



Cisco Unified CallManager 4.0-PBX Interoperability: Siemens Hicom 300E to a Cisco 6608 Gateway using T1 PRI NI2 with MGCP

Introduction

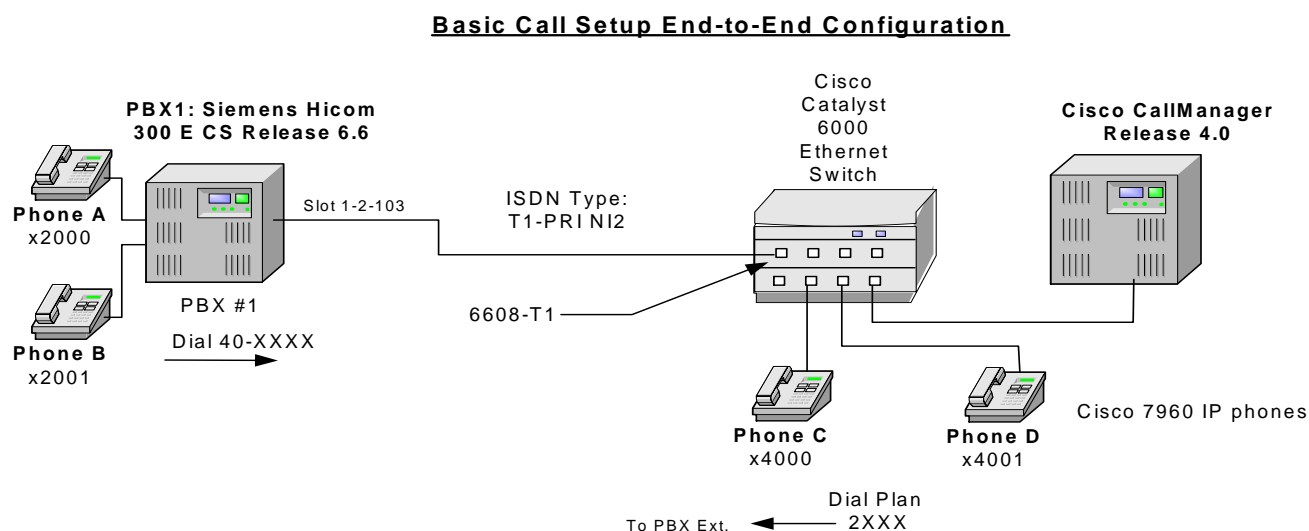
This is an application note for connectivity of the Siemens Hicom 300E with Cisco Unified CallManager Release 4.0 using a Cisco Catalyst 6000 Series Switch with T1 PRI NI2.

- The Network Topology diagram shows the test set-up for end-to-end interoperability with the Cisco Unified CallManager Release 4.0 connected to the Siemens Hicom 300E PBX via T1 PRI link as MGCP Gateway.
- Connectivity is achieved by the industry standard PRI NI-2 protocol. The Siemens Hicom 300 E CS PBX can be configured as either NETWORK or USER side.
- The Siemens Hicom 330E T1 PRI interface with switch-type setting of NI2 does not support Calling Name presentation feature.
- Cisco Unified CallManager Release 4.0 does not send the Connected Number information in the connect message back to Siemens Hicom 330E PBX.



Network Topology

Figure 1. Network Topology



Limitations

- Calling Name delivery and presentation features are not supported by the Siemens Hicom 300 E CS PBX when set to NI2 switch-type.
- When calling from Cisco 7960 IP phone to Siemens digital phone, both phones display Calling/Called Number after the call is answered.
- When calling from Siemens digital phone to Cisco 7960 IP phone, the Cisco IP phone displays the Calling Number after the call is answered. Siemens phone however does not get updated when the call is answered. It displays the number being dialed instead (that is, the Access Code + extension number). It was verified that the Cisco Unified CallManager was not sending "Connected Number" information in the connect message back to the PBX.
- When a call is established on the Siemens digital phone, the phone display is only active (Calling/Called Number is displayed) for approximately 30 seconds, thereafter it goes blank. This behavior is caused by a display timer which is expiring.

