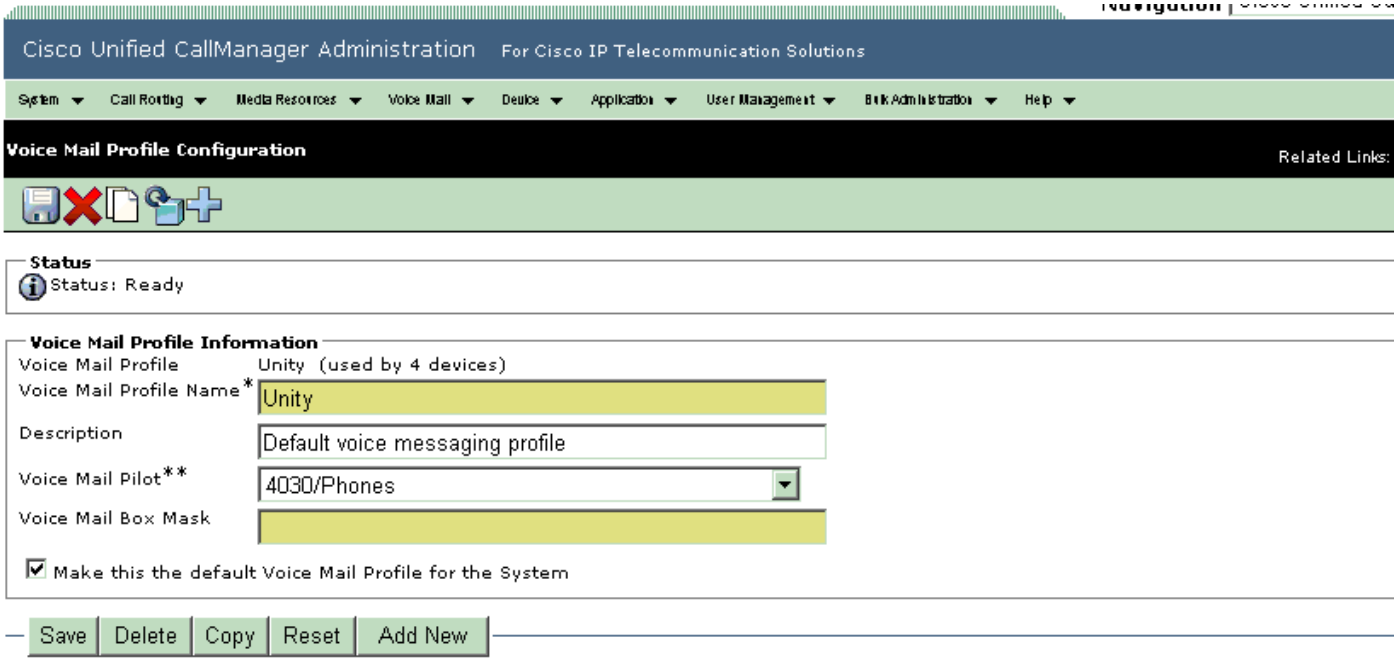
Target (Destination)	
MLPP Calling Search Space	< None >
MLPP No Answer Ring Duration (seconds)	

Line 1 on Device SEP00170EEE2F9E

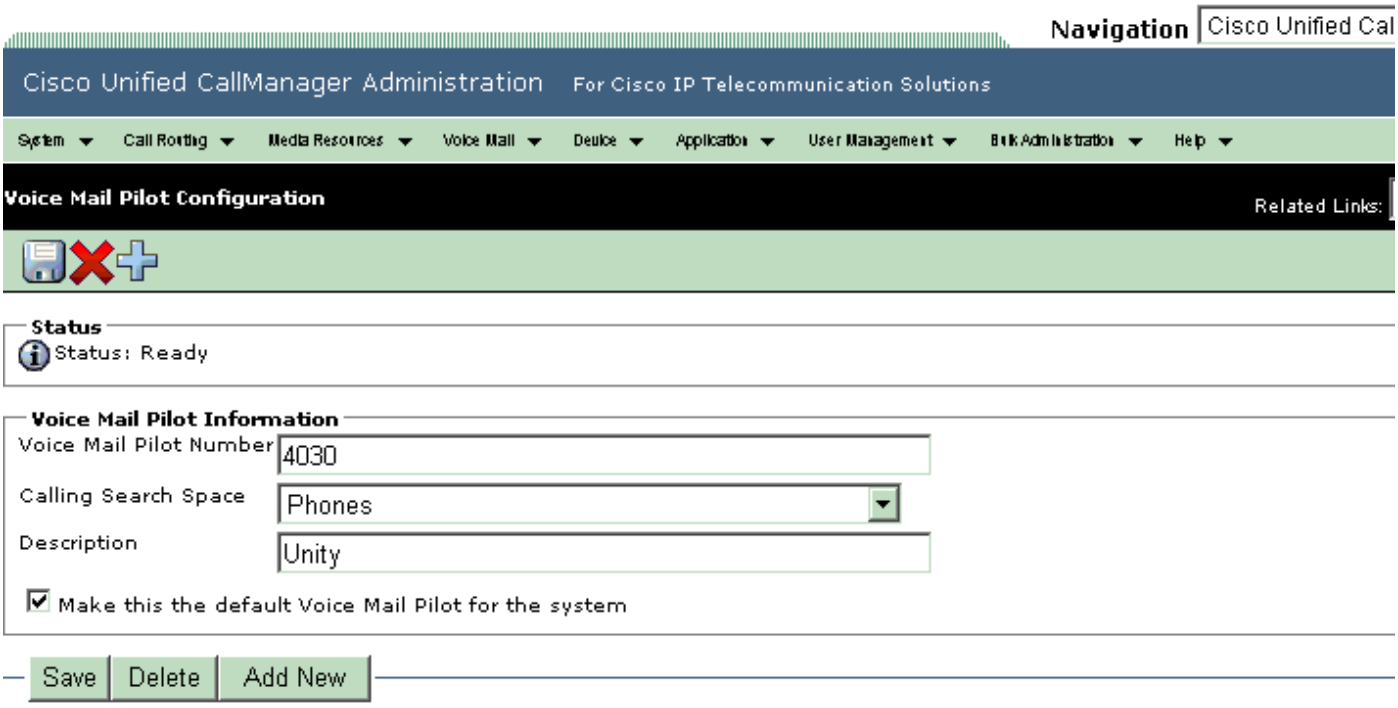
Display (Internal Caller ID)	Vindaloo-SIP-02 Display text for a line appearance is intended for displaying text such as a name in:
	number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.
ASCII Display (Internal Caller ID)	Vindaloo-SIP-02
Line Text Label	Vindaloo-SIP-02
ASCII Line Text Label	Vindaloo-SIP-02
External Phone Number Mask	
Message Waiting Lamp Policy*	Use System Policy
Ring Setting (Phone Idle)*	Ring
Ring Setting (Phone Active)	Use System Default Applies to this line when any line on the phone has a call in progress.



