



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

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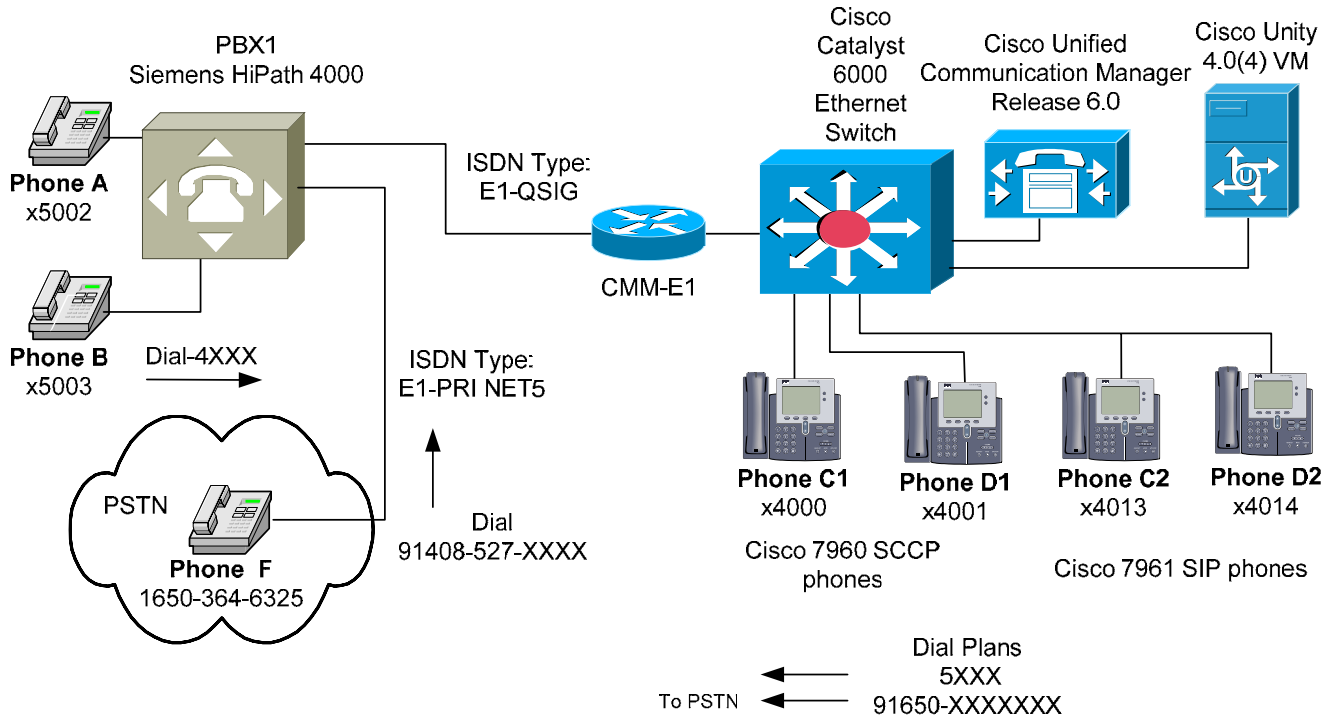
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Introduction

- 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 MCM-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) ¹ - 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 LDAT + RICHT.
