



# Ericsson MD110 BC13 SP3 using E1 ECMA QSIG to Cisco Unified Communications Manager 6.0

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## Introduction

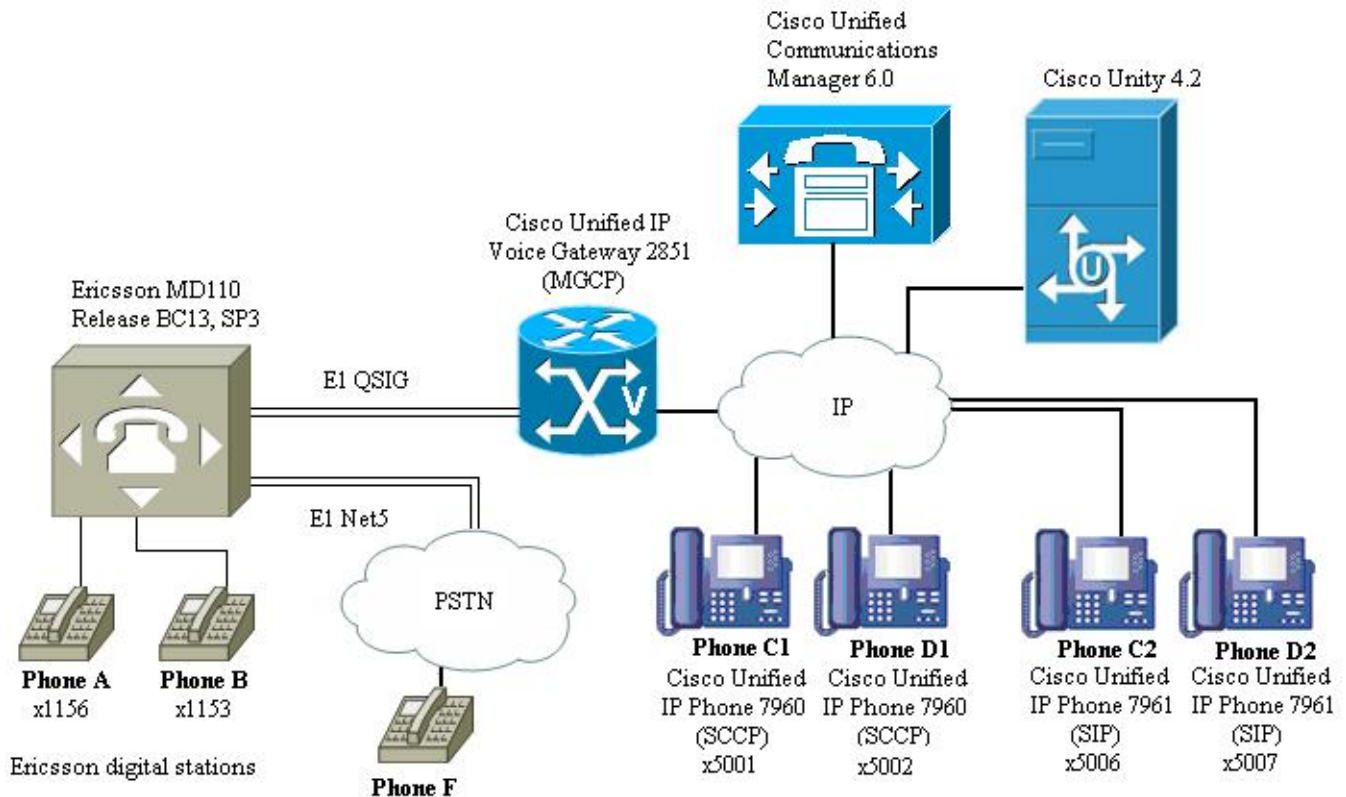
This is an application note for connectivity of Ericsson MD-110 Release BC13 PBX with Cisco Unified Communications Manager Release 6.0 via Cisco 2851 as MGCP gateway using ECMA QSIG protocol. A VWIC-2MFT-E1 is used to provide the physical E1 interface on the Cisco 2851.

The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified Communications Manager connected to the PBX via Cisco 2851 as MGCP gateway. Interoperability is achieved by using the PRI QSIG E1 protocol type on the MGCP gateway with Communications Manager Service parameter QSIG variant of ECMA and ECMA switch type on the Ericsson MD-110 PBX.