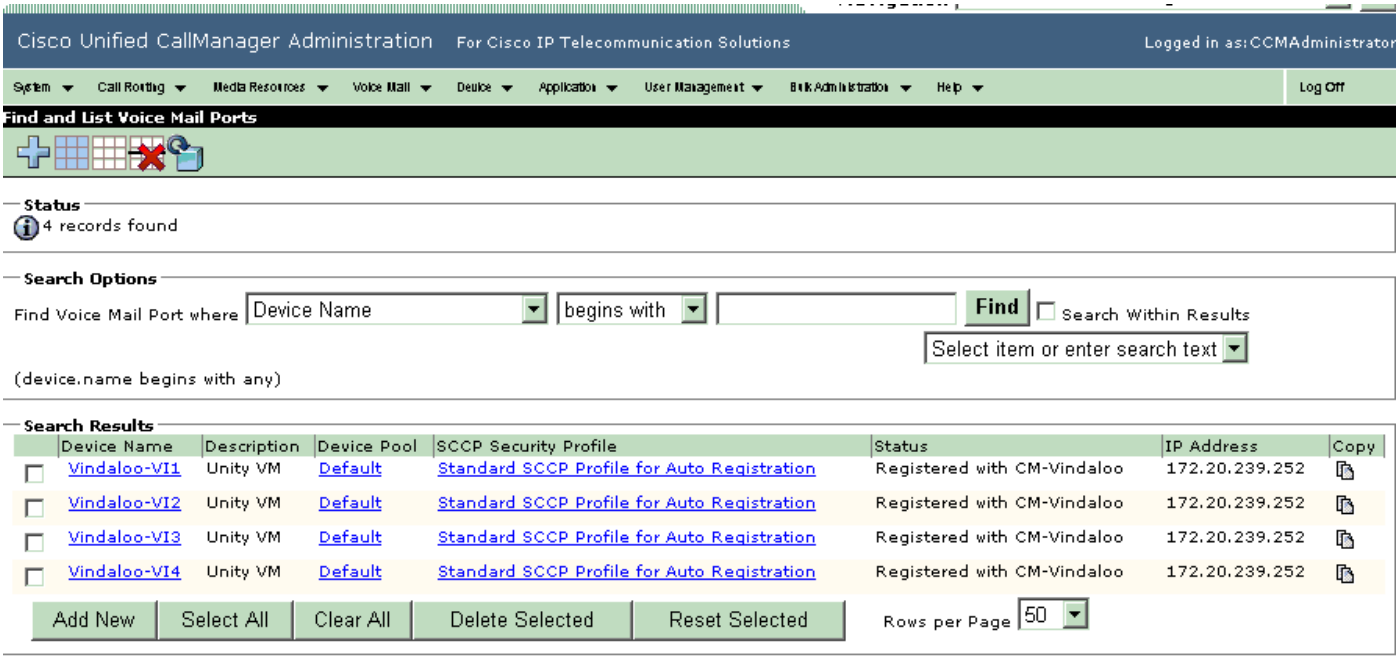
Voicemail Profile Configuration

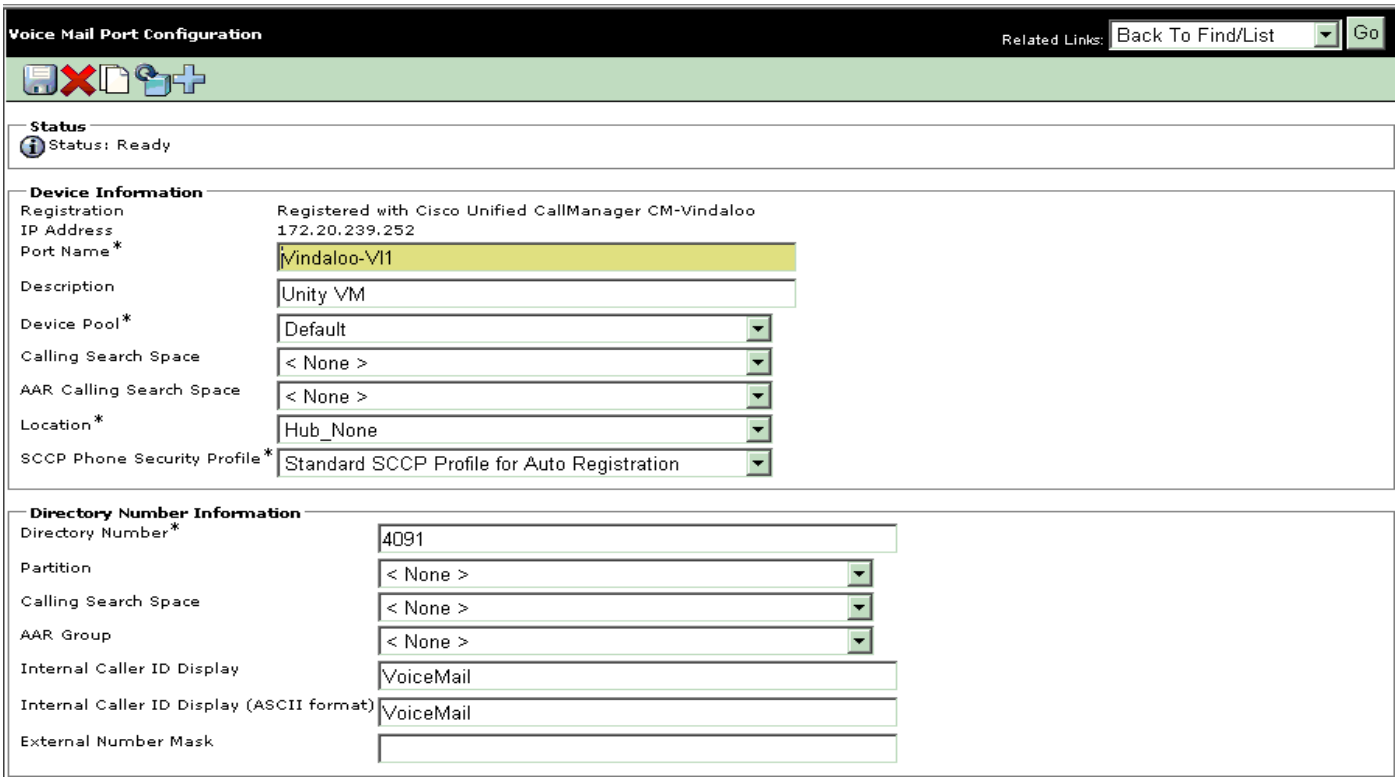


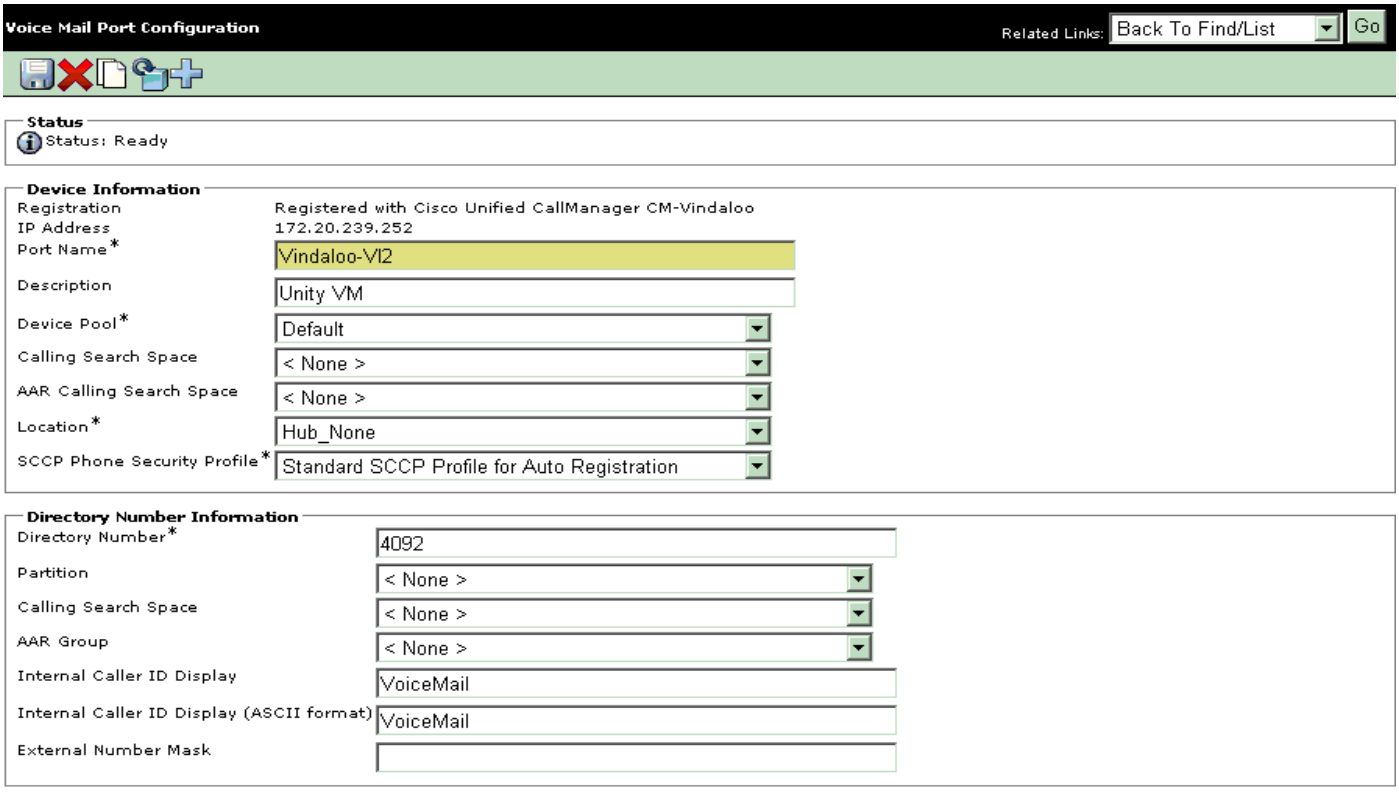
Voicemail Pilot Configuration



Voicemail Ports







Status
Status: Ready

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.239.252
Port Name*	Vindaloo-VI3
Description	Unity VM
Device Pool*	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Location*	Hub_None
SCCP Phone Security Profile*	Standard SCCP Profile for Auto Registration

Directory Number Information

Directory Number*	4093
Partition	< None >
Calling Search Space	< None >
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	

