



# Ericsson MD-110 Release BC12 using E1 Q.SIG to Cisco Unified CallManager 4.1

November 5, 2007 Revision 5

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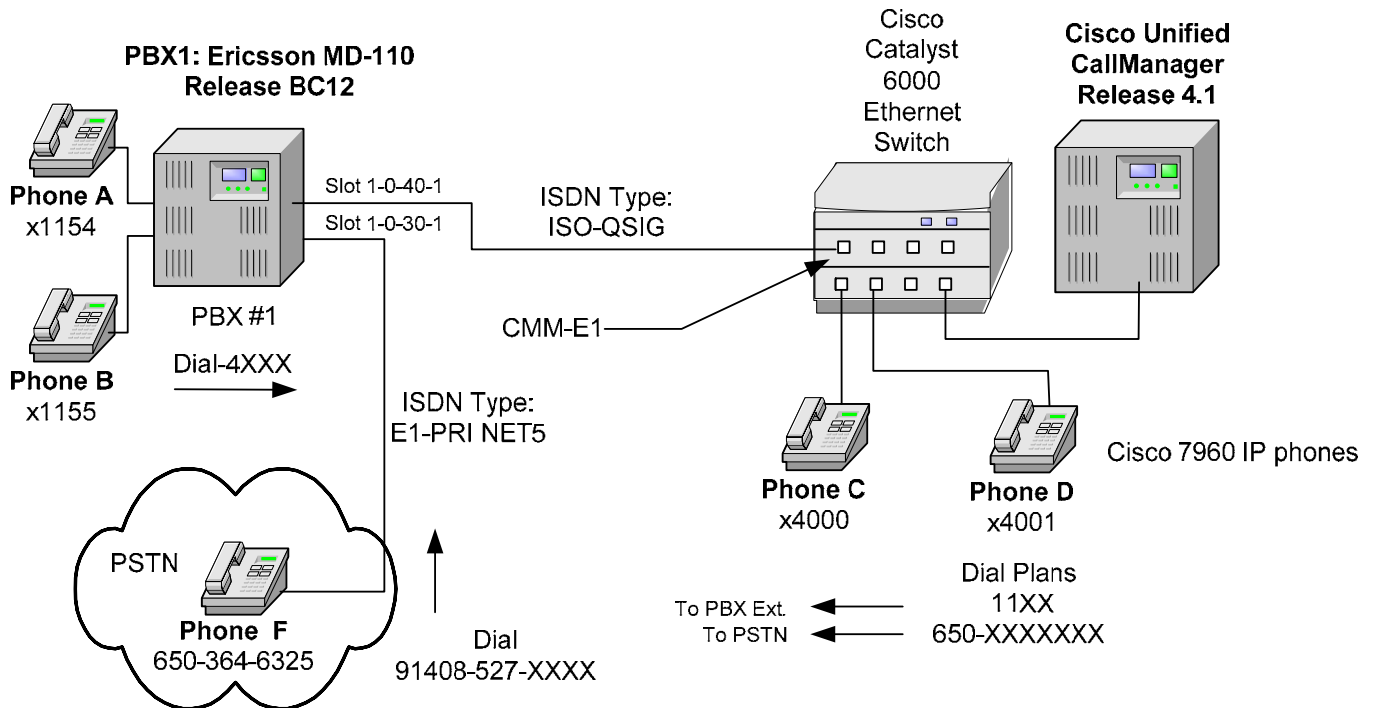
## Introduction

- This is an application note for connectivity of Ericsson MD-110 Release BC12 PBX with Cisco Unified CallManager Release 4.1 via Cisco Communication Media Module CMM-E1 as MGCP gateway using ISO QSIG protocol.
- The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified CallManager connected to the PBX via CMM-E1 QSIG link as MGCP gateway.
- Connectivity is achieved by using the PRI QSIG E1 protocol type on the MGCP gateway with Cisco Unified CallManager Service parameter QSIG variant of ISO and ISO switch type on the Ericsson MD-110 PBX.
- This Application Note uses the CMM-E1 voice gateway, however other Cisco voice gateways are also an option to use since Cisco Unified CallManager QSIG implementation does not depend on the physical interface.

## Network Topology

Figure 1. Network Topology

### Basic Call Setup End-to-End Configuration



## Limitations

### Calling/Connected Name Restrictions

- Ericsson phone displayed Calling/Connected Name when Cisco Unified CallManager sends it as restricted.

### Call Completion (Call Back)

- For the case of Cisco IP phone initiating the Call Back, Ericsson MD-110 PBX accepts the Call Back Request from Cisco Unified CallManager. Ericsson MD-110 PBX tries to complete the Call Back as the Ericsson phone becomes free. Cisco Unified CallManager sends the call setup as a response, but Ericsson MD-110 PBX drops the call with "FailureToMatch" error message. Ericsson MD110 PBX is complaining about Numbering Plan encoding in the Call Back request not matching the Numbering Plan encoding when Cisco Unified CallManager tries to complete the Call Back.
- For the case of Ericsson phone initiating the Call Back, Cisco Unified CallManager accepts the Call Back Request from Ericsson MD-110 PBX. Cisco Unified CallManager tries to complete the Call Back as the Cisco IP phone becomes free but Ericsson MD110 PBX responds with Call Back Cancel. The issue is the MD110 wants to do Call Back with "Path Reservation" method and Cisco Unified CallManager responds in the return result to a CCBS/CCNR request with: "No-Path-Reservation" method. In order to get CallBack feature to work from Ericsson phone, Cisco Unified CallManager needs to respond to the Call Back request with "Path Reservation" method.



## **ANF-PR-Additional Network Feature Path Replacement for Call Diversion by join**

- Ericsson MD-110 PBX did not initiate Path Replacement proposal for a Call that originated from Ericsson PBX and was diverted from Cisco Unified CallManager to another Ericsson MD-110 PBX node.

### **System Components**

#### **Hardware Requirements**

- Cisco Hardware:
  - Cisco Catalyst 6000 switch with CMM-E1 Gateway
  - Cisco Unified CallManager Server
- Ericsson MD-110 PBX Hardware:
  - TLU76/1, E1 PRI/QSIG

#### **Software Requirements**

- PBX Software version BC12
- Cisco Unified CallManager 4.1

### **Features**

#### **Features Supported**

- CLIP-Calling Line (Number) Identification Presentation
- CLIR-Calling Line (Number) Identification Restriction
- CNIP-Calling Name Identification Presentation
- COLP-Connected Line (Number) Identification Presentation
- COLR- Connected Line (Number) Identification Restriction
- CONP-Connected Name Identification Presentation
- Sending Alerting Name
- CT-Call Transfer (by join)
- CFU-Call Forwarding Unconditional (by join)
- CFB-Call Forwarding Busy (by join)
- CFNR-Call Forwarding No Reply (by join)
- CFU-Call Forwarding Unconditional (by Reroute)
- CFB-Call Forwarding Busy (by Reroute)
- CFNR-Call Forwarding No Reply (by Reroute)
- ANF-PR-Additional Network Feature Path Replacement (for Call Transfer by join)
- ANF-PR-Additional Network Feature Path Replacement (for Trombone connection)

#### **Features Not Supported**

- Ericsson PBX did not honor CNIR-Calling Name Identification Restriction



- Ericsson PBX did not honor CONR- Connected Name Identification Restriction
- Ericsson PBX did not support Network Call Forwarding (CFU, CFB, CFNR) by join. It did diversion by Reroute instead
- Ericsson PBX did not support Q.SIG MWI- Message Waiting Indication (lamp ON, lamp OFF)

## Configuration

### Configuring the Ericsson MD-110 PBX

**Warning:** The Ericsson MD-110 PBX user interface is very cryptic. All parameters and options are mapped to position-dependent numeric fields within the various commands listed below. The user must have the correct revision of the Ericsson MD-110 PBX administration manual to be able to decipher each field position and determine its meaning. It is therefore not advisable to make changes to an MD-110 PBX unless you know exactly what you are doing. A single number out of place in a command string can cause unusual behavior on the PBX.

