

# Siemens HiPath 4000 Release 3 using E1 ECMA Q.SIG to Cisco Unified Communications Manager 6.0

October 26, 2007 Revision 3

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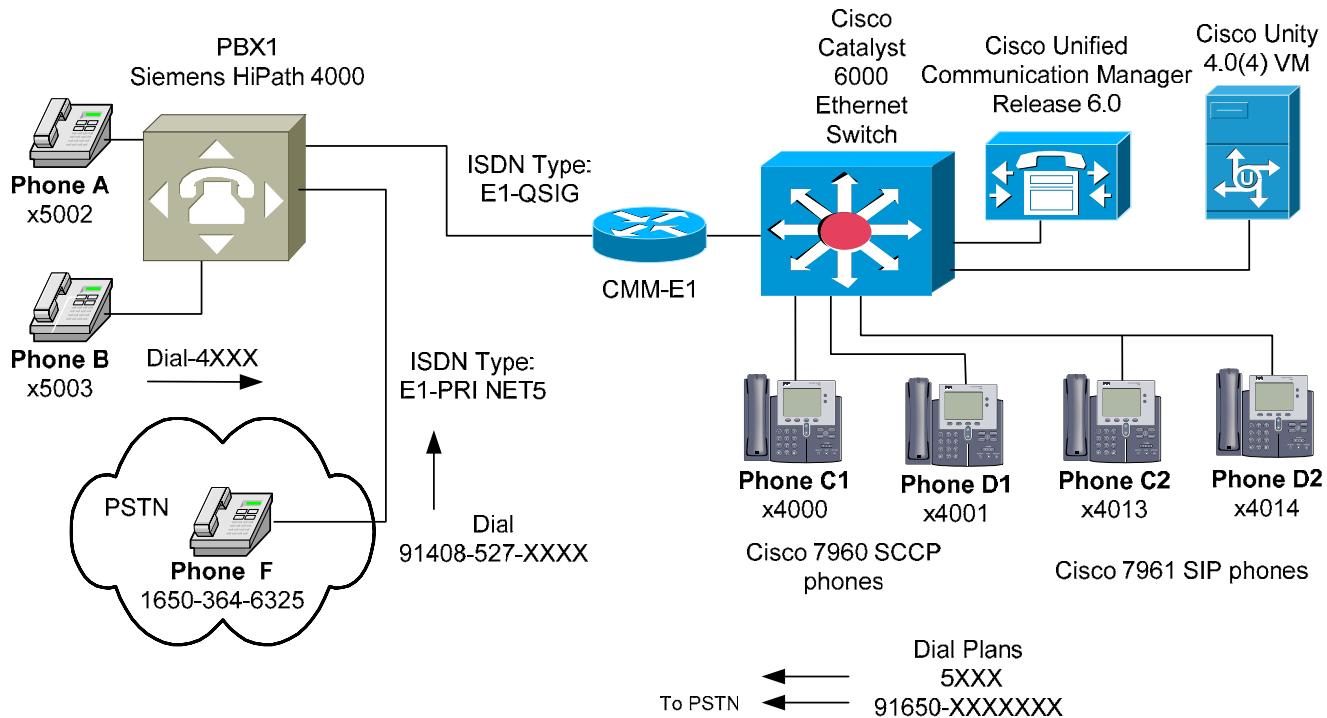
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## Introduction

- This is an application note for connectivity of Siemens HiPath 4000 Release 3 PBX with Cisco Unified Communications Manager (CUCM) Release 6.0 via Cisco CMM-E1 as MGCP gateway using ECMA Q.SIG protocol.
- The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified Communications Manager connected to the PBX via Cisco CMM-E1 link as MGCP gateway.
- Connectivity is achieved by using the PRI QSIG E1 protocol type on the MGCP gateway with Unified Communications Manager Service parameter Q.SIG variant of ECMA and ECMAV1 switch type on the Hipath 4000 PBX.
- This Application Note uses the Cisco CMM-E1 voice gateway, however other Cisco voice gateways are also an option to use since Cisco Unified Communications Manager Q.SIG implementation does not depend on the physical interface.

## Network Topology

Figure 1. Basic Call Setup



## Limitations

### B-Channel Mapping:

- Siemens HiPath 4000 PBX uses Timeslot channel numbering (1-15 & 17-31) when Q.SIG protocol “ECMA1” is selected, therefore the Cisco CMM-E1 gateway configuration for **Channel IE Type** field should be set to **Timeslot Number**.

### Connected Name and Number Restrictions:

- Siemens phone displayed dialed digits when CUCM sends Connected Name and Number as restricted.

### Additional Network Feature Path Replacement for Call Diversion by forward switching:

- Siemens HiPath 4000 PBX does not send Path Replacement proposal for Call Diversion by forward switching.

### Overlap Sending

- When CUCM is configured for Overlap Sending, calls made from SIP Phones C2 or D2 (Fig 1) to Siemens Hipath result in the Name not being updated on the SIP phone during Alerting State (Siemens has been verified to be sending Alerting Name). This interoperability issue is considered a limitation on Cisco Unified Communication Manager and an internal corrective action bug fix ticket has been generated to resolve this issue in future releases. (DDTS # CSCsj51238 Title: SIP Phone fails to display Alerting Name when using OVERLAP Sending).

### MWI

- When Siemens Hipath 4000 is configured for ECMAV1 Q.SIG variant, the APDU sent to activate MWI on any Siemens digital station from CUCM is rejected by the Siemens Hipath for reasons unknown.



## System Components

### Hardware Requirements

Cisco Hardware:

- Cisco 35xx Ethernet Switch
- Cisco CMM-E1 Gateway
- Cisco IP Phones
- Cisco Unified Communication Manager Server

Siemens Hipath 4000 PBX Hardware:

- DIU-N2

### Software Requirements

The following software is required:

- Cisco Unified Communication Manager Release 6.0
- PBX software release 3
- Cisco IOS Release 12.4 (for the CMM 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
- Sending Busy 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)
- MWI- Message Waiting Indication (lamp ON, lamp OFF)<sup>1</sup> - see limitation section

## Configuration

### Configuring the Siemens HiPath 4000 PBX

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

### Configuration Menus and Commands for Hipath 4000

#### DPLN

```
<dis-wabe:gen;
DIS-WABE:GEN;
H500: AMO WABE STARTED
-----|-----|-----|-----|-----|-----|-----|-----|
| DIGIT INTERPRETATION | VALID FOR ALL DIAL PLANS |
```

<sup>1</sup> MWI was tested with Communication Manager 6.0 as the Message Center PINX and PBX users as remote subscribers.



CISCO

CODE	CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
	1	11111	11112	22		
0	0	12345	67890	12345	67890	12
001	- 009	.	****	..****	**... . . . . . *	CO NETRTE
111		*	.....	.....	.....	TIE
12		.	****	*****	**... . . . . . *	TIE
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		
CODE	CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
	1	11111	11112	22		
0	0	12345	67890	12345	67890	12
3000	- 3010	.	****	*****	**... . . . . . *	STN
3011	- 3020	.	****	*****	**... . . . . . *	STN
3021	- 3030	.	****	*****	**... . . . . . *	STN
3031	- 3040	.	****	*****	**... . . . . . *	STN
3041	- 3050	.	****	*****	**... . . . . . *	STN
31		.	.....	.....	* . . . . .	NAMEKY
32		.	.....	.....	* . . . . .	PARKKY
DIGIT INTERPRETATION				VALID FOR ALL DIAL PLANS		
CODE	CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
	1	11111	11112	22		
0	0	12345	67890	12345	67890	12
33		.	.....	.....	* . . . . .	CCKY
34		.	.....	.....	* . . . . .	HTKY
35		.	.....	.....	* . . . . .	STKY
36		.	.....	.....	* . . . . .	REMKY
36	- 37	.	****	***	**... . . . . . *	CO
38		.	.....	.....	* . . . . .	TIMEKY
39		.	****	*****	**... . . . . . *	TIE
4000	- 4050	.	****	*****	**... . . . . . *	STN
4051	- 4566	.	****	*****	**... . . . . . *	STN
4567		.	****	*****	**... . . . . . *	STN
						DESTNO 111 DNNO 0- 0-111
						DESTNO 222 DNNO 0- 0-222
						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 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=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		
----------------------	--	--------------------------	--	--

CODE		CALL PROGRESS STATE 1 11111 11112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=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 :	4	LDP :	111-X
		SPC :	22
		FDSFIELD :	0 SDSFIELD : 0 PINDP : N
DPLN	LROUTE	LAUTH	
0		1 1	
1		1 1	
2		1 1	
3		1 1	
4		1 1	
5		1 1	
6		1 1	
7		1 1	
8		1 1	
9		1 1	
10		1 1	
11		1 1	
12		1 1	
13		1 1	
14		1 1	
15		1 1	

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



## Access code for Overlap Sending Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP,LDPNO=12;
```

```
DISPLAY-LDPLN:TYPE=LDP,LDPNO=12;
```

```
H500: AMO LDPLN STARTED
```

LDPNO :	12	LDP : 59-X SPC : 22 FDSFIELD : 0 SDSFIELD : 0 PINDP : N
DPLN	LROUTE	LAUTH
0	27	1
1	27	1
2	27	1
3	27	1
4	27	1
5	27	1
6	27	1
7	27	1
8	27	1
9	27	1
10	27	1
11	27	1
12	27	1
13	27	1
14	27	1
15	27	1

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

## PSTN Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP,LDPNO=5;
```

```
DISPLAY-LDPLN:TYPE=LDP,LDPNO=5;
```

```
H500: AMO LDPLN STARTED
```

LDPNO :	5	LDP : 9-1650-XXXXXXX SPC : 22 FDSFIELD : 0 SDSFIELD : 0 PINDP : N
DPLN	LROUTE	LAUTH
0	165	1
1	165	1
2	165	1
3	165	1
4	165	1
5	165	1
6	165	1
7	165	1
8	165	1
9	165	1
10	165	1
11	165	1
12	165	1
13	165	1
14	165	1
15	165	1



AMO-LDPLN-111 ADMINISTRATION LCR DIALPLAN  
DISPLAY COMPLETED;

## BCSU

### PRI Board

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

ADDRESS : LTG 1 LTU 3 SOURCE GROUP 1

PEN	ASSIGNED MODULE	MODULE TYPE	FCT ID	HWY BDL	INSERTED MODULE	STATE	HW-INFO	MODULE STATUS
25	Q2196-X	DIU-N2	1	A	Q2196-X	1	-06 -	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

PEN	ASSIGNED MODULE	MODULE TYPE	FCT ID	HWY BDL	INSERTED MODULE	STATE	HW-INFO	MODULE 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:22;  
DIS-COT:22;  
H500: AMO COT STARTED

COT: 22 INFO:  
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 COT22**  
**For Path Replacement need to add ROPT to COT 22 on the Hipath 4000.**

```
<CHANGE-COT:COTNO=22,COTTYPE=COTADD,PAR=FNAN&FWDN;  
CHANGE-COT:COTNO=22,COTTYPE=COTADD,PAR=FNAN&FWDN&ROPT;  
H500: AMO COT STARTED  
H07: CHANGED COT STILL LINKED WITH FOLLOWING TRUNKS:  
COT TRUNK BCGR DEVICE  
-----  
22 1- 3- 55- 0 1 CDGCONN  
1- 3- 55- 1 1 CDGCONN  
1- 3- 25- 0 1 S2CONN  
1- 3- 25- 1 1 S2CONN
```

