



Siemens Hicom 300 E Release 3.1 using E1 QSIG to Cisco Unified CallManager 4.0

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Introduction

This is an application note for connectivity of Siemens Hicom 300 E Release 3.1 PBX with Cisco Unified CallManager Release 4.0 using Cisco 6608-E1 QSIG as MGCP gateway.

The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified CallManager connected to the PBX via 6608-E1 QSIG link as MGCP gateway.

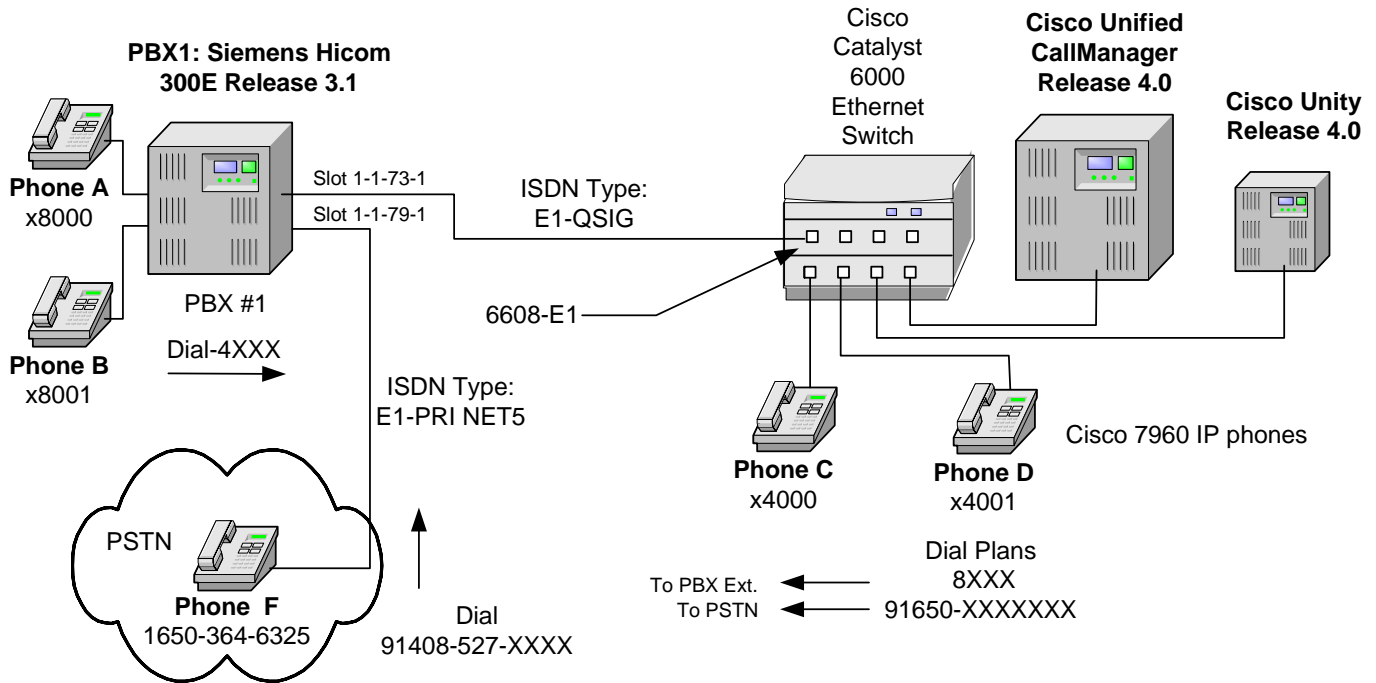
Connectivity is achieved by using the PRI ISO QSIG E1 protocol type on the MGCP gateway and PSS1V2 switch type on the Siemens Hicom 300 E PBX.

Basic calls worked fine in both directions with Calling/Connected Name and Calling/Connected Number features support.

Network Topology

Figure 1. Network Topology

Basic Call Setup End-to-End Configuration



Limitations

Calling Name and Number Feature

Siemens Hicom 300E PBX did not honor incoming CNIR-Calling Name Identification Restriction from Cisco Unified CallManager. Siemens phone displays the Calling Name even though Cisco Unified CallManager is coding it Restricted. This might be a configuration issue on the Hicom 300E PBX.

B-Channel Mapping

Siemens Hicom 300E PBX uses sequential channel numbering (1-30) when ISO QSIG protocol "PSS1V2" is selected, therefore the Cisco 6608-E1 Gateway configuration for **Channel IE Type** field should be set to **Continuous Number**

System Components

Hardware Requirements

Cisco hardware:

- Cisco Catalyst 6000 switch with 6608-E1 Gateway

- Cisco Unified CallManager 4.0

Siemens Hicom 300E PBX Hardware:

- DIU-N2



Software Requirements

PBX Software version 3.1

Cisco Unified CallManager 4.0

Cisco WS-X6608-E1 gateway Version 7.6(2)

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

CONP-Connected Name Identification Presentation

CONR- Connected Name Identification Restriction

CT-Call Transfer (by join)

CFU-Call Forwarding Unconditional (by join)

CFB-Call Forwarding Busy (by join)

CFNR-Call Forwarding No Reply (by join)

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

Features Not Supported

CUCM 4.0 release does not support sending Alerting Name or Busy Name Identification information

Configuration

Configuring the Siemens Hicom 300E 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.

¹ MWI was tested with Cisco Unified CallManager 4.0 configured with Cisco Unity as the message center PINX and PBX users as remote subscribers. Siemens Hicom 300E PBX was not configured to handle Q.SIG MWI messages at the time of testing therefore it was not known at that time whether Q.SIG MWI integration with the Hicom PBX will work.



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 RICHT.
12. Configure Digital Station's Class of Service for Mailbox (MWI) application.