System Components

Hardware Requirements

- Cisco Catalyst 6000 Series Switch, WS-6608-E1 Gateway Module
- Siemens Hicom 300E CS PBX with TMDN or TMDN 64
- Cisco Unified CallManager server

Software Requirements

- Cisco Unified CallManager Release 4.0



- Siemens HiCom software 6.6

Features

Key Features Supported

- Calling/Called Number

Key Features Not Supported

- Calling Name
- Connected Name
- Connected Number

Configuration

Configuration Sequence and Tasks

- Add the new access code to Dialing Plans.
- Add the new trunk board using BCSU.
- Configure Class of Trunk using COT.
- Configure Class of Parameter for device handler using COP.
- Add the new trunk group access code using TGACC
- Add the channels using TCSU
- Configure LROUT
- Configure LCR Out-dial Rules using LODR

Configuration Menus and Commands

Configuring the Siemens HiCom 300E

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 (SKIP DIGIT)	RSVD	ROUTE	
0	1 1111 1111222	12345 67890 12345 6789012			
1**			
2000 - 2023**			
2024 - 2026	.....*	.....*	R	
2222**			
3000 - 3023**			
3024 - 3099	.....*	.....*	R	
36**			
37 - 41**			
43 - 48**			
49 - 59**			
6000 - 6099	.....*	.....*		42



DIRECTORY NUMBER	CALL PROGRESS STATE	DIGIT ANALYSIS	RSVD	ROUTE
	1 11111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
7000 - 7999	.**** * *	STN		40
8000 - 8099	.**** * *	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	RSVD	ROUTE
	1 11111 1111222	RESULT		
	12345 67890 12345 6789012	(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 11111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
**3	* . . . *	PU		
**41 - **48	* . . . *	CONFRMV		
**50	* . . . *	CAFGRVL		
**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 11111 1111222	RESULT		
	12345 67890 12345 6789012	(SKIP DIGIT)		
*#04	* . . . *	PRITEST		
*#274	* . . . *	WS		
*#50	* . . . *	CAFVLB		
*#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)		

#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		
###23	.....*	**..*	COMBO		
###4	*.....*	.....*	THRCONF		
###6	.....*	.....*	MONTONE		

AMO-DPLN -10 DIALING PLANS, FEATURE ACCESS CODES
 DISPLAY COMPLETED;

BCSU

<dis-bcsu

TYPE = tmd
 LTG = 1
 LTU = 2
 SLOT = 103

DIS-BCSU:TMD,1,2,103;
 H500: AMO BCSU STARTED

DETAILS OF TMD BOARD AT ADDRESS (LTG.LTU.SLOT) = 1. 2.103					
CABTYP =	1	TIMTYP =	SYST	SIGTYP =	MOS
FRAME =	ESF	TABS =	NO	FCTID =	2
BI8SUB =	YES	BIVDET =	NO		
RDRATIO =	6	RDTH =	2500	RDQUAL =	15000
YLSSEND =	5000	YLTH =	400	YLQUAL =	100
LOS =	150	AOS =	4000		
SESDISTH =	10	SESREQTH =	10		
OESDISTH =	30	OESDISIN =	24-00-00		
OESREQTH =	4	OESREQIN =	04-00-00		
NETUSR =	NETWK	ACKTIM =	1000	DLVTIM =	30000
OCTMAX =	260	RETMAX =	3	WINDOW =	1
CRIDC =		TTSC =		NSFIV =	
NSFTSC =		PFDGT =			
IGN =	0	IID =	1		

AMO-BCSU -13 BOARD CONFIGURATION, SWITCHING UNIT
 DISPLAY COMPLETED;



```

ACD THRESHOLD : * TRACENO : 0 USAGE TYPE: TERR
ALLOCATED TO AT LEAST ONE ROUTE GDTR RULE : 0
SELECTION : LOW CFBLOCK : DISABLED
THE FOLLOWING PORTS (LTG-LTU-SLOT-CIRCUIT) ARE ALLOCATED:
-----
| 1- 2-103- 1| 1- 2-103- 2| 1- 2-103- 3| 1- 2-103- 4| 1- 2-103- 5| 1- 2-103- 6|
-----
| 1- 2-103- 7| 1- 2-103- 8| 1- 2-103- 9| 1- 2-103-10| 1- 2-103-11| 1- 2-103-12|
-----
| 1- 2-103-13| 1- 2-103-14| 1- 2-103-15| 1- 2-103-16| 1- 2-103-17| 1- 2-103-18|
-----
| 1- 2-103-19| 1- 2-103-20| 1- 2-103-21| 1- 2-103-22| 1- 2-103-23| - - - |
-----

```

AMO-TGACC-13 TRUNK GROUP ACCESS CODE
 DISPLAY COMPLETED;

TCSU-B Channel

<dis-tcsu

PEN1 = 1-2-103-1;