H06: COT 22 CHANGED

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

```
<DISPLAY-COT:COTNO=22;  
DISPLAY-COT:COTNO=22;  
H500: AMO COT STARTED  
  
COT: 22 INFO:  
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=21;  
DISPLAY-COP:COPNO=21;  
H500: AMO COP STARTED  
  
COP: 21 INFO:  
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
```



```
CO TRUNK ACCESS:  
TRUNK ACCESS TA
```

```
TOLL ACCESS:  
TRUNK ACCESS TA
```

```
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	DTE
32 >	TA TNOTCR	NOCO NOTIE	TA TNOTCR BASIC MSN CDRINT MULTRA

```
AMO-COSSU-111 CLASSES OF SERVICE  
DISPLAY COMPLETED;
```

```
<DISPLAY-COSSU:TYPE=LCOSV,LCOSV=1;  
DISPLAY-COSSU:TYPE=LCOSV,LCOSV=1;  
H500: AMO COSSU STARTED
```

LCOS	1	2	3	4	5	6	LAUTH	COPIN	NUM
V	1234567890123456789012345678901234567890123456789012345678901234								
	>SERVICE INFORMATION								
1	X.....							0	
	>LCR ATTENDANT FOR VOICE								

```
AMO-COSSU-111 CLASSES OF SERVICE  
DISPLAY COMPLETED;
```



## Trunk Group Access Code, BUEND

```
<DISPLAY-BUEND:TGRP=26,FORMAT=L;
```

```
DISPLAY-BUEND:TGRP=26,FORMAT=L;
```

```
H500: AMO BUEND STARTED
```

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

```
AMO-BUEND-111      TRUNK GROUP
```

```
DISPLAY COMPLETED;
```

```
<DISPLAY-BUEND:TGRP=27,FORMAT=L;
```

```
DISPLAY-BUEND:TGRP=27,FORMAT=L;
```

```
H500: AMO BUEND STARTED
```

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

```
AMO-BUEND-111      TRUNK GROUP
```

```
DISPLAY COMPLETED;
```



## Trunk Configuration, TDCSU

### For Master-side Configuration

```
<dis-tdcsv:1-3-25-1;
DIS-TDCSU:1-3-25-1;
H500: AMO TDCSU STARTED
+----- DIGITAL TRUNK (FORMAT=L) -----
| DEV      = S2CONN      PEN      = 1-03-025-1    TGRP     = 27
|-----+
| PROTVAR = ECMA1       INS      = Y          SRCHMODE = CIR
| COTNO   = 22          COPNO    = 21         DPLN     = 0
| ITR      = 1           COS      = 32         LCOSV    = 1
| LCOSD   = 1           CCT      = PRI ECMA 4  DESTNO   = 111
| SEGMENT  = 1          DEDSCC   =             DEDSVC   = NONE
| FACILITY=             DITIDX   =             SRTIDX   =
| TRTBL   = GDTR        SIDANI   = N          ATNTYP   = TIE
| CBMATTR  = NONE        NWMMUXTIM = 10        TCHARG   = N
| SUPPRESS = 0          DGTPR    =             CHIMAP   = N
| ISDNIP   =
| PNPL2P   =
| TRACOUNT = 31          ISDNNP   =
| ALARMNO  = 0           PNPL1P   =             PNPAC    =
| ZONE     = EMPTY        SATCOUNT = MANY        NNO      = 111
| DOMTYPE  =
| INIGHT   =
| UUSCCX   = 16          FIDX     = 1          CARRIER  = 1
| CLASSMRK= EC           COTX     = 22         FWDX     = 5
| TCCID    =
|-----+
| BCNEG   = N            BCGR     = 1          LWPAR    = 1
| LWPP    = 0            LWLT     = 0          LWPS     = 0
| LWR1    = 0            LWR2     = 0
| SVCDOM  =
| BCHAN   = 1 && 30
+-----+
AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30
```

AMO-TDCSU-111 DIGITAL TRUNKS  
DISPLAY COMPLETED;

```
<DISPLAY-LWPAR:FORMAT=L,BLNO=1,TYPE=DIUS2;
DISPLAY-LWPAR:FORMAT=L,BLNO=1,TYPE=DIUS2;
H500: AMO LWPAR STARTED
+-----+
| LOADWARE PARAMETERS      CIRCUIT TYPE: DIUS2  SOURCE:DB    BLOCK: 1 |
|-----+
| 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     =
+-----+
```

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



## For Slave-side Configuration

<dis-tdcSU:1-3-25-1;

DIS-TDCSU:1-3-25-1;

H500: AMO TDCSU STARTED

DIGITAL TRUNK (FORMAT=L)				
DEV	= S2CONN	PEN	= 1-03-025-1	TGRP
PROTVAR	= ECMA1	INS	= Y	SRCHMODE = CIR
COTNO	= 22	COPNO	= 21	DPLN = 0
ITR	= 1	COS	= 32	LCOSV = 1
LCOSD	= 1	CCT	= PRI ECMA 4	DESTNO = 111
SEGMENT	= 1	DEDSCC	=	DEDSVC = NONE
FACILITY	=	DITIDX	=	SRTIDX =
TRTBL	= GDTR	SIDANI	= N	ATNTYP = TIE
CBMATTR	= NONE	NWMUXTIM	= 10	TCHARG = N
SUPPRESS	= 0	DGTPR	=	CHIMAP = N
ISDNIP	=	ISDNNP	=	
PNPL2P	=	PNPL1P	=	PNPAC =
TRACOUNT	= 31	SATCOUNT	= MANY	NNO = 111
ALARMNO	= 0	FIDX	= 1	CARRIER = 1
ZONE	= EMPTY	COTX	= 22	FWDX = 5
DOMTYPE	=	DOMAINNO	=	TPROFNO =
INIGHT	=			CCHDL =
UUSCCX	= 16	UUSCCY	= 8	FNIDX = 1
CLASSMRK	= EC & G711 & G729OPT			SRCGRP =
TCCID	=			
BCNEG	= N	BCGR	= 1	LWPAR = 0
LWPP	= 0	LWLT	= 0	LWPS = 0
LWR1	= 0	LWR2	= 0	
SVCDOM	=			
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: 0				
LOADWARE	PARAMETERS	VERSION	= S2	QUAL = ON
LNTYPE	= COPPER	DCHAN1	= 16	DCHAN2 = 0
MASTER	= N	QUAL1	= 10 SEC.	QUAL2 = 10 MIN.
PATTERN	= D5H	PERMACT	= Y	FCBAB = DFH
SMD	= N	FIXEDTEI	= 0	CNTRNR = 255
CDG	= N	CRC4REP	= N	
TEIVERIF	= N			
DEV	= INDEP			
INFO	=			

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



## PSTN Trunk Configuration, TDCSU

```

<dis-tdcsv:1-2-79-1;
DIS-TDCSU:1-2-79-1;
H500: AMO TDCSU STARTED
+----- DIGITAL TRUNK (FORMAT=L) -----
| DEV      = S2CONN      PEN      = 1-02-079-1    TGRP     = 23
+-----+
| PROTVAR = ETSI          INS      = Y          SRCHMODE = CIR
| COTNO   = 21            COPNO    = 21         DPLN     = 0
| ITR     = 1              COS      = 10         LCOSV    = 32
| LCOSD   = 32            CCT      = PRI ECMA 2  DESTNO   = 100
| SEGMENT = 8             DEDSCC   =           DEDSVC   = NONE
| FACILITY=               DITIDX   =           SRTIDX   =
| TRTBL   = GDTR          SIDANI   = N          ATNTYP   = TIE
| CBMATTR = NONE          NWMUXTIM = 10        TCHARG   = N
| SUPPRESS= 0              DGTPR    =           CHIMAP   = N
| ISDNIP   =               ISDNNP   =           PNPAC    =
| PNPL2P   =               PNPL1P   =           NNO      = 1
| TRACOUNT= 31            SATCOUNT = MANY       CARRIER  = 1
| ALARMNO = 0              FIDX     = 1          FWDX    = 10
| ZONE    = EMPTY          COTX     = 21         TPROFNO  =
| DOMTYPE =               DOMAINNO=           CCHDL    =
| INIGHT   =               UUSCCY   = 8          FNIDX   = 1
| UUSCCX  = 16            & G711   & G729OPT  SRCGRP   =
| CLASSMRK= EC
| TCCID   =
+-----+
| BCNEG   = N              BCGR     = 1          LWPAR    = 1
| LWPP    = 0              LWLT     = 0          LWPS     = 0
| LWR1    = 0              LWR2     = 0
| SVCDOM  =
| BCHAN   = 1 && 30
+-----+
AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

```

AMO-TDCSU-111        DIGITAL TRUNKS  
DISPLAY COMPLETED;

## Trunk Configuration to Hicom node, TDCSU

```

<DISPLAY-TDCSU:PNL1=1-3-25-0;
DISPLAY-TDCSU:PNL1=1-3-25-0;
H500: AMO TDCSU STARTED
+----- DIGITAL TRUNK (FORMAT=L) -----
| DEV      = S2CONN      PEN      = 1-03-025-0    TGRP     = 26
+-----+
| PROTVAR = PSS1V2      INS      = Y          SRCHMODE = CIR
| COTNO   = 22            COPNO    = 21         DPLN     = 0
| ITR     = 1              COS      = 32         LCOSV    = 1
| LCOSD   = 1            CCT      = PRI ECMA 3  DESTNO   = 222
| SEGMENT = 1            DEDSCC   =           DEDSVC   = NONE
| FACILITY=               DITIDX   =           SRTIDX   =
| TRTBL   = GDTR          SIDANI   = N          ATNTYP   = TIE
| CBMATTR = NONE          NWMUXTIM = 10        TCHARG   = N
| SUPPRESS= 0              DGTPR    =           CHIMAP   = N
| ISDNIP   =               ISDNNP   =           PNPAC    =
| PNPL2P   =               PNPL1P   =           NNO      = 222
| TRACOUNT= 31            SATCOUNT = MANY       CARRIER  = 1
| ALARMNO = 0              FIDX     = 1          FWDX    = 10
| ZONE    = EMPTY          COTX     = 22         TPROFNO  =
| DOMTYPE =               DOMAINNO=           CCHDL    =

```



```

| INIGHT    =
| UUSCCX   = 16          UUSCCY   = 8
| CLASSMRK = EC          & G711    & G729OPT
| TCCID     =
+-----+
| BCNEG    = N           BCGR     = 1
| LWPP     = 0           LWLT     = 0
| LWR1     = 0           LWR2     = 0
| SVCDOM   =
| 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=1-3-25-1,KIND=ALL;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-3-25-1,KIND=ALL;
H500: AMO REFTA STARTED
```

REFERENCE CLOCK CIRCUITS								
PEN	MODULE	DEVICE	PRI	ERROR	BLOCK	SUPP.	READY	SRCGRP
1- 3- 25- 1	DIU-N2	S2CONN	0	0	N		N	1

AMO-REFTA-111 REFERENCE CLOCK TABLE  
DISPLAY COMPLETED;

### For Slave-side Configuration