Configure the Ericsson MD-110 PBX in the following sequence:

1. **ROCAI** Route Category Initiate
2. **RODAI** Route Data Initiate
3. **ROEQI** Route Equipment Initiate
4. **RODDI** Route External Destination

### Configuration Menus and Commands

#### Route Category Initiate

Setup internal characteristics for the route. Ex. Traffic direction, services, Bearer capabilities.

#### For Ericsson 1 node

```
<ROCAP:ROU=100;
ROUTE CATEGORY DATA
ROU SEL          TRM  SERV          NODG DIST  DISL  TRAF      SIG          BCAP
100 7110000000000010 5   2110030000 0   30   128  03151515 111110000031 111111
```

END

```
<ROCAP:ROU=101;
ROUTE CATEGORY DATA
ROU SEL          TRM  SERV          NODG DIST  DISL  TRAF      SIG          BCAP
101 7110000000000010 5   2110030000 0   30   128  03151515 111110000031 001100
```

END

#### For Ericsson 2 node

```
<ROCAP:ROU=1;
ROUTE CATEGORY DATA
ROU SEL          TRM  SERV          NODG DIST  DISL  TRAF      SIG          BCAP
1   7110000000000010 5   3110000000 0   30   128  03151515 111110000031 111111
```

END

```
<ROCAP:ROU=3;
ROUTE CATEGORY DATA
```



```
ROU SEL          TRM SERV          NODG DIST DISL TRAF          SIG          BCAP
3  7110000000000010 5  3110000000  0  30  128  03151515 111110000031 111111
```

END

## Route Data Initiate

### For Ericsson 1 node

```
E1-PRI ISO QSIG Route Protocol Characteristics, protocol side "Network"
<RODAP:ROU=100;
```

```
ROUTE DATA
ROU  TYPE  VARC          VARI          VARO          FILTER
100  SL60  H'00000310  H'55450000  H'06300000  NO
```

END

```
PSTN trunk E1-PRI ETSI Route Protocol Characteristics, protocol side "Network"
<RODAP:ROU=100;
```

```
ROUTE DATA
ROU  TYPE  VARC          VARI          VARO          FILTER
100  SL60  H'00000310  H'05400000  H'06300000  NO
```

END

```
E1-PRI ISO QSIG Route Protocol Characteristics, protocol side "User"
```

```
<RODAP:ROU=101;
```

```
ROUTE DATA
ROU  TYPE  VARC          VARI          VARO          FILTER
101  SL60  H'00000310  H'55440000  H'06400000  NO
```

END

### For Ericsson 2 node

```
<RODAP:ROU=1;
```

```
ROUTE DATA
ROU  TYPE  VARC          VARI          VARO          FILTER
1    SL60  H'00000310  H'55440000  H'06400000  NO
```

END

```
<RODAP:ROU=3;
```

```
ROUTE DATA
ROU  TYPE  VARC          VARI          VARO          FILTER
3    SL60  H'00000310  H'55440000  H'06400000  NO
```

END

## Route Equipment Initiate

### For Ericsson 1 node

```
E1-PRI QSIG trunk lines (B-channels)
```

```
< ROEDP:ROU=100,TRU=ALL;
```

```
ROUTE EQUIPMENT DATA
```



ROU	TRU	EQU	SQU	INDDAT	CNTRL
100	001-1	001-0-30-01		H'000000000000	
100	001-2	001-0-30-02		H'000000000000	
100	001-3	001-0-30-03		H'000000000000	
100	001-4	001-0-30-04		H'000000000000	
100	001-5	001-0-30-05		H'000000000000	
100	001-6	001-0-30-06		H'000000000000	
100	001-7	001-0-30-07		H'000000000000	
100	001-8	001-0-30-08		H'000000000000	
100	001-9	001-0-30-09		H'000000000000	
100	001-10	001-0-30-10		H'000000000000	
100	001-11	001-0-30-11		H'000000000000	
100	001-12	001-0-30-12		H'000000000000	
100	001-13	001-0-30-13		H'000000000000	
100	001-14	001-0-30-14		H'000000000000	
100	001-15	001-0-30-15		H'000000000000	
100	001-16	001-0-30-17		H'000000000000	
100	001-17	001-0-30-18		H'000000000000	
100	001-18	001-0-30-19		H'000000000000	
100	001-19	001-0-30-20		H'000000000000	
100	001-20	001-0-30-21		H'000000000000	
100	001-21	001-0-30-22		H'000000000000	
100	001-22	001-0-30-23		H'000000000000	
100	001-23	001-0-30-24		H'000000000000	
100	001-24	001-0-30-25		H'000000000000	
100	001-25	001-0-30-26		H'000000000000	
100	001-26	001-0-30-27		H'000000000000	
100	001-27	001-0-30-28		H'000000000000	
100	001-28	001-0-30-29		H'000000000000	
100	001-29	001-0-30-30		H'000000000000	
100	001-30	001-0-30-31		H'000000000000	

END

<ROEDP:ROU=101,TRU=ALL;

ROUTE	EQUIPMENT	DATA			
ROU	TRU	EQU	SQU	INDDAT	CNTRL
101	001-1	001-0-40-01		H'000000000000	
101	001-2	001-0-40-02		H'000000000000	
101	001-3	001-0-40-03		H'000000000000	
101	001-4	001-0-40-04		H'000000000000	
101	001-5	001-0-40-05		H'000000000000	
101	001-6	001-0-40-06		H'000000000000	
101	001-7	001-0-40-07		H'000000000000	
101	001-8	001-0-40-08		H'000000000000	
101	001-9	001-0-40-09		H'000000000000	
101	001-10	001-0-40-10		H'000000000000	
101	001-11	001-0-40-11		H'000000000000	
101	001-12	001-0-40-12		H'000000000000	
101	001-13	001-0-40-13		H'000000000000	
101	001-14	001-0-40-14		H'000000000000	
101	001-15	001-0-40-15		H'000000000000	
101	001-16	001-0-40-17		H'000000000000	
101	001-17	001-0-40-18		H'000000000000	
101	001-18	001-0-40-19		H'000000000000	
101	001-19	001-0-40-20		H'000000000000	



```
101          001-20          001-0-40-21          H'000000000000
101          001-21          001-0-40-22          H'000000000000
101          001-22          001-0-40-23          H'000000000000
101          001-23          001-0-40-24          H'000000000000
101          001-24          001-0-40-25          H'000000000000
101          001-25          001-0-40-26          H'000000000000
101          001-26          001-0-40-27          H'000000000000
101          001-27          001-0-40-28          H'000000000000
101          001-28          001-0-40-29          H'000000000000
101          001-29          001-0-40-30          H'000000000000
101          001-30          001-0-40-31          H'000000000000
```