DIS-TCSU:1-2-103-1;
 H500: AMO TCSU STARTED

```

-----
| PEN: 1- 2-103- 1 INS: Y BOARD: TMDN64P DEV: PRIB TGRP: 40 |
-----
| TRKID : 0040 TCCID : |
| CCT : T1PRI /0040 |
|-----|
| ACDATA : 0 DITIDX : 0 LOCANA : |
| ATNTYP : ISDN DPLN : 0 REMANA : |
| COPNO : 0 ITR : 0 SIDANI : N |
| COSNO : 75 LCRCOSD : 5 SRTIDX : 3 |
| COTNO : 0 LCRCOSV : 5 TRTBL : DIDCR |
| DEDSVC : NONE FACILITY : * |
|-----|

```

AMO-TCSU -13 TRUNK CONFIGURATION, SWITCHING UNIT
 DISPLAY COMPLETED;

TCSU-D Channel

<dis-tcsu

PEN1 = 1-2-103-24;

DIS-TCSU:1-2-103-24;
 H500: AMO TCSU STARTED

```

-----
| PEN: 1- 2-103-24 INS: Y BOARD: TMDN64P DEV: PRID |
-----
| TCCID : |
| CCT : T1PRI |
|-----|
| ACDATA : 0 DEDSCC : INTERFID : 0 |
| COPNO : 0 DITIDX : ITR : 0 |
| COTNO : 0 DPLN : 0 PROTOCOL : NI2 |
|-----|
| TMR301 : 300 SEC. TMR308 : 4 SEC. TMR313 : 4 SEC. |
| TMR303 : 4 SEC. TMR309 : 90 SEC. TMR316 : 30 SEC. |
| TMR305 : 30 SEC. TMR310 : 30 SEC. TMR322 : 4 SEC. |
| TDELAY : 3000 MSEC. BEARER: ONE |
| NCT : N TNCT : |
|-----|

```




AMO-TCSU -13 TRUNK CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;

Trunk Least Cost Routing Configuration

LROUT

<dis-lrout

ROUTE = 40
DIS-LROUT:40;

H500: AMO LROUT STARTED
LCR ROUTE DEFINITION TABLE

```
-----  
ROUTENUM = 40          SCHED A = X  AORT   =      INFORMATION  
ROUTEELE = 1           B =      AUTH   = 1    TRANS CAP = SU3V  
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 =  
H =  
-----
```

END OF LCR ROUTE DEFINITION TABLE DISPLAY

AMO-LROUT-13 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 -13 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     Y  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     -  SPKALERT  Y
PATTERN   -  TFAGROUP  -  ATMADDR   -
RELTEST   -
FIXED CFW1 -  FIXED CFW2 -  VAR CFW  414990
STATION-HUNT N
UCD-HUNT   N
PILOT-HUNT N
NIGHTVARIANT N
-----

```

```

AMO-SCSU -13      SUBSCRIBER CONFIGURATION IN THE SWU
DISPLAY COMPLETED;

```

Display Timer for Optiset phone

```
<dis-timdl
```

```
TYPEDH = digite
```

```

DIS-TIMD1:DIGITE;
H500: AMO TIMD1 STARTED
TIMERS FOR DIGITE:
=====

```

```

NORMON    = 1000 MS.    NORMOFF   = 3000 MS.
CO1ON     = 250 MS.    COOFF1    = 500 MS.
CO2ON     = 250 MS.    COOFF2    = 3000 MS.
SR1ON     = 2000 MS.   SR1OFF    = 6000 MS.
SR21ON    = 250 MS.   SR21OFF   = 250 MS.
SR22ON    = 250 MS.   SR22OFF   = 250 MS.
MTON      = 1000 MS.   MTOFF     = 4000 MS.
VCTONE    = 1000 MS.   DITS1     = 9999 SEC.
DD1NTS    = 5 SEC.    DD2NTS   = 30 SEC.
DD1TS     = 5 SEC.    DIALPAU   = 30 SEC.
BURST     = 15 SEC.   DISDEL    = 9999 SEC.
DLGMIDLE  = 8 SEC.   HWTEST    = 10 SEC.

```

