

# Cisco Unified CallManager Release 4.0-PBX Interoperability: Siemens Hicom 300 E Release 3.1 PBX Using 6608-E1 QSIG as MGCP Gateway

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## Introduction

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

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

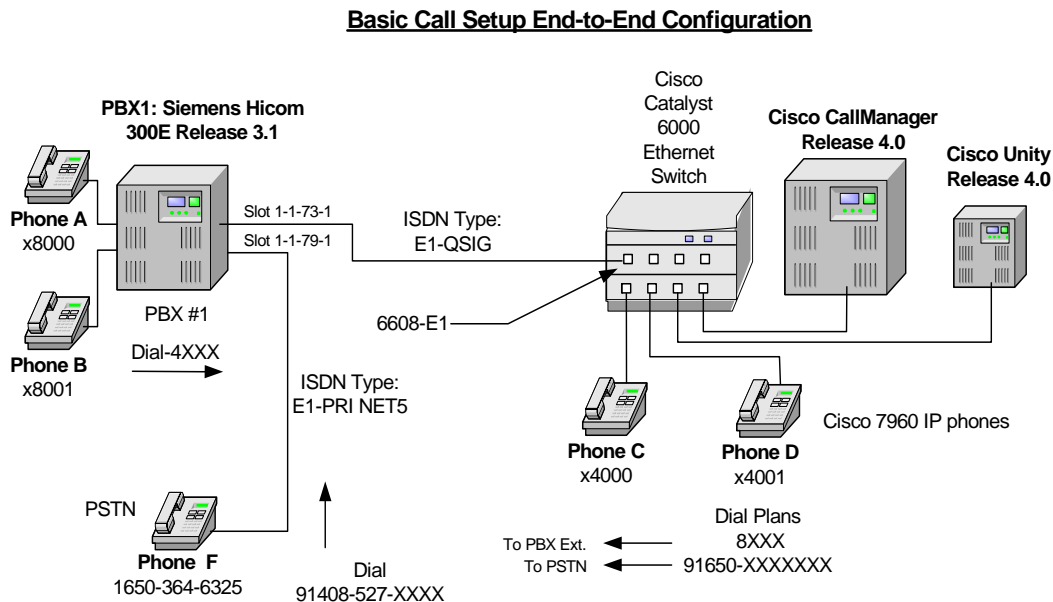
Connectivity is achieved by using the PRI ISO QSIG E1 protocol type on the MGCP gateway and PSS1V2 switch type on the Siemens Hicom 300 E PBX.

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



## Network Topology

Figure 1. Test Setup



## Limitations

### Calling Name and Number Feature

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

### B-Channel Mapping

Because the Siemens Hicom 300E PBX uses sequential channel numbering (1-30) when ISO QSIG protocol "PSS1V2" is selected, set the Cisco 6608-E1 Gateway configuration for **Channel IE Type** field 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 Unity Software Release

Cisco Unity 4.0 Build 4.0(0)

### CallManager Software Release

CallManager System version 4.0(1)

## Features

The key supported features:

- 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) <sup>1</sup>

The key non-supported features:

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

## Configuration

### Siemens Hicom 300E Configuration Sequence and Tasks

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.

---

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



5. Configure Class of Service using COSSU.
6. Add the new trunk group access code using BUEND.
7. Configure trunk using TDCSU.
8. Configure Reference Clock using REFTA.
9. Configure trunk Least Cost Routing using LDAT + RICHT.
10. Configure LCR Out-dial Rules using LODR.
11. Enable In-Band DTMF signaling for the Digital Stations using RICHT.
12. Configure Digital Station's Class of Service for Mailbox (MWI) application.



## Configuration Menus and Commands

### 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		
		0	12345	67890	12345	67890	12
001	- 003	*	.....	.....	.....	.....	NETRTE
004		*	.....	.....	.....	.....	NETRTE
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		
		0	12345	67890	12345	67890	12
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
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 1 1111 1112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE		
			5500 - 5501	. **** * . . . . .	STN
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 1 1111 1112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE		
			8020	. **** * . . . . .	STN
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 1 1111 1112 22 0 12345 67890 12345 67890 12	DIGIT ANALYSIS RESULT	RESERVED/CONVERT DNI/ADD-INFO *=OWN NODE		
			##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	RESERVED/CONVERT
	1	11111	11112	22	ANALYSIS	DNI/ADD-INFO
	0	12345	67890	12345	67890	12
					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