DPLN

```
<DISPLAY-WABE:TYPE=GEN;
DIS-WABE:GEN;
H500: AMO WABE STARTED
```

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS					
CODE		CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO
		1	11111	11112	22		
001 - 003	*					NETRTE	
004	*					NETRTE	R
005 - 006	*					NETRTE	
1000	. **** *					STN	DESTNO 25 DNNO 0- 0- 25
11	. . . . . * . . . . .					MBKY	
111	. **** *					TIE	
222	. **** *					OWNNODE	
3000	. **** *					STN	DESTNO 33 DNNO 0- 0-333
4000 - 4050	. **** *					STN	DESTNO 111 DNNO 0- 0-111

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS					
CODE		CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO
		1	11111	11112	22		
4051 - 4599	. **** *					STN	R DESTNO 0 DNNO 0- 0-222*
4700 - 4999	. **** *					STN	R DESTNO 0 DNNO 0- 0-222*
5000 - 5009	. **** *					STN	DESTNO 55 DNNO 0- 0- 55
5010	. **** * . **** *					ATNDIND	R
5011 - 5020	. **** *					STN	DESTNO 55 DNNO 0- 0- 55
5021 - 5050	. **** *					STN	DESTNO 111 DNNO 0- 0-111
5051	. **** * . **** *					ATNDIND	

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS



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

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

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

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE				DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE
	1	11111	11112	22		
##29*	MSGRKY	
##35*	TIMEKY	
##36*	VCKY	
##37*	VCRKY	
##38*	CCKY	
##39*	CONFKY	
##41*	NAMEKY	
##42*	PARKKY	
##43*	REMKY	
##44*	STKY	
##45*	CBKKY	
##46*	CONSKY	
##47*	DNDKY	
##48*	EXHOLDKY	
##49*	HOLDKY	
##50*	IUSEKY	



##51	. . . . . * ..	LNRKY	
DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS	
CODE	CALL PROGRESS STATE	DIGIT ANALYSIS	RESERVED/CONVERT DNI/ADD-INFO
	1 1111 11112 22	RESULT	*=OWN NODE
##52	. . . . . * ..	PRIVKY	
##53	. . . . . * ..	RLSKY	
##54	. . . . . * ..	SNRKY	
##55	. . . . . * ..	TRNSKY	
##56	. . . . . * ..	RCTOFFKY	
##57	. . . . . * ..	TOGGLEKY	

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

Enbloc Sending Dial Plan, DPLN

<dis-richt:lrte,111;
 DIS-RICT:LRTE,111;
 H500: AMO RICHT STARTED

LRTE = 111	NAME = ROPT CCM	(NEUTRAL)	SRVC = ALL
DNNO =	111	DESTNO = 111	
ROUTOPT = YES	REROUT = YES	PLB = NO	FWDBL = NO
MFV: CNV=WITHOUT	DSP=WITHOUT	TEXT=	PULS=
ROUTENO = 15	BUGS = LIN	ROUTATT = NO	MAINGRP = 15
INFO =			
TGRP = 38	LDAT PRI MWI	(NEUTRAL)	SUBGROUP = 9

Overlap Sending Dial Plan, DPLN

<DISPLAY-LDPLN:TYPE=LDP,LDPNO=43;
 DISPLAY-LDPLN:TYPE=LDP,LDPNO=43;
 H500: AMO LDPLN STARTED

LDPNO : 43	LDP : 38-x	
	SPC : 22	
	DPLN	LRTE
	LAUTH	DPLN
	LRTE	LAUTH
0	38	1
1		8
2		9
3		10
4		11
5		12
6		13
7		14
		15

AMO-LDPLN-111 ADMINISTRATION LCR DIALPLAN
 DISPLAY COMPLETED;

PSTN Dial Plan, DPLN



DIS-LDPLN:LDP,34;
H500: AMO LDPLN STARTED

LDPNO : 34	LDP : 9-1650-XXXXXXX					
	SPC : 22					
	DPLN	LRTE	LAUTH	DPLN	LRTE	LAUTH
	0	916	1	8		
	1			9		
	2			10		
	3			11		
	4			12		
	5			13		
	6			14		
	7			15		

AMO-LDPLN-111 ADMINISTRATION LCR DIALPLAN
DISPLAY COMPLETED;

BCSU

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

ADDRESS : LTG 1 LTU 1

PEN	ASSIGNED MODULE	MODULE TYPE	FCT ID	HWY BDL	INSERTED MODULE	STATE	HW-INFO	MODULE STATUS
73	Q2196-X	DIU-N2	1	A	Q2196-X	1	-04 -	READY

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

Class of Trunk, COT

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

COT: 4 INFO: 4:Q931 EXTERNAL
DEVICE: INDEP SOURCE: DB
PARAMETER:

PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE	PRI
RECALL IF USER HANGS UP IN CONSULTATION CALL	RCL
TRUNK CALL TRANSFER	XFER
TRUNK SIGNALING ANSWER	ANS
CHANGEOVER FROM HOLD TO RING TONE	CHRT
KNOCKING OVERRIDE POSSIBLE	KNOR
CALL EXTEND FOR BUSY, RING OR CALL STATE	CEBC
NETWORKWIDE AUTOMATIC CALLBACK ON BUSY	CBBN
NETWORKWIDE AUTOMATIC CALLBACK ON FREE	CBFN
DON'T RELEASE CALL TO BUSY HUNT GROUP	BSHT
SEND NO NODE NUMBER TO PARTNER	LWNC
CONNECTION TO ROUTE OPTIMIZATION NODE	ROPT
INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR	NLCR
TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)	TSCS
INCOMING CDR BY ZONE OR FROM LINE	ICZL



```

INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR (DATA)          NLRD
INTERWORKING CALLBACK - NO ANSWER AND MAILBOX CALLBACK  IWCB
LINE WITH IMPLICIT NUMBERS                               LINO
CONTROLLED TRUNK AND LINE SELECTION                     CTLS
NO TONE                                                  NTON

```

```

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

```

Class of Parameter for Device Handler, COP

```

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

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

```

```

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

```

Class of Service, COSSU

```

<DISPLAY-COSSU:TYPE=COS,COS=32;
DISPLAY-COSSU:TYPE=COS,COS=32;
H500: AMO COSSU STARTED

```

COS	VOICE	FAX	TTX	VTX	DTE
32	>32:TRUNKS TA TNOTCR	NOCO NOTIE	NOCO NOTIE	NOCO NOTIE	TA TNOTCR BASIC MSN CDRINT MULTRA

```

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