```

AMO-TIMD1-13      DEVICE HANDLER TIMERS
DISPLAY COMPLETED;

```



Configuring Cisco Unified CallManager

6608-T1 Gateway Configuration

The screenshot shows the Cisco CallManager 4.0 Administration web interface in Microsoft Internet Explorer. The browser address bar shows the URL: `http://cm-kingon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&type=1`. The page title is "Gateway Configuration" and it includes a "Cisco SYSTEMS" logo. The main content area displays the configuration for a Cisco Catalyst 6000 T1 VoIP Gateway. The gateway is identified as S0/DS1-0@SDA0001C9D93A98, with a device protocol of Digital Access PRI and a registration status of "Registered with Cisco CallManager 172.20.32.254". The IP address is 172.20.32.112. The status is "Ready", and there are buttons for "Update", "Delete", and "Reset Gateway". The configuration is organized into several sections: "Device Information" (MAC Address, Description, Device Pool, Network Locale, Media Resource Group List, Location, AAR Group, Load Information), "Multilevel Precedence and Preemption (MLPP) Information" (MLPP Domain, MLPP Indication, MLPP Preemption), and "Interface Information" (PRI Protocol Type, Protocol Side, Channel Selection Order, Channel IE Type).

Gateway Configuration

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 NI2"/>
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"/>



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-kingon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&type=1> Go Links >>

PCM Type*

Delay for first restart (1/8 sec ticks)

Delay between restarts (1/8 sec ticks)

Inhibit restarts at PRI initialization

Enable status poll

Call Routing Information

Inbound Calls

Significant Digits*

Calling Search Space

AAR Calling Search Space

Prefix DN

Outbound Calls

Calling Line ID 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 DisplayIE***

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

Local intranet



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

Address: http://cm-kingon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&type=1

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)*

Connected PBX Model

Product Specific Configuration

Clock Reference*

TX-Level CSU*

FDL Channel*

Framing*

Audio Signal Adjustment into IP Network*

Audio Signal Adjustment from IP Network*

Yellow Alarm*

Zero Suppression*

Digit On Duration(50-500ms)*

Interdigit Duration(50-500msec)*

SNMP Community String

Disable SNMP Set operations*

Debug Port Enable*

Hold Tone Silence Duration*

Port Used for Voice Calls*

Port Used for Modem Calls*

Port Used for Fax Calls*

Fax and Modem Parameters

Fax Relay Enable*

Fax Error Correction Mode Override*

Maximum Fax Rate*

Local intranet



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address http://cm-kingon/CCMAdmin/gatewayconfig.asp?pkid={DF71136E-4975-4B2C-BDE6-C24A840B4ABC}&Status=US&Action= Go Links >>

Maximum Fax Rate*	14400bps
Fax Payload Size*	20
Non Standard Facilities Country Code*	65535
Non Standard Facilities Vendor Code*	65535
Fax/Modem Packet Redundancy*	<input type="checkbox"/>
NSE Type*	Non-IOS Gateways

Playout Delay Parameters

Initial Playout Delay*	40
Minimum Playout Delay*	20
Maximum Playout Delay*	150

Echo Canceller Configuration

Echo TailLength (ms)*	32 ms
Minimum ERL (db)*	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](#)

Reset succeeded. Local intranet



Enbloc Route Pattern Configuration