END

**For Ericsson 2 node**

**<ROEDP:ROU=1,TRU=ALL;**

ROUTE EQUIPMENT DATA

ROU	TRU	EQU	IP ADDRESS	SQU	INDDAT	CNTRL
1	001-1	001-1-40-01			H'000000000000	
1	001-2	001-1-40-02			H'000000000000	
1	001-3	001-1-40-03			H'000000000000	
1	001-4	001-1-40-04			H'000000000000	
1	001-5	001-1-40-05			H'000000000000	
1	001-6	001-1-40-06			H'000000000000	
1	001-7	001-1-40-07			H'000000000000	
1	001-8	001-1-40-08			H'000000000000	
1	001-9	001-1-40-09			H'000000000000	
1	001-10	001-1-40-10			H'000000000000	
1	001-11	001-1-40-11			H'000000000000	
1	001-12	001-1-40-12			H'000000000000	
1	001-13	001-1-40-13			H'000000000000	
1	001-14	001-1-40-14			H'000000000000	
1	001-15	001-1-40-15			H'000000000000	
1	001-16	001-1-40-17			H'000000000000	
1	001-17	001-1-40-18			H'000000000000	
1	001-18	001-1-40-19			H'000000000000	
1	001-19	001-1-40-20			H'000000000000	
1	001-20	001-1-40-21			H'000000000000	
1	001-21	001-1-40-22			H'000000000000	
1	001-22	001-1-40-23			H'000000000000	
1	001-23	001-1-40-24			H'000000000000	
1	001-24	001-1-40-25			H'000000000000	
1	001-25	001-1-40-26			H'000000000000	
1	001-26	001-1-40-27			H'000000000000	
1	001-27	001-1-40-28			H'000000000000	
1	001-28	001-1-40-29			H'000000000000	
1	001-29	001-1-40-30			H'000000000000	
1	001-30	001-1-40-31			H'000000000000	

END

**<ROEDP:ROU=3,TRU=ALL;**

ROUTE EQUIPMENT DATA

ROU	TRU	EQU	IP ADDRESS	SQU	INDDAT	CNTRL
3	001-1	001-1-50-01			H'000000000000	
3	001-2	001-1-50-02			H'000000000000	
3	001-3	001-1-50-03			H'000000000000	
3	001-4	001-1-50-04			H'000000000000	



```

3      001-5      001-1-50-05      H'000000000000
3      001-6      001-1-50-06      H'000000000000
3      001-7      001-1-50-07      H'000000000000
3      001-8      001-1-50-08      H'000000000000
3      001-9      001-1-50-09      H'000000000000
3      001-10     001-1-50-10     H'000000000000
3      001-11     001-1-50-11     H'000000000000
3      001-12     001-1-50-12     H'000000000000
3      001-13     001-1-50-13     H'000000000000
3      001-14     001-1-50-14     H'000000000000
3      001-15     001-1-50-15     H'000000000000
3      001-16     001-1-50-17     H'000000000000
3      001-17     001-1-50-18     H'000000000000
3      001-18     001-1-50-19     H'000000000000
3      001-19     001-1-50-20     H'000000000000
3      001-20     001-1-50-21     H'000000000000
3      001-21     001-1-50-22     H'000000000000
3      001-22     001-1-50-23     H'000000000000
3      001-23     001-1-50-24     H'000000000000
3      001-24     001-1-50-25     H'000000000000
3      001-25     001-1-50-26     H'000000000000
3      001-26     001-1-50-27     H'000000000000
3      001-27     001-1-50-28     H'000000000000
3      001-28     001-1-50-29     H'000000000000
3      001-29     001-1-50-30     H'000000000000
3      001-30     001-1-50-31     H'000000000000

```

END

### Route External Destination Data Initiate

#### For Ericsson 1 PSTN ROUTE

```

NANSI:NUMTYP=ED,NUMSE=650;
RODDI:DEST=650,ROU=100,ADC=1707000000000250107001100,SRT=1;
NANLS:EXL=650,MIN=10,MAX=10;

```

#### For Ericsson 1 node

Route and Access Code for the trunk Information- Note Route 100 & 101 are the PRI QSIG

< RODDP:DEST=ALL;

#### EXTERNAL DESTINATION ROUTE DATA

DEST	DRN	ROU	CHO	CUST	ADC	TRC	SRT	NUMACK	PRE
21		1			1707000000000250107001100	0	3	0	
25		100			1707000000000250107001100	0	3	0	
31		11			1005000000000250000000000	0	3	0	
35		11			0606000000000250106001100	0	3	0	
36		6			0115000000000250001000000	0	3	0	
38		8			0115000000000250001000000	0	3	0	
40		101			1707000000000250107001100	0	1	0	
42		100			1707000000000250107001100	0	1	0	
550		11			0606000000000250106001100	0	1	0	
551		101			0707000000000250107001100	0	1	0	
560		11			0606000000000250106001100	0	1	0	
650		100			1707000000000250107001100	0	1	0	
666		100			0707000000000250107001100	0	1	0	
950		11			0606000000000250106001100	0	7	0	





END

**For Ericsson 2 node**

Route and Access Code for the trunk Information- Note Route 1 & 3 are the PRI QSIG

<RODDP:DEST=ALL;

EXTERNAL DESTINATION ROUTE DATA

DEST	DRN	ROU	CHO	CUST	ADC	TRC	SRT	NUMACK	PRE
11		1			17072000000000250107001100	0	1	0	
21		1			17270000000000250107001100	0	1	0	
23		3			17270000000000250107001100	0	1	0	
31		11			10052000000000250100001000	0	3	0	
40		3			17070000000000250107001100	0	1	0	
50		11			06060000000000250106001100	0	1	0	
550		11			06060000000000250106001100	0	1	0	
551		3			07071000000000250107001100	0	1	0	
560		11			06060000000000250106001100	0	1	0	
60		11			06060000000000250106001100	0	1	0	
777		1			07070000000000250007001100	0	1	0	
950		11			06060000000000250106001100	0	7	0	

END

**Overlap/Enbloc sending**

**For Ericsson 1 node**

To do overlap sending First remove access code  
<NANLR:EXL=40;

To do Enbloc sending  
<NANLS:EXL=40,MIN=4,MAX=4;

**Key System Directory**

**For Ericsson 1 node**

<KSDDP:DIR=1154;

KEY SYSTEM DIRECTORY DATA

DIR	CUST	EQU	CAT	ADN	ODN	CALALT	TIMER
1154		001-0-20-03	-			1	0

END

<KSDDP:DIR=1155;