```

```

<DISPLAY-COSSU:TYPE=LCOSV,LCOSV=32;
DISPLAY-COSSU:TYPE=LCOSV,LCOSV=32;
H500: AMO COSSU STARTED

```

LCOSV	1	2	3	4	5	6	LCR
V	123456789012345678901234567890123456789012345678901234	123456789012345678901234567890123456789012345678901234	123456789012345678901234567890123456789012345678901234	123456789012345678901234567890123456789012345678901234	123456789012345678901234567890123456789012345678901234	123456789012345678901234	OPTS= LCRET
	>SERVICE INFORMATION						LCR
32	XX						.
	>32:TRUNKS						

```

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

```



Trunk Group Access Code, BUEND

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

```

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

```

AMO-BUEND-111 TRUNK GROUP
DISPLAY COMPLETED;

Trunk Configuration, TDCSU

For Master-side Configuration

<dis-tdcsu:1-1-73-1;
DIS-TDCSU:1-1-73-1;
H500: AMO TDCSU STARTED

```

-----
+-----+-----+-----+-----+-----+-----+-----+-----+
|          DEV = S2CONN          |          PEN = 1-01-073-1          |
+-----+-----+-----+-----+-----+-----+-----+-----+
| COTNO = 4 | COPNO = 4 | DPLN = 0 |
| ITR = 0 | COS = 32 | LCOSV = 32 |
| LCOSD = 32 | CCT = HIPATH S2 | DESTNO = 111 |
| PROTVAR = PSS1V2 | SEGMENT = 1 | TCHARG = N |
| SUPPRESS = 0 | DGTPR = | CHIMAP = N |
| ISDNCC = | ISDNAC = | ISDNLC = |
| ISDNIP = | ISDNNP = |
| PNPL2C = | PNPL1C = | PNPLC = |
| PNPL2P = | PNPL1P = | PNPAC = |
| TRACOUNT = 31 | SATCOUNT = MANY | NNO = 111 |
| ALARMNO = 0 | FIDX = 1 | CARRIER = 1 |
| ZONE = EMPTY | COTX = 4 | FWDX = 5 |
| DOMTYPE = | DOMAINNO = | TPROFNO = |
| INIGHT = |
| CCHDL = | UUSCCX = 16 | UUSCCY = 8 |
+-----+-----+-----+-----+-----+-----+-----+-----+
| TGRP = 38 | SRCHMODE = CIR | BCNEG = Y |
| BCGR = 1 | INS = Y | LWPAR = 2 |
| LWPP = 0 | LWLT = 0 | LWPS = 0 |
| LWR1 = 0 | LWR2 = 0 |
| BCHAN 1 && 30 |
+-----+-----+-----+-----+-----+-----+-----+-----+

```

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30



AMO-TDCSU-111 DIGITAL TRUNKS
 DISPLAY COMPLETED;

<DISPLAY-LWPAR:INFOPAT="2";
 DISPLAY-LWPAR:INFOPAT="2";
 H500: AMO LWPAR STARTED

```

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

```

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

For Slave-side Configuration

<dis-tdcsu:1-1-73-1;
 DIS-TDCSU:1-1-73-1;
 H500: AMO TDCSU STARTED

```

+-----+
|              DEV = S2CONN                      PEN = 1-01-073-1 |
+-----+
| COTNO    = 4          COPNO    = 4          DPLN     = 0      |
| ITR      = 0          COS      = 32         LCOSV    = 32     |
| LCOSD    = 32         CCT      = HIPATH S2  DESTNO   = 111    |
| PROTVAR = PSS1V2    SEGMENT  = 1          TCHARG   = N      |
| SUPPRESS = 0          DGTPR    =           CHIMAP  = N      |
| ISDNCC   =           ISDNAC   =           ISDNLC  =       |
| ISDNIP   =           ISDNNP   =           |
| PNPL2C   =           PNPL1C   =           PNPLC   =       |
| PNPL2P   =           PNPL1P   =           PNPAC   =       |
| TRACOUNT = 31         SATCOUNT = MANY     NNO     = 111    |
| ALARMNO  = 0          FIDX     = 1          CARRIER = 1      |
| ZONE     = EMPTY     COTX     = 4          FWDX    = 5      |
| DOMTYPE  =           DOMAINNO =           TPROFNO =       |
| INIGHT   =           |
| CCHDL    =           UUSCCX   = 16         UUSCCY   = 8      |
+-----+
| TGRP     = 38         SRCHMODE = CIR        BCNEG    = Y      |
| BCGR     = 1          INS      = Y          LWPAR   = 3      |
| LWPP     = 0          LWLT    = 0          LWPS    = 0      |
| LWR1     = 0          LWR2    = 0          |
| BCHAN    1 && 30      |
+-----+

```

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS
 DISPLAY COMPLETED;

<DISPLAY-LWPAR:INFOPAT="3";
 DISPLAY-LWPAR:INFOPAT="3";
 H500: AMO LWPAR STARTED



```

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

```

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

PSTN Trunk Configuration, TDCSU

```

<dis-tdcsu
PEN1 = 1-1-79-1;
DIS-TDCSU:1-1-79-1;
H500: AMO TDCSU STARTED

```

```

+-----+
|          DIGITAL TRUNK (FORMAT=L)  -----+
|          DEV = S2CONN                PEN = 1-01-079-1
+-----+
| COTNO   = 4          COPNO   = 4          DPLN    = 0
| ITR     = 0          COS     = 32         LCOSV   = 32
| LCOSD   = 32         CCT     =           DESTNO  = 59
| PROTVAR = ETSI      SEGMENT = 1          TCHARG  = N
| SUPPRESS = 0         DGTPR   =           CHIMAP  = N
| ISDNCC  =           ISDNAC  =           ISDNLC  =
| ISDNIP  =           ISDNPN  =
| PNPL2C  =           PNPL1C  =           PNPLC   =
| PNPL2P  =           PNPL1P  =           PNPAC  =
| TRACOUNT = 31        SATCOUNT = MANY     NNO     = 59
| ALARMNO = 0          FIDX    = 1          CARRIER = 1
| ZONE    = EMPTY     COTX    = 4          FWDX    = 10
| DOMTYPE =           DOMAINNO =          TPROFNO =
| INIGHT  =
| CCHDL   =           UUSCCX  = 16         UUSCCY  = 8
+-----+
| TGRP    = 71        SRCHMODE = CIR        BCNEG   = N
| BCGR    = 1         INS      = Y          LWPAR  = 2
| LWPP    = 0         LWLT    = 0          LWPS    = 0
| LWR1    = 0         LWR2    = 0
| BCHAN   1 && 30
+-----+

