



Siemens Hicom 300 E CS Release 6.6 using T1 QSIG to Cisco Unified CallManager 4.0

December 10, 2007 Revision 2

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Introduction

This is an Application Note for Connectivity of Siemens Hicom 300 E CS Release 6.6 PBX with Cisco Unified CallManager (CUCM) Release 4.0 using Cisco 6608-T1 QSIG as MGCP Gateway.

The Network Topology diagram shows the test set-up for end-to-end interoperability with the Cisco Unified CallManager connected to the PBX via 6608-T1 QSIG link as MGCP Gateway.

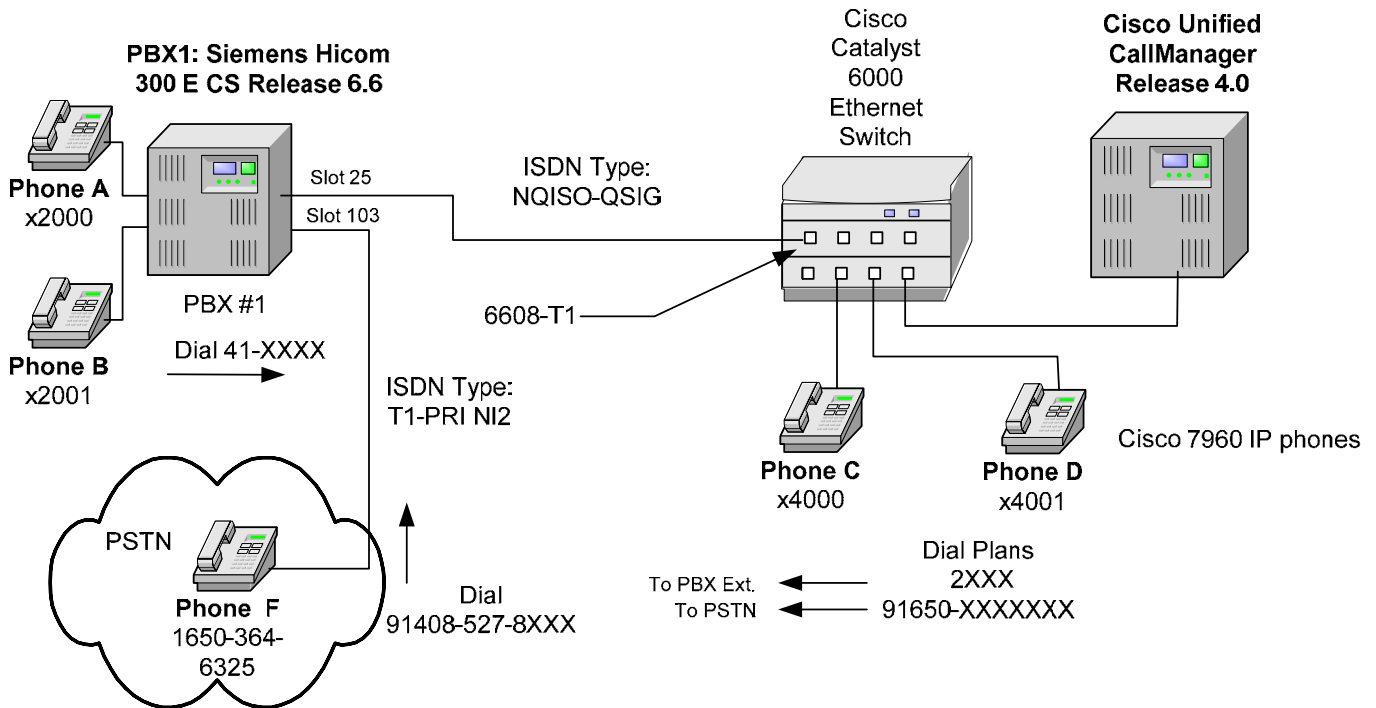
Connectivity is achieved by using the PRI ISO QSIG T1 protocol type on the MGCP gateway and NQISO switch type on the Siemens PBX.

Basic Calls worked 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



System Components

Hardware Requirements

Cisco Hardware

Cisco Catalyst 6000 switch with 6608-T1 Gateway

Cisco Unified CallManager 4.0

Siemens Hicom 300 E CS PBX.