This Application Note uses the Cisco 2851 w/ VWIC-2MFT-E1 voice gateway. However, other Cisco voice gateways are also an option to use since Communications Manager QSIG implementation does not depend on the physical interface.

## Network Topology

Figure 1. Basic Call Setup





## Limitations

The following section lists known limitations, caveats, or integration issues.

In a previous release of this application note, it was stated that Alerting Name was sent by the PBX extension, but not displayed on an originating SIP phone registered with Cisco Communications Manager 6.0. This was due to an improper PROGRESS message being sent before the ALERTING message from the PBX. This issue was resolved by passivating a patch (S111995A) from Ericsson, and should not be an issue in the field.

Cisco Unified IP Phones registered on Cisco Unified Communications Manager 6.0 do not display Busy Name sent over QSIG. Cisco Unified Communications Manager 6.0 does not support decode and display of Busy Name. It does support sending Busy Name.

The Ericsson MD110 PBX does not send or recognize "Call Transfer Complete" or "Call Transfer Active" FACILITY messages for ECMA QSIG. Therefore, the called (connected) name and number information is not updated on the originating phone after a transfer. Additionally, the original calling name and number information is not displayed on the final destination phone if the transfer is network/external (e.g., phone C1 calls phone A and phone A transfers to phone D1). Rather, the transferring phone's information is displayed.

On a call that originates from a Cisco Unified IP Phone (registered on Cisco Unified Communications Manager 6.0) to an Ericsson MD110 PBX extension, and is then forwarded unconditionally to another Cisco Unified IP Phone over the same trunk (e.g., phone C1 calls phone A, and phone A forwards back to phone D1), the original calling name and number information is not displayed. Only the forwarding name and number information are displayed. This is because the PBX sets up the second leg of the call with a new SETUP message (i.e., no reroute), and the forwarding party's information is sent as the calling party in this message. Also, the final destination connected name is not updated on the originating phone. The proper connected name is sent from Cisco Unified Communications Manager 6.0 to the PBX, but it is not included when the CONNECT message is relayed back to the Cisco Unified Communications Manager 6.0 in the first call leg.

On a call that originates from an Ericsson MD110 PBX extension to a Cisco Unified IP Phone (registered on Cisco Unified Communications Manager 6.0), and is then forwarded (either unconditionally or on busy or on no reply) to another extension on the same PBX, and where Reroute is not invoked, the forwarding name and number information is not displayed on the final destination. This is because the Cisco Unified Communications Manager 6.0 sets up the second leg of the call with a new SETUP message (i.e., no reroute), and the original party's information is sent as the calling party in this message. No forwarding party (diverting leg) information is sent.

The Ericsson MD110 PBX does not support external Call Forward Busy or Call Forward No Reply for ECMA QSIG. This is a limitation of the PBX and was also seen on the previous release (BC12, SP5).

The Ericsson MD110 PBX does not support Call Forward by Reroute for ECMA QSIG. There is no reroute proposal from the PBX, even if the parameter is enabled. This is a limitation of the PBX and was also seen on the previous release (BC12, SP5). In cases where the Cisco Unified Communications Manager 6.0 is the forwarding PINX, it sends a Reroute request, but the PBX ignores it. The Cisco Unified Communications Manager 6.0 waits for a timer to expire before abandoning the Reroute proposal and joining the call. This causes a ~5 second delay for the call to be completed. So, it is recommended for ECMA QSIG that the Reroute feature is turned off in Cisco Unified Communications Manager 6.0 Service Parameters to avoid this delay.

The Ericsson MD110 PBX does not support Call Back (on No Reply or on Busy) for ECMA QSIG. This is a limitation of the PBX and was also seen on the previous release (BC12, SP5).

The Ericsson MD110 PBX does not support Path Replacement for ECMA QSIG. This is a limitation of the PBX and was also seen on the previous release (BC12, SP5).

The Ericsson MD110 PBX does not support a voice mail integration with Cisco Unity for ECMA QSIG. This is because no diverting leg information is sent for Call Forward Unconditional, and because Ericsson MD110 PBX does not support external Call Forward Busy or Call Forward No Reply for ECMA QSIG.