<b>LRTE = 111</b>	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 =			
<b>TGRP = 38</b>	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	8		
1			9		
2			10		
3			11		
4			12		
5			13		
6			14		
7			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
CONNECTION TO ROUTE OPTIMIZATION NODE
INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR
TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)
INCOMING CDR BY ZONE OR FROM LINE
INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR (DATA)
INTERWORKING CALLBACK - NO ANSWER AND MAILBOX CALLBACK
LINE WITH IMPLICIT NUMBERS
CONTROLLED TRUNK AND LINE SELECTION
NO TONE
LWNC
ROPT
NLCR
TSCS
ICZL
NLRD
IWCB
LINO
CTLS
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
SPECIAL MODE
CODE CALLING RELEASE AFTER EVERY TASK
REGISTRATION OF LAYER 3 ADVISORIES
EOD
SFRM
CCR
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	123456789012345678901234567890123456789012345678901234	OPTS= LCRET LCR
>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

```

```

-----+-----
                        FORMAT = L
-----+-----
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 (Master-side Configuration)

```

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

```

```

-----+-----
DIGITAL TRUNK (FORMAT=L)
-----+-----
                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;

```

### Trunk Configuration, TDCSU (Slave-side Configuration)

```

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

```

```

+-----+
|          DIGITAL TRUNK (FORMAT=L)          |
+-----+
|          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   = 0          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
```

```

+-----+
|          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  =           ISDNNP  =           |
| 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   =           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 (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
```

R E F E R E N C E C L O C K C I R C U I T S							
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;
```

## Reference Clock Configuration, REFTA (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
```

R E F E R E N C E C L O C K C I R C U I T S							
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

```
<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 DNNO OF ROUTE = 111									
SERVICE INFO =									
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER ZONE	BAND WDTH	LATTR	
1	1	38	1	1	*****	1 EMPTY	1	NONE	
DNNO = 1 -1 -999									

```
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
| 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
+-----+
```

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

## PSTN RICHT

```
DIS-RICT: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-RICT-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;
```

**To enable in-band DTMF signaling on digital stations for Voicemail applications, set the RICHT parameter DTMFCNV = FIX.**





For Closed (Uniformed) Numbering Plan:

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

```
AMO-RICT-111 TRUNK ROUTING
CHANGE COMPLETED;
```

Close numbering RICHT

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

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



### 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
	TSUID	NOTIE	NOTIE	NOTIE	TNOTCR
	TNOTCR				BASIC
	CDRINT				MSN
	CDRS				CDRINT
	CDRC				MULTRA
	<b>MB</b>				
	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
          SEC     =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;
```



# Siemens Hicom 300E Software Release

LOGIN = root

-----  
Connection opened to: direct 04-06-07 15:26:50  
-----

L01: LOGON ACCEPTED TSN 0285 ALLOCATED 04-04-07 15:29:01

DIS-DBC;  
H500: AMO DBC STARTED

```

+-----+
| SYSTEM CLASSIFICATION   : SYSTEM 80          (H80   )
| HARDWARE ASSEMBLY      : EXTENDED COMPACT CXE (CXE   )
| DEVELOPMENT LINE       : EUROPE DEVELOPMENT  (H300)
| OPERATING MODE         : SIMPLEX
| RESTART TYPE           : SYM
| HW-ARCHITECTURE       : 330E
| HW-ARCHITECTURE TYPE   : 4
|
| 'NO OF' HW VALUES
| LTG'S      : 1  LTU'S      : 4  LOG.LINES : 8000  MTS BD /GSN: 1
| SIUP'S/LTU: 4  TMD24'S PER LTU: 4  PHYS.PORTS: 2688  HWY /MTS BD: 64
| HDLC /DCL : 5  PBC /DCL   : 1  PBC'S     : 17
| LOG. SIU LINES      : 26
| LOG. CONF LINES    : 35
| LOG. DCL LINES     : 36
| DB DIMENSIONING-NAME : 350EMSTD          CONF-TABLE VERSION: 1
| DB SUSY'S:
| SWITCH NUMBER : L31900Q2999A00001
| LOCATION      : CUSTOMER
| BAPPL        : 6ECXM48
| DBAPPL       : 6ECXM48
| SYSTEM_ID    : PKP091000
+-----+

```

AMO-DBC -111 DATABASE CONFIGURATION  
DISPLAY COMPLETED;