```
<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-3-25-1,KIND=ALL;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-3-25-1,KIND=ALL;
H500: AMO REFTA STARTED
```

REFERENCE CLOCK CIRCUITS								
PEN	MODULE	DEVICE	PRI	ERROR	BLOCK	SUPP.	READY	SRCGRP
1- 3- 25- 1	DIU-N2	S2CONN	11	0	N		N	1

AMO-REFTA-111 REFERENCE CLOCK TABLE  
DISPLAY COMPLETED;



## Trunk Least Cost Routing Configuration

### LDAT

<DISPLAY-LDAT:TYPE=LCR,LROUTE=1;

DISPLAY-LDAT:TYPE=LCR,LROUTE=1;

H500: AMO LDAT STARTED

LROUTE = 1		LDPLN	NAME = ROPTCCM		SERVICE = ALL			
TYPE = LCR					DNNO OF ROUTE = 111			
SERVICE INFO =								
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER	ZONE	LATTR LDSRT
1	1	27	111	1	*****	1	EMPTY	NONE
			DNNO = 111					

AMO-LDAT -111 LCR-DIRECTIONS

DISPLAY COMPLETED;

<DISPLAY-LDAT:TYPE=LCR,LROUTE=26;

DISPLAY-LDAT:TYPE=LCR,LROUTE=26;

H500: AMO LDAT STARTED

LROUTE = 26		LDPLN	NAME = PRI 3 ECMA1		SERVICE = ALL			
TYPE = LCR					DNNO OF ROUTE = 111			
SERVICE INFO =								
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER	ZONE	LATTR LDSRT
1	1	26	15	3	*****	1	EMPTY	NONE
			DNNO = 111					

AMO-LDAT -111 LCR-DIRECTIONS

DISPLAY COMPLETED;

<DISPLAY-LDAT:TYPE=LCR,LROUTE=27;

DISPLAY-LDAT:TYPE=LCR,LROUTE=27;

H500: AMO LDAT STARTED

LROUTE = 27		LDPLN	NAME = PRI 4 ECMA1		SERVICE = ALL			
TYPE = LCR					DNNO OF ROUTE = 111			
SERVICE INFO =								
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER	ZONE	LATTR LDSRT
1	1	27	15	1	*****	1	EMPTY	NONE
			DNNO = 111					

AMO-LDAT -111 LCR-DIRECTIONS

DISPLAY COMPLETED;

<DISPLAY-LDAT:TYPE=LCR,LROUTE=165;

DISPLAY-LDAT:TYPE=LCR,LROUTE=165;

H500: AMO LDAT STARTED

LROUTE = 165		LDPLN	NAME = PSTN 91650		SERVICE = ALL			
TYPE = LCR					DNNO OF ROUTE = 89			
SERVICE INFO =								



LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE	CARRIER	ZONE	LATTR	LDSRT
1	1	23	50	1	*****	1	EMPTY	NONE	
	DNNO =	89							

AMO-LDAT -111        LCR-DIRECTIONS  
DISPLAY COMPLETED;

## RICHT

DISPLAY-RICHT:MODE=LRTE ,LRTE=1;

H500: AMO RICHT STARTED

LRTE = 1	NAME = ROPTCCM	(NEUTRAL)	LSVC = ALL
DNNO = 111	PDNNO = 0	DESTNO =111	
ROUTOPT = YES	REROUT = YES	PLB = NO	FWDBL = NO
DTMFNCNV = WITHOUT	DTMFDSP = WITHOUT	DTMFTEXT =	
DTMFPULS = BUGS = LIN	ROUTATT = NO	MAINGRP = 24	
EMCYRTT = NO	CONF TONE = NO	RERINGRP = NO	RTENO = 24
INFO =			
NOPRCFWD = NO			
TGRP = 27	LDAT PRI ECMA 4	(NEUTRAL)	SUBGROUP = 10

AMO-RICHT-111        TRUNK ROUTING  
DISPLAY COMPLETED;

<DISPLAY-RICHT:MODE=LRTE ,LRTE=26;

DISPLAY-RICHT:MODE=LRTE ,LRTE=26;

H500: AMO RICHT STARTED

LRTE = 26	NAME = PRI 3 ECMA1	(NEUTRAL)	LSVC = ALL
DNNO = 111	PDNNO = 0		
ROUTOPT = YES	REROUT = YES	PLB = NO	FWDBL = NO
DTMFNCNV = WITHOUT	DTMFDSP = WITHOUT	DTMFTEXT =	
DTMFPULS = BUGS = LIN	ROUTATT = NO	MAINGRP = 14	
EMCYRTT = NO	CONF TONE = NO	RERINGRP = NO	RTENO = 14
INFO =			
NOPRCFWD = NO			
TGRP = 26	LDAT PRI ECMA 3	(NEUTRAL)	SUBGROUP = 9

AMO-RICHT-111        TRUNK ROUTING  
DISPLAY COMPLETED;

<DISPLAY-RICHT:MODE=LRTE ,LRTE=27;

DISPLAY-RICHT:MODE=LRTE ,LRTE=27;

H500: AMO RICHT STARTED

LRTE = 27	NAME = PRI 4 ECMA1	(NEUTRAL)	LSVC = ALL
DNNO = 111	PDNNO = 0		
ROUTOPT = YES	REROUT = YES	PLB = NO	FWDBL = NO
DTMFNCNV = FIX	DTMFDSP = WITHOUT	DTMFTEXT =	
DTMFPULS = PP300	BUGS = LIN	ROUTATT = NO	MAINGRP = 15
EMCYRTT = NO	CONF TONE = NO	RERINGRP = NO	RTENO = 15
INFO =			
NOPRCFWD = NO			
TGRP = 27	LDAT PRI ECMA 4	(NEUTRAL)	SUBGROUP = 10



AMO-RICHT-111 TRUNK ROUTING  
DISPLAY COMPLETED;

## PSTN RICHT

```
<DISPLAY-RICHT:MODE=LRTE,LRTE=165;  
DISPLAY-RICHT:MODE=LRTE,LRTE=165;  
H500: AMO RICHT STARTED  
+-----+  
| LRTE = 165      NAME = PSTN 91650      (NEUTRAL)  LSVC = ALL  
| DNNO =        89  PDNNO =          0  DESTNO = 89  
| ROUTOPT = YES    REROUT = YES    PLB = NO      FWDBL = NO  
| DTMFCNV = WITHOUT DTMFDSP = WITHOUT DTMFTEXT =  
| DTMFPULS =        BUGS = LIN    ROUTATT = NO      MAINGRP = 27  
| EMCYRTT = NO      CONFONE = NO    RERINGRP = NO    RTENO = 27  
| INFO =  
| NOPRCFWD = NO  
+-----+  
| TGRP = 23  LDAT  ECMA 2      (NEUTRAL)  SUBGROUP = 6 |  
+-----+
```

AMO-RICHT-111 TRUNK ROUTING  
DISPLAY COMPLETED;

## LCR Out-dial Rules, LODR

```
<DISPLAY-LODR:ODR=111,FORMAT=L;  
H500: AMO LODR STARTED  
+-----+  
| ODR      POSITION  CMD      PARAMETER |  
+-----+  
| 111      |        1  ECHO      1  
|          |        2  ECHO      2  
|          |        3  END       |  
+-----+  
H03: THE NEXT FREE ODR IS 2  
  
AMO-LODR -111      ADMINISTRATION OF LCR OUTDIAL RULES  
DISPLAY COMPLETED;  
<DISPLAY-LODR:ODR=15,FORMAT=L;  
DISPLAY-LODR:ODR=15,FORMAT=L;  
H500: AMO LODR STARTED  
+-----+  
| ODR      POSITION  CMD      PARAMETER |  
+-----+  
| 15       |        1  ECHO      2  
|          |        2  END       |  
+-----+  
H03: THE NEXT FREE ODR IS 2
```

```
AMO-LODR -111      ADMINISTRATION OF LCR OUTDIAL RULES  
DISPLAY COMPLETED;  
<DISPLAY-LODR:ODR=50,FORMAT=L;  
DISPLAY-LODR:ODR=50,FORMAT=L;  
H500: AMO LODR STARTED  
+-----+  
| ODR      POSITION  CMD      PARAMETER |  
+-----+  
| 50       |        1  ECHO      2  
|          |        2  ECHO      3 |
```



| | 3 END |

H03: THE NEXT FREE ODR IS 2

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

### In-Band DTMF signaling:

In order to enable In-band DTMF signaling on digital stations for Voicemail applications, the station configuration has to be changed so that the parameter DTMFCTRD=Y.

### 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).

```
<dis-sbcsv:5002;
DIS-SBCSU:5002;
H500: AMO SBCSU STARTED

----- USER DATA -----
STNO =5002 OPT =OPTI COS1 =2 DPLN =1
MAINO =5002 CONN =DIR COS2 =2 ITR =1
PEN = 1- 3- 31- 2 LCOSV1 =6 COSX =0
INS =Y ASYNCT =500 LCOSV2 =6
PERMACT =
LCOSD1 =6
SSTNO =Y EXTBUS =
LCOSD2 =6 CBKBMAX =5
TRACE =N RCBKB =N
ALARMNO =0 DF SVCANA= SPDI =0 RCBKNA =N
HMUSIC =0 FLASH = SPDC1 = CBKNAMB =Y
PMIDX =0 SPDC2 =
COMGRP =0
SECR =N DIGNODIS=N DSSTNA =N
STD =55 CALLOG =NONE DSSTNB =Y TEXTSEL =ENGLISH
REP =0 OPTICOM =N OPTIUSB :0 VPI =
IDCR =N OPTICA =1 OPTISOA : VCI =
OPTIDA = OPTISPA :0 PATTERN =
OPTIABA :0
DCFWBUSY=N HEADSET =N APICLASS=
DNIDSP =N HSKEY =NORMAL ACFAPPL =0
DTMFBLK =N IPPASSW =
DTMFCTRD=Y BASICSVC=
DVCFIG =OPTIP500 TSI =1 SPROT = SOPTIDX =
DPROT = DOPTIDX =
FPROT = FOPTIDX =
----- ACTIVATION IDENTIFIERS FOR FEATURES -----
FWDS :N HTOS :N DND :N
FWDD :N HTOD :N VCP :Y TWLOGIN :N
FWDF :N HTOF :N CWT :N
----- FEATURES AND GROUP MEMBERSHIPS -----
PUGR : ESSTN :
KEYSYS :N NOPTNO :
HUNT CD :N
----- SUBSCRIBER ATTRIBUTES (AMO SDAT) -----
NONE
```

AMO-SBCSU-111



## Configure Digital Station for MWI Application:

To get the MWI light to work, the station configuration should be changed so that the parameter PMIDX (phoneMail Index parameter) needs to point to the IDX identifier that identifies the Message Center's Service Access Number.