Cisco CallManager 4.0 Administration - Route Pattern/Hunt Pilot Configuration - Microsoft Internet Explorer

Address: http://cm-klngon/CCMAdmin/routepatternconfig.asp?pkid={C26A5255-B1A4-403E-A274-612D32EE2E60}

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

Pattern Definition

Route Pattern/Hunt Pilot*	<input type="text" value="2XXX"/>	
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@SDA0001C9D93A98 (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

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"/>

Done Local intranet



Translation Pattern for Incoming Calls

Cisco CallManager 4.0 Administration - Translation Pattern Configuration - Microsoft Internet Explorer

Address: http://cm-klngon/CCMAdmin/translationconfig.asp?pkid={89B55D17-7179-4943-A5CF-EED9D09BF290}

Translation Pattern Configuration

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

Translation Pattern: 4XXX
Status: Ready

Copy Update Delete

Pattern Definition

Translation Pattern	4XXX
Partition	Incoming Trunk
Description	
Numbering Plan*	North American Numbering Plan
Route Filter	< None >
Calling Search Space	Phones
MLPP Precedence	Default
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern — 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	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Default
Calling Name Presentation	Default

Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

Called Party Transformations

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

* indicates required item.

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7960 IP phone Configuration

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 >"/>



Cisco CallManager 4.0 Administration - Phone Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-klngon/CCMAdmin/phoneconfig.asp?pkid={23EE0A35-0B85-42D6-8B13-18D674D3F2CE}> Go Links >>

Firmware Load Information (leave blank to use default)

Phone Load Name

Module 1 Load Name (Module 1 selection required)

Module 2 Load Name (Module 2 selection required)

Cisco IP Phone - External Data Locations (leave blank to use default)

Information

Directory

Messages

Services

Authentication Server

Proxy Server

Idle

Idle Timer (seconds)

Extension Mobility (Device Profile) Information

Enable Extension Mobility Feature

Log Out Profile

Log In User ID

Log In Time

Log Out Time

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain (e.g., "0000FF")

MLPP Indication

MLPP Preemption

Product Specific Configuration

Disable Speakerphone

Disable Speakerphone and Headset

Forwarding Delay*

PC Port*

Settings Access*

Gratuitous ARP*

PC Voice VLAN Access*

Local intranet



Cisco CallManager 4.0 Administration - Directory Number Configuration - Microsoft Internet Explorer

Address: http://cm-kingon/CCMAdmin/directorynumber.asp?NumPlanMapID={FDF4C8AE-583C-4480-9C58-36FC82BAA685}

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* 4000
Partition Phones

Directory Number Settings
Voice Mail Profile <None >
(Choose <None> to use default)
Calling Search Space Phones
AAR Group <None >
User Hold Audio Source <None >
Network Hold Audio Source <None >
Auto Answer Auto Answer Off

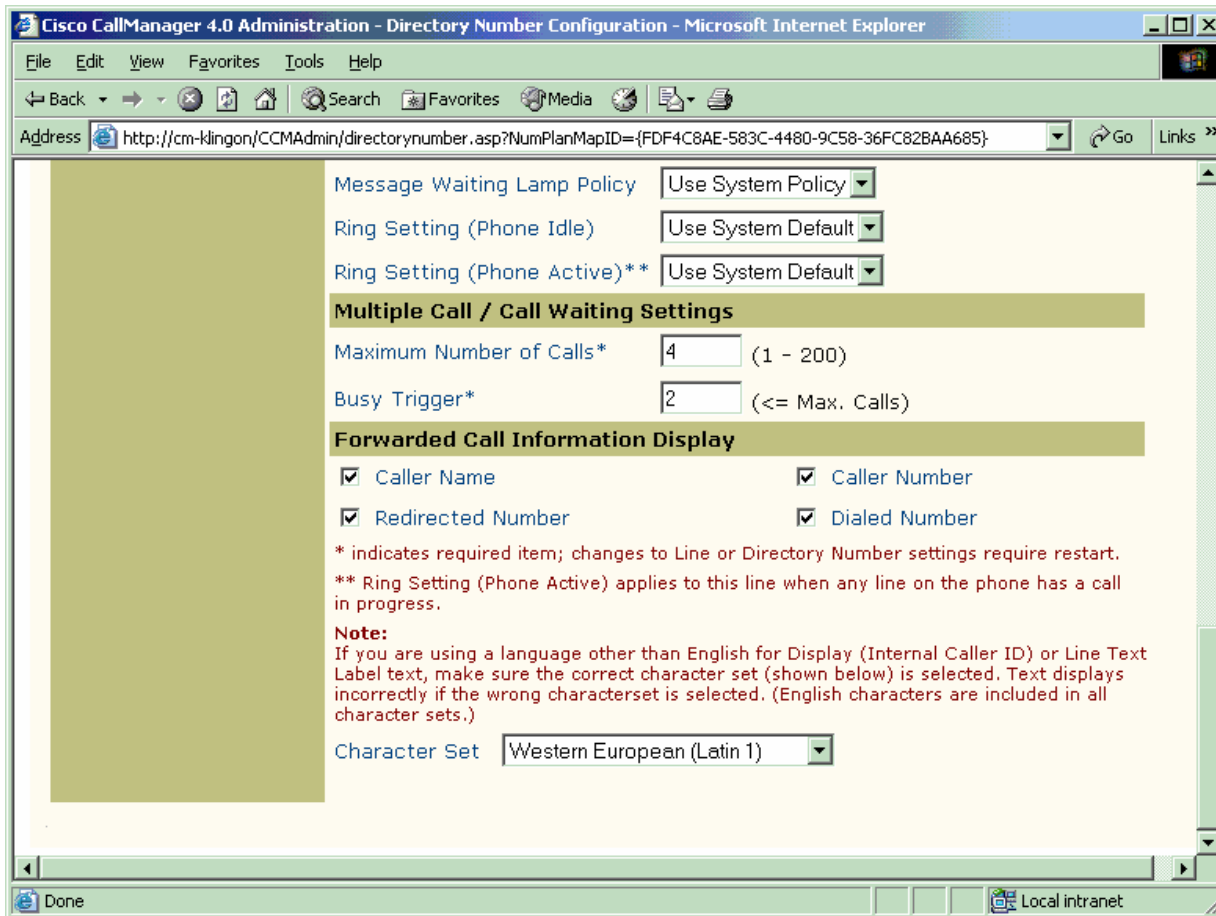
Call Forward and Pickup Settings

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

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

Line Settings for this Device
Display (Internal Caller ID) JOHN DOE
Line Text Label
External Phone Number Mask

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Printed in the USA