10. Configure LCR Out-dial Rules using LODR.
11. Enable In-Band DTMF signaling for the Digital Stations using SBCSU.
12. Configure Digital Station for MWI application.
13. Configure Message Center's Service Access Number for MWI application.
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          |
-----
```

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



CODE	CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE	
	1	1111	11112	22			
	0	12345	67890	12345	67890	12	
0	.	****	..***	**..	*	CO
001 - 009	*	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	1111	11112	22			
	0	12345	67890	12345	67890	12	
3000 - 3010	.	****	*****	**..	*	STN DESTNO 30 DNNO 0- 0-222
3011 - 3020	.	****	*****	**..	*	STN DESTNO 31 DNNO 0- 0- 31
3021 - 3030	.	****	*****	**..	*	STN DESTNO 32 DNNO 0- 0- 32
3031 - 3040	.	****	*****	**..	*	STN DESTNO 33 DNNO 0- 0- 33
3041 - 3050	.	****	*****	**..	*	STN DESTNO 35 DNNO 0- 0- 35
31	*	NAMEKY
32	*	PARKKY

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE	
	1	1111	11112	22			
	0	12345	67890	12345	67890	12	
33	*	CCKY
34	*	HTKY
35	*	STKY
36	*	REMKY
36 - 37	.	****	..***	**..	*	CO
38	*	TIMEKY
39	.	****	*****	**..	*	TIE
4000 - 4050	.	****	*****	**..	*	STN DESTNO 111 DNNO 0- 0-111
4051 - 4566	.	****	*****	**..	*	STN DESTNO 222 DNNO 0- 0-222
4567	.	****	*****	**..	*	STN DESTNO 34 DNNO 0- 0-200



DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS			
CODE	CALL PROGRESS STATE 1 1111 1112 22	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO		
			*=OWN NODE		
4568 - 4999	. **** * *	STN	DESTNO 222		
5000 - 5040	. **** * *	STN	DNNO 0- 0-222		
5500 - 5501	. **** * *	STN	DESTNO 0		
555	. **** * *	OWNNODE	DNNO 0- 0-555*		
560	. **** * *	TIE	DESTNO 56		
59	. **** * *	TIE	DNNO 0- 0-560		
6000 - 6009	. **** * *	STN	R		
			DESTNO 0		
			DNNO 0- 0-555*		

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS			
CODE	CALL PROGRESS STATE 1 1111 1112 22	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO		
			*=OWN NODE		
7000 - 7002	. **** * *	STN	DESTNO 56		
8000 - 8050	. **** * *	STN	DNNO 0- 0-560		
8060	. **** * *	TIE	DESTNO 222		
8070	. **** * *	TIE	DNNO 0- 0-222		
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 1111 1112 22	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	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1
7	1	1	1
8	1	1	1
9	1	1	1
10	1	1	1
11	1	1	1
12	1	1	1
13	1	1	1
14	1	1	1
15	1	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 (AUTOMATIC 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	LAUTH																								COPIN		
V	1	2	3	4	5	6	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	NUM
	>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 ACDPGRP : 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 ACDPGRP : 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-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      = 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      NWMUXTIM = 10         TCHARG   = N    |
| SUPPRESS = 0          DGTPR    =             CHIMAP   = N    |
| ISDNIP   =           ISDNPNP   =             PNPAC    =     |
| PNPL2P   =           PNPL1P   =             NNO      = 111  |
| TRACOUNT = 31         SATCOUNT = MANY      CARRIER = 1    |
| ALARMNO  = 0          FIDX     = 1          FWDX     = 5    |
| ZONE     = EMPTY     COTX     = 22         TPROFNO  =     |
| DOMTYPE  =           DOMAINNO =             CCHDL    =     |
| INIGHT   =           UUSCCY   = 8          FNIDX    = 1    |
| UUSCCX   = 16        & G711   & G729OPT   SRCGRP   =     |
| CLASSMRK = EC        & G711   & G729OPT   SRCGRP   =     |
| 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

```

+-----+-----+-----+-----+-----+
| 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       NWMUXTIM = 10        TCHARG   = N
| SUPPRESS = 0          DGTPR   =          CHIMAP   = N
| ISDNIP   =          ISDNIP   =
| 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   =          UUSCCY   = 8          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
+-----+-----+-----+-----+
| LNATYPE = COPPER         VERSION = S2          QUAL      = ON
| MASTER = N              DCHAN1 = 16          DCHAN2   = 0
| PATTERN = D5H           QUAL1   = 10 SEC.    QUAL2    = 10 MIN.
| SMD    = N              PERMACT = Y          FCBAB    = DFH
| CDG     = N              FIXEDTEI = 0         CNTRNR   = 255
| TEIVERIF = N            CRC4REP = N
| DEV     = INDEP
| INFO    =
+-----+-----+-----+-----+

```

AMO-LWPAR-111 LOADWARE PARAMETERS FOR NETWORKING MODULES

DISPLAY COMPLETED;



PSTN Trunk Configuration, TDCSU

```
<dis-tdcsu: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   =            ISDNPNP  =
| PNPL2P   =            PNPL1P   =          PNPAC    =
| TRACOUNT = 31         SATCOUNT = MANY      NNO       = 1
| ALARMNO  = 0          FIDX    = 1          CARRIER  = 1
| ZONE     = EMPTY     COTX    = 21        FWDX     = 10
| DOMTYPE  =           DOMAINNO  =          TPROFNO  =
| INIGHT   =
| UUSCCX   = 16         UUSCCY  = 8          FNIDX    = 1
| CLASSMRK = EC        & G711   & G729OPT  SRCGRP    =
| 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:PEN1=1-3-25-0;
DISPLAY-TDCSU:PEN1=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   =            ISDNPNP  =
| PNPL2P   =            PNPL1P   =          PNPAC    =
| TRACOUNT = 31         SATCOUNT = MANY      NNO       = 222
| ALARMNO  = 0          FIDX    = 1          CARRIER  = 1
| ZONE     = EMPTY     COTX    = 22        FWDX     = 10
| DOMTYPE  =           DOMAINNO  =          TPROFNO  =
+-----+

```



```

| INIGHT = |
| UUSCCX = 16 | UUSCCY = 8 | CCHDL = |
| CLASSMRK = EC & G711 & G729OPT | FNIDX = 1 |
| TCCID = | SRCGRP = |
-----
| BCNEG = N | BCGR = 1 | LWPARG = 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;

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	
							BUT		
							ASYN.		