<DISPLAY-VEGAS:LIST=LONG;  
DISPLAY-VEGAS:LIST=LONG;  
H500: AMO VEGAS STARTED

SYSTEM NO.	AMO	APS NO.	START	USER	STATUS
SWU: L31900Q2999A00001	REGEN	P30252B4200B00105	03.04.04	04:19 HIM	FREE
SWU RES CODE APS:		P30252B4200S00105	(DIR FILE:	:PDS:APSI/PS/S0-EK0SC)	
SWU AMO CODE APS:		P30252B4200B00105	(DIR FILE:	:PDS:APSI/PS/B0-EK0BC)	
SWU AMO TEXT APS:		P30252B4200B00105	(DIR FILE:	:PDS:APSI/PS/B0-EK0BC)	
BREAK MARK	: NO				
RESERVATION	: NO				
ADS: L31900Q2999A00001	REGEN	P30252B4200A00105	03.04.04	04:19 HIM	FREE
ADS RES CODE APS:		P30252B4200D00105	(DIR FILE:	:PDS:APSI/PS/D0-EK0DC)	
ADS AMO CODE APS:		P30252B4200A00105	(DIR FILE:	:PDS:APSI/PS/A0-EK0AC)	
ADS AMO TEXT APS:		P30252B4200A00105	(DIR FILE:	:PDS:APSI/PS/A0-EK0AC)	
BREAK MARK	: NO				
RESERVATION	: NO				

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

<DISPLAY-APS:ANS=Y,TYPE=PSALL,SP="Y0-EK0YC";  
DISPLAY-APS:ANS=Y,TYPE=PSALL,SP="Y0-EK0YC";



```
H500: AMO APS   STARTED
ADINIT STARTED
PROGRAM SYSTEM       : Y0-EK0YC
VERSION NUMBER       : 10
CORRECTION VERSION NUMBER : 001
PART NUMBER           : P30252N4205B00014
PROGRAM SYSTEM WITH CODE SUBSYSTEMS
INTERFACE VERSION:
PROGRAM SYSTEM DOES NOT CONTAIN ANY INTERFACE VERSIONS
```

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

```
-----
Connection closed to:  direct                               04-06-07 15:53:45
-----
```



## Configuring Cisco Unified CallManager

### 6608-E1 Gateway Configuration

The screenshot shows the Cisco CallManager 4.0 Administration interface in a Microsoft Internet Explorer browser. The page title is "Gateway Configuration" and it displays details for a Cisco Catalyst 6000 E1 VoIP Gateway. The gateway is identified as S0/DS1-0@SDA0001C9D8633E, using Digital Access PRI protocol, registered with Cisco CallManager at IP 172.20.32.254. The gateway status is "Ready".

**Gateway Configuration**

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*	0001C9D8633E
Description	SDA0001C9D8633E
Device Pool*	Default
Network Locale	United States
Media Resource Group List	< None >
Location	< None >
AAR Group	< None >
Load Information	

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

MLPP Domain (e.g., "0000FF")	
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

**Interface Information**

PRI Protocol Type*	PRI ISO QSIG E1
Protocol Side*	User
Channel Selection Order*	Top Down
Channel IE Type*	Continuous Number



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-klington/CCMAdmin/gatewayconfig.asp?pkid={2E043967-780A-4425-8FEF-343CBAD17186}&type=2> Go Links

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****

Local intranet



Cisco CallManager 4.0 Administration - Gateway Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://cm-klington/CCMAdmin/gatewayconfig.asp?pkid={2E043967-780A-4425-8FEF-343CBAD17186}&type=2> Go Links >>

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\*

Framing\*

Audio Signal Adjustment into IP Network\*

Audio Signal Adjustment from IP Network\*

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\*

Fax Payload Size\*

Non Standard Facilities Country Code\*

Non Standard Facilities Header

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-klington/CCMAdmin/gatewayconfig.asp?pkid={2E043967-780A-4425-8FEF-343CBAD17186}&type=2> Go Links >>

Non Standard Facilities Vendor Code\*

Fax/Modem Packet Redundancy\*

NSE Type\*

**Playout Delay Parameters**

Initial Playout Delay\*

Minimum Playout Delay\*

Maximum Playout Delay\*

**Echo Canceller Configuration**

Echo TailLength (ms)\*

Minimum ERL (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](#)

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-klington/CCMAdmin/gatewayconfig.asp?pkid={2E043967-780A-4425-8FEF-343CBAD17186}&type=2> Go Links >>

Non Standard Facilities Vendor Code\*

Fax/Modem Packet Redundancy\*

NSE Type\*

**Playout Delay Parameters**

Initial Playout Delay\*

Minimum Playout Delay\*

Maximum Playout Delay\*

**Echo Canceller Configuration**

Echo TailLength (ms)\*

Minimum ERL (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](#)

Local intranet



## Partitions 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-klingon/CCMAdmin/routepartitionlist.asp?findBy=name&match=begins&pattern=&submit1=Find&rows=20`. The page title is "Find and List Partitions".