KEY SYSTEM DIRECTORY DATA

DIR	CUST	EQU	CAT	ADN	ODN	CALALT	TIMER
1155		001-0-20-04	-			1	0

END

**For Ericsson 2 node**

<KSDDP:DIR=4200&&4201;

KEY SYSTEM DIRECTORY DATA

DIR	CUST	EQU	CAT	ADN	ODN	CALALT	TIMER
4200		001-1-20-00	1			1	0
4201		001-1-20-01	1			1	0

END



## Calling/Connected Name and Number Restrictions

To configure Calling/Connected Name and Number Restricted, use the following command:

```
<KSCAC:DIR=1154&&1155,ADC=00010013010000;
```

To configure Calling/Connected Name and Number Allowed, use the following command:

```
<KSCAC:DIR=1154&&1155,ADC=00100013010000;
```

To remove Name, use the following command:

```
<NIINE:DIR=1154;//REMOVE NAME
```

To add Name, use the following command:

```
<NIINI:DIR=1154,NAME1="BC12-1",NAME2="FOUR",PRES=20; //ADD NAME
```

To print Station's Name, use the following command:

```
<NIINP:DIR=1154&&1155;
```

```
EXTENSION NAMES
```

DIR	NAME1	NAME2	PRES	INFO
1154	BC12-1	FOUR	10	
1155	BC12-1	FIVE	10	

```
END
```

## Path Replacement (Route Optimization)

To enable/disable Path Replacement, use the following command:

```
<ASPAC:PARNUM=66,PARVAL=1; //Route optimization allowed. --- FORWARD
```

```
<ASPAC:PARNUM=66,PARVAL=0; //Route optimization NOT allowed.
```

## Call Diversion on Busy/No Reply

To enable/disable Diversion on Busy/No Reply, use the following command:

```
<CDINI:DIR=1154,DIV=4200; // CALL DIVERSION INDIVIDUAL NUMBER INITIATE
```

```
<CDINE:DIR=1154; // CALL DIVERSION INDIVIDUAL NUMBER END
```

## Diversion Counter

```
<ASUVP:PARNUM=121; // check current setting for maximum number of hop diversions
```

```
<ASPAC:PARNUM=121,PARVAL= VALUE; // To set maximum number of hop diversions where VALUE range is  
0-255
```

```
<ASUVP:PARNUM=121;
```

```
APPLICATION SYSTEM PARAMETER VALUES FOR UNIT
```



PARNUM	CHA	PARVAL	MINVAL	MAXVAL	UNIT	REMARK
121	YES	12	0	255	RMP	

END

## Network Services

<ASPAC:PARNUM=223,PARVAL=7; // Network Features: Standard SS-Call Forwarding, Standard SS-Call Transfer, Path Replacement for route optimization.

## Ericsson MD-110 Software Version

### For Ericsson 1 node

```
<•CADAP;  
CALENDAR DATA  
IDENTITY=ACM-1  
VERSION=CXP1010101/2/BC12SP5/R2A  
15:19:20  
TUE 10 MAY 2005  
END
```

### For Ericsson 2 node

```
<CADAP;  
CALENDAR DATA  
  
IDENTITY=DANDS-EURO  
VERSION=CXP1010101/2/BC12SP5/R2A  
  
17:23:44  
TUE 10 MAY 2005  
END
```

## Configuring the Cisco Unified CallManager

### ISO Protocol Service Parameter



Clusterwide Parameters (Device - PRI and MGCP Gateway)		
Parameter Name	Parameter Value	Suggested Value
ASN.1 ROSE OID Encoding*	<input type="text" value="Use Local Value"/>	Use Local Value
QSIG Variant*	<input type="text" value="ISO (Protocol Profile 0x9F)"/>	ISO (Protocol Profile 0x9F)
Caller ID	<input type="text"/>	
Calling Name Not Available Timeout (msec)*	<input type="text" value="2000"/>	2000
Calling Party Number Screening Indicator*	<input type="text" value="CallManager sets the screening indicator value - Default setting"/>	CallManager sets the screening indicator value - Default setting
Change B- Channel Maintenance Status 1	<input type="text"/>	
Change B- Channel Maintenance Status 2	<input type="text"/>	
Change B- Channel Maintenance Status 3	<input type="text"/>	
Change B- Channel Maintenance Status 4	<input type="text"/>	
Change B- Channel Maintenance Status 5	<input type="text"/>	
Clear Calls Flag When Datalink Is Down*	<input type="text" value="True"/>	True
Device Status Poll Interval (msec)*	<input type="text" value="3000"/>	3000
Disable		

## CMM-E1 Gateway Configuration

Cisco CallManager Administration
CISCO SYSTEMS

### Gateway Configuration

[Back to Find/List Gateways](#)

**Product: Communication Media Module**  
**Protocol: MGCP**  
**MGCP : CMM-E1**

Status: Ready

Domain Name\*   
 Description   
 Cisco CallManager Group\*

**Installed Voice Interface Cards**

Module in Slot	Interface	Endpoint Identifiers	
Module in Slot 1	WS-X6600	Subunit WS-X6600-8E1	
			(1/0)  (1/1)  (1/2)  (1/3)
			(1/4)  (1/5)
Module in Slot 2	< None >		
Module in Slot 3	< None >		
Module in Slot 4	< None >		

**Product Specific Configuration** i

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

\* indicates required item

[Back to Find/List Gateways](#)

## Gateway Configuration

[Back to MGCP Configuration](#)

[Back to Find/List Gateways](#)

[Dependency Records](#)

**Product : Communication Media Module**  
**Gateway : S1/DS1-1@CMM-E1**  
**Device Protocol: Digital Access PRI**  
**Registration: Registered with Cisco CallManager CM-MARS**  
**IP Address: 172.20.231.51**

Status: Ready

Update

Delete

Reset Gateway

### Device Information

End-Point Name*	<input type="text" value="S1/DS1-1@CMM-E1"/>
Description	<input type="text" value="CM-MARS to Ericsson E1"/>
Device Pool*	<input type="text" value="Default"/>
Call Classification*	<input type="text" value="Use System Default"/>
Network Locale	<input type="text" value="United States"/>
Media Resource Group List	<input type="text" value="&lt; None &gt;"/>
Location	<input type="text" value="&lt; None &gt;"/>
AAR Group	<input type="text" value="&lt; None &gt;"/>
Load Information	<input type="text"/>


### Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain (e.g., "0000FF")	<input type="text"/>
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

### Interface Information

PRI Protocol Type*	<input type="text" value="PRI QSIG E1"/>
Protocol Side*	<input type="text" value="Network"/>
Channel Selection Order*	<input type="text" value="Top Down"/>
Channel IE Type*	<input type="text" value="Continuous Number"/>