Status
Status: Ready

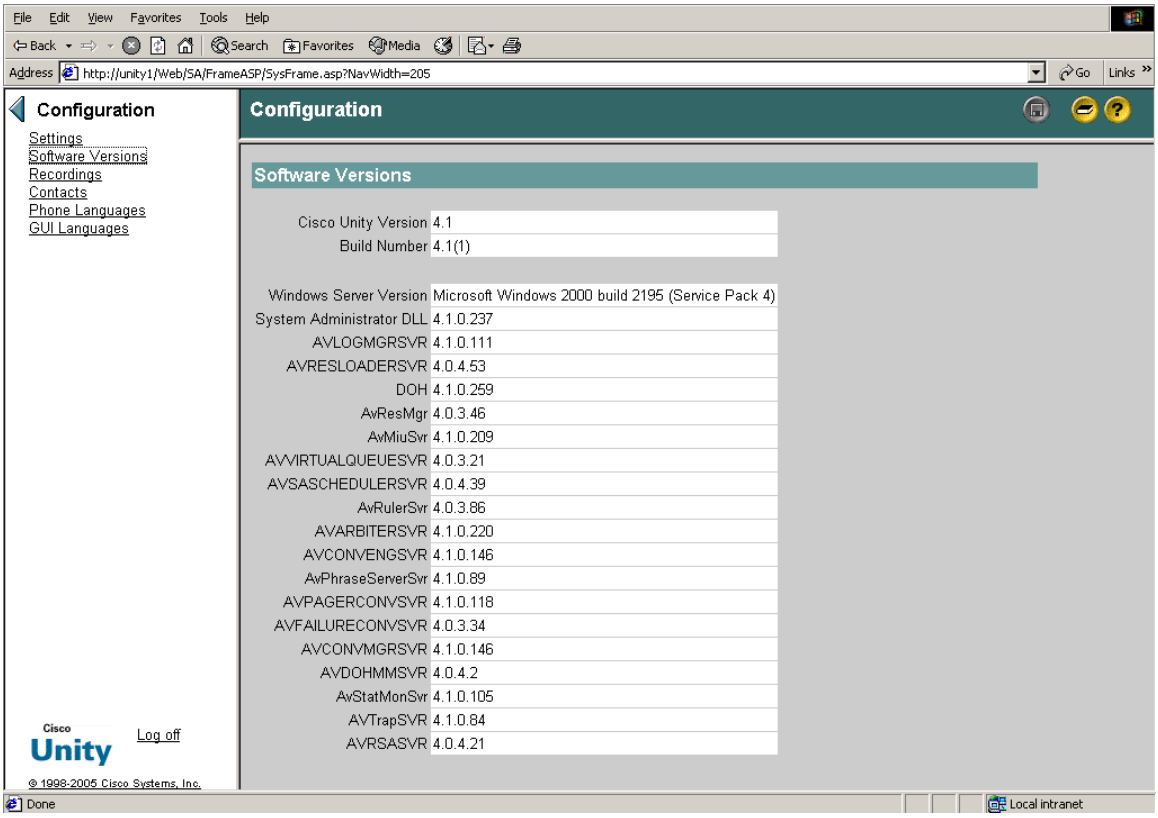
Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.239.252
Port Name*	Vindaloo-VI4
Description	Unity VM
Device Pool*	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Location*	Hub_None
SCCP Phone Security Profile*	Standard SCCP Profile for Auto Registration

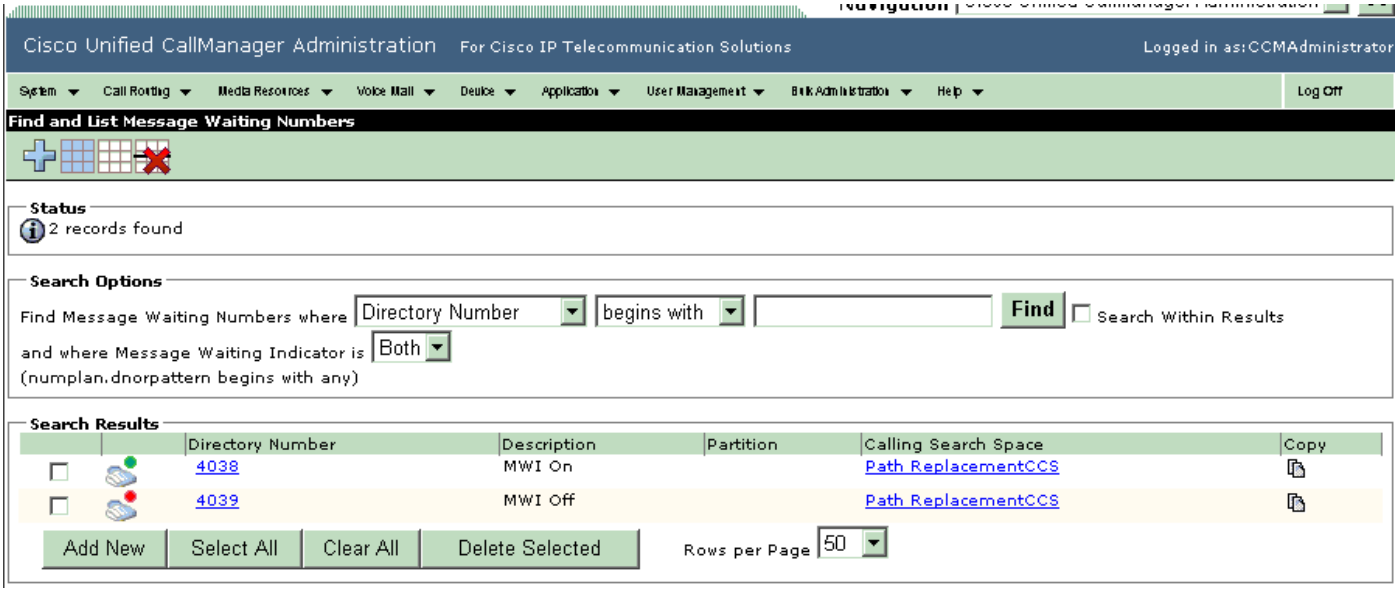
Directory Number Information

Directory Number*	4094
Partition	< None >
Calling Search Space	< None >
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	