The interface includes a navigation menu with options: System, Route Plan, Service, Feature, Device, User, Application, and Help. The main header displays "Cisco CallManager Administration For Cisco IP Telephony Solutions" and the Cisco Systems logo.

### 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

Page  of 1

Navigation: First Previous Next Last



## Calling Search Space Configuration

The screenshot shows the Cisco CallManager 4.0 Administration web interface in Microsoft Internet Explorer. The browser title is "Cisco CallManager 4.0 Administration - Calling Search Space Configuration - Microsoft Internet Explorer". The address bar shows the URL: <http://cm-klington/CCMAdmin/callingsearchspace.asp?pkid={9106F9C5-B86A-4C9E-A3A3-BA0F27017989}>. The navigation menu includes System, Route Plan, Service, Feature, Device, User, Application, and Help. The main header displays "Cisco CallManager Administration For Cisco IP Telephony Solutions" and the Cisco Systems logo.

### 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

Selected Partitions\*  
(ordered by highest priority)

\* indicates required item



Cisco CallManager 4.0 Administration - Calling Search Space Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address http://cm-klington/CCMAdmin/callingsearchspace.asp?pkid={607F7659-E6E6-4AB2-A2CC-3A124448754B} Go Links

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: Phones (in use)**  
Status: Ready

Copy Update Delete Restart Devices

**Calling Search Space Information**

Calling Search Space Name\*

Description

**Route Partitions for this Calling Search Space**

Find Partitions containing  Find

Available Partitions

Incoming Trunk
----------------

Selected Partitions\*  
(ordered by highest priority)

Phones
--------

\* indicates required item

Done Local intranet



## Enbloc Route Pattern Configuration

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

File Edit View Favorites Tools Help

Address: http://cm-klngon/CCMAdmin/routepatternconfig.asp?pkid={3F08903A-3126-4CE1-95DF-9E01A95B7DC4}&status=uc

### 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\* 8XXX

Partition < None >

Description

Numbering Plan\* North American Numbering Plan

Route Filter < None >

MLPP Precedence Default

Gateway or Route/Hunt List\* S0/DS1-0@SDA0001C9D8633E (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 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)

#### 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 >	

Done Local intranet



## Overlap Sending Route Pattern Configuration

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

Address: http://cm-klngon/CCMAdmin/routepatternconfig.asp?pkid={E959BFF6-5645-4444-9E24-2768AFCAAD03}

### 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*	<input type="text" value="9.X"/>
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 <a href="#">(Edit)</a>
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     Allow Overlap Sending     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	PreDot
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



## Route Pattern for Cisco Unity Voicemail

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

Address: http://cm-klington/CCMAdmin/routepatternconfig.asp?pkid={00F4BC16-DECD-4E94-86B8-E7156C5006B7}

### 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="&lt; Not Exist &gt;"/>	<input type="text"/>

Done Local intranet





## Cisco Unity Voicemail HuntList

The screenshot displays the Cisco CallManager 4.0 Administration interface for configuring a Route/Hunt List. The browser window title is "Cisco CallManager 4.0 Administration - Route/Hunt List Configuration - Microsoft Internet Explorer". The address bar shows the URL: <http://cm-klngon/CCMAdmin/routelistmainconfig.asp?pkid={C0689627-534D-45CA-AACA-90A2C00FE547}>. The navigation menu includes System, Route Plan, Service, Feature, Device, User, Application, and Help. The page header features the Cisco CallManager Administration logo and the Cisco Systems logo.

### 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\* UnityHuntList  
Description  
Cisco CallManager Group\* Default  
 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)  
CiscoUM1

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

\* indicates required item



## Cisco Unity Voicemail Line Group

Cisco CallManager 4.0 Administration - Line Group Configuration - Microsoft Internet Explorer

Address: http://cm-klngon/CCMAdmin/linegroupconfig.asp?Action=Update&pkid={A31668E7-267F-4CF3-A540-3034B3169534}

### Line Group Configuration

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

**Directory Numbers**

- 4990
- 4991

**Line Group: CiscoUM1**  
Status: Ready

**Line Group Information**

Line Group Name\*: CiscoUM1  
RNA Reversion Timeout\*: 10  
Distribution Algorithm\*: Top Down

**Hunt Options**

No Answer\*: Try next member; then, try next group in Hunt List  
Busy\*\*: Try next member; then, try next group in Hunt List  
Not Available\*\*: Try next member; then, try next group in Hunt List

**Line Group Member Information**

**Find Directory Numbers to add to Line Group**

Route Partition: < None >  
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\*: 4990, 4991

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



## Cisco Unity Subscriber

**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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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

#### 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=" &lt; None &gt;"/>	
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=" &lt; None &gt;"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

\* indicates required item.