```
<dis-sbcsv:5002;
DIS-SBCSU:5002;
H500: AMO SBCSU STARTED

----- USER DATA -----
STNO    =5002      OPT     =OPTI      COS1    =2      DPLN    =1
MAINO   =5002      CONN    =DIR       COS2    =2      ITR     =1
PEN     = 1- 3- 31- 2      LCOSV1  =6      COSX    =0
INS     =Y        ASYNCT   =500      LCOSV2  =6
                      PERMACT  =
                      EXTBUS   =
SSTNO   =N        DF SVCANA=      SPDI    =0      CBKBMAX =5
TRACE   =N        FLASH     =      SPDC1   =
HMUSIC  =0        =          SPDC2   =
PMIDX   =1        =          COMGRP  =0
SECR    =N        DIGNODIS=N    DSSTNA =N
STD     =55       CALLOG    =NONE    DSSTNB =Y      TEXTSEL =ENGLISH
REP     =0        OPTICOM =N      OPTIUSB :0      VPI     =
IDCR    =N        OPTICA   =1      OPTISOA :
                      OPTIDA   =
                      OPTISPA  :0      PATTERN =
                      OPTIABA  :0
DCFWBUSY=N      HEADSET  =N      APICLASS=
DNIDSP   =N      HSKEY    =NORMAL   ACFAPPL =0
DTMFBLK =N      =          IPPASSW =
DTMFCTR=Y      BASICSVC=
DVCFIG   =OPTIP500 TSI      =1      SPROT    =
                      DPROT    =
                      FPROT    =
----- ACTIVATION IDENTIFIERS FOR FEATURES -----
FWDS    :N        HTOS     :N      DND     :N
FWDD    :N        HTOD     :N      VCP     :Y      TWLOGIN :N
FWDF    :N        HTOF     :N      CWT     :N
----- FEATURES AND GROUP MEMBERSHIPS -----
PUGR    :          ESSTN   :
KEYSYS  :N        NOPTNO  :
HUNT CD :N
----- SUBSCRIBER ATTRIBUTES (AMO SDAT) -----
NONE
```

AMO-SBCSU-111



## Configure Message Center's Service Access Number for MWI Application:

Since the MWI was tested with the Message Center integrated on Cisco Communication Manager side, the PBX needs to configure an identifier for the Message Center's Service Access Number in order for the MWI light to work. Without this identifier the MWI light will not work.

```
<ADD-RICHT:MODE=PM,IDX=1,SAN=4005;
ADD-RICHT:MODE=PM,IDX=1,SAN=4005;
H500: AMO RICHT STARTED

AMO-RICHT-111      TRUNK ROUTING
ADD COMPLETED;
<DISP-RICHT:MODE=PM;
S3: DATA SUBSYSTEM FOR AMO RICHT NOT FOUND ON HARD DISK
```

```
<DISP-RICHT
MODE = PM
DISP-RICHT:PM;
H500: AMO RICHT STARTED
+-----+
| IDX |       SAN        |           NAME          |   TYPE   |
+-----+-----+-----+
|   1 | 4005          |                   OTHER          |
+-----+
```

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

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

```
<DISPLAY-COSSU:TYPE=COS,COS=2,FORMAT=L;
DISPLAY-COSSU:TYPE=COS,COS=2,FORMAT=L;
H500: AMO COSSU STARTED
+-----+
| COS |       VOICE     |       FAX      |       DTE    |
+-----+
2 | >          TA          NOCO          TA
          TSUID        NOTIE         TNOTCR
          TNOTCR      BASIC         BASIC
          CDRINT
          CDRS
          CDRC
          MB
          COSXCD
          VCE
          SPKR
          DATA
          FWNDWK
          RERING
          CDRIND
          MSN
          FWDECA
          FWDBAS
          FWDDIR
          CFB
          CFNR
          CCBS
          CW
          FWDEXT
```



```
          |      GRPCAL      |
          |      SUTVA      |
          +-----+
AMO-COSSU-111      CLASSES OF SERVICE
DISPLAY COMPLETED;

<DISPLAY-PERSI:TYPE=NAME,STNO=5002;
DISPLAY-PERSI:TYPE=NAME,STNO=5002;
H500: AMO PERSI STARTED
+-----+-----+-----+
| STNO | CHRISTIAN AND SURNAME      CHARCON | ORGANIZATIONAL UNIT |
+-----+-----+-----+
| 5002 | HIPATH DT2*                |                   |
+-----+-----+-----+
```

AMO-PERSI-111 PERSONAL IDENTIFICATION DATA
DISPLAY COMPLETED;

## Siemens HiPath 4000 Software Release

```
<
  <dis-dbc:verbose=n;
DIS-DBC:VERBOSE=N;
H500: AMO DBC      STARTED
+-----+
SYSTEM CLASSIFICATION   : SYSTEM 80          (H80    )
HARDWARE ASSEMBLY       : EXTENDED COMPACT CXE (CXE    )
OPERATING MODE           : SIMPLEX
RESTART TYPE              : SYM
HW-ARCHITECTURE        : 4300
HW-ARCHITECTURE TYPE     : 2

'NO OF' HW VALUES
LTG'S      : 1  LTU'S      : 4  LOG.LINES : 12000  MTS BD /GSN:  1
SIUP'S/LTU: 4  TMD24'S PER LTU: 4  PHYS.PORTS: 6000  HWY /MTS BD: 64
HDLC /DCL : 5  PBC /DCL   : 1  PBC'S     : 17
LOG. SIU LINES           : 26
LOG. CONF LINES          : 35
LOG. DCL LINES           : 36
DB DIMENSIONING-NAME     : SMALL           CONF-TABLE VERSION: 1
DB SUSY'S:
SWITCH NUMBER : L31903Q1930A00001
LOCATION      : CUSTOMER
BAPPL         : BSMONO
DBAPPL        : DBSMALL
SYSTEM_ID      :

OVERLAY RESOURCES IN ADP:
SLOTS        : 1000  MEMORY SPACE : 2000 KB
OVERLAY RESOURCES IN SWU:
SLOTS        : 1000  MEMORY SPACE : 2000 KB
OVERLAY RESOURCES BEI MONO PROCESSING:
SLOTS        : 400   MEMORY SPACE : 3000 KB
+-----+
```

AMO-DBC -111 DATABASE CONFIGURATION
DISPLAY COMPLETED;

```
<disp-vegas:list=long;
DISP-VEGAS:LIST=LONG;
H500: AMO VEGAS STARTED
  SYSTEM NO.      AMO      APS NO.      START      USER      STATUS
```



```
SWU: L31903Q1930A00001 --- P30252B4500B00105 00.00.00 00:00 NOBODY FREE
    SWU RES CODE APS: P30252B4500S00105 (DIR FILE: :PDS:APSI/PS/S0-EM0SC)
    SWU AMO CODE APS: P30252B4500B00105 (DIR FILE: :PDS:APSI/PS/B0-EM0BC)
    SWU AMO TEXT APS: P30252B4500B00105 (DIR FILE: :PDS:APSI/PS/B0-EM0BC)
    BREAK MARK : NO
    RESERVATION : NO
ADS: L31903Q1930A00001 --- P30252B4500A00105 00.00.00 00:00 NOBODY FREE
    ADS RES CODE APS: P30252B4500D00105 (DIR FILE: :PDS:APSI/PS/D0-EM0DC)
    ADS AMO CODE APS: P30252B4500A00105 (DIR FILE: :PDS:APSI/PS/A0-EM0AC)
    ADS AMO TEXT APS: P30252B4500A00105 (DIR FILE: :PDS:APSI/PS/A0-EM0AC)
    BREAK MARK : NO
    RESERVATION : NO

AMO-VEGAS-111      ADMIN. OF DATABASE GENERATION RUNS ON SUPPORT SYSTEM
DISPLAY COMPLETED;

<DISPLAY-APS:ANS=Y,TYPE=PSALL,SP="Y0-EM0YC";
DISPLAY-APS:ANS=Y,TYPE=PSALL,SP="Y0-EM0YC";
H500: AMO APS     STARTED
ADINIT STARTED
PROGRAM SYSTEM      : Y0-EM0YC
VERSION NUMBER      : 10
CORRECTION VERSION NUMBER : 001
PART NUMBER         : P30252N4505B00005
PROGRAM SYSTEM WITH CODE SUBSYSTEMS
INTERFACE VERSION:
PROGRAM SYSTEM DOES NOT CONTAIN ANY INTERFACE VERSIONS