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	
							BUT		
							ASYN.		
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      DNNNO OF ROUTE = 111  |
| SERVICE INFO =  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTEL | LVAL | TGRP | ODR | LAUTH | SCHEDULE | CARRIER | LATTR | LDSRT |
| ABCDEFGH | ZONE |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 27 | 111 | 1 | ***** | 1 | EMPTY | NONE |
| DNNNO = 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      NAME = PRI 3 ECMA1      SERVICE = ALL  |
| TYPE = LCR      DNNNO OF ROUTE = 111  |
| SERVICE INFO =  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTEL | LVAL | TGRP | ODR | LAUTH | SCHEDULE | CARRIER | LATTR | LDSRT |
| ABCDEFGH | ZONE |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 26 | 15 | 3 | ***** | 1 | EMPTY | NONE |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```
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      DNNNO OF ROUTE = 111  |
| SERVICE INFO =  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTEL | LVAL | TGRP | ODR | LAUTH | SCHEDULE | CARRIER | LATTR | LDSRT |
| ABCDEFGH | ZONE |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 27 | 15 | 1 | ***** | 1 | EMPTY | NONE |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```
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      DNNNO OF ROUTE = 89  |
| SERVICE INFO =  |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```



LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	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
DTMFCNV = WITHOUT	DTMFDSP = WITHOUT	DTMFTEXT =	
DTMFPULS =	BUGS = LIN	ROUTATT = NO	MAINGRP = 24
EMCYRRT = NO	CONFTONE = 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
DTMFCNV = WITHOUT	DTMFDSP = WITHOUT	DTMFTEXT =	
DTMFPULS =	BUGS = LIN	ROUTATT = NO	MAINGRP = 14
EMCYRRT = NO	CONFTONE = 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
DTMFCNV = FIX	DTMFDSP = WITHOUT	DTMFTEXT =	
DTMFPULS = PP300	BUGS = LIN	ROUTATT = NO	MAINGRP = 15
EMCYRRT = NO	CONFTONE = 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
| EMCYRRT = NO   CONFTONE = 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
+-----+

```



```

|           |           |           |           |           |
+-----+-----+-----+-----+-----+

```

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-sbcusu: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         EXTBUS  =          RCBKB  =N
ALARMNO =0        DFSVCANA=          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       OPTIS0A :        VCI     =
          OPTIDA  =          OPTISPA :0       PATTERN =
          OPTIABA :0

DCFWBUSY=N       HEADSET =N
DNIDSP  =N       HSKEY   =NORMAL  APICLASS=
DTMFBLK =N       IPPASSW =        ACFAPPL =0
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-sbcusu: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
                                EXTBUS  =        LCOSD2 =6
SSTNO  =N        EXTBUS  =        CBKBMX =5
TRACE  =N                                RCBKB  =N
ALARMNO =0      DFSVCANA=      SPDI   =0        RCBKNA =N
HMUSIC =0      FLASH   =      SPDC1  =        CBKNAMB =Y
PMIDX  =1                                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      OPTIS0A :        VCI     =
                                OPTID   =        OPTISPA :0       PATTERN =
                                OPTIABA :0
DCFWBUSY=N     HEADSET =N      APICLASS=
DNIDSP =N      HSKEY   =NORMAL ACFAPPL =0
DTMFBLK =N                                IPPASSW =
DTMFCTR=Y     BASICSVCS=
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 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-RICH:MODE=PM;
S3: DATA SUBSYSTEM FOR AMO RICH 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		
	FWDNWK		
	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.