Hardware: TMDN or TMDN 64

Software Requirements

PBX Software version 6.6 with CorNetNQ package

Cisco Unified CallManager 4.0

Cisco WS-X6608-T1 gateway Version 7.6(2)



Features

Features Supported

- CLIP-Calling Line (Number) Identification Presentation
- CNIP-Calling Name Identification Presentation
- COLP-Connected Line (Number) Identification Presentation
- CONP-Connected Name Identification Presentation
- CT-Call Transfer (by join)
- CFU-Call Forwarding Unconditional (by join)
- CFB-Call Forwarding Busy (by join)
- CFNR-Call Forwarding No Reply (by join)
- QSIG MWI- Message Waiting Indication (lamp ON, lamp OFF) supported by Cisco Unified CallManager 4.0 (not tested ¹)

Features Not Supported

- Cisco Unified CallManager 4.0 does not support sending Alerting Name or Busy Name Identification information
- CLIR-Calling Line (Number) Identification Restriction not supported by Hicom 300E CS PBX
- CNIR-Calling Name Identification Restriction not supported by Hicom 300E CS PBX
- COLR- Connected Line (Number) Identification Restriction not supported by Hicom 300E CS PBX
- CONR- Connected Name Identification Restriction not supported by Hicom 300E CS PBX

Configuration

Configuring the Siemens Hicom 300 E CS PBX

Configure in the following sequence:

1. Add the new access code to Dialing Plans
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. Add the new trunk group access code using TGACC
6. Add the channels using TCSU
7. Configure LROUT
8. Configure LCR Out-dial Rules using LODR

¹ MWI is supported on CUCM 4.0 but was not tested because CUCM 4.0 was not configured with a messaging System at the time of testing therefore it is not known at this time whether QSIG MWI integration with Siemens Hicom 300E CS PBX will work. MWI will be tested when the CUCM 4.0 is configured with Unity as the message center PINX and PBX users as remote subscribers.



Configuration Menus and Commands

DPLN

```
<dis-dpln;
TYPE = dgts
DGTS = ;
DIS-DPLN:DGTS,;
H500: AMO DPLN STARTED
```

DIGIT INTERPRETATION		VALID FOR DIAL PLAN 0			
DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS RESULT	RSVD	ROUTE	
	1 1111 1111222	(SKIP DIGIT)			
0	. . . *	ANS			
1	. * . . . *	CO			
2000 - 2023	. . . . . * . . . . .	STN			
2024 - 2026	. . . . . * . . . . .	STN	R		
2222	. . . . . * . . . . .	ATNDIND			
3000 - 3023	. . . . . * . . . . .	STN			
3024 - 3099	. . . . . * . . . . .	STN	R		
36	. . . . . * . . . . .	GENANS			
37 - 41	. * . . . *	CO			
43 - 48	. . . . . * . . . . .	TIE			
49 - 59	. * . . . *	CO			
71000	. . . . . * . . . . .	STN			1
DIGIT INTERPRETATION		VALID FOR DIAL PLAN 0			
DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS RESULT	RSVD	ROUTE	
	1 1111 1111222	(SKIP DIGIT)			
71001 - 79999	. . . . . * . . . . .	STN	R		
8000 - 8001	. . . . . * . . . . .	STN			41
9	. . . . . * . . . . .	TIE			
*0	* . . . *	ACDWORK			
*2	* . . . *	ACCTCODE			
*3	* . . . *	PUDIR			
*4	* . . . *	CONFRNC			
*52	* . . . *	MWCAN			
*530	* . . . *	PMCANCEL			
*532	* . . . *	PMCALLBK			
*563	* . . . *	BADLINE			
*564	* . . . *	ACDLOGON			
DIGIT INTERPRETATION		VALID FOR DIAL PLAN 0			
DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS RESULT	RSVD	ROUTE	
	1 1111 1111222	(SKIP DIGIT)			
*565	* . . . *	ACDLOGOF			
*570	* . . . *	ACDPQ			
*571	* . . . *	ACDPS			
*572	* . . . *	RING			
*580	* . . . *	ACDSQ			
*581	* . . . *	ACDSS			



*6	*****	..**	.....	.....	ROLMPARK		
*7	*..*	..**	.....	.....	CONSULT		
*80	- *89	*****	..**	.....	PARK		
*9	..**	..**	.....	.....	HOLD		
0	***	.....	.....	.....	BVSL		
1	*..*	..**	.....	.....*	TOGGLE		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		