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

<input checked="" type="checkbox"/>	Display IE Delivery
<input checked="" type="checkbox"/>	Redirecting Number IE Delivery - Outbound
<input checked="" type="checkbox"/>	Redirecting Number IE Delivery - Inbound
<input checked="" type="checkbox"/>	Send Extra Leading Character In DisplayIE***
<input type="checkbox"/>	Setup non-ISDN Progress Indicator IE Enable****
<input type="checkbox"/>	MCDN Channel Number Extension Bit Set to Zero**
<input type="checkbox"/>	Send Calling Name In Facility IE
<input type="checkbox"/>	Interface Identifier Present**
Interface Identifier Value**	<input type="text" value="0"/>
Connected Line ID Presentation (QSIG Inbound Call)*	<input type="text" value="Default"/>
<b>UUIE Configuration</b>	
<input type="checkbox"/>	Passing Precedence Level Through UUIE
Security Access Level	<input type="text" value="2"/>
<b>Product Specific Configuration</b> 	
Line Coding*	<input type="text" value="HDB3"/>
Framing*	<input type="text" value="CRC4"/>
Clock*	<input type="text" value="External"/>
Input Gain (-6..14 db)*	<input type="text" value="0"/>
Output Attenuation (-6..14 db)*	<input type="text" value="0"/>
Echo Cancellation Enable*	<input type="text" value="Enable"/>
Echo Cancel Coverage (ms)*	<input type="text" value="64"/>
<p>* 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</p>	
<p><a href="#">Back to MGCP Configuration</a> <a href="#">Back to Find/List Gateways</a></p>	



## Partitions Configuration

System Route Plan Service Feature Device User Application Help

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

CISCO SYSTEMS

### Find and List Partitions

[Add a New Partition](#)

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

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

Matching record(s) 1 to 2 of 2

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

First Previous Next Last

Page  of 1



## Calling Search Space Configuration

System Route Plan Service Feature Device User Application Help

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

CISCO SYSTEMS

### Calling Search Space Configuration

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

**Calling Search Space: Incoming Trunk (in use)**  
Status: Ready

Copy Update Delete Restart Devices

#### Calling Search Space Information

Calling Search Space Name\* Incoming Trunk  
Description

#### Route Partitions for this Calling Search Space

Find Partitions containing Find  
Available Partitions phones

Selected Partitions\* (ordered by highest priority) Incoming Trunk

\* indicates required item

## Calling Search Space Configuration

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

Calling Search Space: phones (in use)

Status: Ready

### Calling Search Space Information

Calling Search Space Name\*

Description

### Route Partitions for this Calling Search Space

Find Partitions containing

Available Partitions



Selected Partitions\*  
(ordered by highest priority)



\* indicates required item

## Calling Search Space Configuration

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

### Calling Search Space: PathReplacementCSS

Status: Ready

#### Calling Search Space Information

Calling Search Space Name\*

Description

#### Route Partitions for this Calling Search Space

Find Partitions containing

Available Partitions



Selected Partitions\*  
(ordered by highest priority)



\* indicates required item



## Enbloc Route Pattern Configuration

**Route Pattern: 11XX**

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

**Pattern Definition**

Route Pattern*	<input type="text" value="11XX"/>
Partition	<input type="text" value="&lt; None &gt;"/>
Description	<input type="text" value="CM-MARS to Ericsson 1"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="&lt; None &gt;"/>
MLPP Precedence	<input type="text" value="Default"/>
Gateway or Route List*	<input type="text" value="S1/DS1-1@CMM-E1"/> <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 —"/>
Call Classification*	<input type="text" value="OnNet"/> <input type="checkbox"/> Allow Device Override
<input type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending <input type="checkbox"/> Urgent Priority
<input type="checkbox"/> Require Forced Authorization Code	
Authorization Level	<input type="text" value="0"/>
<input type="checkbox"/> Require Client Matter Code	

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	<input type="text" value="551XXXX"/>
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"/>



**Route Pattern: 777**  
Status: Ready  
Note: Any update to this Route Pattern automatically resets the associated gateway or Route List

**Pattern Definition**

Route Pattern\*   
Partition   
Description   
Numbering Plan\*   
Route Filter   
MLPP Precedence   
Gateway or Route List\*  [\(Edit\)](#)  
Route Option  
 Route this pattern  
 Block this pattern   
Call Classification\*   Allow Device Override  
 Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority  
 Require Forced Authorization Code  
Authorization Level   
 Require Client Matter Code

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask   
Prefix Digits (Outgoing Calls)   
Calling Line ID Presentation   
Calling Name Presentation

**Connected Party Transformations**

Connected Line ID Presentation   
Connected Name Presentation

**Called Party Transformations**

Discard Digits   
Called Party Transform Mask   
Prefix Digits (Outgoing Calls)

**Trunk Network: Specific Facility Transformation Element**

**Route Pattern: 42XX**

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

---

**Pattern Definition**

Route Pattern\*

Partition

Description

Numbering Plan\*

Route Filter

MLPP Precedence

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

Route Option  
 Route this pattern  
 Block this pattern

Call Classification\*   Allow Device Override

Provide Outside Dial Tone   
  Allow Overlap Sending   
  Urgent Priority  
 Require Forced Authorization Code  
 Authorization Level

Require Client Matter Code

---

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation

Calling Name Presentation

---

**Connected Party Transformations**

Connected Line ID Presentation

Connected Name Presentation

---

**Called Party Transformations**

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)



**Route Pattern: 666**

Status: Update completed

Note: Any update to this Route Pattern automatically resets the associated gateway or Route List

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

**Pattern Definition**

Route Pattern*	<input type="text" value="666"/>
Partition	<input type="text" value=" &lt; None &gt;"/>
Description	<input type="text" value="CM-MARS to Ericsson 3"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value=" &lt; None &gt;"/>
MLPP Precedence	<input type="text" value="Default"/>
Gateway or Route List*	<input type="text" value="S1/DS1-0@CMM-E1"/> <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 —"/>
Call Classification*	<input type="text" value="OnNet"/> <input type="checkbox"/> Allow Device Override
<input type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending <input type="checkbox"/> Urgent Priority
<input type="checkbox"/> Require Forced Authorization Code	
Authorization Level	<input type="text" value="0"/>
<input type="checkbox"/> Require Client Matter Code	

**Calling Party Transformations**

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





## Overlap Sending Route Pattern Configuration

**Route Pattern: 9.1**  
Status: Ready  
Note: Any update to this Route Pattern automatically resets the associated gateway or Route List

**Pattern Definition**

Route Pattern*	<input type="text" value="9.1"/>
Partition	<input type="text" value="&lt; None &gt;"/>
Description	<input type="text" value="Ovlp sending CM-MARS to Ericsson 1"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="&lt; None &gt;"/>
MLPP Precedence	<input type="text" value="Default"/>
Gateway or Route List*	<input type="text" value="S1/DS1-1@CMM-E1"/> <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 —"/>
Call Classification*	<input type="text" value="OffNet"/> <input type="checkbox"/> Allow Device Override
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input checked="" type="checkbox"/> Allow Overlap Sending <input type="checkbox"/> Urgent Priority
<input type="checkbox"/> Require Forced Authorization Code	
Authorization Level	<input type="text" value="0"/>
<input type="checkbox"/> Require Client Matter Code	

**Calling Party Transformations**

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



## PSTN Route Pattern Configuration

**Route Pattern: 650364XXXX**

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

**Pattern Definition**

Route Pattern*	<input type="text" value="650364XXXX"/>
Partition	<input type="text" value=" &lt; None &gt;"/>
Description	<input type="text" value="PSTN Route gateway"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value=" &lt; None &gt;"/>
MLPP Precedence	<input type="text" value="Default"/>
Gateway or Route List*	<input type="text" value="S1/DS1-1@CMM-E1"/> <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 —"/>
Call Classification*	<input type="text" value="OnNet"/> <input type="checkbox"/> Allow Device Override
<input type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending <input type="checkbox"/> Urgent Priority
<input type="checkbox"/> Require Forced Authorization Code	
Authorization Level	<input type="text" value="0"/>
<input type="checkbox"/> Require Client Matter Code	

**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" value="408527"/>
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"/>



## Translation Pattern for Incoming Calls

### Translation Pattern Configuration

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

**Translation Pattern: 40XX**  
Status: Ready

#### Pattern Definition

Translation Pattern	<input type="text" value="40XX"/>
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="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.