Cisco Unified CM Administration
For Cisco Unified Communications Solutions

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Service Parameter Configuration Related Links: Parameters for All Servers

Save

Clusterwide Parameters (Device - PRI and MGCP Gateway)

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



CUCM Version

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Cisco Unified CM Administration

System version: 6.0.1.1000-37

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CMM-E1 Gateway Configuration

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Gateway Configuration Related Links:

Status
Status: Ready

Gateway Details

Product	Communication Media Module
Gateway	VENUS-CMM-E1
Protocol	MGCP
Domain Name*	<input type="text" value="VENUS-CMM-E1"/>
Description	<input type="text" value="VENUS-CMM-E1 MGCP GW"/>
Cisco Unified Communications Manager Group*	<input type="text" value="Default"/>

Configured Slots, VICs and Endpoints

Module in Slot 1	<input type="text" value="WS-X6600"/>						
Subunit 0	<input type="text" value="WS-X6600-6T1"/>	1/ 0	1/ 1	1/ 2	1/ 3	1/ 4	1/ 5
Module in Slot 2	<input type="text" value="WS-X6600"/>						
Subunit 0	<input type="text" value="WS-X6600-6E1"/>	2/ 0	2/ 1	2/ 2	2/ 3	2/ 4	2/ 5
Module in Slot 3	<input type="text" value="< None >"/>						
Module in Slot 4	<input type="text" value="< None >"/>						

Product Specific Configuration Layout

Global ISDN Switch Type	<input type="text" value="4ESS"/>	
Switchback Timing*	<input type="text" value="Graceful"/>	
Switchback uptime-delay (min)	<input type="text" value="10"/>	
Switchback schedule (hh:mm)	<input type="text" value="12:00"/>	
Fax mode*	<input type="text" value="Fax Relay"/>	

*- indicates required item.



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Gateway Configuration Related Links: [Back to MGCP Configuration](#)

Status
 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	<input type="text" value="CM-VENUS to Hipath"/>
Device Pool*	<input type="text" value="Default"/>
Common Device Configuration	<input type="text" value="< None >"/>
Call Classification*	<input type="text" value="Use System Default"/>
NetworkLocale	<input type="text" value="United States"/>
Media Resource Group List	<input type="text" value="MRGL-CM-VENUS"/>
Location*	<input type="text" value="Hub_None"/>
AAR Group	<input type="text" value="< None >"/>
Load Information	<input type="text"/>

Transmit UTF-8 for Calling Party Name

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain	<input type="text" value="< None >"/>
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

Interface Information

PRI Protocol Type*	<input type="text" value="PRI ISO QSIG E1"/>
Protocol Side*	<input type="text" value="User"/>
Channel Selection Order*	<input type="text" value="Top Down"/>
Channel IE Type*	<input type="text" value="Timeslot Number"/>
PCM Type*	<input type="text" value="A-law"/>



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Gateway Configuration Related Links: [Back to MGCP Configuration](#)

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

Delay between restarts (1/8 sec ticks)*

Inhibit restarts at PRI initialization

Enable status poll

Unattended Port

Call Routing Information - Inbound Calls

Significant Digits*

Calling Search Space

AAR Calling Search Space

Prefix DN

Call Routing Information - Outbound Calls

Calling Party Presentation*

Calling Party Selection*

Called party IE number type unknown*

Calling party IE number type unknown*

Called Numbering Plan*

Calling Numbering Plan*

Number of digits to strip*

Caller ID DN

SMDI Base Port*

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 **X** 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

i *- indicates required item.

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

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

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

i *****- 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 ▾

<input type="checkbox"/>	Partition Name ^	Description
<input type="checkbox"/>	Incoming Trunk	Incoming Trunk
<input type="checkbox"/>	Phones	Phones



Calling Search Space

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Find and List Calling Search Spaces

Status
 3 records found

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

Find Calling Search Space where begins with

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



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Calling Search Space Configuration Related Links:

Status

Status: Ready

Calling Search Space Information

Name*

Description

Route Partitions for this Calling Search Space

Available Partitions**

▼ ▲

Selected Partitions

▼ ▲

*- indicates required item.