```

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS
 DISPLAY COMPLETED;

Reference Clock Configuration, REFTA

For Master-side Configuration

```

<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
H500: AMO REFTA STARTED

```



```

+-----+
| REFERENCE CLOCK CIRCUITS |
+-----+
| PEN      | MODULE | DEVICE | PRI | ERROR | BLOCK | SUPP. | READY |
|          |        |        |     |        |        |        | BUT   |
|          |        |        |     |        |        |        | ASYN. |
+-----+
| 1- 1- 73- 1 | DIU-N2 | S2CONN | 0 | 59090 | N |        | N |
+-----+

```

AMO-REFTA-111 REFERENCE CLOCK TABLE
 DISPLAY COMPLETED;

For Slave-side Configuration

```

<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
H500: AMO REFTA STARTED

```

```

+-----+
| REFERENCE CLOCK CIRCUITS |
+-----+
| PEN      | MODULE | DEVICE | PRI | ERROR | BLOCK | SUPP. | READY |
|          |        |        |     |        |        |        | BUT   |
|          |        |        |     |        |        |        | ASYN. |
+-----+
| 1- 1- 73- 1 | DIU-N2 | S2CONN | 11 | 59090 | N |        | N |
+-----+

```

AMO-REFTA-111 REFERENCE CLOCK TABLE
 DISPLAY COMPLETED;

Trunk Least Cost Routing Configuration

LDAT

For Closed (Uniformed) Numbering Plan:

```

<DISPLAY-LDAT:TYPE=LCR,LROUTE=111;
DISPLAY-LDAT:TYPE=LCR,LROUTE=111;
H500: AMO LDAT STARTED

```

```

+-----+
| LROUTE = 111  LDPLN      NAME = ROPT CCM      SERVICE = ALL |
| TYPE = LCR                                DNNO OF ROUTE = 111 |
| SERVICE INFO = |
+-----+
| LRTEL | LVAL | TGRP | ODR | LAUTH | SCHEDULE | CARRIER | BAND |
|        |      |      |     |       | ABCDEFGH |          | ZONE | WPTH | LATTR |
+-----+
| 1     | 1    | 38   | 4   | 1     | ***** | 1       | EMPTY | 1    | NONE |
|        | DNNO = 111 |
+-----+

```

AMO-LDAT -111 LCR-DIRECTIONS
 DISPLAY COMPLETED;

For Open (use of access codes) Numbering Plan:

```

<DISPLAY-LDAT:TYPE=LCR,LROUTE=38;
DISPLAY-LDAT:TYPE=LCR,LROUTE=38;
H500: AMO LDAT STARTED

```

```

+-----+
| LROUTE = 38  LDPLN      NAME = PRI      SERVICE = ALL |
+-----+

```



```

| TYPE = LCR                                DNNNO OF ROUTE =      111 |
| SERVICE INFO =                            |
+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTEL | LVAL | TGRP | ODR | LAUTH | SCHEDULE | CARRIER | BAND | LATTR |
| ABCDEFGH | ZONE | WPTH |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 38 | 1 | 1 | ***** | 1 | EMPTY | 1 | NONE |
| DNNNO = 1 -1 -999 |
+-----+-----+-----+-----+-----+-----+-----+

```

AMO-LDAT -111 LCR-DIRECTIONS
 DISPLAY COMPLETED;

For PSTN Numbering Plan:

<DISPLAY-LDAT:TYPE=LCR,LROUTE=916;
 DISPLAY-LDAT:TYPE=LCR,LROUTE=916;
 H500: AMO LDAT STARTED

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| LROUTE = 916 LDPLN      NAME = 91650 PSTN          SERVICE = ALL |
| TYPE = LCR                                DNNNO OF ROUTE =      59 |
| SERVICE INFO =                            |
+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTEL | LVAL | TGRP | ODR | LAUTH | SCHEDULE | CARRIER | BAND | LATTR |
| ABCDEFGH | ZONE | WPTH |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | 71 | 6 | 1 | ***** | 1 | EMPTY | 1 | NONE |
| DNNNO = 99 |
+-----+-----+-----+-----+-----+-----+-----+

```

AMO-LDAT -111 LCR-DIRECTIONS
 DISPLAY COMPLETED;

RICHT

<dis-richt:lrte,111;
 DIS-RICT:LRTE,111;
 H500: AMO RICHT STARTED

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTE = 111 NAME = ROPT CCM          (NEUTRAL) SRVC = ALL |
| DNNNO = 111 DESTNO = 111 |
| ROUTOPT = YES REROUT = YES PLB = NO FWDBL = NO |
| MFV: CNV=WITHOUT DSP=WITHOUT TEXT= PULS= |
| ROUTENO = 15 BUGS = LIN ROUTATT = NO MAINGRP = 15 |
| INFO = |
+-----+-----+-----+-----+-----+-----+-----+-----+
| TGRP = 38 LDAT PRI MWI          (NEUTRAL) SUBGROUP = 9 |
+-----+-----+-----+-----+-----+-----+-----+

```

AMO-RICT-111 TRUNK ROUTING
 DISPLAY COMPLETED;

<DISPLAY-RICT:MODE=LRTE,LRTE=38;
 DISPLAY-RICT:MODE=LRTE,LRTE=38;
 H500: AMO RICHT STARTED

```

+-----+-----+-----+-----+-----+-----+-----+-----+
| LRTE = 38 NAME = PRI          (NEUTRAL) SRVC = ALL |
| DNNNO = 111 |
| ROUTOPT = YES REROUT = YES PLB = NO FWDBL = NO |
| MFV: CNV=FIX DSP=WITHOUT TEXT= PULS=PP300 |
| ROUTENO = 8 BUGS = LIN ROUTATT = NO MAINGRP = 8 |
| INFO = |
+-----+-----+-----+-----+-----+-----+-----+

```



```
| TGRP = 38 LDAT ETSI CCM (NEUTRAL) SUBGROUP = 9 |
+-----+
```

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

PSTN RICHT

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

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

LCR Out-dial Rules, LODR

```
<dis-lodr:1;
DIS-LODR:1;
H500: AMO LODR STARTED
+-----+
| ODR POSITION CMD PARAMETER |
+-----+
| 1 1 ECHO 2 |
| 2 2 END |
+-----+
| INFO:PSTN |
+-----+
```

```
H03: THE NEXT FREE ODR IS 7
```

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

In order to enable In-band DTMF signaling on digital stations for Voicemail applications, the RICHT has to be changed so that the parameter DTMF CNV=FIX.