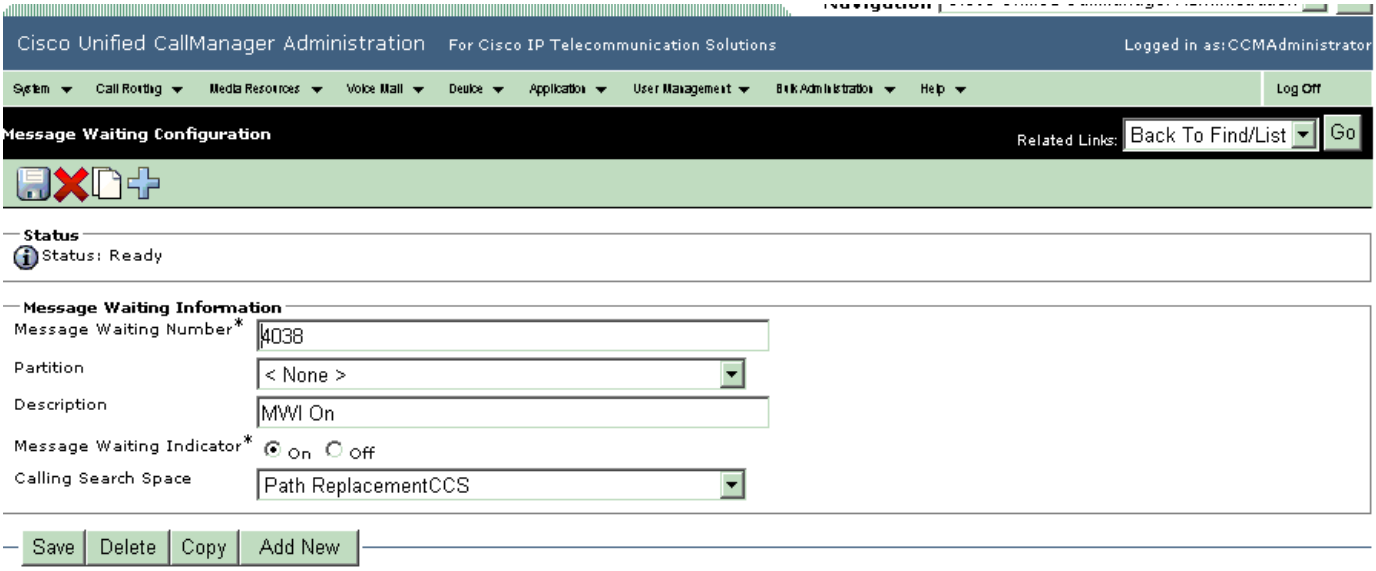
Voicemail Version



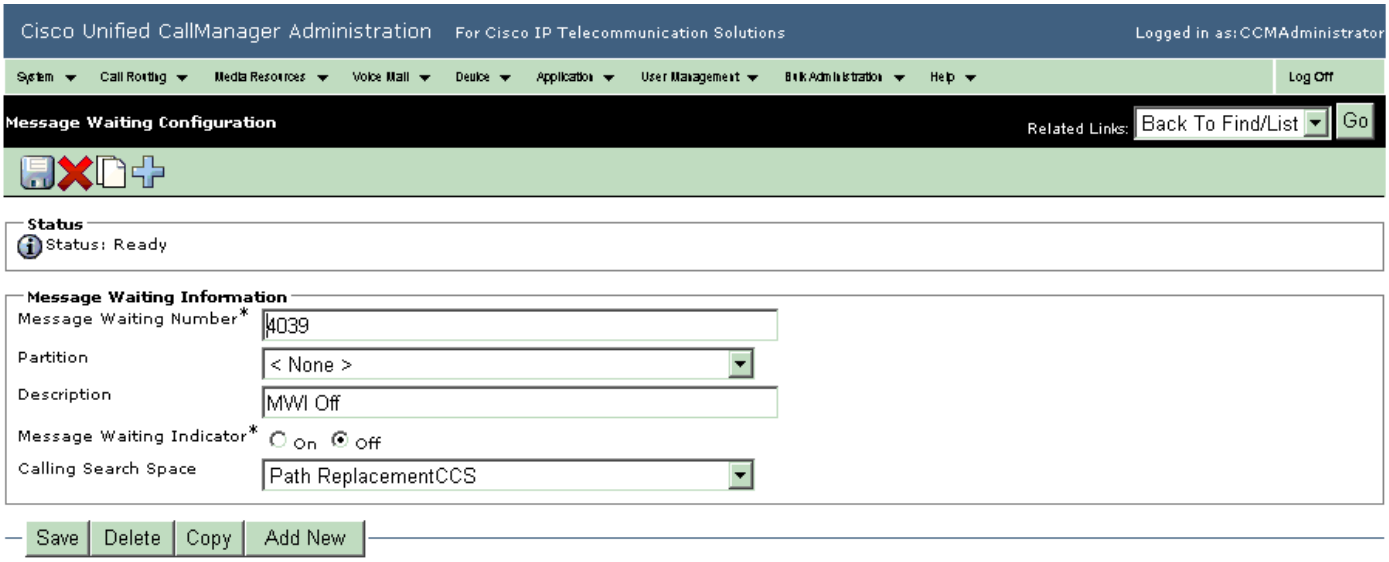
MWI Configuration



MWI ON



MWI OFF



Configuring the 3745 Router

sho ver
Cisco IOS Software, 3700 Software (C3745-IPVOICE-M), Version 12.4(3), RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by Cisco Systems, Inc.
Compiled Fri 22-Jul-05 03:09 by hqluong