**Selected Partitions are ordered by highest priority



Calling Search Space Configuration

Related Links:

Status

Status: Ready

Calling Search Space Information

Name*
Description

Route Partitions for this Calling Search Space

Available Partitions**



Selected Partitions

*- indicates required item.

**Selected Partitions are ordered by highest priority



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Calling Search Space Configuration Related Links:

Status

Status: Ready

Calling Search Space Information

Name*

Description

Route Partitions for this Calling Search Space

Available Partitions**

▼ ▲

Selected Partitions

▼ ▲

*- 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

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* 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**

Save **X** Delete Copy Add New

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:

Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List* [\(Edit\)](#)

Route Option
 Route this pattern
 Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

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*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits



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

Save **X** Delete Copy **+** Add New

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:

Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List* [\(Edit\)](#)

Route Option

Route this pattern

Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

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*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits



PSTN Route Pattern Configuration

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Route Pattern Configuration

Related Links: [Back To Find/List](#)

Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List* [\(Edit\)](#)

Route Option
 Route this pattern
 Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

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*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits



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

Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Calling Search Space

Route Option
 Route this pattern
 Block this pattern

Provide Outside Dial Tone
 Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)



CLIR Route Pattern Configuration

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Route Pattern Configuration

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Save Delete Copy Add New

Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List* [\(Edit\)](#)

Route Option

Route this pattern

Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

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*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits



CNIR Route Pattern Configuration

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Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List* [\(Edit\)](#)

Route Option

Route this pattern

Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

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*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits



COLR Translation Pattern Configuration

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Pattern Definition

Translation Pattern

Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Calling Search Space

Route Option
 Route this pattern
 Block this pattern

Provide Outside Dial Tone
 Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)



CONR Translation Pattern Configuration

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Pattern Definition

Translation Pattern

Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Calling Search Space

Route Option

Route this pattern

Block this pattern

Provide Outside Dial Tone

Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits

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

*- indicates required item.

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Save Delete Copy Add New

Status

Status: Ready

Message Waiting Information

Message Waiting Number*

Partition

Description

Message Waiting Indicator* On Off

Calling Search Space

*- indicates required item.





Voice Mail Profile Configuration

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Voice Mail Profile Configuration Related Links:

Status

Status: Ready

Voice Mail Profile Information

Voice Mail Profile Unity2 (used by 12 devices)

Voice Mail Profile Name*

Description

Voice Mail Pilot**

Voice Mail Box Mask

Make this the default Voice Mail Profile for the System

*- indicates required item.

**- The Voice Mail Pilot is comprised of the Voice Mail Pilot Number and it's 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:

Status

Status: Ready

Voice Mail Pilot Information

Voice Mail Pilot Number

Calling Search Space

Description

Make this the default Voice Mail Pilot for the system

*- indicates required item.



Voice Mail Ports List

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Find and List Voice Mail Ports

Status
 2 records found

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

Find Voice Mail Port where ▾ begins with ▾

▾

<input type="checkbox"/>	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	



Voice Mail Port Configuration

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Voice Mail Port Configuration Related Links:

Status

Status: Ready

Device Information

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

Directory Number Information

Directory Number*	<input type="text" value="2900"/>
Partition	<input type="text" value="Phones"/>
Calling Search Space	<input type="text" value="Phones"/>
AAR Group	<input type="text" value="< None >"/>
Internal Caller ID Display	<input type="text" value="VoiceMail"/>
Internal Caller ID Display (ASCII format)	<input type="text" value="VoiceMail"/>
External Number Mask	<input type="text"/>

*- indicates required item.