ADINIT COMPLETED
STATUS = H'0000
AMO-APS -111      SOFTWARE LOAD UPGRADE
DISPLAY COMPLETED;
```



## Configuring the Cisco Unified Communication Manager

### CUCM ECMA Service Parameter Configuration.

Saved at 10:30 AM on 10/16/2007 by ccmadministrator

**Service Parameter Configuration**

Related Links: Parameters for All Servers

Clusterwide Parameters (Device - PRI and MGCP Gateway)

<u>ASN.1 ROSE OID Encoding</u> *	<input type="button" value="Save"/> <input type="button" value="Set to Default"/> <input type="button" value="Condensed"/>	<input type="button" value="Use Global Value (ECMA)"/> <input type="button" value="Use Local Value"/>
<u>QSIG Variant</u> *		<input type="button" value="ECMA (Protocol Profile 0x91)"/> <input type="button" value="ISO (Protocol Profile 0x9F)"/>
<u>Caller ID</u>		
<u>Calling Name Not Available Timeout</u> *	2000	2000
<u>Calling Party Number Screening Indicator</u> *	<input type="button" value="CallManager sets the screening indicator value - Default setting"/>	CallManager sets the screening indicator value - Default setting
<u>Change B-Channel Maintenance Status 1</u>		
<u>Change B-Channel Maintenance Status 2</u>		
<u>Change B-Channel Maintenance Status 3</u>		
<u>Change B-Channel Maintenance Status 4</u>		
<u>Change B-Channel Maintenance Status 5</u>		
<u>Clear Calls Flag When Datalink Is Down</u> *	<input type="button" value="True"/>	True
<u>Database MGCP Device Request Timer</u> *	5	5
<u>Device Status Poll Interval</u> *	3000	3000
<u>Disable Alerting Progress Indicator</u> *	<input type="button" value="False"/>	False
<u>Discard Non Inband Progress in Overlap Sending</u> *	<input type="button" value="False"/>	False
<u>Disable Resume from Shared-line MGCP FXS Port</u> *	<input type="button" value="True"/>	True
<u>DTMF Silence Tone Flag</u> *	<input type="button" value="False"/>	False
<u>Enable Display IE in Codeset 6</u> *	<input type="button" value="False"/>	False
<u>Enable Sending PRI NI2 Service Message</u> *	<input type="button" value="False"/>	False
<u>Flash Hook Duration</u> *	500	500
<u>Gateway Poll Timer</u> *	10	10
<u>Location In PRI Progress Indicator IE (User Side Only)</u> *	<input type="button" value="Use the Network Side PRI progress indicator IE"/>	Use the Network Side PRI progress indicator IE
<u>Matching Calling Party with Attendant Flag</u> *	<input type="button" value="False"/>	False
<u>MGCP Database Query Delay Timer</u> *	1000	1000
<u>MGCP FXS On-Hook Pending Timer</u> *	3	3
<u>MGCP Response Timer</u> *	30	30
<u>MGCP Timer</u> *	3	3



## CUCM Version

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# Cisco Unified CM Administration

System version: 6.0.1.1000-37

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This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wl/export/crypto/tool/stqrg.html>.  
If you require further assistance please contact us by sending email to [export@cisco.com](mailto:export@cisco.com).



## CMM-E1 Gateway Configuration

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Gateway Configuration Related Links: Back To Find/List Go

**Status**  
 Status: Ready

**Gateway Details**

Product	Communication Media Module
Gateway	VENUS-CMM-E1
Protocol	MGCP
Domain Name*	VENUS-CMM-E1
Description	VENUS-CMM-E1 MGCP GW
Cisco Unified Communications Manager Group*	Default

**Configured Slots, VICs and Endpoints**

Module in Slot 1	WS-X6600	Subunit 0	WS-X6600-6T1	1/ 0	1/ 1	1/ 2	1/ 3	1/ 4	1/ 5
Module in Slot 2	WS-X6600	Subunit 0	WS-X6600-6E1	2/ 0	2/ 1	2/ 2	2/ 3	2/ 4	2/ 5
Module in Slot 3	< None >								
Module in Slot 4	< None >								

**Product Specific Configuration Layout**

Global ISDN Switch Type	4ESS
Switchback Timing*	Graceful
Switchback uptime-delay (min)	10
Switchback schedule (hh:mm)	12:00
Fax mode*	Fax Relay

Save Delete Reset Add New

\* - indicates required item.



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Gateway Configuration Related Links: Back to MGCP Configuration Go

Save  Delete  Reset

**Status**  
i Status: Ready

**Device Information**

Product	Cisco MGCP E1 Port
Gateway	VENUS-CMM-E1
Device Protocol	Digital Access PRI
Registration	Registered with Cisco Unified Communications Manager CM-VENUS
IP Address	172.20.214.51
End-Point Name *	S2/DS1-0@VENUS-CMM-E1
Description	CM-VENUS to Hipath
Device Pool*	Default
Common Device Configuration	< None >
Call Classification*	Use System Default
NetworkLocale	United States
Media Resource Group List	MRGL-CM-VENUS
Location*	Hub_None
AAR Group	< None >
Load Information	

Transmit UTF-8 for Calling Party Name

**Multilevel Precedence and Preemption (MLPP) Information**

MLPP Domain	< None >
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

**Interface Information**

PRI Protocol Type*	PRI ISO QSIG E1
Protocol Side*	User
Channel Selection Order*	Top Down
Channel IE Type*	Timeslot Number
PCM Type*	A-law



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**Gateway Configuration**

Related Links: Back to MGCP Configuration Go

Save  Delete  Reset

Delay for first restart (1/8 sec ticks)\* 32

Delay between restarts (1/8 sec ticks)\* 4

Inhibit restarts at PRI initialization

Enable status poll

Unattended Port

**Call Routing Information - Inbound Calls**

Significant Digits\* All

Calling Search Space Incoming Trunk

AAR Calling Search Space < None >

Prefix DN

**Call Routing Information - Outbound Calls**

Calling Party Presentation\* Default

Calling Party Selection\* Originator

Called party IE number type unknown\* Unknown

Calling party IE number type unknown\* Unknown

Called Numbering Plan\* Private

Calling Numbering Plan\* Private

Number of digits to strip\* 0

Caller ID DN

SMDI Base Port\* 0

**PRI Protocol Type Specific Information**

Display IE Delivery

Redirecting Number IE Delivery - Outbound

Redirecting Number IE Delivery - Inbound

Send Extra Leading Character in Display IE\*\*\*

Setup non-ISDN Progress Indicator IE Enable\*\*\*\*



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**Gateway Configuration** Related Links: Back to MGCP Configuration Go

Save  Delete  Reset

Setup non-ISDN Progress Indicator IE Enable

MCDN Channel Number Extension Bit Set to Zero\*\*

Send Calling Name In Facility IE

Interface Identifier Present\*\*

Interface Identifier Value\*\*

Connected Line ID Presentation (QSIG Inbound Call)\*

**UUIE Configuration**

Passing Precedence Level Through UUIE

Security Access Level\*

**Product Specific Configuration Layout**

Line Coding\*

Framing\*

Clock\*

Input Gain (-6..14 db)\*

Output Attenuation (-6..14 db)\*

Echo Cancellation Enable\*

Echo Cancel Coverage (ms)\*

Save  Delete  Reset

\*- indicates required item.

\*\*- applies to DMS-100 protocol only.

\*\*\*- applies to DMS-100 protocol and DMS-250 protocol only.

\*\*\*\*- may be required to force ringback from some PBXs.

\*\*\*\*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.



## Partition Configuration

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**Find and List Partitions**

Add New Select All Clear All Delete Selected

**Status**  
2 records found

**Partition (1 - 2 of 2)** Rows per Page 50

Find Partition where Name begins with Find Clear Filter + -

	Partition Name ▲	Description
<input type="checkbox"/>	<a href="#">Incoming Trunk</a>	Incoming Trunk
<input type="checkbox"/>	<a href="#">Phones</a>	Phones

Add New Select All Clear All Delete Selected



## Calling Search Space

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**Find and List Calling Search Spaces**

Add New Select All Clear All Delete Selected

**Status**  
 3 records found

**Calling Search Space (1 - 3 of 3)** Rows per Page 50

Find Calling Search Space where CSS Name begins with  Find Clear Filter + -

<input type="checkbox"/>	CSS Name	Description	Copy
<input type="checkbox"/>	<a href="#">Incoming Trunk</a>		
<input type="checkbox"/>	<a href="#">PathReplacementCSS</a>		
<input type="checkbox"/>	<a href="#">Phones</a>		

Add New Select All Clear All Delete Selected



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Calling Search Space Configuration Related Links: Back To Find/List Go

Save Delete Copy Add New

Status  
**i** Status: Ready

Calling Search Space Information  
Name \* Incoming Trunk  
Description

Route Partitions for this Calling Search Space  
Available Partitions \*\* Phones  
Selected Partitions Incoming Trunk

Save Delete Copy Add New

**i** \*- indicates required item.  
**i** \*\*Selected Partitions are ordered by highest priority



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**Calling Search Space Configuration**

Related Links: Back To Find/List Go

**Status**  
 Status: Ready

**Calling Search Space Information**  
Name\*  Description

**Route Partitions for this Calling Search Space**

Available Partitions\*\*

Selected Partitions

**Actions**: Save, Delete, Copy, Add New

**Notes**:

- \* - indicates required item.
- \*\* Selected Partitions are ordered by highest priority



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Calling Search Space Configuration Related Links: Back To Find/List Go

Save Delete Copy Add New

Status: Ready

**Calling Search Space Information**

Name\* PathReplacementCSS  
Description

**Route Partitions for this Calling Search Space**

Available Partitions\*\*

Selected Partitions Incoming Trunk Phones

Save Delete Copy Add New

**Information**  
\*- indicates required item.  
\*\*Selected Partitions are ordered by highest priority

## Enbloc Route Configuration



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Route Pattern Configuration Related Links: Back To Find/List Go

**Pattern Definition**

Route Pattern\* 5XXX  
Route Partition < None >  
Description CM-VENUS to Siemens Hipath  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-0@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits < None >



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Route Pattern Configuration Related Links: Back To Find/List Go

**Pattern Definition**

Route Pattern\* 555  
Route Partition < None >  
Description CM-VENUS to Siemens Hipath  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-0@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits < None >



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Route Pattern Configuration Related Links: Back To Find/List Go

**Pattern Definition**

Route Pattern\* 8XXX  
Route Partition < None >  
Description CM-VENUS to Siemens Hicom  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-1@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits < None >



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Route Pattern Configuration Related Links: Back To Find/List Go

**Pattern Definition**

Route Pattern\* 222  
Route Partition < None >  
Description CM-VENUS to Siemens Hicom  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-1@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits < None >



## Overlap Sending Route Pattern Configuration

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Route Pattern Configuration Related Links: Back To Find/List Go

Save  Delete  Copy  Add New

**Pattern Definition**

Route Pattern\* 9.5  
Route Partition < None >  
Description Ovlp sending CM-VENUS to Siemens Hipath  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-0@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits PreDot



## PSTN Route Pattern Configuration

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Route Pattern Configuration Related Links: Back To Find/List Go

**Pattern Definition**

Route Pattern\* 91650364XXXX  
Route Partition < None >  
Description PSTN gateway  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-0@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits < None >



## Translation Pattern for Incoming Calls

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**Translation Pattern Configuration** Related Links: Back To Find/List Go

Save  Delete  Copy  Add New

**Pattern Definition**

Translation Pattern	40XX
Partition	Incoming Trunk
Description	
Numbering Plan	< None >
Route Filter	< None >
MLPP Precedence*	Default
Calling Search Space	Phones
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern No Error
<input checked="" type="checkbox"/> Provide Outside Dial Tone	
<input checked="" type="checkbox"/> Urgent Priority	

**Calling Party Transformations**

<input type="checkbox"/> Use Calling Party's External Phone Number Mask	
Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation*	Default
Calling Name Presentation*	Default

**Connected Party Transformations**

Connected Line ID Presentation*	Default
Connected Name Presentation*	Default

**Called Party Transformations**

Discard Digits	< None >
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	



## CLIR Route Pattern Configuration

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Route Pattern Configuration Related Links: Back To Find/List Go

**Pattern Definition**

Route Pattern*	5XXX
Route Partition	< None >
Description	CM-VENUS to Siemens Hipath
Numbering Plan	-- Not Selected --
Route Filter	< None >
MLPP Precedence*	Default
Gateway/Route List*	S2/DS1-0@VENUS-CMM-E1 (Edit)
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern No Error
Call Classification*	OffNet
<input type="checkbox"/> Allow Device Override <input type="checkbox"/> Provide Outside Dial Tone <input type="checkbox"/> Allow Overlap Sending <input type="checkbox"/> Urgent Priority	
<input type="checkbox"/> Require Forced Authorization Code	
Authorization Level*	0
<input type="checkbox"/> Require Client Matter Code	

**Calling Party Transformations**

<input type="checkbox"/> Use Calling Party's External Phone Number Mask	
Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation*	Restricted
Calling Name Presentation*	Default

**Connected Party Transformations**

Connected Line ID Presentation*	Default
Connected Name Presentation*	Default

**Called Party Transformations**

Discard Digits	< None >
----------------	----------



## CNIR Route Pattern Configuration

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Route Pattern Configuration Related Links: Back To Find/List Go

Save Delete Copy Add New

**Pattern Definition**

Route Pattern\* 5XXX  
Route Partition < None >  
Description CM-VENUS to Siemens Hipath  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List\* S2/DS1-0@VENUS-CMM-E1 (Edit)  
Route Option  Route this pattern  
 Block this pattern No Error  
Call Classification\* OffNet  
 Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level\* 0  
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask  
Prefix Digits (Outgoing Calls)  
Calling Line ID Presentation\* Default  
Calling Name Presentation\* Restricted

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits < None >



## COLR Translation Pattern Configuration

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Translation Pattern Configuration Related Links: Back To Find/List Go

Save  Delete  Copy  Add New

**Pattern Definition**

Translation Pattern	40XX
Partition	Incoming Trunk
Description	
Numbering Plan	< None >
Route Filter	< None >
MLPP Precedence *	Default
Calling Search Space	Phones
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern No Error
<input checked="" type="checkbox"/> Provide Outside Dial Tone	
<input checked="" type="checkbox"/> Urgent Priority	

**Calling Party Transformations**

<input type="checkbox"/> Use Calling Party's External Phone Number Mask	
Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation*	Default
Calling Name Presentation*	Default

**Connected Party Transformations**

Connected Line ID Presentation*	Restricted
Connected Name Presentation*	Default

**Called Party Transformations**

Discard Digits	< None >
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	



## CONR Translation Pattern Configuration

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Translation Pattern Configuration Related Links: Back To Find/List Go

Save  Delete  Copy  Add New

**Pattern Definition**

Translation Pattern	40XX
Partition	Incoming Trunk
Description	
Numbering Plan	< None >
Route Filter	< None >
MLPP Precedence*	Default
Calling Search Space	Phones
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern No Error
<input checked="" type="checkbox"/> Provide Outside Dial Tone	
<input checked="" type="checkbox"/> Urgent Priority	

**Calling Party Transformations**

<input type="checkbox"/> Use Calling Party's External Phone Number Mask	
Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation*	Default
Calling Name Presentation*	Default

**Connected Party Transformations**

Connected Line ID Presentation*	Default
Connected Name Presentation*	Restricted

**Called Party Transformations**

Discard Digits	< None >
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	



## MWI lamp On/Off Configuration

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**Message Waiting Configuration** Related Links: Back To Find/List Go

Save Delete Copy Add New

**Status**  
 Status: Ready

**Message Waiting Information**

Message Waiting Number\*   
Partition   
Description   
Message Waiting Indicator\*  On  Off  
Calling Search Space

Save Delete Copy Add New

\*- indicates required item.

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**Message Waiting Configuration** Related Links: Back To Find/List Go

Save Delete Copy Add New

**Status**  
 Status: Ready

**Message Waiting Information**

Message Waiting Number\*   
Partition   
Description   
Message Waiting Indicator\*  On  Off  
Calling Search Space

Save Delete Copy Add New

\*- indicates required item.





## Voice Mail Profile Configuration

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Voice Mail Profile Configuration Related Links: Back To Find/List Go

Save  Delete  Copy  Reset  Add New

**Status**  
 Status: Ready

**Voice Mail Profile Information**

Voice Mail Profile	Unity2 (used by 12 devices)
Voice Mail Profile Name*	Unity2
Description	Unity Integration
Voice Mail Pilot**	2904/Phones
Voice Mail Box Mask	

Make this the default Voice Mail Profile for the System

Save  Delete  Copy  Reset  Add New

\* - indicates required item.  
 \*\* - The Voice Mail Pilot is comprised of the Voice Mail Pilot Number and its corresponding Calling Search Space Name (< Voice Mail Pilot Number >/< Calling Search Space >).



## Voice Mail Pilot Configuration

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Voice Mail Pilot Configuration Related Links: Back To Find/List Go

Save  Delete  Add New

**Status**  
 Status: Ready

**Voice Mail Pilot Information**

Voice Mail Pilot Number	2904
Calling Search Space	Phones
Description	Unity 2 Integration

Make this the default Voice Mail Pilot for the system

Save  Delete  Add New

\*- indicates required item.



## Voice Mail Ports List

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**Find and List Voice Mail Ports**

Add New Select All Clear All Delete Selected Reset Selected

**Status**  
**i** 2 records found

**Voice Mail Port (1 - 2 of 2)** Rows per Page 50

Find Voice Mail Port where Device Name begins with  Find Clear Filter + -  
Select item or enter search text

	Device Name	Description	Device Pool	Device Security Mode	Calling Search Space	Ext.	Partition	Status	IP Address	Copy
<input type="checkbox"/>	Unity2-VI1	Unity Integration	Default	Non Secure Voice Mail Port	Phones	2900	Phones	Registered with CM-VENUS	172.20.214.250	
<input type="checkbox"/>	Unity2-VI2	Unity Integration	Default	Non Secure Voice Mail Port	Phones	2901	Phones	Registered with CM-VENUS	172.20.214.250	

Add New Select All Clear All Delete Selected Reset Selected



## Voice Mail Port Configuration

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Voice Mail Port Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Status**  
 Status: Ready

**Device Information**

Registration	Registered with Cisco Unified Communications Manager CM-VENUS
IP Address	172.20.214.250
Port Name*	Unity2-VI1
Description	Unity Integration
Device Pool*	Default
Common Device Configuration	MigratedCommonDeviceConfig1
Calling Search Space	Phones
AAR Calling Search Space	< None >
Location*	Hub_None
Device Security Mode*	Non Secure Voice Mail Port

**Directory Number Information**

Directory Number*	2900
Partition	Phones
Calling Search Space	Phones
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	

Save Delete Copy Reset Add New

\*- indicates required item.



## CallBack Service Parameters

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Service Parameter Configuration Related Links: Parameters for All Servers Go

Save Set to Default Advanced

**Clusterwide Parameters (Feature - Call Back)**

Call Back Enabled Flag *	True	True
Call Back Notification Audio File Name *	CallBack.raw	CallBack.raw
Connection Proposal Type *	Connection Retention	Connection Retention
Connection Response Type *	Default to Connection Retention	Default to Connection Retention
Call Back Request Protection T1 Timer *	10	10
Call Back Recall T3 Timer *	20	20
Call Back Calling Search Space	< None >	
No Path Reservation *	True	True
Set Private Numbering Plan for Call Back *	False	False

**Clusterwide Parameters (Feature - Call Recording)**

Play Recording Notification Tone To Observed Target *	False	False
Play Recording Notification Tone To Observed Connected Parties *	False	False

**Clusterwide Parameters (Feature - Monitoring)**

Play Monitoring Notification Tone To Observed Target *	False	False
Play Monitoring Notification Tone To Observed Connected Parties *	False	False

**Clusterwide Parameters (Route Plan)**

Stop Routing on Out of Bandwidth Flag *	False	False
Stop Routing on Unallocated Number Flag *	True	True
Stop Routing on User Busy Flag *	True	True

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

**Clusterwide Parameters (Hunt List)**

Stop Hunting on Out of Bandwidth Flag *	False	False
---	-------	-------

**Clusterwide Parameters (Service)**



## CallBack Softkey Configuration

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Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save  Reset

**Status**  
 Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User CallBack  
Select a call state to configure On Hook

Unselected Softkeys	Selected Softkeys (ordered by position)**
Conference List (ConfList) Direct Transfer (DirTrfr) Group Pick Up (GPickUp) HLog (HLog) Immediate Divert (iDivert) Join (Join) Meet Me (MeetMe) Mobility (Mobility) Other Pickup (oPickup) Pick Up (PickUp) Quality Report Tool (QRT) Remove Last Conference Party (RmLstC) Select (Select) Undefined (Undefined) Video Mode Command (VidMode)	Redial (Redial) **NewCall (NewCall) End Call (EndCall) Forward All (CfwdAll) Call Back (CallBack) Toggle Do Not Disturb (DND)

Save  Reset

\*- indicates required item.  
 \*\*- indicates mandatory fields



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Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save  Reset

**Status**  
 Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User CallBack  
Select a call state to configure Ring Out

Unselected Softkeys  
Undefined (Undefined)

Selected Softkeys (ordered by position)\*\*  
Undefined (Undefined)  
End Call (EndCall)  
Call Back (CallBack)  
Toggle Do Not Disturb (DND)

Save  Reset

\*- indicates required item.  
 \*\*- indicates mandatory fields



## IDivert Softkey Configuration

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Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save  Reset

**Status**  
 Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User CallBack  
Select a call state to configure

Unselected Softkeys    
Selected Softkeys (ordered by position)\*\*

HLog (HLog) Mobility (Mobility) Quality Report Tool (QRT) Remove Last Conference Party (RmLstC) Toggle Malicious Call Trace (MCID) Undefined (Undefined)	Hold (Hold) End Call (EndCall) Transfer (Trnsfer) Park (Park) Conference (Confrn) Conference List (ConfList) Select (Select) Join (Join) Direct Transfer (DirTrfr) Video Mode Command (VidMode) Immediate Divert (iDivert) Toggle Do Not Disturb (DND)
---	---

Save  Reset

\* - indicates required item.  
 \*\* - indicates mandatory fields



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**Softkey Template Configuration** Related Links: Softkey Template Configuration Go

Save  Reset

**Status**  
 Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User CallBack  
Select a call state to configure

Unselected Softkeys  
Undefined (Undefined)

Selected Softkeys (ordered by position)\*\*  
\*\*Resume (Resume)  
NewCall (NewCall)  
Direct Transfer (DirTrfr)  
Select (Select)  
Join (Join)  
Immediate Divert (iDivert)  
Toggle Do Not Disturb (DND)

> < ^ v

Save  Reset

\* - indicates required item.  
 \*\* - indicates mandatory fields



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Softkey Template Configuration Related Links: Softkey Template Configuration Go

Save  Reset

**Status**  
 Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User CallBack  
Select a call state to configure Ring In

Unselected Softkeys	Selected Softkeys (ordered by position)**
Undefined (Undefined)	Answer (Answer) Immediate Divert (iDivert) Toggle Do Not Disturb (DND)

Save  Reset

\*- indicates required item.  
 \*\*- indicates mandatory fields



## Path Replacement Service Parameters

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Service Parameter Configuration Related Links: Parameters for All Servers Go

Save Set to Default Advanced

**Clusterwide Parameters (Feature - Call Pickup)**

<u>Auto Call Pickup Enabled</u> *	<input type="checkbox"/> False	<input checked="" type="checkbox"/> False
<u>Call Pickup Locating Timer</u> *	<input type="text"/> 1	<input checked="" type="checkbox"/> 1
<u>Call Pickup No Answer Timer</u> *	<input type="text"/> 12	<input checked="" type="checkbox"/> 12

**Clusterwide Parameters (Feature - Refer)**

<u>Validate Refer-to URI</u> *	<input type="text"/> Validate Except for Anonymous Users	<input checked="" type="checkbox"/> Validate Except for Anonymous Users
--------------------------------	--	---

**Clusterwide Parameters (Feature - Replaces)**

<u>Block OffNet To OffNet Replaces</u> *	<input type="checkbox"/> False	<input checked="" type="checkbox"/> False
--	--------------------------------	---

**Clusterwide Parameters (Feature - Redirection [3xx])**

<u>Redirection Ring No Answer Reversion Timer</u> *	<input type="text"/> 24	<input checked="" type="checkbox"/> 24
<u>Maximum Redirection Count</u> *	<input type="text"/> 70	<input checked="" type="checkbox"/> 70

**Clusterwide Parameters (Feature - Multilevel Precedence and Preemption)**

<u>Locations-based MLPP Enable</u> *	<input type="checkbox"/> False	<input checked="" type="checkbox"/> False
<u>Executive Override Call Preemptable</u> *	<input type="checkbox"/> False	<input checked="" type="checkbox"/> False

**Clusterwide Parameters (Feature - Path Replacement)**

<u>Path Replacement Enabled</u> *	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
<u>Path Replacement on Tromboned Calls</u> *	<input type="checkbox"/> True	<input checked="" type="checkbox"/> True
<u>Start Path Replacement Minimum Delay Time</u> *	<input type="text"/> 2	<input checked="" type="checkbox"/> 0
<u>Start Path Replacement Maximum Delay Time</u> *	<input type="text"/> 4	<input checked="" type="checkbox"/> 0
<u>Path Replacement T1 Timer</u> *	<input type="text"/> 30	<input checked="" type="checkbox"/> 30
<u>Path Replacement T2 Timer</u> *	<input type="text"/> 15	<input checked="" type="checkbox"/> 15
<u>Path Replacement PINX ID</u>	<input type="text"/> 111	
<u>Path Replacement Calling Search Space</u>	<input type="text"/> PathReplacementCSS	<input checked="" type="checkbox"/>



## PR Call Pick Up Group

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Call Pickup Group Configuration Related Links: Back To Find/List Go

Save  Delete  Copy  Add New

**Call Pickup Group Information**

Call Pickup Group Name\* PR-call-pickup-group

Call Pickup Group Number\* 111

Description

Partition Incoming Trunk

**Call Pickup Group Notification Settings**

Call Pickup Group Notification Policy No Alert

Call Pickup Group Notification Timer (seconds)\* 6

**Call Information Display For Call Pickup Group Notification**

Calling Party Information  Called Party Information

**Associated Call Pickup Group Information**

**Find Pickup Numbers by Numbers/Partition**

Partition < None >

Call Pickup Group Numbers Contain

Available Call Pickup Groups (No Matches Found)

Add to Associated Call Pickup Groups

**Current Associated Call Pickup Groups**

Selected Call Pickup Groups 111/Incoming Trunk

Reverse Order of Selected Numbers

Removed Call Pickup Groups



## Forward by Reroute Service Parameter

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Service Parameter Configuration Related Links: Parameters for All Servers Go

Save Set to Default Advanced

Translation CSS

Block OffNet To OffNet Transfer \* False False

Drop Ad Hoc Conference \* Never Never

Advanced Ad Hoc Conference Enabled \* False False

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

**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 \* True False

Forward By Reroute Enabled \* True False

Transform Forward by Reroute Destination \* True True

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

Max Forward UnRegistered Hops to DN \* 0 0

CFA CSS Activation Policy \* With Configured CSS With Configured CSS

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

**Clusterwide Parameters (Feature - Hold Reversion)**

Hold Reversion Duration \* 0 0

Hold Reversion Notification Interval \* 30 30

CFA Destination Override \* False False

**Clusterwide Parameters (Feature - Call Pickup)**

Auto Call Pickup Enabled \* False False

Call Pickup Locating Timer \* 1 1

Call Pickup No Answer Timer \* 12 12



## IP 7960 SCCP phone Configuration

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Phone Configuration Related Links: Back To Find>List Go

Save Delete Copy Reset Add New

**Association Information**

Modify Button Items

1 [Line \[1\] - 4000 in Phones](#)  
2 [Line \[2\] - 6007 in Phones](#)  
3 [Add a new SD](#)  
4 [Add a new SD](#)  
5 [Add a new SD](#)  
6 [Add a new SD](#)  
----- Unassigned Associated Items -----  
7 [Line \[3\] - Add a new DN](#)  
8 [Add a new SD](#)  
9 [Add a new SURL](#)  
10 [Add a new BLF SD](#)  
11 [Add a new BLF Directed Call Park](#)  
12 Privacy  
13 None

**Phone Type**

Product Type: Cisco 7960  
Device Protocol: SCCP

**Device Information**

Registration Registered with Cisco Unified Communications Manager CM-VENUS  
IP Address 172.20.214.100  
MAC Address\* 00127F3B9054  
Description 4000 SCCP  
Device Pool\* Default View Details  
Common Device Configuration MigratedCommonDeviceConfig1 View Details  
Phone Button Template\* Standard 7960 SCCP  
Softkey Template Standard User CallBack  