Voice mail features with the Ericsson MD110 PBX designated as the message center PINX were not tested. This is because there was not a fully integrated voice mail system at the time of testing.

iDivert to voicemail using the Ericsson MD110 PBX as a forwarding node (e.g., phone C1 calls phone A, phone A forwards to phone D1, and phone D1 presses iDivert soft key) are limited to Legacy mode for ECMA QSIG, even if Legacy mode is de-selected in Cisco Unified Communications Manager 6.0. As soon as the soft key is pressed, the originator hits the voice mailbox for the final destination with no data-pass-through screen presented.



## System Components

### Hardware Requirements

The following hardware is required:

- Cisco Unified IOS gateway 2851 with NM-HD-2VE and VWIC-2MFT-E1

- Cisco MCS 7800 server (for Cisco Unified Communications Manager and Cisco Unity)

- Cisco Unified IP Phones 7960 and 7961

- Ericsson MD110 PBX and TL76/1, PRI-E1 interface card

### Software Requirements

The following software is required:

- Cisco Unified Communications Manager Release 6.0

- PBX software release BC13, SP3

- Cisco IOS Release 12.4



## Features

This section lists new and changed features and features that are not supported.

### Features Supported

- Basic Call (Overlap and ENBLOC dialing)
- 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
- Alerting Name (See Limitations)
- Busy Name (See Limitations)
- Tandem Call through PBX to/from PSTN
- Consultation Transfer – Local and Network/External
- Blind Transfer – Local and Network/External
- Call Forward Unconditional by Join – Local and Network/External (See Limitations)
- Call Forward Busy by Join – Local (See Limitations)
- Call Forward No Reply by Join – Local (See Limitations)
- iDivert (Legacy mode only)

### Features Not Supported

- Call Forward Busy by Join – Network/External
- Call Forward No Reply by Join – Network/External
- Call Forward Unconditional by Reroute – Network/External
- Call Forward Busy by Reroute – Network/External
- Call Forward No Reply by Reroute – Network/External
- Call Back/Call Completion – Busy and No Reply
- Path Replacement (for Call Transfer by join)
- Path Replacement (for Trombone connection)
- Voice Mail Integration and MWI



## Configuration

### Configuring the Ericsson MD110 BC13 SP3 PBX

**Warning:** The Ericsson MD-110 PBX user interface is very precise. 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 node (BC13, SP2) - using routes 100 & 101 only.**

**<ROCAP:ROU=ALL;**  
ROUTE CATEGORY DATA

ROU	SEL	TRM	SERV	NODG	DIST	DISL	TRAF	SIG	BCAP
1	7110000000700010	4	3100000010	0	30	128	00151515	111110000031	001100
6	2110000000700010	5	0010100010	0	30	128	00151515	211100010050	001100
8	2110000000700010	5	0000100010	0	30	128	00151515	211100010050	001100
11	7110000000700010	5	3110030000	0	30	128	03151515	111110000011	111111
12	7110000000700010	5	3110000000	0	30	128	03151515	111110000011	111111
13	7110000000700010	5	3110000011	0	30	128	00151515	311110000011	101111
39	4110000000700010	5	3110000011	0	30	128	00151515	311110000031	001100
40	2110000000700010	5	0010000011	0	30	128	00151515	111110000031	001100
<b>100</b>	<b>7110000000000010</b>	<b>5</b>	<b>3110000011</b>	<b>0</b>	<b>30</b>	<b>128</b>	<b>03151515</b>	<b>111110000031</b>	<b>111111</b>
<b>101</b>	<b>7110000000000010</b>	<b>5</b>	<b>3110000011</b>	<b>0</b>	<b>30</b>	<b>128</b>	<b>03151515</b>	<b>111110000031</b>	<b>111111</b>

END



Route Data Initiate

**For Ericsson node**

E1-PRI QSIG Route Protocol Characteristics, protocol side "Network"

**<RODAP:ROU=ALL;**

ROUTE DATA

ROU	TYPE	VARC	VARI	VARO	FILTER
1	SL60	H'00000310	H'15420000	H'06300000	NO
6	TL30		H'00000036	H'00002016	NO
8	TL30	H'00000000	H'00002232	H'00002016	NO
11	TL50	H'00000001	H'00000000	H'00000000	NO
12	TL50	H'00000002	H'00000000	H'00000000	NO
13					
39	SL60	H'00000310	H'05400000	H'06400000	NO
40	SL60	H'00000B14	H'3A820000	H'46415000	NO
<b>100</b>	<b>SL60</b>	<b>H'00000310</b>	<b>H'15400000</b>	<b>H'06300000</b>	<b>NO</b>
<b>101</b>	<b>SL60</b>	<b>H'00000310</b>	<b>H'05400000</b>	<b>H'06300000</b>	<b>NO</b>

END

For, E1-PRI QSIG Route Protocol Characteristics, protocol side "User", make VARO = 06400000.