CallBack Service Parameters

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Service Parameter Configuration Related Links: Parameters for All Servers

Save | Set to Default | Advanced

Clusterwide Parameters (Feature - Call Back)

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

Clusterwide Parameters (Feature - Call Recording)

Play Recording Notification Tone To Observed Target *	<input type="text" value="False"/>	<input type="button" value="v"/>	False
Play Recording Notification Tone To Observed Connected Parties *	<input type="text" value="False"/>	<input type="button" value="v"/>	False

Clusterwide Parameters (Feature - Monitoring)

Play Monitoring Notification Tone To Observed Target *	<input type="text" value="False"/>	<input type="button" value="v"/>	False
Play Monitoring Notification Tone To Observed Connected Parties *	<input type="text" value="False"/>	<input type="button" value="v"/>	False

Clusterwide Parameters (Route Plan)

Stop Routing on Out of Bandwidth Flag *	<input type="text" value="False"/>	<input type="button" value="v"/>	False
Stop Routing on Unallocated Number Flag *	<input type="text" value="True"/>	<input type="button" value="v"/>	True
Stop Routing on User Busy Flag *	<input type="text" value="True"/>	<input type="button" value="v"/>	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 *	<input type="text" value="False"/>	<input type="button" value="v"/>	False
---	------------------------------------	----------------------------------	-------

Clusterwide Parameters (Service)



CallBack Softkey Configuration

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Softkey Template Configuration Related Links: [Softkey Template Configuration](#)

Status

Status: Ready

Softkey Layout Configuration

Softkey Template: Standard User CallBack

Select a call state to configure

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)

*- 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	Selected Softkeys (ordered by position)**
Undefined (Undefined)	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](#)

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

*- indicates required item.

**- indicates mandatory fields



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Softkey Template Configuration

Related Links: Softkey Template Configuration Go

Save Reset

Status

i Status: Ready

Softkey Layout Configuration

Softkey Template: Standard User CallBack

Select a call state to configure On Hold

Unselected Softkeys

Selected Softkeys (ordered by position)**

Undefined (Undefined)

- **Resume (Resume)
- NewCall (NewCall)
- Direct Transfer (DirTrfr)
- Select (Select)
- Join (Join)
- Immediate Divert (iDivert)
- Toggle Do Not Disturb (DND)

Save Reset

i *- indicates required item.
i **- 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

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



Path Replacement Service Parameters

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Service Parameter Configuration Related Links: Parameters for All Servers

Clusterwide Parameters (Feature - Call Pickup)

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

Clusterwide Parameters (Feature - Refer)

Validate Refer-to URI *	<input type="text" value="Validate Except for Anonymous Users"/>	<input type="button" value="Validate Except for Anonymous Users"/>
---	--	--

Clusterwide Parameters (Feature - Replaces)

Block OffNet To OffNet Replaces *	<input type="text" value="False"/>	<input type="button" value="False"/>
---	------------------------------------	--------------------------------------

Clusterwide Parameters (Feature - Redirection [3xx])

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

Clusterwide Parameters (Feature - Multilevel Precedence and Preemption)

Locations-based MLPP Enable *	<input type="text" value="False"/>	<input type="button" value="False"/>
Executive Override Call Preemptable *	<input type="text" value="False"/>	<input type="button" value="False"/>

Clusterwide Parameters (Feature - Path Replacement)

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



PR Call Pick Up Group

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

Save **X** 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 **Find**

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

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:

Save Copy

Association Information

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*	<input type="text" value="00127F3B9054"/>
Description	<input type="text" value="4000 SCCP"/>
Device Pool*	<input type="text" value="Default"/> View Details
Common Device Configuration	<input type="text" value="MigratedCommonDeviceConfig1"/> View Details
Phone Button Template*	<input type="text" value="Standard 7960 SCCP"/>
Softkey Template	<input type="text" value="Standard User CallBack"/>
Common Phone Profile*	<input type="text" value="Standard Common Phone Profile"/>
Calling Search Space	<input type="text" value="< None >"/>
AAR Calling Search Space	<input type="text" value="< None >"/>
Media Resource Group List	<input type="text" value="MRGL-CM-VENUS"/>
User Hold MOH Audio Source	<input type="text" value="1-SampleAudioSource"/>
Network Hold MOH Audio Source	<input type="text" value="< None >"/>
Location*	<input type="text" value="Hub_None"/>
AAR Group	<input type="text" value="< None >"/>
User Locale	<input type="text" value="< None >"/>
Network Locale	<input type="text" value="< None >"/>
Built In Bridge*	<input type="text" value="Default"/>
Privacy*	<input type="text" value="Default"/>
Device Mobility Mode*	<input type="text" value="Default"/> View Current Device Mobility Settings
Owner User ID	<input type="text" value="< 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:

Module 2
Module 2 Load Name

External Data Locations Information (Leave blank to use default)

Information
Directory
Messages
Services
Authentication Server
Proxy Server
Idle
Idle Timer (seconds)

Extension Information

Enable Extension Mobility
Log Out Profile
Log in Time
Log out Time

MLPP Information

MLPP Domain
MLPP Indication*
MLPP Preemption*

Do Not Disturb

Do Not Disturb
DND Option*
DND Incoming Call Alert

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

DND Option*	Ringer Off
DND Incoming Call Alert	Beep Only

Product Specific Configuration Layout ?