## CLIR Route Pattern Configuration

**Route Pattern: 11XX**

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

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

---

**Pattern Definition**

Route Pattern\*

Partition

Description

Numbering Plan\*

Route Filter

MLPP Precedence

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

Route Option  
 Route this pattern  
 Block this pattern

Call Classification\*   Allow Device Override

Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority

Require Forced Authorization Code

Authorization Level

Require Client Matter Code

---

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation

Calling Name Presentation

---

**Connected Party Transformations**

Connected Line ID Presentation

Connected Name Presentation

---

**Called Party Transformations**

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

## CNIR Route Pattern Configuration



**Route Pattern: 11XX**  
Status: Ready  
Note: Any update to this Route Pattern automatically resets the associated gateway or Route List

**Pattern Definition**

Route Pattern*	<input type="text" value="11XX"/>	
Partition	<input type="text" value=" &lt; None &gt;"/>	
Description	<input type="text" value="CM-MARS to Ericsson 1"/>	
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>	
Route Filter	<input type="text" value=" &lt; None &gt;"/>	
MLPP Precedence	<input type="text" value="Default"/>	
Gateway or Route List*	<input type="text" value="S1/DS1-1@CMM-E1"/> <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 —"/>	
Call Classification*	<input type="text" value="OnNet"/> <input type="checkbox"/> Allow Device Override	
<input type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending	<input type="checkbox"/> Urgent Priority
<input type="checkbox"/> Require Forced Authorization Code	Authorization Level <input type="text" value="0"/>	
<input type="checkbox"/> Require Client Matter Code		

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask	<input type="text" value="551XXXX"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>
Calling Line ID Presentation	<input type="text" value="Default"/>
Calling Name Presentation	<input type="text" value="Restricted"/>

**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"/>



## COLR Translation Pattern Configuration

### Translation Pattern Configuration

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

**Translation Pattern: 40XX**  
Status: Ready

#### Pattern Definition

Translation Pattern	<input type="text" value="40XX"/>
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 —"/>

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="&lt; None &gt;"/>
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: 40XX**

Status: Ready

### Pattern Definition

Translation Pattern	<input type="text" value="40XX"/>
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.

## MWI lamp On/Off Configuration

System Route Plan Service Feature Device User Application Help

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

CISCO SYSTEMS

## Message Waiting Configuration

[Add a New Message Waiting Number](#)  
[Back to Find/List Message Waiting Numbers](#)

**Message Waiting Number : 7001**  
Status: Ready

Copy Update Delete

Message Waiting Number\*

Description

Message Waiting Indicator  On  Off

Partition

Calling Search Space

\* indicates required item

System Route Plan Service Feature Device User Application Help

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

CISCO SYSTEMS

## Message Waiting Configuration

[Add a New Message Waiting Number](#)  
[Back to Find/List Message Waiting Numbers](#)

**Message Waiting Number : 7000**  
Status: Ready

Copy Update Delete

Message Waiting Number\*

Description

Message Waiting Indicator  On  Off

Partition

Calling Search Space

\* indicates required item





## MWI Activate Translation Pattern Configuration

### Translation Pattern Configuration

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

**Translation Pattern: 7701**  
Status: Ready

#### Pattern Definition

Translation Pattern	<input type="text" value="7701"/>
Partition	<input type="text" value="phones"/>
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" value="1154"/>
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" value="7001"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

\* indicates required item.



## MWI Deactivate Translation Pattern Configuration

### Translation Pattern Configuration

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

**Translation Pattern: 7700**  
Status: Ready

#### Pattern Definition

Translation Pattern	<input type="text" value="7700"/>
Partition	<input type="text" value="phones"/>
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" value="1154"/>
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" value="7000"/>
Prefix Digits (Outgoing Calls)	<input type="text"/>

\* indicates required item.



### CallBack Service Parameters

Parameter Name	Parameter Value	Suggested Value
Callback Notification Audio File Name*	<input type="text" value="CallBack.raw"/>	CallBack.raw
Connection Proposal Type*	<input type="text" value="Connection Retention"/>	Connection Release
Connection Response Type*	<input type="text" value="Default to Connection Retention"/>	Default to Connection Retention
Callback Request Protection Timer (T1) (sec)*	<input type="text" value="10"/>	10
Callback Recall Timer (T3) (sec)*	<input type="text" value="20"/>	20
Callback Calling Search Space	<input type="text" value="&lt; None &gt;"/>	



## CallBack Softkey Configuration

System Route Plan Service Feature Device User Application Help

**Cisco CallManager Administration**  
For Cisco IP Telephony Solutions

Cisco SYSTEMS

### Softkey Template Configuration

[Add New Softkey Template](#)  
[Configure Softkey Layout](#)  
[Dependency Records](#)  
[Back to Find/List Softkey Templates](#)

**Softkey Template: Standard User CallBack**  
Status: Ready

Copy Update Delete Restart Devices

Softkey Template Name\* Standard User CallBack

Description Standard Softkey Template for CallManager only

Add Application Delete Application

Application Cisco CallManager

\* indicates required item

System Route Plan Service Feature Device User Application Help

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For Cisco IP Telephony Solutions

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## Softkey Layout Configuration

[Softkey Template Configuration](#)

**Call States**

-  Connected
-  Connected Conference
-  Connected Transfer
-  Digits After First
-  Off Hook
-  Off Hook With Feature
-  On Hold
-  **On Hook**
-  Remote In Use
-  Ring In
-  Ring Out

**Softkey Template: Standard User CallBack**

Status: Ready

Unselected Softkeys

- Conference List (30)(ConfList)
- Direct Transfer (28)(DirTrfr)
- Immediate Divert (31)(iDivert)
- Join (15)(Join)
- Quality Report Tool (22)(QRT)
- Remove Last Conference Party (19)
- Select (29)(Select)
- Undefined (0)(Undefined)
- Video Mode Command (33)(VidMoc)

Selected Softkeys (ordered by position)\*\*

- Redial (1)(Redial)
- \*\*NewCall (2)(NewCall)
- Forward All (5)(CfwdAll)
- Call Back (20)(CallBack)

\*\* indicates mandatory fields  
\* indicates required item

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## Softkey Layout Configuration