3	..**	.....*	.....	.....	PU		
**41	- **48	.....	.....	.....*	CONFRMV		
50	*..*	..**	.....	.....	CAFGRAVL		
51	*..*	..**	.....	.....	CAFGRUNA		
6	..**	..**	.....	.....	INTERCOM		
8	..**	.....	.....	.....	MWANS		
***4	.....	.....	.....	.....*	CONFRMVL		
***5	.....	.....	.....	.....	MONSLNT		
#65	*..*	..**	.....	.....	CAFGRUFF		
*#01	.....	.....	.....	.....	RCHNL		
*#02	.....	.....	.....	.....	RTERM		
*#03	.....	.....	.....	.....	LTERM		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		

#04	.....*	.....*	.....	.....	PRITEST		
*#274	*..*	.....	.....	.....	WS		
*#50	*..*	..**	.....	.....	CAFAVLB		
*#51	*..*	..**	.....	.....	CAFUNAV		
*#53	*****	*..**	**..*	.....**	CIDBLK		
*#54	*****	*..**	**..*	.....**	CIDUBLK		
*#55	*..*	..**	.....	.....	CAFFWD		
*#56	*..*	..**	.....	.....	CAFFWDC		
#57	.....*	.....*	.....*	.....*	PIDON		
#58	.....*	.....*	.....*	.....*	PIDOFF		
#590	.....*	.....*	.....*	.....*	DCOSX		
#591	.....*	.....*	.....*	.....*	ACOSX		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		

*#63	*****	*****	*****	*****	CLEAR		
*#65	*..*	..**	.....	.....	CAFLOGOF		
#735	.....*	.....	.....	.....	RELOCATE		
#738	.....*	.....	.....	.....	SET		
*#97	..**	*..*	.....	.....	COXFER		
#0	*..*	..**	.....	.....*	ACDUNAV		
#1	*..*	..**	.....*	.....	ACBK		
#2	*..*	..**	.....	.....	PRION		
#3	..**	..**	.....*	.....*	SPDI		
#4	***.*	..**	.....*	.....*	SNR		
#5	.....*	.....	.....	.....	ADND		
#61	*****	..**	**..*	.....*	SPDC1		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		



DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
#62	.**** .*** **...	SPDC2		
#80	*...* .***	BROADCST		
#81	*...* .***	SPKRCALL		
#8378	.....* .....	HWTEST		
#91	.....* .....	CFWVABTH		
#92	.....* .....	CFWVAEXT		
#93	.....* .....	CFWVAINT		
#94	.....* .....	CFWVB		
#95	.....* .....	CFWVBNA		
#96	.....* .....	CFWVNA		
##056	.....* .....	DATA56		
##1	***** .***	MWACT		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
##2	*...* .***	BUZZ		
##329	.*** *... **...	FAX	R	
##4	*...* .***	VCECALL		
##75	.....* .....	DIGIDAT		
##76	.....* .*** .*. *	SWITCH		
##77	.....* .*** .*** *	DTE		
##78	.....* .*** .....	CODE		
##79	.....* .*** .....	SPEED		
##8	***** .*** .*** .***	MWCANORI		
##90	.....* .....	HUNTPROG		
##92	.....* .....	AHTVCE		
##93	.....* .....	DHTVCE		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
##94	.....* .....	AHTDTE		
##95	.....* .....	DHTDTE		
##96	.....* .....	AHTFAX		
##97	.....* .....	DHTFAX		
##99	.....* .....	HUNTCLR		
##0	*...* .***	ACDAVLB		
##1	.....* .....	DCBK		
##2	*...* .***	PRIOFF		
##3	.....* .....	SPDIPROG		
##4	*...* .***	LNR		
##5	.....* .....	DDND		
##7	*...*	KNOVR		

DIGIT INTERPRETATION VALID FOR DIAL PLAN 0

DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 1111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
##8	***** .***	DTA		
##91	.....* .....	CFWVAOFF		
##*78	.....* .....	RESET		
###1	*...* .***	TRACE		
###20	.....* .*** **...	MILLWAT		
###21	.....* .*** **...	LOOPBACK		
###22	.....* .*** **...	SILENCE		



<dis-tcsu

PEN1 = 1-2-25-1;

DIS-TCSU:1-2-25-1;

H500: AMO TCSU STARTED

```

+-----+
| PEN: 1- 2- 25- 1  INS: Y  BOARD: TMDN64P  DEV: S1B  TGRP: 41  |
+-----+
| TRKID : 0002          TCCID   :              |
| CCT   : QSIG        /0002          |
|-----|-----|-----|-----|
| ACDATA : 0          COTNO   : 6          LCRCOSD : 5          |
| ATNTYP : TIE       DITIDX  : 0          LCRCOSV : 5          |
| BNEGOT : N         DPLN    : 0          LOCANA  :              |
| COPNO  : 6         ITR     : 0          REMANA  :              |
| COSNO  : 75                                     |
+-----+