<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

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 Delete Reset Add New

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

[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 >

Retain this destination in the call forwarding history

Call Forward and Call Pickup Settings



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Directory Number Configuration Related Links:

Call Forward and Call Pickup Settings

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

MLPP Alternate Party Settings

Target (Destination)

MLPP Calling Search Space

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) 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)

Line Text Label

ASCII Line Text Label

External Phone Number Mask

Visual Message Waiting Indicator Policy*

Ring Setting (Phone Idle)*

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

Call Pickup Group Audio Alert Setting (Phone Idle)

Call Pickup Group Audio Alert Setting (Phone Active)

Monitoring Calling 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*



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

Save Delete Reset Add New

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

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

i *- indicates required item.

i **- Changes to Line or Directory Number settings require restart.



IP 7961 SIP phone Configuration

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Phone Configuration Related Links:

Association Information

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 <input type="button" value="View Details"/>
Common Device Configuration	MigratedCommonDeviceConfig1 <input type="button" value="View Details"/>
Phone Button Template*	Standard 7961 SIP
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-SampleAudioSource
Network Hold MOH Audio Source	1-SampleAudioSource
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 <input type="button" value="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 Personalization* **Default**

Phone Load Name

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

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 >**

Media Termination Point Required

Unattended Port

Require DTMF Reception

Certification Authority Proxy Function (CAPF) Information

Certificate Operation* **No Pending Operation**

Authentication Mode* **By Null String**

Authentication String

Key Size (Bits)* **1024**

Operation Completes By (YYYY:MM:DD:HH)



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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

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

External Data Locations Information (Leave blank to use default)

Information

Directory

Messages

Services

Authentication Server

Proxy Server

Idle

Idle Timer (seconds)

Extension Information

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

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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Phone Configuration Related Links:

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



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Directory Number Configuration Related Links:

Directory Number Information

Directory Number*

Route Partition

Description

Alerting Name

ASCII Alerting Name

Allow Control of Device from CTI

Associated Devices

▼ ▲

Dissociate Devices

Directory Number Settings

Voice Mail Profile (Choose <None> to use system default)

Calling Search Space

Presence Group*

User Hold MOH Audio Source

Network Hold MOH Audio Source

Auto Answer*

AAR Settings

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



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Directory Number Configuration Related Links:

Call Forward and Call Pickup Settings

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

MI PP Alternate Party Settings



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

Display (Internal Caller ID) 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)

Line Text Label

ASCII Line Text Label

External Phone Number Mask

Visual Message Waiting Indicator Policy*

Audible Message Waiting Indicator Policy*

Ring Setting (Phone Idle)*

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

Call Pickup Group Audio Alert Setting (Phone Idle)

Call Pickup Group Audio Alert Setting



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Directory Number Configuration Related Links: [Configure Device \(SEP00152B8F3767\)](#)

Ring Setting (Phone Active)	<input type="text" value="Use System Default"/>	Applies to this line when any line on the phone has a call in progress.
Call Pickup Group	<input type="text" value="Use System Default"/>	
Audio Alert Setting (Phone Idle)	<input type="text" value="Use System Default"/>	
Call Pickup Group	<input type="text" value="Use System Default"/>	
Audio Alert Setting (Phone Active)	<input type="text" value="Use System Default"/>	
Recording Option*	<input type="text" value="Call Recording Disabled"/>	
Recording Profile	<input type="text" value="< None >"/>	
Monitoring Calling Search Space	<input type="text" value="< 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*

Busy Trigger* (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



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), RELEA
SE 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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