[Softkey Template Configuration](#)

**Call States**

- Connected
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- Digits After First
- Off Hook
- Off Hook With Feature
- On Hold
- On Hook
- Remote In Use
- Ring In
- Ring Out**

**Softkey Template: Standard User CallBack**

Status: Ready

Unselected Softkeys

Undefined (0)(Undefined)

Selected Softkeys (ordered by position)\*\*

Undefined (0)(Undefined)  
 \*\*End Call (9)(EndCall)  
 Call Back (20)(CallBack)

\*\* indicates mandatory fields  
\* indicates required item



### Path Replacement Service Parameters

Clusterwide Parameters (Feature - Path Replacement)		
Parameter Name	Parameter Value	Suggested Value
Path Replacement Enabled*	<input type="text" value="True"/>	False
Path Replacement on Tromboned Calls*	<input type="text" value="True"/>	True
Start Path Replacement Minimum Delay Time (sec)*	<input type="text" value="2"/>	0
Start Path Replacement Maximum Delay Time (sec)*	<input type="text" value="4"/>	0
Path Replacement T1 Timer (sec)*	<input type="text" value="30"/>	30
Path Replacement T2 Timer (sec)*	<input type="text" value="15"/>	15
Path Replacement PINX Id	<input type="text" value="551"/>	
Path Replacement Calling Search Space	<input type="text" value="PathReplacementCSS"/>	

Clusterwide Parameters (Feature - Call Back)

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## Call Pickup Configuration

[Add a New Call Pickup Number](#)  
[Back to Find/List Call Pickup Numbers](#)  
[Dependency Records](#)

**Call Pickup Number: 551 - Incoming Trunk**

Status: Ready

Copy Update Delete

Call Pickup Number\*

Description

Partition

\* indicates required item





### Forward by Reroute Service Parameter

Clusterwide Parameters (Feature - Forward)		
Parameter Name	Parameter Value	Suggested Value
Forward Maximum Hop Count*	<input type="text" value="12"/>	12
Forward No Answer Timer (sec)*	<input type="text" value="12"/>	12
Max Forwards Hops to DN*	<input type="text" value="12"/>	12
Retain Forward Information*	<input type="text" value="False"/>	False
Forward By Reroute Enabled*	<input type="text" value="True"/>	False
Forward By Reroute T1 Timer (sec)*	<input type="text" value="15"/>	15

Cluster Wide Parameters (Feature - Path Replacement)



## IP phone Configuration

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

# Phone Configuration

**Directory Numbers**

**Base Phone**

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

**Phone: SEP003094C331AD (Auto 4000)**  
**Registration: Registered with Cisco CallManager 172.20.231.254**  
**IP Address: 172.20.231.102**

Status: Ready

**Phone Configuration (Model = Cisco 7960)**

**Device Information**

MAC Address*	<input type="text" value="003094C331AD"/>
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="1 - SampleAudioSource"/>
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"/>
Signal Packet Capture Mode	<input type="text" value="None"/>
Packet Capture Duration	<input type="text" value="0"/>
Built In Bridge	<input type="text" value="Default"/>
Privacy	<input type="text" value="Default"/>
<input checked="" type="checkbox"/> Retry Video Call as Audio	
<input type="checkbox"/> Ignore Presentation Indicators (internal calls only)	

**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="Standard User CallBack"/>
------------------	-----------------------------------------------------



<b>Expansion Module Information</b>	
Module 1	< None >
Module 2	< None >
<b>Firmware Load Information (leave blank to use default)</b>	
Phone Load Name	
Module 1 Load Name	(Module 1 selection required)
Module 2 Load Name	(Module 2 selection required)
<b>Cisco IP Phone - External Data Locations (leave blank to use default)</b>	
Information	
Directory	
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	
<b>Extension Mobility (Device Profile) Information</b>	
<input type="checkbox"/> Enable Extension Mobility Feature	
Log Out Profile	— Not Selected —
Log In User ID	< None >
Log In Time	< None >
Log Out Time	< None >
<b>Certification Authority Proxy Function (CAPF) Information</b>	
Certificate Operation	No Pending Operation
Authentication Mode	By Authentication String
Authentication String	<input type="text"/> <input type="button" value="Generate String"/>
Key Size (bits)	1024
Operation Completes By**	: : : (YYYY : MM : DD : HH )
Certificate Operation Status : None	
<b>Multilevel Precedence and Preemption (MLPP) Information</b>	
MLPP Domain	(e.g., "0000FF")
MLPP Indication	Default

Multilevel Precedence and Preemption (MLPP) Information	
MLPP Domain	<input type="text" value=""/> (e.g., "0000FF")
MLPP Indication	Default
MLPP Preemption	Default

Product Specific Configuration	
Disable Speakerphone	<input type="checkbox"/>
Disable Speakerphone and Headset	<input type="checkbox"/>
Forwarding Delay*	Disabled
PC Port*	Enabled
Settings Access*	Enabled
Gratuitous ARP*	Enabled
PC Voice VLAN Access*	Enabled
Video Capabilities*	Disabled
Auto Line Select*	Disabled

\* indicates a required item.  
\*\* Indicates time on Publisher.

[Back to top of page](#)  
[Back to Find/List Phones](#)



# Directory Number Configuration

[Configure Device \(SEP003094C331AD\)](#)  
[Dependency Records](#)

## Associated With

SEP003094C331AD  
7960 (Line 1)

## Directory Number: 4000 (phones)

Status: Ready

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

[Update](#)

[Remove from Device](#)

[Reset Devices](#)

### Directory Number

Directory Number\*

Partition

### Directory Number Settings

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

Calling Search Space

AAR Group

User Hold Audio Source

Network Hold Audio Source

Auto Answer

### Call Forward and Pickup Settings

	Voice Mail	Coverage/ Destination	Calling Search Space
Forward All	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>
Forward Busy Internal	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>
Forward Busy External	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>
Forward No Answer Internal	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>
Forward No Answer External	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>
Forward No Coverage Internal	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>
Forward No Coverage External	<input type="checkbox"/>	<input type="text"/>	<input type="text" value=" &lt; None &gt;"/>

No Answer Ring Duration  (seconds)

Call Pickup Group

### MLPP Alternate Party Settings

Target (Destination)

Calling Search Space

No Answer Ring Duration  (seconds)

No Answer Ring Duration	<input type="text"/> (seconds)
Call Pickup Group	< None >
<b>MLPP Alternate Party Settings</b>	
Target (Destination)	<input type="text"/>
Calling Search Space	< None >
No Answer Ring Duration	<input type="text"/> (seconds)
<b>Line Settings for all Devices</b>	
Alerting Name	MARS 0
<b>Line Settings for this Device</b>	
Display (Internal Caller ID)	MARS 0
Line Text Label	MARS 0
External Phone Number Mask	<input type="text"/>
Message Waiting Lamp Policy	Use System Policy
Ring Setting (Phone Idle)	Use System Default
Ring Setting (Phone Active)**	Use System Default
<b>Multiple Call / Call Waiting Settings</b>	
Maximum Number of Calls*	4 (1 - 200)
Busy Trigger*	2 (<= Max. Calls)
<b>Forwarded Call Information Display</b>	
<input checked="" type="checkbox"/> Caller Name	<input checked="" type="checkbox"/> Caller Number
<input checked="" type="checkbox"/> Redirected Number	<input checked="" type="checkbox"/> 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.	
<b>Note:</b> 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 charset is selected. (English characters are included in all character sets.)	
Character Set	Western European (Latin 1)