For Closed (Uniformed) Numbering Plan:

```
<CHANGE-RICHT:MODE=CD,CD=001,SVC=VCE,TYPE=DTMF,DTMFCNV=FIX;
CHANGE-RICHT:MODE=CD,CD=001,SVC=VCE,TYPE=DTMF,DTMFCNV=FIX;
H500: AMO RICHT STARTED
```



AMO-RICHT-111 TRUNK ROUTING
CHANGE COMPLETED;

Close numbering RICHT

<DISPLAY-RICHT:MODE=CD;
DISPLAY-RICHT:MODE=CD;
H500: AMO RICHT STARTED

ROUTES FOR ALL DPLN										SVC = VCE	
CODE	NAME, CQMAX, DESTNO AND CPS	TGRP CCNO	P L	DTMF			LRTE	CPAR	U F	N W	
	1 11111 12345 67890 12345		B	CNV	DSP	TEXT	PULS PAUSE		I D T B		
001 NEUTRAL	..... ETSI CCM DNNO: 111 DESTNO : 111 ROUTOPT : YES REROUT : YES	38	F	W			PP300	888		
002 NEUTRAL	..... ETSI HIPATH DNNO: 55 DESTNO : 55 ROUTOPT : YES REROUT : YES	37	W	W				999		
003 NEUTRAL	..... CLOSEDDPNSS DNNO: 560 DESTNO : 56 ROUTOPT : YES REROUT : YES	60	W	W				561		
005 NEUTRAL	..... CLOSED E1 DNNO: 333 DESTNO : 33 REROUT : YES	71	W	W				3000		
006 NEUTRAL	..... BRI CLOSED DNNO: 25 DESTNO : 25 REROUT : YES	40	W	W				2500		

For Open (use of access codes) Numbering Plan:

<CHANGE-RICHT:MODE=LRTE,LRTE=38,DTMFCNV=FIX;
CHANGE-RICHT:MODE=LRTE,LRTE=38,DTMFCNV=FIX;
H500: AMO RICHT STARTED

AMO-RICHT-111 TRUNK ROUTING
CHANGE COMPLETED;

<DISPLAY-RICHT:MODE=LRTE,LRTE=38;
DISPLAY-RICHT:MODE=LRTE,LRTE=38;
H500: AMO RICHT STARTED



```

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

```

AMO-RICHT-111 TRUNK ROUTING
 DISPLAY COMPLETED;

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

```

<DISPLAY-COSSU:TYPE=COS,COS=7;
DISPLAY-COSSU:TYPE=COS,COS=7;
H500: AMO COSSU STARTED

```

COS	VOICE	FAX	TTX	VTX	DTE
7	>7: STANDARD/FWDNWK - NOANSA&FWDBSY				
	TA	NOCO	NOCO	NOCO	TA
	TSULD	NOTIE	NOTIE	NOTIE	TNOTCR
	TNOTCR				BASIC
	CDRINT				MSN
	CDRS				CDRINT
	CDRC				MULTRA
	MB				
	COSXCD				
	VCE				
	SPKR				
	DATA				
	NOANSA				
	FWDNWK				
	RERING				
	MSN				
	FWDBSY				
	FWDECA				
	CCBS				
	FWDEXT				

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

Station Configuration for Name and Number Restrictions

```

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

```

USER DATA									
STNO	=8000	OPT	=OPTI	COS1	=7	DPLN	=0	SPDI	=Y
MAINO	=8000	CONN	=DIR	COS2	=7	ITR	=0	SPDC1	=0
PEN	= 1- 1- 55-	1		LCOSV1	=31	COSX	=0	SPDC2	=1
INS	=Y	STD	=3	LCOSV2	=31	SERVID	=0	CBKBMAX	=5
		SECR	=N	LCOSD1	=31	DSSTNA	=N	RCBKB	=N



```

SSTNO   =Y          DIGNODIS=N          LCOSD2 =31          DSSTNB =Y          RCBKNA =N
TRACE   =N          HFREE   =          ASYNCT =500        PERMACT=          CBKNAMB=Y
ALARMNO =0          HMUSIC  =0          API     =N          TEXTSEL=ENGLISH
EXTBUS  =          REP     =0          OPTICOM=N         OPTISPA:0        DLAUT  =
CALLOG  =NONE      IDCR    =N          OPTICA  =0         OPTIS0A:0        DLMAN  =
                                                HEADSET =N         OPTIDA  =0         OPTIABA:0        PRIO   =
                                                HSKEY   =NORMAL    ATMADDR=          VPI    =
                                                DFSVCANA=          TFAGRP =          PATTERN=         VCI    =
DVCFIG  =OPTISET   TSI     =1          SOPTIDX=          SPROT  =
                                                DOPTIDX=          DPROT  =
                                                FOPTIDX=          FPROT  =
                                                TOPTIDX=          TPROT  =
                                                VOPTIDX=          VPROT  =

```

```

----- ACTIVATION IDENTIFIERS FOR FEATURES -----
FWDS    :N          FWDT    :N          FWDV    :N          FWDF    :N          FWDD    :N
HTOS    :N          HTOT    :N          HTOV    :N          HTOF    :N          HTOD    :N
DND     :N          VCP     :Y          CWT     :N          TCLOGIN:N

```

```

----- FEATURES AND GROUP MEMBERSHIPS -----

```

```

ESSTN   :
PUGR    :          HUNTING GROUP   : N
KEYSYS  :N          NIGHT OPTION    : N          ASSOCIATED STN      : N

```

```

----- SUBSCRIBER ATTRIBUTES (AMO SDAT) -----

```

```

NONE

```

```

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

```



Configuring the Cisco Unified CallManager

6608-E1 Gateway Configuration

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

[Back to Find/List Gateways](#)
[Dependency Records](#)