Done Local intranet



## PSTN Route Pattern Configuration

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

Address: http://cm-klington/CCMAdmin/routepatternconfig.asp?pkid={A0E58AC2-80ED-4857-9D43-DCC43AA6EA56}

### 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

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

#### Pattern Definition

Route Pattern/Hunt Pilot*	91650XXXXXX	
Partition	< None >	
Description		
Numbering Plan*	North American Numbering Plan	
Route Filter	< None >	
MLPP Precedence	Default	
Gateway or Route/Hunt List*	S0/DS1-0@SDA0001C9D8633E <a href="#">(Edit)</a>	
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <span>— Not Selected —</span>	
<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	
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)	

#### 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 >	

Done Local intranet



## CLIR Route Pattern Configuration

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

Address: http://cm-kingon/CCMAdmin/routepatternconfig.asp?pkid={3F08903A-3126-4CE1-95DF-9E01A95B7DC4}&status=uc

### 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*	8XXX	
Partition	< None >	
Description		
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 — 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	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation	Restricted
Calling Name Presentation	Default

#### Connected Party Transformations

Connected Line ID Presentation	Default
Connected Name Presentation	Default

#### Called Party Transformations

Discard Digits	< None >
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 >	

Done Local intranet



## CNIR Route Pattern Configuration

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

Address: http://cm-klngon/CCMAdmin/routepatternconfig.asp?pkid={3F08903A-3126-4CE1-95DF-9E01A95B7DC4}&status=uc

### 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*	8XXX
Partition	< None >
Description	
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 — 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	Allowed
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 >	

Done Local intranet



## COLR Translation Pattern Configuration

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

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

### Translation Pattern Configuration

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

**Translation Pattern: 4XXX**  
Status: Update completed

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	Restricted
Connected Name Presentation	Default

#### Called Party Transformations

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

\* indicates required item.

Done Local intranet





## CONR Translation Pattern Configuration

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

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

### 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="&lt; None &gt;"/>
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="&lt; None &gt;"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

\* indicates required item.

Done Local intranet



## 7960 IP phone Configuration

Cisco CallManager 4.0 Administration - Phone Configuration - Microsoft Internet Explorer

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

# 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"/> <a href="#">(Select User ID)</a>
Device Pool*	<input type="text" value="Default"/> <a href="#">(View details)</a>
Calling Search Space	<input type="text" value="&lt; None &gt;"/>
AAR Calling Search Space	<input type="text" value="&lt; None &gt;"/>
Media Resource Group List	<input type="text" value="&lt; None &gt;"/>
User Hold Audio Source	<input type="text" value="&lt; None &gt;"/>
Network Hold Audio Source	<input type="text" value="&lt; None &gt;"/>
Location	<input type="text" value="&lt; None &gt;"/>
User Locale	<input type="text" value="&lt; None &gt;"/>
Network Locale	<input type="text" value="&lt; None &gt;"/>
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"/> <a href="#">(View button list)</a>
------------------------	---

**Softkey Template Information**

Softkey Template	<input type="text" value="&lt; None &gt;"/>
------------------	---

**Expansion Module Information**

Module 1	<input type="text" value="&lt; None &gt;"/>
Module 2	<input type="text" value="&lt; None &gt;"/>

Local intranet



Cisco CallManager 4.0 Administration - Phone Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://cm-klington/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 i

Disable Speakerphone

Disable Speakerphone and Headset

Forwarding Delay\*

PC Port\*

Settings Access\*

Gratuitous ARP\*

PC Voice VLAN Access\*

Local intranet



## Directory Number Configuration

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

File Edit View Favorites Tools Help

Address <http://cm-klngon/CCMAdmin/directorynumber.asp?NumPlanMapID={FDF4C8AE-583C-4480-9C58-36FC82BAA685}> Go Links >>

# 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

Done Local intranet



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

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print

Address <http://cm-klngon/CCMAdmin/directorynumber.asp?NumPlanMapID={FDF4C8AE-583C-4480-9C58-36FC82BAA685}> Go Links

Message Waiting Lamp Policy Use System Policy

Ring Setting (Phone Idle) Use System Default

Ring Setting (Phone Active)\*\* Use System Default

**Multiple Call / Call Waiting Settings**

Maximum Number of Calls\* 4 (1 - 200)

Busy Trigger\* 2 (<= Max. Calls)

**Forwarded Call Information Display**

Caller Name  Caller Number

Redirected Number  Dialed Number

\* 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.

**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 Western European (Latin 1)

Done Local intranet



## 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.
CCM	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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