```

AMO-TCSU -10 TRUNK CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;

TCSU-D Channel

<dis-tcsu

PEN1 = 1-2-25-24;

DIS-TCSU:1-2-25-24;

H500: AMO TCSU STARTED

```

+-----+
| PEN: 1- 2- 25-24  INS: Y  BOARD: TMDN64P  DEV: S1D  |
+-----+
| TCCID :              |
| CCT   : QSIG          |
|-----|-----|-----|-----|
| ACDATA : 0          COTNO   : 6          DPLN    : 0          |
| COPNO  : 6          DITIDX  :              ITR     : 0          |
| CONVER : N         PROTOCOL : NQISO          |
| BEARER : ONE                                     |
| TMR:                                     |
| 302:   15 303:    6 304:   20 305:   30 306:   30          |
| 308:    6 309:   90 310:  110 313:    4 314:    6          |
| 316:  120 322:    4 384:   30 385:   30 386:   30          |
+-----+

```

AMO-TCSU -10 TRUNK CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;

Trunk Least Cost Routing Configuration

LROUT

<dis-lrout

ROUTE = 41;

DIS-LROUT:41;

H500: AMO LROUT STARTED

LCR ROUTE DEFINITION TABLE

```

+-----+
| ROUTENUM = 41          SCHED A = X  AORT   =          INFORMATION  |
| ROUTEELE = 1          B =          AUTH   = 1          TRANS CAP = S3V  |
+-----+

```



```

| BEARER = ONE          C = ONHKQ = Y      TRKSIG = COR
| BANDWTH = 1          D = OFFHKQ = Y      SCCID =
| TRUNKGRP = 41       E = ODRNUM = 1      SVCVCE = NON
| MASTGRP = 3         F = APLTYP = VFD     SVCN-V = NON
| ROUTSERV = N        G =                  FACNUM =
|                      H =

```

```

-----
| ROUTENUM = 41        SCHED A = X  AORT = INFORMATION
| ROUTEELE = 2        B = AUTH = 1    TRANS CAP = S3V
| BEARER = ONE        C = ONHKQ = Y    TRKSIG = COR
| BANDWTH = 1        D = OFFHKQ = Y    SCCID =
| TRUNKGRP = 41       E = ODRNUM = 1    SVCVCE = NON
| MASTGRP = 3         F = APLTYP = VD   SVCN-V = NON
| ROUTSERV = N        G =                  FACNUM =
|                      H =

```

END OF LCR ROUTE DEFINITION TABLE DISPLAY
 AMO-LROUT-10 ROUTE DEFINITION DETERMINATION PACKAGE

DISPLAY COMPLETED;

PSTN Trunk Routing Configuration

<dis-ldpln

PLAN = 148
 DIS-LDPLN:148;

H500: AMO LDPLN STARTED

OUTPUT DISPLAY FORMAT

```

-----
| PLAN NUMBER: 148    | DIGIT PATTERN      : 9-1-NXX-NXX-XXXX
|                   | AREA CODE FIELD   : NONE
|                   | OFFICE CODE FIELD : NONE
|                   | TYPE OF NUMBER    : UNKNOWN
|                   | NUMBERING PLAN ID : ISDN_TELEPHONY

```

```

-----
| DIGIT ANALYSIS GROUP : 0
| ROUTE                 : 1
| ACCOUNT FLAG         :
| USER AUTHORIZATION   : 1
| AMO-LDPLN-25         : AMO LCR DIALING PLAN FOR THE SWITCHING UNIT

```

DISPLAY COMPLETED;

<dis-lrout

ROUTE = 1

DIS-LROUT:1;
 H500: AMO LROUT STARTED

LCR ROUTE DEFINITION TABLE

```

-----
| ROUTENUM = 1        SCHED A = X  AORT = INFORMATION
| ROUTEELE = 1        B = AUTH = 1    TRANS CAP = S3
| BEARER = ONE        C = ONHKQ = Y    TRKSIG = PRI
| BANDWTH = 1        D = OFFHKQ = Y    SCCID =

```



```

|TRUNKGRP = 40          E =      ODRNUM = 1      SVCVCE = NON      |
|MASTGRP  = 1          F =      APLTYP = VD      SVCN-V  = NON      |
|ROUTSERV = N          G =                                  FACNUM =      |
|                    H =                                  |
-----