Common Phone Profile\* Standard Common Phone Profile  
Calling Search Space < None >  
AAR Calling Search Space < None >  
Media Resource Group List MRGL-CM-VENUS  
User Hold MOH Audio Source 1-Sample AudioSource  
Network Hold MOH Audio Source < None >  
Location\* Hub\_None  
AAR Group < None >  
User Locale < None >  
Network Locale < None >  
Built In Bridge\* Default  
Privacy\* Default  
Device Mobility Mode\* Default View Current Device Mobility Settings  
Owner User ID < None >



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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

Phone Load Name [ ]

Retry Video Call as Audio

Ignore Presentation Indicators (internal calls only)

Allow Control of Device from CTI

Logged Into Hunt Group

Remote Device

**Protocol Specific Information**

Packet Capture Mode\* [None]

Packet Capture Duration [60]

Presence Group\* [Standard Presence group]

Device Security Profile\* [Cisco 7960 - Standard SCCP Non-Secure Profile]

SUBSCRIBE Calling Search Space [< None >]

Unattended Port

Require DTMF Reception

RFC2833 Disabled

**Certification Authority Proxy Function (CAPF) Information**

Certificate Operation\* [No Pending Operation]

Authentication Mode\* [By Null String]

Authentication String [ ]

Generate String

Key Size (Bits)\* [1024]

Operation Completes By [2007 5 19 12 (YYYY:MM:DD:HH)]

Certificate Operation Status: None

Note: Security Profile Contains Addition CAPF Settings.

**Expansion Module Information**

Module 1 [< None >]

Module 1 Load Name [ ]



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Phone Configuration Related Links: Back To Find/List Go

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Module 2 < None >  
Module 2 Load Name

External Data Locations Information (Leave blank to use default)

Information	<input type="text"/>
Directory	<input type="text"/>
Messages	<input type="text"/>
Services	<input type="text"/>
Authentication Server	<input type="text"/>
Proxy Server	<input type="text"/>
Idle	<input type="text"/>
Idle Timer (seconds)	<input type="text"/>

Extension Information

<input type="checkbox"/> Enable Extension Mobility
Log Out Profile -- Use Current Device Settings --
Log in Time < None >
Log out Time < None >

MLPP Information

MLPP Domain < None >
MLPP Indication* Default
MLPP Preemption* Default

Do Not Disturb

<input type="checkbox"/> Do Not Disturb
DND Option* Ringer Off
DND Incoming Call Alert Beep Only

Product Specific Configuration Layout



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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New Log Out Time < None >

**MLPP Information**

MLPP Domain	< None >
MLPP Indication*	Default
MLPP Preemption*	Default

**Do Not Disturb**

Do Not Disturb	<input type="checkbox"/>
DND Option*	Ringer Off
DND Incoming Call Alert	Beep Only

**Product Specific Configuration Layout**

Disable Speakerphone	<input type="checkbox"/>
Disable Speakerphone and Headset	<input type="checkbox"/>
PC Port *	Enabled
Settings Access*	Enabled
Gratuitous ARP*	Enabled
PC Voice VLAN Access*	Enabled
Video Capabilities*	Disabled
Auto Line Select*	Disabled
Web Access*	Enabled

Save Delete Copy Reset Add New

**i** \*- indicates required item.  
**i** \*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.  
**i** \*\*\*Note: Security Profile Contains Addition CAPF Settings.



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Directory Number Configuration Related Links: Configure Device (SEP00127F3B9054) Go

Save Reset

**Directory Number Information**

Directory Number\* 4000  
Route Partition Phones  
Description  
Alerting Name VENUS-0(A)  
ASCII Alerting Name VENUS-0(A)

Allow Control of Device from CTI

Associated Devices SEP00127F3B9054

Dissociate Devices

**Directory Number Settings**

Voice Mail Profile Unity2 (Choose <None> to use system default)  
Calling Search Space Phones  
Presence Group\* Standard Presence group  
User Hold MOH Audio Source < None >  
Network Hold MOH Audio Source < None >  
Auto Answer\* Auto Answer Off

**AAR Settings**

AAR	Voice Mail	AAR Destination Mask	AAR Group
<input type="checkbox"/> or			< None >

Retain this destination in the call forwarding history

**Call Forward and Call Pickup Settings**



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Directory Number Configuration Related Links: Configure Device (SEP00127F3B9054) Go

Save Delete Reset Add New

**Call Forward and Call Pickup Settings**

Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy		
Forward All	<input type="checkbox"/> or [ ]	Use System Default Phones
Secondary Calling Search Space for Forward All		
Forward Busy Internal	<input type="checkbox"/> or [ ]	Phones
Forward Busy External	<input type="checkbox"/> or [ ]	Phones
Forward No Answer Internal	<input type="checkbox"/> or [ ]	Phones
Forward No Answer External	<input type="checkbox"/> or [ ]	Phones
Forward No Coverage Internal	<input type="checkbox"/> or [ ]	< None >
Forward No Coverage External	<input type="checkbox"/> or [ ]	< None >
Forward on CTI Failure	<input type="checkbox"/> or [ ]	< None >
Forward Unregistered Internal	<input type="checkbox"/> or [ ]	Phones
Forward Unregistered External	<input type="checkbox"/> or [ ]	Phones
No Answer Ring Duration (seconds)	5	
Call Pickup Group	< None >	

**MLPP Alternate Party Settings**

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

**Line Settings for All Devices**



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Directory Number Configuration Related Links: Configure Device (SEP00127F3B9054) Go

Save Delete Reset Add New

**Line Settings for All Devices**

Hold Reversion Ring Duration (seconds)  Setting the Hold Reversion Ring Duration to zero will disable the feature

Hold Reversion Notification Interval (seconds)  Setting the Hold Reversion Notification Interval to zero will disable the feature

**Line 1 on Device SEP00127F3B9054**

Display (Internal Caller ID)  VENUS-0 Display text for a line appearance is intended for displaying text such as a name instead of a directory 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)  VENUS-0

Line Text Label  VENUS-0

ASCII Line Text Label  VENUS-0

External Phone Number Mask

Visual Message Waiting Indicator 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.

Call Pickup Group Audio Alert Setting (Phone Idle)  Use System Default

Call Pickup Group Audio Alert Setting (Phone Active)  Use System Default

Monitoring Calling Search Space  < None >

**Multiple Call/Call Waiting Settings on Device SEP00127F3B9054**

Note: The range to select the Max Number of calls is: 1-196

Maximum Number of Calls\*  4



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Directory Number Configuration Related Links: Configure Device (SEP00127F3B9054) Go

Save Reset

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.)  
Call Pickup Group Audio Alert Setting (Phone Idle): Use System Default  
Call Pickup Group Audio Alert Setting (Phone Active): Use System Default  
Monitoring Calling: < None >  
Search Space

**Multiple Call/Call Waiting Settings on Device SEP00127F3B9054**  
Note: The range to select the Max Number of calls is: 1-196  
Maximum Number of Calls\*: 4  
Busy Trigger\*: 2 (Less than or equal to Max. Calls)

**Forwarded Call Information Display on Device SEP00127F3B9054**  
 Caller Name  
 Caller Number  
 Redirected Number  
 Dialed Number

**Users Associated with Line**  
Associate End Users  
Save Delete Reset Add New

\*- indicates required item.  
 \*\*- Changes to Line or Directory Number settings require restart.



## IP 7961 SIP phone Configuration

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Association Information**

Modify Button Items

- 1 [Line \[1\] - 4013 in Phones](#)
- 2 [Line \[2\] - Add a new DN](#)
- 3 [Add a new SD](#)
- 4 [Add a new SD](#)
- 5 [Add a new SD](#)
- 6 [Add a new SD](#)
- Unassigned Associated Items -----
- 7 [Add a new SD](#)
- 8 [Add a new SURL](#)
- 9 [Add a new BLF SD](#)
- 10 [Add a new BLF Directed Call Park](#)
- 11 [Intercom \[1\] - Add a new Intercom](#)
- 12 Do Not Disturb
- 13 Privacy
- 14 None

**Phone Type**

Product Type: Cisco 7961  
Device Protocol: SIP

**Device Information**

Registration	Registered with Cisco Unified Communications Manager CM-VENUS
IP Address	172.20.214.113
MAC Address*	00152B8F3767
Description	4013 SIP
Device Pool*	Default
Common Device Configuration	MigratedCommonDeviceConfig1
Phone Button Template*	Standard 7961 SIP
Softkey Template	Standard UserCallBack
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	MRGL-CM-VENUS
User Hold MOH Audio Source	1-Sample AudioSource
Network Hold MOH Audio Source	1-Sample AudioSource
Location*	Hub_None
AAR Group	< None >
User Locale	English, United States
Network Locale	United States
Built In Bridge*	Default
Privacy*	Default
Device Mobility Mode*	Default
Owner User ID	< None >



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Phone Configuration Related Links: Back To Find/List Go

Save Copy Add New

Phone Personalization*	Default
Phone Load Name	
<input type="checkbox"/> Ignore Presentation Indicators (internal calls only)	
<input checked="" type="checkbox"/> Allow Control of Device from CTI	
<input checked="" type="checkbox"/> Logged Into Hunt Group	
<input type="checkbox"/> Remote Device	
<b>Protocol Specific Information</b>	
Packet Capture Mode*	None
Packet Capture Duration	0
Presence Group*	Standard Presence group
SIP Dial Rules	< None >
MTP Preferred Originating Codec*	711ulaw
Device Security Profile*	Cisco 7961 - Standard SIP Non-Secure Profile
Rerouting Calling Search Space	Phones
SUBSCRIBE Calling Search Space	phones
SIP Profile*	Default SIP Profile
Digest User	< None >
<input type="checkbox"/> Media Termination Point Required	
<input type="checkbox"/> Unattended Port	
<input type="checkbox"/> Require DTMF Reception	
<b>Certification Authority Proxy Function (CAPF) Information</b>	
Certificate Operation*	No Pending Operation
Authentication Mode*	By Null String
Authentication String	
<input type="button" value="Generate String"/>	
Key Size (Bits)*	1024
Operation Completes By	2007 5 19 12 (YYYY:MM:DD:HH)



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Certificate Operation Status: None  
Note: Security Profile Contains Addition CAPF Settings.

**External Data Locations Information (Leave blank to use default)**

Information	<input type="text"/>
Directory	<input type="text"/>
Messages	<input type="text"/>
Services	<input type="text"/>
Authentication Server	<input type="text"/>
Proxy Server	<input type="text"/>
Idle	<input type="text"/>
Idle Timer (seconds)	<input type="text"/>

**Extension Information**

<input type="checkbox"/> Enable Extension Mobility
Log Out Profile -- Use Current Device Settings --
Log In Time < None >
Log out Time < None >

**MLPP Information**

MLPP Domain < None >
----------------------

**Do Not Disturb**

<input type="checkbox"/> Do Not Disturb
DND Option* Ringer Off
DND Incoming Call Alert Disable

**Secure Shell Information**

Secure Shell User
Secure Shell Password



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<input type="checkbox"/> Disable Speakerphone	
<input type="checkbox"/> Disable Speakerphone and Headset	
PC Port *	Enabled
Settings Access*	Enabled
Gratuitous ARP*	Enabled
PC Voice VLAN Access*	Enabled
Video Capabilities*	Disabled
Auto Line Select*	Disabled
Web Access*	Enabled
Span to PC Port*	Disabled
Logging Display*	PC Controlled
Load Server	
Recording Tone*	Disabled
Recording Tone Local Volume*	100
Recording Tone Remote Volume*	50
Recording Tone Duration	
RTCP*	Disabled
"more" Soft Key Timer	5
Auto Call Select*	Enabled
Log Server	
Advertise G.722 Codec*	Use System Default
Wideband Headset UI Control*	Enabled
Wideband Handset UI Control*	Enabled



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**Directory Number Information**

Directory Number\* 4013  
Route Partition Phones  
Description  
Alerting Name VENUS-13(A)  
ASCII Alerting Name VENUS-13(A)  
 Allow Control of Device from CTI  
Associated Devices SEP00152B8F3767 **Edit Device** **Edit Line Appearance**

Dissociate Devices

**Directory Number Settings**

Voice Mail Profile Unity2 (Choose <None> to use system default)  
Calling Search Space Phones  
Presence Group\* Standard Presence group  
User Hold MOH Audio Source < None >  
Network Hold MOH Audio Source < None >  
Auto Answer\* Auto Answer Off

**AAR Settings**

Voice Mail	AAR Destination Mask	AAR Group
AAR <input type="checkbox"/> or		< None > <input type="checkbox"/>



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Directory Number Configuration Related Links: Configure Device (SEP00152B8F3767) Go

Save Delete Reset Add New

**Call Forward and Call Pickup Settings**

Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy		
Forward All	<input type="checkbox"/> or	Use System Default
		Phones
Secondary Calling Search Space for Forward All		
Forward Busy Internal	<input type="checkbox"/> or	< None >
		Phones
Forward Busy External	<input type="checkbox"/> or	Phones
Forward No Answer Internal	<input type="checkbox"/> or	Phones
Forward No Answer External	<input type="checkbox"/> or	Phones
Forward No Coverage Internal	<input type="checkbox"/> or	< None >
Forward No Coverage External	<input type="checkbox"/> or	< None >
Forward on CTI Failure	<input type="checkbox"/> or	< None >
Forward Unregistered Internal	<input type="checkbox"/> or	Phones
Forward Unregistered External	<input type="checkbox"/> or	Phones
No Answer Ring Duration (seconds)	5	
Call Pickup Group	< None >	

**MIPP Alternate Party Settings**



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Save Delete Reset Add New

**Line Settings for All Devices**

Hold Reversion Ring Duration (seconds)  Setting the Hold Reversion Ring Duration to zero will disable the feature

Hold Reversion Notification Interval (seconds)  Setting the Hold Reversion Notification Interval to zero will disable the feature

**Line 1 on Device SEP00152B8F3767**

Display (Internal Caller ID) VENUS-13 Display text for a line appearance is intended for displaying text such as a name instead of a directory 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) VENUS-13

Line Text Label VENUS-13

ASCII Line Text Label VENUS-13

External Phone Number Mask

Visual Message Waiting Indicator Policy\* Use System Policy

Audible Message Waiting Indicator Policy\* Default

Ring Setting (Phone Idle)\* Use System Default

Ring Setting (Phone Active) Use System Default Applies to this line when any line on the phone has a call in progress.

Call Pickup Group Audio Alert Setting (Phone Idle) Use System Default

Call Pickup Group Audio Alert Setting Use System Default



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Save Delete Reset Add New

Ring Setting (Phone Active): Use System Default (Applies to this line when any line on the phone has a call in progress.)

Call Pickup Group: Use System Default

Audio Alert Setting (Phone Idle): Use System Default

Recording Option\*: Call Recording Disabled

Recording Profile: < None >

Monitoring Calling Search Space: < None >

**Multiple Call/Call Waiting Settings on Device SEP00152B8F3767**

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 SEP00152B8F3767**

Caller Name  
 Caller Number  
 Redirected Number  
 Dialed Number

**Users Associated with Line**

Associate End Users

Save Delete Reset Add New



## Configuring the CMM-E1 gateway