Product : Cisco Catalyst 6000 E1 VoIP Gateway
Gateway : S0/DS1-0@SDA0001C9D8633E
Device Protocol: Digital Access PRI
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: [172.20.32.103](#)

Status: Ready

Device Information

MAC Address*	<input type="text" value="0001C9D8633E"/>
Description	<input type="text" value="SDA0001C9D8633E"/>
Device Pool*	<input type="text" value="Default"/>
Network Locale	<input type="text" value="United States"/>
Media Resource Group List	<input type="text" value=" < None >"/>
Location	<input type="text" value=" < None >"/>
AAR Group	<input type="text" value=" < None >"/>
Load Information	<input type="text"/>

Multilevel Precedence and Preemption (MLPP) Information


MLPP Domain (e.g., "0000FF")	<input type="text"/>
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="Continuous Number"/>



PCM Type*	A-law
Delay for first restart (1/8 sec ticks)	32
Delay between restarts (1/8 sec ticks)	4
<input checked="" type="checkbox"/> Inhibit restarts at PRI initialization	
<input type="checkbox"/> Enable status poll	
Call Routing Information	
Inbound Calls	
Significant Digits*	All
Calling Search Space	Phones
AAR Calling Search Space	< None >
Prefix DN	
Outbound Calls	
Calling Line ID Presentation*	Default
Calling Party Selection*	Originator
Called party IE number type unknown*	Cisco CallManager
Calling party IE number type unknown*	Cisco CallManager
Called Numbering Plan*	Private
Calling Numbering Plan*	Cisco CallManager
Number of digits to strip*	0
Caller ID DN	
SMDI Base Port*	0
PRI Protocol Type Specific Information	
<input checked="" type="checkbox"/> Display IE Delivery	
<input checked="" type="checkbox"/> Redirecting Number IE Delivery - Outbound	
<input checked="" type="checkbox"/> Redirecting Number IE Delivery - Inbound	
<input checked="" type="checkbox"/> Send Extra Leading Character In DisplayIE***	
<input type="checkbox"/> Setup non-ISDN Progress Indicator IE Enable****	

<input type="checkbox"/>	MCDN Channel Number Extension Bit Set to Zero**
<input type="checkbox"/>	Send Calling Name In Facility IE
<input type="checkbox"/>	Interface Identifier Present**
Interface Identifier Value**	<input type="text" value="0"/>
Connected Line ID Presentation (QSIG Inbound Call)*	<input type="text" value="Default"/>
Connected PBX Model	<input type="text" value="None"/>
Product Specific Configuration 	
Clock Reference*	<input type="text" value="Network"/>
Framing*	<input type="text" value="CRC4"/>
Audio Signal Adjustment into IP Network*	<input type="text" value="NoDbPadding"/>
Audio Signal Adjustment from IP Network*	<input type="text" value="NoDbPadding"/>
Zero Suppression*	<input type="text" value="HDB3"/>
Digit On Duration(50-500ms)*	<input type="text" value="100"/>
Interdigit Duration(50-500msec)*	<input type="text" value="100"/>
SNMP Community String	<input type="text" value="public"/>
Disable SNMP Set operations*	<input type="checkbox"/>
Debug Port Enable*	<input checked="" type="checkbox"/>
Hold Tone Silence Duration*	<input type="text" value="0"/>
Port Used for Voice Calls*	<input checked="" type="checkbox"/>
Port Used for Modem Calls*	<input checked="" type="checkbox"/>
Port Used for Fax Calls*	<input checked="" type="checkbox"/>
Fax and Modem Parameters	
Fax Relay Enable*	<input checked="" type="checkbox"/>
Fax Error Correction Mode Override*	<input checked="" type="checkbox"/>
Maximum Fax Rate*	<input type="text" value="14400bps"/>
Fax Payload Size*	<input type="text" value="20"/>
Non Standard Facilities Country Code*	<input type="text" value="65535"/>
Non Standard Facilities Number*	<input type="text"/>

Non Standard Facilities Vendor Code*	<input type="text" value="65535"/>
Fax/Modem Packet Redundancy*	<input type="checkbox"/>
NSE Type*	<input type="text" value="Non-IOS Gateways"/>

Playout Delay Parameters

Initial Playout Delay*	<input type="text" value="40"/>
Minimum Playout Delay*	<input type="text" value="20"/>
Maximum Playout Delay*	<input type="text" value="150"/>

Echo Canceller Configuration

Echo TailLength (ms)*	<input type="text" value="32 ms"/>
Minimum ERL (db)*	<input type="text" value="6 db"/>

* indicates required item
** applicable to DMS-100 protocol only
*** applicable to DMS-100 protocol and DMS-250 protocol only
**** may be required to force ringback from some PBXs

[Back to Find/List Gateways](#)

Non Standard Facilities Vendor Code*	<input type="text" value="65535"/>
Fax/Modem Packet Redundancy*	<input type="checkbox"/>
NSE Type*	<input type="text" value="Non-IOS Gateways"/>

Playout Delay Parameters

Initial Playout Delay*	<input type="text" value="40"/>
Minimum Playout Delay*	<input type="text" value="20"/>
Maximum Playout Delay*	<input type="text" value="150"/>

Echo Canceller Configuration

Echo TailLength (ms)*	<input type="text" value="32 ms"/>
Minimum ERL (db)*	<input type="text" value="6 db"/>

* indicates required item
** applicable to DMS-100 protocol only
*** applicable to DMS-100 protocol and DMS-250 protocol only
**** may be required to force ringback from some PBXs

[Back to Find/List Gateways](#)

Partitions Configuration

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Find and List Partitions [Add a New Partition](#)

2 matching record(s) for Partition Name begins with ""

Find Partitions where Partition Name
and show items per page
To list all items, click Find without entering any search text.