Done Local intranet



## Configuring the Cisco CMM-E1 MGCP Router

```
CMM-E1#  
CMM-E1#sh ver  
Cisco IOS Software, Cat6K-lc Software (wscmm-I6S-M), Version 12.3(8)XY2, RELEASE  
SOFTWARE (fc1)  
Technical Support: http://www.cisco.com/techsupport  
Copyright (c) 1986-2004 by Cisco Systems, Inc.  
Compiled Tue 16-Nov-04 12:19 by cmong
```

```
ROM: System Bootstrap, Version 12.2(1r)T2, RELEASE SOFTWARE (fc1)
```

```
CMM-E1 uptime is 5 days, 1 hour, 8 minutes  
System returned to ROM by power-on  
System image file is "bootflash:wscmm-i6s-mz.123-8.XY2.bin"
```

```
cisco WS-SVC-CMM Cat6k Voice Linecard (R7000) processor (revision 0xFF) with 196  
608K/65536K bytes of memory.  
Processor board ID SAD0825030S  
R7000 CPU at 400MHz, Implementation 39, Rev 3.3, 256KB L2 Cache  
Last reset from power-on  
1 FastEthernet interface  
1 Gigabit Ethernet interface  
186 Serial interfaces  
6 Channelized E1/PRI ports  
32768K bytes of processor board bootflash (Read/Write)
```

```
Configuration register is 0x2
```

```
CMM-E1#sh run  
Building configuration...
```

```
Current configuration : 3496 bytes  
!  
version 12.3  
no service pad  
service timestamps debug datetime msec  
service timestamps log datetime msec  
no service password-encryption  
!  
hostname CMM-E1  
!  
boot-start-marker  
boot-end-marker  
!  
no logging console  
!  
no aaa new-model  
ip subnet-zero  
ip tcp synwait-time 13  
ip host CM-MARS 172.20.231.254
```



```
ip host CM-VENUS 172.20.214.254
!
!
isdn switch-type primary-4ess
!
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server CM-MARS
ccm-manager config
!
!
!
controller E1 1/0
  pri-group timeslots 1-31 service mgcp
!
controller E1 1/1
  pri-group timeslots 1-31 service mgcp
!
controller E1 1/2
  pri-group timeslots 1-31 service mgcp
!
controller E1 1/3
  pri-group timeslots 1-31 service mgcp
!
controller E1 1/4
  pri-group timeslots 1-31 service mgcp
!
controller E1 1/5
  pri-group timeslots 1-31 service mgcp
!
interface GigabitEthernet1/0
  ip address 172.20.231.51 255.255.255.0
  no ip proxy-arp
  no negotiation auto
  no keepalive
!
interface Serial1/0:15
  no ip address
  no logging event link-status
  isdn switch-type primary-qsig
  isdn incoming-voice voice
  isdn bind-13 ccm-manager
  no cdp enable
!
interface Serial1/1:15
  no ip address
  no logging event link-status
  isdn switch-type primary-qsig
  isdn protocol-emulate network
  isdn incoming-voice voice
  isdn T310 120000
  isdn bind-13 ccm-manager
  no cdp enable
```





```
!  
interface Serial1/2:15  
  no ip address  
  no logging event link-status  
  isdn switch-type primary-net5  
  isdn protocol-emulate network  
  isdn incoming-voice voice  
  isdn bind-13 ccm-manager  
  no cdp enable  
!  
interface Serial1/3:15  
  no ip address  
  no logging event link-status  
  isdn switch-type primary-qsig  
  isdn incoming-voice voice  
  isdn bind-13 ccm-manager  
  no cdp enable  
!  
interface Serial1/4:15  
  no ip address  
  no logging event link-status  
  isdn switch-type primary-qsig  
  isdn protocol-emulate network  
  isdn incoming-voice voice  
  isdn T310 120000  
  isdn bind-13 ccm-manager  
  no cdp enable  
!  
interface Serial1/5:15  
  no ip address  
  no logging event link-status  
  isdn switch-type primary-qsig  
  isdn incoming-voice voice  
  isdn bind-13 ccm-manager  
  no cdp enable  
!  
ip classless  
ip route 0.0.0.0 0.0.0.0 172.20.231.1  
ip route 0.0.0.0 0.0.0.0 172.20.214.1  
no ip http server  
!  
!  
control-plane  
!  
!  
voice-port 1/0:15  
  echo-cancel coverage 64  
!  
voice-port 1/1:15  
  echo-cancel coverage 64  
!  
voice-port 1/2:15  
  echo-cancel coverage 64  
!
```



```
voice-port 1/3:15
  echo-cancel coverage 64
!
voice-port 1/4:15
  echo-cancel coverage 64
!
voice-port 1/5:15
  echo-cancel coverage 64
!
mgcp
mgcp call-agent CM-MARS 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
no mgcp package-capability res-package
mgcp package-capability sst-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
!
mgcp profile default
!
!
!
!
dial-peer voice 1 pots
  application mgcpapp
  port 1/0:15
!
dial-peer voice 2 pots
  application mgcpapp
  port 1/1:15
!
dial-peer voice 3 pots
  application mgcpapp
  port 1/2:15
!
dial-peer voice 4 pots
  application mgcpapp
  port 1/3:15
!
dial-peer voice 5 pots
  application mgcpapp
  port 1/4:15
!
dial-peer voice 6 pots
  application mgcpapp
  port 1/5:15
!
!
line con 0
```



```
transport preferred all
transport output all
line vty 0 4
login
transport preferred all
transport input all
transport output all
!
!
```

CMM-E1#



## Acronyms

Acronym	Definitions
ANF-PR	Additional Network Feature Path Replacement
AOC	Advice-of-charge. Information element is sent with the connection setup information for incoming Euro-ISDN connections. The AOC IE is used for call charge calculation.
CUCM	Cisco Unified CallManager
CCBS	Call Completion to Busy Subscriber
CCNR	Call Completion on No Reply
CFB	Call Forwarding on Busy
CFNR	Call Forwarding No Reply
CFU	Call Forwarding Unconditional
CLIP	Calling Line (Number) Identification Presentation
CLIR	Calling Line (Number) Identification Restriction
CMM	Communication Media Module (CMM) is a Cisco Catalyst® 6500 Series and Cisco 7600 Series line card that provides flexible and high-density T1/E1 gateways
CNIP	Calling Name Identification Presentation
CNIR	Calling Name Identification Restriction
COLP	Connected Line (Number) Identification Presentation
COLR	Connected Line (Number) Identification Restriction
CONP	Connected Name Identification Presentation
CONR	Connected Name Identification Restriction
CT	Call Transfer
MWI	Message Waiting Indicator
PSTN	Public Switched Telephone Network



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