```
VENUS-CMM-E1#sh ver
VENUS-CMM-E1#sh version
Cisco IOS Software, Cat6K-lc Software (wscmm-IPVOICE-M), Version 12.4(5a), RELEASE SOFTWARE (fc3)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2006 by Cisco Systems, Inc.
Compiled Sat 14-Jan-06 04:52 by alnguyen

ROM: System Bootstrap, Version 12.2(1r)T2, RELEASE SOFTWARE (fc1)

VENUS-CMM-E1 uptime is 1 day, 2 hours, 34 minutes
System returned to ROM by power-on
System image file is "bootflash:wscmm-ipvoice-mz.124-5a.bin"

cisco WS-SVC-CMM Cat6k Voice Linecard (R7000) processor (revision 0xFF) with 196
608K/65536K bytes of memory.
Processor board ID SAD0825032A
R7000 CPU at 400MHz, Implementation 39, Rev 3.3, 256KB L2 Cache
Last reset from power-on
1 FastEthernet interface
1 Gigabit Ethernet interface
206 Serial interfaces
6 Channelized E1/PRI ports
6 Channelized T1/PRI ports
32768K bytes of processor board bootflash (Read/Write)

Configuration register is 0x2

VENUS-CMM-E1#
VENUS-CMM-E1#sh run
Building configuration...

Current configuration : 4329 bytes
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname VENUS-CMM-E1
!
boot-start-marker
boot-end-marker
!
enable password cisco
!
no aaa new-model
!
resource policy
```



```
!
mmi polling-interval 60
no mmi auto-configure
no mmi pvc
mmi snmp-timeout 180
!
!
no ip domain lookup
ip host CM-CHIVAS 172.20.8.254
ip host CM-BARZA 172.20.110.254
ip host CM-MERCURY 172.20.215.254
ip host CM-VENUS 172.20.214.254
!
isdn switch-type primary-4ess
!
!
!
!
controller T1 1/0
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 1/1
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 1/2
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 1/3
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 1/4
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 1/5
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller E1 2/0
pri-group timeslots 1-31 service mgcp
!
controller E1 2/1
pri-group timeslots 1-31 service mgcp
!
```



```
controller E1 2/2
!
controller E1 2/3
!
controller E1 2/4
!
controller E1 2/5
!
!
!
interface GigabitEthernet1/0
 ip address 172.20.214.51 255.255.255.0
 no ip proxy-arp
 no negotiation auto
 no keepalive
!
interface Serial1/0:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-qsig
 isdn incoming-voice voice
 isdn bind-13 ccm-manager
 no cdp enable
!
interface Serial1/1:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-qsig
 isdn incoming-voice voice
 isdn bind-13 ccm-manager
 no cdp enable
!
interface Serial1/2:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-qsig
 isdn incoming-voice voice
 isdn bind-13 ccm-manager
 no cdp enable
!
interface Serial1/3:23
 no ip address
 encapsulation hdlc
 no logging event link-status
 isdn switch-type primary-qsig
 isdn incoming-voice voice
 isdn bind-13 ccm-manager
 no cdp enable
!
interface Serial1/4:23
 no ip address
```



```
encapsulation hdlc
no logging event link-status
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-13 ccm-manager
no cdp enable
!
interface Serial1/5:23
no ip address
encapsulation hdlc
no logging event link-status
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-13 ccm-manager
no cdp enable
!
interface Serial2/0:15
no ip address
encapsulation hdlc
no logging event link-status
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-13 ccm-manager
no cdp enable
!
interface Serial2/1:15
no ip address
encapsulation hdlc
no logging event link-status
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-13 ccm-manager
no cdp enable
!
ip default-gateway 172.20.8.1
ip route 0.0.0.0 0.0.0.0 172.20.8.1
ip route 0.0.0.0 0.0.0.0 172.20.215.1
ip route 0.0.0.0 0.0.0.0 172.20.214.1
!
no ip http server
!
!
control-plane
!
!
voice-port 1/0:23
!
voice-port 1/1:23
!
voice-port 1/2:23
!
voice-port 1/3:23
!
voice-port 1/4:23
```



```
!
voice-port 1/5:23
!
voice-port 2/0:15
!
voice-port 2/1:15
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server CM-VENUS
ccm-manager config
!
mgcp
mgcp call-agent CM-VENUS 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
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 voice 1 pots
  service mgcpapp
  port 1/0:23
!
dial-peer voice 2 pots
  service mgcpapp
  port 1/1:23
!
dial-peer voice 3 pots
  service mgcpapp
  port 1/2:23
!
dial-peer voice 4 pots
  service mgcpapp
  port 1/3:23
!
dial-peer voice 5 pots
  service mgcpapp
  port 1/4:23
!
dial-peer voice 6 pots
  service mgcpapp
  port 1/5:23
```



```
!
dial-peer voice 7 pots
  service mgcpapp
  port 2/0:15
!
dial-peer voice 8 pots
  service mgcpapp
  port 2/1:15
!
!
line con 0
  password cisco
line vty 0 4
  password cisco
  login
!
!
end
```

VENUS-CMM-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 Communication Manager
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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