ROM: System Bootstrap, Version 12.2(8r)T2, RELEASE SOFTWARE (fc1)

3745B4_E1 uptime is 2 weeks, 6 days, 19 hours, 11 minutes
System returned to ROM by power-on
System image file is "flash:c3745-ipvoice-mz.124-3.bin"

Cisco 3745 (R7000) processor (revision 2.0) with 241664K/20480K bytes of memory.
Processor board ID JMX0715L08P
R7000 CPU at 350MHz, Implementation 39, Rev 3.3, 256KB L2, 2048KB L3 Cache
2 FastEthernet interfaces
124 Serial interfaces
4 Channelized E1/PRI ports
2 Voice FXS interfaces
DRAM configuration is 64 bits wide with parity disabled.
151K bytes of NVRAM.
125184K bytes of ATA System CompactFlash (Read/Write)
62592K bytes of ATA Slot0 CompactFlash (Read/Write)
Configuration register is 0x2102

3745B4_E1#
sho run
Building configuration...

Current configuration : 3738 bytes
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname 3745B4_E1
!
boot-start-marker
boot system flash:c3745-ipvoice-mz.124-3.bin
boot-end-marker
!
logging buffered 1000000 debugging
!
no aaa new-model
!
resource policy
!
no network-clock-participate slot 1
no network-clock-participate slot 2
voice-card 1
 dspfarm
!
voice-card 2

```
 dspfarm
!
ip subnet-zero
ip cef
ip tcp synwait-time 13
!
!
no ip dhcp use vrf connected
ip dhcp excluded-address 192.168.10.0 192.168.10.60
ip dhcp excluded-address 192.168.11.0 192.168.11.10
!
ip dhcp pool hq-pool-phones
   network 192.168.10.0 255.255.255.0
   option 150 ip 192.168.10.50
   default-router 192.168.10.1
!
ip dhcp pool hq-pool-data
   network 192.168.11.0 255.255.255.0
   default-router 192.168.11.1
!
!
no ip domain lookup
ip host whiz 171.69.1.162
ip host dirt 171.69.1.129
ip host danube 171.69.17.14
ip host CM-VINDALOO 172.20.221.254
ip name-server 172.20.221.254
ip dhcp-server 192.168.10.1
isdn switch-type primary-net5
!
!
voice call carrier capacity active
!
!
!
!
!
!
!
!
!
!
!
!
controller E1 1/0
 pri-group timeslots 1-31 service mgcp
!
controller E1 1/1
 pri-group timeslots 1-31 service mgcp
!
controller E1 2/0
 pri-group timeslots 1-31 service mgcp
!
```

```
controller E1 2/1
 pri-group timeslots 1-31 service mgcp
!
!
!
interface FastEthernet0/0
 ip address 172.20.221.200 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/0.10
 encapsulation dot1Q 10
 no snmp trap link-status
!
interface FastEthernet0/0.11
 encapsulation dot1Q 11
 ip address 192.168.11.1 255.255.255.0
 no snmp trap link-status
!
interface FastEthernet0/1
 no ip address
 shutdown
 duplex auto
 speed auto
!
interface Serial1/0:15
 no ip address
 isdn switch-type primary-net5
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial1/1:15
 no ip address
 isdn switch-type primary-net5
 isdn protocol-emulate network
isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/0:15
 no ip address
 isdn switch-type primary-qsig
 isdn incoming-voice voice
 isdn bind-l3 ccm-manager
 no cdp enable
!
interface Serial2/1:15
 no ip address
 isdn switch-type primary-qsig
 isdn protocol-emulate network
 isdn incoming-voice voice
 isdn T310 120000
```

```
 isdn bind-l3 ccm-manager
 no cdp enable
!
ip classless
ip route 0.0.0.0 0.0.0.0 FastEthernet0/0
ip route 0.0.0.0 0.0.0.0 172.20.221.1
!
ip http server
!
dialer-list 1 protocol ip permit
!
!
!
control-plane
!
!
!
voice-port 1/0:15
!
voice-port 1/1:15
!
voice-port 2/0:15
!
voice-port 2/1:15
!
voice-port 3/0/0
!
voice-port 3/0/1
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server CM-VINDALOO
ccm-manager config
!
mgcp
mgcp call-agent CM-Vindaloo 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
no mgcp package-capability res-package
mgcp package-capability sst-package
no mgcp package-capability fxr-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
!
mgcp profile default
!
!
dial-peer cor custom
```

```
!
!
!
dial-peer voice 1 pots
 service mgcpapp
 port 2/0:15
!
dial-peer voice 2 pots
 service mgcpapp
 port 2/1:15
!
dial-peer voice 3 pots
 service mgcpapp
 port 3/0/0
!
dial-peer voice 4 pots
 service mgcpapp
 port 3/0/1
!
dial-peer voice 999300 pots
 service mgcpapp
 port 3/0/0
!
dial-peer voice 999301 pots
 service mgcpapp
 port 3/0/1
!
dial-peer voice 5 pots
 service mgcpapp
!
!
line con 0
line aux 0
line vty 0 4
 login
!
!
end

3745B4_E1#
sho diag
c3700 IO-Board EEPROM:
      Hardware Revision       : 2.0
      Top Assy. Part Number   : 800-14462-01
      Board Revision          : B0
      Deviation Number        : 0-0
      Fab Version             : 03
      PCB Serial Number       : JAD07060M7X
      RMA Test History        : 00
      RMA Number              : 0-0-0-0
      RMA History             : 00
      Calibration Data        : Minimum: -1 dBmV, Maximum: -1 dBmV
          Calibration values : 0xFFFF 0xFFFF 0xFFFF 0xC28B 0x4A4D 0x5830
                               0x3731 0x354C 0x3038 0x50FF 0xFFFF 0xFFFF
```