```

```

|ROUTENUM = 1          SCHED A = X  AORT   =      INFORMATION |
|ROUTEELE = 2          B =      AUTH   = 1      TRANS CAP = A      |
|BEARER   = ONE       C =      ONHKQ  = Y      TRKSIG  = PRI      |
|BANDWTH  = 1          D =      OFFHKQ = Y      SCCID   =          |
|TRUNKGRP = 40        E =      ODRNUM = 1      SVCVCE = NON      |
|MASTGRP  = 1          F =      APLTYP = VFD     SVCN-V  = NON      |
|ROUTSERV = N          G =                                  FACNUM =          |
|                    H =                                  |
-----

```

END OF LCR ROUTE DEFINITION TABLE DISPLAY

AMO-LROUT-25 ROUTE DEFINITION DETERMINATION PACKAGE

DISPLAY COMPLETED;

<

LCR Out-dial Rules, LODR

<dis-lodr;

DIS-LODR;

H500: AMO LODR STARTED

<< DISPLAY LCR OUTDIAL RULE >>

ODR NO	COMMAND	BRANCH VALUE
1	ECHOALL	
	END	

----- END OF DISPLAY -----

AMO-LODR -105 AMO LCR ODR FOR SWITCHING UNIT

DISPLAY COMPLETED;

Station Configuration, SCSU

<dis-scsu

STNO = 2001;

TYPE = all

DIS-SCSU:2001,ALL;

H500: AMO SCSU STARTED

STNO	2001	NAME	DIGITAL TEST 1			ACT DEV
COS1	60	COSX	1	DIAL	-	DLIDX - DEVFUNC OPTI
COS2	60	SPDC1	1	DPLN	0	TA N PEN 1-2-37-1
LCRCOSV1	12	SPDC2	2	HTLNIDX	-	TADLIDX - PUBSCR 2001
LCRCOSV2	12	SPDI	30	ITR	0	TAINS - ACTCDE 000000000000
LCRCOSD1	12	HANDSFR	Y	SPECL	-	ACCLASS - NTYPE NAT
LCRCOSD2	12	INS	Y	PUGRP	-	QPRIOR - RPTYPE
DSSALERT	N	DTS	N	STD	1	FAXSERV N/A HDSTYPE NONE
NWBALNO	-	CDIDX	-	WINKOFF	-	SEIZE - DTE DL VER
CFWDV	N	CFWDD	N	DND	N	CALLWAIT N VCE DL VER 0
VCP	OFF	MSGWLMP	-	PHONMAIL	N	COMGRP 0 DNIDSP Y
MAINO	-	CUI	Y	KEYM	0	TSI 1 LOCODE -
DCFWBUSY	N	API	N	EVMS	N	EVMSIDX 0 OPTITYPE OEADVPL



```
TATYPE      -          TATYPE2      -          FLASH      -
PATTERN     -  TFAGROUP - ATMADDR    -          SPKALERT   Y
RELTEST     -
FIXED CFW1  -          FIXED CFW2   -          VAR CFW    -
STATION-HUNT N
UCD-HUNT    N
PILOT-HUNT  N
NIGHTVARIANT N
```

```
AMO-SCSU -10          SUBSCRIBER CONFIGURATION IN THE SWU
DISPLAY COMPLETED;
```



Configuring the Cisco Unified CallManager

6608-T1 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 T1 VoIP Gateway
Gateway : S0/DS1-0@SDA0001C9D93A98
Device Protocol: Digital Access PRI
Registration: Registered with Cisco CallManager 172.20.32.254
IP Address: [172.20.32.112](#)

Status: Ready

Device Information

MAC Address*	<input type="text" value="0001C9D93A98"/>
Description	<input type="text" value="SDA0001C9D93A98"/>
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	<input type="text" value="Off"/>
MLPP Preemption	<input type="text" value="Disabled"/>