Matching record(s) 1 to 2 of 2

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

First Previous Next Last Page of 1



Calling Search Space Configuration

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Calling Search Space Configuration

[Add New Calling Search Space](#)
[Back to Find/List Calling Search Spaces](#)
[Dependency Records](#)

Calling Search Space: Incoming Trunk
Status: Ready

Calling Search Space Information

Calling Search Space Name*

Description

Route Partitions for this Calling Search Space

Find Partitions containing

Available Partitions

Phones

▼ ▲

Selected Partitions*
(ordered by highest priority)

Incoming Trunk

▲ ▼

* indicates required item

Calling Search Space Configuration

[Add New Calling Search Space](#)
[Back to Find/List Calling Search Spaces](#)
[Dependency Records](#)

Calling Search Space: Phones (in use)

Status: Ready

Calling Search Space Information

Calling Search Space Name*

Description

Route Partitions for this Calling Search Space

Find Partitions containing

Available Partitions



Selected Partitions*
(ordered by highest priority)

* indicates required item



Enbloc Route Pattern Configuration

Route Pattern/Hunt Pilot: 8XXX
Status: Update completed
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Pattern Definition

Route Pattern/Hunt Pilot*	<input type="text" value="8XXX"/>	
Partition	< None >	
Description	<input type="text"/>	
Numbering Plan*	North American Numbering Plan	
Route Filter	< None >	
MLPP Precedence	Default	
Gateway or Route/Hunt List*	S0/DS1-0@SDA0001C9D8633E (Edit)	
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="-- Not Selected --"/>	
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending	<input type="checkbox"/> Urgent Priority

Calling Party Transformations

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

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

Discard Digits	< None >
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

ISDN Network-Specific Facilities Information Element

Carrier Identification Code	<input type="text"/>	
Network Service Protocol	-- Not Selected --	
Network Service	Service Parameter Name	Service Parameter Value
-- Not Selected --	< Not Exist >	<input type="text"/>



Overlap Sending Route Pattern Configuration

Route Pattern/Hunt Pilot: 9.X

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option

Route this pattern

Block this pattern

Provide Outside Dial Tone Allow Overlap Sending 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)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="— Not Selected —"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>



Route Pattern for Cisco Unity Voicemail

Route Pattern/Hunt Pilot: 499X

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

[Copy](#) [Update](#) [Delete](#)

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option

Route this pattern

Block this pattern

Provide Outside Dial Tone Allow Overlap Sending 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)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="— Not Selected —"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>

Cisco Unity Voicemail HuntList

System
Route Plan
Service
Feature
Device
User
Application
Help

Cisco CallManager Administration
CISCO SYSTEMS

Route/Hunt List Configuration

[Add a new Route/Hunt List](#)
[Back to Find/List Route/Hunt Lists](#)
[Dependency Records](#)

Route/Hunt List Details

CiscoUM1

Route/Hunt List: UnityHuntList

Status: Ready

Copy
Update
Delete
Reset

Route/Hunt List Information

Route/Hunt List Name*

Description

Cisco CallManager Group*

Enable this Route/Hunt List (change effective on Update; no reset required)

Route/Hunt List Member Information

Add Route Group
Add Line Group

Selected Groups*
(ordered by highest priority)

▼ ▲

Removed Groups
(to be removed from Route/Hunt List when you click Update)

* indicates required item

Cisco Unity Voicemail Line Group



Line Group Configuration

[Add new Line Group](#)
[Back to Find/List Line Groups](#)
[Dependency Records](#)

Directory Numbers

- 778 4990
779
- 778 4991
779

Line Group: CiscoUM1

Status: Ready

Line Group Information

Line Group Name*
RNA Reversion Timeout*
Distribution Algorithm*

Hunt Options

No Answer*
Busy**
Not Available**

Line Group Member Information

Find Directory Numbers to add to Line Group

Route Partition

Directory Numbers Contains

Available DN/Route Partition
(Do not include directory numbers of application-controlled IP phones, or application-monitored IP phones in the line group.)

Current Line Group Members

Selected DN/Route Partition*

Removed DN/Route Partition
(to be removed from Line Group when you click Update)

Subscribers

- [Profile](#)
- [Account](#)
- [Phone Password](#)
- [Private Lists](#)
- [Conversation](#)
- [Call Transfer](#)
- [Greetings](#)
- [Caller Input](#)
- [Messages](#)
- [Message Notification](#)
- [Alternate Extensions](#)

Digital Test0 Hicom 330E

Profile

Subscriber Information

First name:

Last name:

Display name:

Class of service: [View](#)

Extension:

Fax ID:

Recorded voice: Volume

Active schedule: [View](#)

Time zone:

Set subscriber for self-enrollment at next login

List in phone directory

Show subscriber in e-mail server address book

Exchange Information

Alias:

Server:

Cisco **Unity** [Log off](#)

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Translation Pattern for Incoming Calls

Translation Pattern Configuration

[Add a New Translation Pattern](#)
[Back to Find/List Translation Patterns](#)

Translation Pattern: 4XXX

Status: Ready

Pattern Definition

Translation Pattern	<input type="text" value="4XXX"/>
Partition	<input type="text" value="Incoming Trunk"/>
Description	<input type="text"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="Phones"/>
MLPP Precedence	<input type="text" value="Default"/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="— Not Selected —"/>
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending
	<input checked="" type="checkbox"/> Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>
Calling Line ID Presentation	<input type="text" value="Default"/>
Calling Name Presentation	<input type="text" value="Default"/>

Connected Party Transformations

Connected Line ID Presentation	<input type="text" value="Default"/>
Connected Name Presentation	<input type="text" value="Default"/>

Called Party Transformations

Discard Digits	<input type="text" value="< None >"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.