0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFF15 0xA3C7 0x8B00 0x0000 0x0161
0x13A5 0x6465 0x1F3F 0x6000 0x0000 0x0200
0x0000 0x0100 0x0001 0x0565 0x25B4 0x4065
0x25B4 0x0065 0x25B3 0xC065 0x25B3 0x8000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0300
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0100
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0065
0x25B3 0x4065 0x25B3 0x0000 0x0000 0x0000
0x0001 0x09FF 0xFFFF 0xFF00 0x0000 0x0000
0x0000 0x0015 0xA3C7 0x8B00 0x0000 0x0161
0x13A5 0x6465 0x1F3F 0x6000 0x0000 0x0100
0x0000 0x0100 0x0000 0xC665 0x25B5 0xC065
0x25B5 0x8065 0x25B5 0x4065 0x25B5 0x0000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0300
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0100
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0065
0x25B0 0xC065 0x25B0 0x8000 0x0000 0x0000
0x0001 0x08FF 0xFFFF 0xFF00 0x0000 0x0000
0x0000 0x0015 0xA3C7 0x8B00 0x0000 0x0161
0x7274 0x8065 0x1F3F 0x6000 0x0000 0x0064
0x7832 0xDCAA 0xAAAA 0xAA00 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x6400 0x2D00 0x3700 0x1400 0x1E00
0x0000 0x0200 0x0000 0x0C66 0x0E5D 0xD000
0x0100 0x0060 0x399D 0xD060 0x39A6 0x8460
0x39A4 0x6C00 0x0000 0x0060 0x39A6 0xF400
0x0000 0x0000 0x0000 0x0000 0x0000 0x0064
0x1FC3 0x3065 0x2131 0xB800 0x0000 0x0000
0x0000 0x0000 0x0042 0x4000 0x0000 0x0064
0x7043 0x0C00 0x0000 0x0000 0x0000 0x0000
0x0000 0x0015 0xA3C7

Chassis Serial Number : JMX0715L08P
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 02 F8 41 02 00 C0 46 03 20 00 38 7E 01
0x10: 42 42 30 80 00 00 00 00 02 03 C1 8B 4A 41 44 30
0x20: 37 30 36 30 4D 37 58 03 00 81 00 00 00 00 04 00
0x30: C8 09 FF FF FF FF FF FF FF FF FF C2 8B 4A 4D 58
0x40: 30 37 31 35 4C 30 38 50 FF FF FF FF FF FF FF FF
0x50: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

c3700 Mid-Plane EEPROM:
Hardware Revision : 2.0
Top Assy. Part Number : 800-12289-01
Board Revision : A0
Deviation Number : 0-0
Fab Version : 05
PCB Serial Number : SMQ0710T03N

RMA Test History : 00
RMA Number : 0-0-0-0
RMA History : 00
Calibration Data : Minimum: -1 dBmV, Maximum: -1 dBmV
Calibration values : 0xFFFF 0xFFFF 0xFFFF 0xC28B 0x4A4D 0x5830
0x3731 0x354C 0x3038 0x5043 0x0050 0xC306
0x000C 0x30D0 0x1E50 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0xFF15 0xA3C7 0x8B00 0x0000 0x0061
0x725D 0x1865 0x1F3F 0x60EF 0x4321 0xCD61
0x725F 0xAC0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D15 0xA3C7 0x8B00 0x0000 0x0061
0x725D 0x1865 0x1F3F 0x60EF 0x4321 0xCD61
0x725F 0xAC0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D15 0xA3C7 0x8B00 0x0000 0x0061
0x725D 0x1865 0x1F3F 0x60EF 0x4321 0xCD61
0x725F 0xAC0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B 0x0D0B
0x0D0B 0x0D15 0xA3C7
Chassis Serial Number : JMX0715L08P
MAC Address block size : 80
Chassis MAC Address : 000c.30d0.1e50
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 03 3E 41 02 00 C0 46 03 20 00 30 01 01
0x10: 42 41 30 80 00 00 00 00 02 05 C1 8B 53 4D 51 30
0x20: 37 31 30 54 30 33 4E 03 00 81 00 00 00 00 04 00
0x30: C8 09 FF FF FF FF FF FF FF FF FF C2 8B 4A 4D 58
0x40: 30 37 31 35 4C 30 38 50 43 00 50 C3 06 00 0C 30
0x50: D0 1E 50 FF FF FF FF FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
Slot 0:
C3745 Mother board 2FE(TX)-3W Port adapter, 2 ports
Port adapter is analyzed
Port adapter insertion time unknown
EEPROM contents at hardware discovery:
PCB Serial Number : JAD071106DY
Processor type : 69
Top Assy. Part Number : 800-15934-02
Board Revision : B0
Fab Part Number : 28-4672-04
Deviation Number : 65535-65535
Manufacturing Test Data : FF FF FF FF FF FF FF FF
RMA Number : 0-0-0-0
RMA History : 00
RMA Test History : 00
Field Diagnostics Data : FF FF FF FF FF FF FF FF
Hardware Revision : 2.0
Fab Version : 04
Chassis Serial Number : JMX0715L08P
Product (FRU) Number : C3745-2FE
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF C1 8B 4A 41 44 30 37 31 31 30 36 44 59 09
0x10: 69 40 02 F7 C0 46 03 20 00 3E 3E 02 42 42 30 85
0x20: 1C 12 40 04 80 FF FF FF FF C4 08 FF FF FF FF FF
0x30: FF FF FF 81 00 00 00 00 04 00 03 00 C5 08 FF FF
0x40: FF FF FF FF FF FF 41 02 00 02 04 C2 8B 4A 4D 58
0x50: 30 37 31 35 4C 30 38 50 FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