Interface Information

PRI Protocol Type*	<input type="text" value="PRI ISO QSIG T1"/>
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="μ-law"/>
Delay for first restart (1/8 sec ticks)	<input type="text" value="32"/>
Delay between restarts (1/8 sec ticks)	<input type="text" value="4"/>
<input checked="" type="checkbox"/> Inhibit restarts at PRI initialization	
<input checked="" type="checkbox"/> Enable status poll	
Call Routing Information	
Inbound Calls	
Significant Digits*	<input type="text" value="All"/>
Calling Search Space	<input type="text" value="Incoming Trunk"/>
AAR Calling Search Space	<input type="text" value=" < None >"/>
Prefix DN	<input type="text"/>
Outbound Calls	
Calling Line ID Presentation*	<input type="text" value="Default"/>
Calling Party Selection*	<input type="text" value="Originator"/>
Called party IE number type unknown*	<input type="text" value="National"/>
Calling party IE number type unknown*	<input type="text" value="National"/>
Called Numbering Plan*	<input type="text" value="ISDN"/>
Calling Numbering Plan*	<input type="text" value="ISDN"/>
Number of digits to strip*	<input type="text" value="0"/>
Caller ID DN	<input type="text"/>
SMDI Base Port*	<input type="text" value="0"/>
PRI Protocol Type Specific Information	
<input checked="" type="checkbox"/> Display IE Delivery	
<input checked="" type="checkbox"/> Redirecting Number IE Delivery - Outbound	
<input 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 checked="" type="checkbox"/>	MCDN Channel Number Extension Bit Set to Zero**
<input checked="" 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"/>
TX-Level CSU*	<input type="text" value="0dB"/>
FDL Channel*	<input type="text" value="ATT 54016"/>
Framing*	<input type="text" value="ESF"/>
Audio Signal Adjustment into IP Network*	<input type="text" value="NoDbPadding"/>
Audio Signal Adjustment from IP Network*	<input type="text" value="NoDbPadding"/>
Yellow Alarm*	<input type="text" value="Bit2"/>
Zero Suppression*	<input type="text" value="B8ZS"/>
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"/>

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 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](#)



Enbloc Route Pattern Configuration

Route Pattern/Hunt Pilot: 2XXX

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"/>

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

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 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.

Translation Pattern for Incoming PSTN Calls

Translation Pattern Configuration

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

Translation Pattern: 8XXX

Status: Ready

Pattern Definition

Translation Pattern	<input type="text" value="8XXX"/>
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="Default"/>

Called Party Transformations

Discard Digits	<input type="text" value="< None >"/>
Called Party Transform Mask	<input type="text" value="4XXX"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

* indicates required item.

CLIR Route Pattern Configuration



Route Pattern/Hunt Pilot: 2XXX

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"/>

CNIR Route Pattern Configuration

Route Pattern/Hunt Pilot: 2XXX

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* 2XXX

Partition < None >

Description

Numbering Plan* North American Numbering Plan

Route Filter < None >

MLPP Precedence Default

Gateway or Route/Hunt List* S0/DS1-0@SDA0001C9D93A98 (Edit)

Route Option
 Route this pattern
 Block this pattern — Not Selected —

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 Default

Calling Name Presentation Restricted

Connected Party Transformations

Connected Line ID Presentation Default

Connected Name Presentation Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol — Not Selected —

Network Service	Service Parameter Name	Service Parameter Value
— Not Selected —	< Not Exist >	



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

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

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*	<input type="text" value="Standard 7960"/> (View button list)
------------------------	---

Softkey Template Information

Softkey Template	<input type="text" value="< None >"/>
------------------	---

Expansion Module Information

Module 1	<input type="text" value="< None >"/>
Module 2	<input type="text" value="< None >"/>

Firmware Load Information (leave blank to use default)	
Phone Load Name	<input type="text"/>
Module 1 Load Name	<input type="text"/> (Module 1 selection required)
Module 2 Load Name	<input type="text"/> (Module 2 selection required)
Cisco IP Phone - External Data Locations (leave blank to use default)	
Information	<input type="text"/>
Directory	<input type="text"/>
Messages	<input type="text"/>
Services	<input type="text"/>
Authentication Server	<input type="text"/>
Proxy Server	<input type="text"/>
Idle	<input type="text"/>
Idle Timer (seconds)	<input type="text"/>
Extension Mobility (Device Profile) Information	
<input type="checkbox"/> Enable Extension Mobility Feature	
Log Out Profile	<input type="text" value="-- Not Selected --"/>
Log In User ID	< None >
Log In Time	< None >
Log Out Time	< None >
Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain	<input type="text"/> (e.g., "0000FF")
MLPP Indication	<input type="text" value="Default"/>
MLPP Preemption	<input type="text" value="Default"/>
Product Specific Configuration 	
Disable Speakerphone	<input type="checkbox"/>
Disable Speakerphone and Headset	<input type="checkbox"/>
Forwarding Delay*	<input type="text" value="Disabled"/>
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"/>



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

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"/>	<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>	
<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.)</p>	
Character Set	<input type="text" value="Western European (Latin 1)"/>



Acronyms

Acronym	Definitions
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
PSTN	Public Switched Telephone Network



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Printed in the USA