PSTN Route Pattern Configuration

Route Pattern/Hunt Pilot: 91650XXXXXX

Status: Ready
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option
 Route this pattern
 Block this pattern

Provide Outside Dial Tone Allow Overlap Sending 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)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="— Not Selected —"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>



CLIR Route Pattern Configuration

Route Pattern/Hunt Pilot: 8XXX

Status: Update completed
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

[Copy](#) [Update](#) [Delete](#)

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option

Route this pattern

Block this pattern

Provide Outside Dial Tone Allow Overlap Sending 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)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value=" — Not Selected —"/>	<input type="text" value=" < Not Exist >"/>	<input type="text"/>

CNIR Route Pattern Configuration



Route Pattern/Hunt Pilot: 8XXX

Status: Update completed
Note: Any update to this Route Pattern or Hunt Pilot automatically resets the associated gateway or Route/Hunt List

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option

Route this pattern

Block this pattern

Provide Outside Dial Tone Allow Overlap Sending 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)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="— Not Selected —"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>



COLR Translation Pattern Configuration

Translation Pattern Configuration

[Add a New Translation Pattern](#)
[Back to Find/List Translation Patterns](#)

Translation Pattern: 4XXX
Status: Update completed

Pattern Definition

Translation Pattern	<input type="text" value="4XXX"/>
Partition	<input type="text" value="Incoming Trunk"/>
Description	<input type="text"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="Phones"/>
MLPP Precedence	<input type="text" value="Default"/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="— Not Selected —"/>

Provide Outside Dial Tone Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>
Calling Line ID Presentation	<input type="text" value="Default"/>
Calling Name Presentation	<input type="text" value="Default"/>

Connected Party Transformations

Connected Line ID Presentation	<input type="text" value="Restricted"/>
Connected Name Presentation	<input type="text" value="Default"/>

Called Party Transformations

Discard Digits	<input type="text" value="< None >"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.

CONR Translation Pattern Configuration

Translation Pattern Configuration

[Add a New Translation Pattern](#)
[Back to Find/List Translation Patterns](#)

Translation Pattern: 4XXX

Status: Update completed

Pattern Definition

Translation Pattern	<input type="text" value="4XXX"/>
Partition	<input type="text" value="Incoming Trunk"/>
Description	<input type="text"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="Phones"/>
MLPP Precedence	<input type="text" value="Default"/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="— Not Selected —"/>
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input checked="" type="checkbox"/> Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>
Calling Line ID Presentation	<input type="text" value="Default"/>
Calling Name Presentation	<input type="text" value="Default"/>

Connected Party Transformations

Connected Line ID Presentation	<input type="text" value="Default"/>
Connected Name Presentation	<input type="text" value="Restricted"/>

Called Party Transformations

Discard Digits	<input type="text" value="< None >"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.

Phone Configuration

[Add a new phone](#)
[Add/Update Speed Dials](#)
[Subscribe/Unsubscribe Services](#)
[Dependency Records](#)
[Back to Find/List Phones](#)

Directory Numbers

Base Phone

- 7912 Line 1 - 4000 in
- 7919 Phones
- 7912 Line 2 - Add new DN
- 7919

Phone: SEP000B5FD22FE8 (Auto 4000)
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: [172.20.32.102](#)

Status: Ready

Phone Configuration (Model = Cisco 7960)

Device Information

MAC Address*	<input type="text" value="000B5FD22FE8"/>
Description	<input type="text" value="Auto 4000"/>
Owner User ID	<input type="text"/> (Select User ID)
Device Pool*	<input type="text" value="Default"/> (View details)
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="< None >"/>
User Hold Audio Source	<input type="text" value="< None >"/>
Network Hold Audio Source	<input type="text" value="< None >"/>
Location	<input type="text" value="< None >"/>
User Locale	<input type="text" value="< None >"/>
Network Locale	<input type="text" value="< None >"/>
Device Security Mode	<input type="text" value="Use System Default"/>
Built In Bridge	<input type="text" value="Default"/>
Privacy	<input type="text" value="Default"/>

Phone Button Template Information

Phone Button Template* [\(View button list\)](#)

Softkey Template Information

Softkey Template

Expansion Module Information

Module 1

Module 2



Directory Number Configuration

[Configure Device \(SEP000B5FD22FE8\)](#)
[Dependency Records](#)

Associated With

SEP000B5FD22FE8
7960 (Line 1)

Directory Number: 4000 (Phones)

Status: Ready

Note: Any update to this Directory Number automatically resets the associated devices

Update

Remove from Device

Reset Devices

Directory Number

Directory Number*

Partition

Directory Number Settings

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

Calling Search Space

AAR Group

User Hold Audio Source

Network Hold Audio Source

Auto Answer

Call Forward and Pickup Settings

	Voice Mail Destination	Calling Search Space
Forward All <input type="checkbox"/>	<input type="text"/>	<input type="text" value="< None >"/>
Forward Busy <input type="checkbox"/>	<input type="text"/>	<input type="text" value="< None >"/>
Forward No Answer <input type="checkbox"/>	<input type="text"/>	<input type="text" value="< None >"/>
No Answer Ring Duration <input type="text"/>	(seconds)	
Call Pickup Group	<input type="text" value="< None >"/>	

MLPP Alternate Party Settings

Target (Destination)

Calling Search Space

No Answer Ring Duration (seconds)

Line Settings for this Device

Display (Internal Caller ID)

Line Text Label

External Phone Number Mask



Message Waiting Lamp Policy	<input type="text" value="Use System Policy"/>
Ring Setting (Phone Idle)	<input type="text" value="Use System Default"/>
Ring Setting (Phone Active)**	<input type="text" value="Use System Default"/>
Multiple Call / Call Waiting Settings	
Maximum Number of Calls*	<input type="text" value="4"/> (1 - 200)
Busy Trigger*	<input type="text" value="2"/> (<= Max. Calls)
Forwarded Call Information Display	
<input checked="" type="checkbox"/> Caller Name	<input checked="" type="checkbox"/> Caller Number
<input checked="" type="checkbox"/> Redirected Number	<input checked="" type="checkbox"/> Dialed Number
<p>* indicates required item; changes to Line or Directory Number settings require restart. ** Ring Setting (Phone Active) applies to this line when any line on the phone has a call in progress.</p>	
Note: If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong characterset is selected. (English characters are included in all character sets.)	
Character Set	<input type="text" value="Western European (Latin 1)"/>



Acronyms

Acronym	Definitions
AOC	Advice-of-charge. Information element is sent with the connection setup information for incoming Euro-ISDN connections. The AOC IE is used for call charge calculation.
CUCM	Cisco Unified CallManager
CFB	Call Forwarding Busy
CFNR	Call Forwarding No Reply
CFU	Call Forwarding Unconditional
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
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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**Corporate
Headquarters**

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

**European
Headquarters**

Cisco Systems International
BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

**Americas
Headquarters**

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

**Asia Pacific
Headquarters**

Cisco Systems, Inc.
Capital Tower
168 Robinson Road
#22-01 to #29-01
Singapore 068912
www.cisco.com
Tel: +65 317 7777
Fax: +65 317 7799

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