Slot 1:
High Density Voice Port adapter
Port adapter is analyzed
Port adapter insertion time unknown
EEPROM contents at hardware discovery:
Hardware Revision : 1.1
Top Assy. Part Number : 800-03567-01
Board Revision : G0
Deviation Number : 0-0
Fab Version : 02
PCB Serial Number : JAD06380IBZ
RMA Test History : 00
RMA Number : 0-0-0-0
RMA History : 00
Product (FRU) Number : NM-HDV=
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 00 CC 41 01 01 C0 46 03 20 00 0D EF 01
0x10: 42 47 30 80 00 00 00 00 02 02 C1 8B 4A 41 44 30
0x20: 36 33 38 30 49 42 5A 03 00 81 00 00 00 00 04 00
0x30: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x40: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x50: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

HDV SIMMs: Product (FRU) Number: PVDM-12=

SIMM slot 0: PVDM-12 SIMM present.
SIMM slot 1: PVDM-12 SIMM present.
SIMM slot 2: PVDM-12 SIMM present.
SIMM slot 3: PVDM-12 SIMM present.
SIMM slot 4: PVDM-12 SIMM present.

WIC Slot 0:
E1 (2 Port) Multi-Flex Trunk WAN Daughter Card
Hardware revision 1.0 Board revision B0
Serial number 29416808 Part number 800-04479-03
FRU Part Number VWIC-2MFT-E1=

Test history 0x0 RMA number 00-00-00
Connector type PCI
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 23 01 00 01 C0 DD 68 50 11 7F 03 00 00 00 00
0x30: 58 00 00 00 02 12 24 00 FF FF FF FF FF FF FF FF

HDV firmware: Compiled Fri 19-Nov-04 14:23 by michen
HDV memory size 524280 heap free 141761

Slot 2:
High Density Voice Port adapter
Port adapter is analyzed
Port adapter insertion time unknown
EEPROM contents at hardware discovery:
Hardware Revision : 1.1
Top Assy. Part Number : 800-03567-01
Board Revision : E0
Deviation Number : 0-0
Fab Version : 02
PCB Serial Number : JAB043409F7
RMA Test History : 00
RMA Number : 0-0-0-0
RMA History : 00
Product (FRU) Number : NM-HDV=
EEPROM format version 4
EEPROM contents (hex):
0x00: 04 FF 40 00 CC 41 01 01 C0 46 03 20 00 0D EF 01
0x10: 42 45 30 80 00 00 00 00 02 02 C1 8B 4A 41 42 30
0x20: 34 33 34 30 39 46 37 03 00 81 00 00 00 00 04 00
0x30: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x40: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x50: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x60: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF
0x70: FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF FF

HDV SIMMs: Product (FRU) Number: PVDM-12=
SIMM slot 0: PVDM-12 SIMM present.
SIMM slot 1: PVDM-12 SIMM present.
SIMM slot 2: PVDM-12 SIMM present.
SIMM slot 3: PVDM-12 SIMM present.
SIMM slot 4: PVDM-12 SIMM present.

WIC Slot 0:
E1 (2 Port) Multi-Flex Trunk WAN Daughter Card
Hardware revision 1.0 Board revision B0
Serial number 22101697 Part number 800-04479-02

FRU Part Number VWIC-2MFT-E1=

Test history 0x0 RMA number 00-00-00
Connector type PCI
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 23 01 00 01 51 3E C1 50 11 7F 02 00 00 00 00
0x30: 58 00 00 00 00 09 07 00 FF FF FF FF FF FF FF FF

HDV firmware: Compiled Fri 19-Nov-04 14:23 by michen
HDV memory size 524280 heap free 141761

Slot 3:
4 PORT Voice PM for MARs Port adapter
Port adapter is analyzed
Port adapter insertion time unknown
EEPROM contents at hardware discovery:
Hardware revision 1.1 Board revision H0
Serial number 25100457 Part number 800-02491-02
FRU Part Number: NM-2V=

Test history 0x0 RMA number 00-00-00
EEPROM format version 1
EEPROM contents (hex):
0x00: 01 65 01 01 01 7F 00 A9 50 09 BB 02 00 00 00 00
0x10: 88 00 00 00 01 03 09 17 FF FF FF FF FF FF FF FF

VIC Slot 0:

FXS Voice daughter card (2 port)
Hardware revision 1.1 Board revision B0
Serial number 27635018 Part number 800-02493-04
FRU Part Number VIC-2FXS=

Test history 0x0 RMA number 00-00-00
Connector type Wan Module
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 0E 01 01 01 A5 AD 4A 50 09 BD 04 00 00 00 00
0x30: 58 00 00 00 02 06 22 01 FF FF FF FF FF FF FF FF
3745B4_E1#

Acronyms

Acronym	Definitions
ANF-PR	Additional Network Feature Path Replacement
AOC	Advice-of-charge. Information element is sent with the connection setup information for incoming Euro-ISDN connections. The AOC IE is used for call charge calculation.
CUCM	Cisco Unified CallManager
CCBS	Call Completion to Busy Subscriber
CCNR	Call Completion on No Reply
CFB	Call Forwarding on Busy
CFNR	Call Forwarding No Reply
CFU	Call Forwarding Unconditional
CLIP	Calling Line (Number) Identification Presentation
CLIR	Calling Line (Number) Identification Restriction
CMM	Communication Media Module (CMM) is a Cisco Catalyst® 6500 Series and Cisco 7600 Series line card that provides flexible and high-density T1/E1 gateways
CNIP	Calling Name Identification Presentation
CNIR	Calling Name Identification Restriction
COLP	Connected Line (Number) Identification Presentation
COLR	Connected Line (Number) Identification Restriction
CONP	Connected Name Identification Presentation
CONR	Connected Name Identification Restriction
CT	Call Transfer
MWI	Message Waiting Indicator
PSTN	Public Switched Telephone Network

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