## Route Equipment Initiate

E1-PRI QSIG trunk lines (B-channels)

### For Ericsson node

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

ROUTE EQUIPMENT DATA

ROU	TRU	EQU	IP ADDRESS	SQU	INDDAT	CNTRL
11	001-1	001-0-00-01			H'0000000000FF	
11	001-2	001-0-00-02			H'0000000000FF	
11	001-3	001-0-00-03			H'0000000000FF	
11	001-4	001-0-00-04			H'0000000000FF	
11	001-5	001-0-00-05			H'0000000000FF	
11	001-6	001-0-00-06			H'0000000000FF	
11	001-7	001-0-00-07			H'0000000000FF	
11	001-8	001-0-00-08			H'0000000000FF	
11	001-9	001-0-00-09			H'0000000000FF	
11	001-10	001-0-00-10			H'0000000000FF	
11	001-11	001-0-00-11			H'0000000000FF	
11	001-12	001-0-00-12			H'0000000000FF	
11	001-13	001-0-00-13			H'0000000000FF	
11	001-14	001-0-00-14			H'0000000000FF	
11	001-15	001-0-00-15			H'0000000000FF	
11	001-17	001-0-00-17			H'0000000000FF	
11	001-18	001-0-00-18			H'0000000000FF	
11	001-19	001-0-00-19			H'0000000000FF	
11	001-20	001-0-00-20			H'0000000000FF	
11	001-21	001-0-00-21			H'0000000000FF	
11	001-22	001-0-00-22			H'0000000000FF	
11	001-23	001-0-00-23			H'0000000000FF	
11	001-24	001-0-00-24			H'0000000000FF	
11	001-25	001-0-00-25			H'0000000000FF	
11	001-26	001-0-00-26			H'0000000000FF	
11	001-27	001-0-00-27			H'0000000000FF	
11	001-28	001-0-00-28			H'0000000000FF	
11	001-29	001-0-00-29			H'0000000000FF	
11	001-30	001-0-00-30			H'0000000000FF	
11	001-31	001-0-00-31			H'0000000000FF	
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
100 001-17 001-0-30-17 H'000000000000
100 001-18 001-0-30-18 H'000000000000
100 001-19 001-0-30-19 H'000000000000
100 001-20 001-0-30-20 H'000000000000
100 001-21 001-0-30-21 H'000000000000
100 001-22 001-0-30-22 H'000000000000
100 001-23 001-0-30-23 H'000000000000
100 001-24 001-0-30-24 H'000000000000
100 001-25 001-0-30-25 H'000000000000
100 001-26 001-0-30-26 H'000000000000
100 001-27 001-0-30-27 H'000000000000
100 001-28 001-0-30-28 H'000000000000
100 001-29 001-0-30-29 H'000000000000
100 001-30 001-0-30-30 H'000000000000
100 001-31 001-0-30-31 H'000000000000

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



Route External Destination Data Initiate

**For Ericsson node**

Route and Access Code for the trunk Information. Note Routes 100 and 101 are for the PRI trunks.

**<RODDP:DEST=ALL;**

EXTERNAL DESTINATION ROUTE DATA

DEST	DRN	ROU	CHO	CUST	ADC	TRC	SRT	NUMACK	PRE
12		101			15050000000002501050010010	0	1	0	
21		1			12250000000002501020011000	0	3	0	
235		100			15050000000002501050010010	0	1	0	
25		100			06061000000002500060000000	0	3	0	
30		100			16060000000002501060010010	0	1	0	
31		11			10050000000002500000000000	0	3	0	
35		11			06060000000002501060011000	0	3	0	
36		6			01150000000002500010000000	0	3	0	
38		8			01150000000002500010000000	0	3	0	
40		100			17070000000002501070010010	0	1	0	
<b>42</b>		<b>101</b>			<b>16060000000002501060010010</b>	<b>0</b>	<b>1</b>	<b>0</b>	
<b>50</b>		<b>100</b>			<b>16060000000002501060010010</b>	<b>0</b>	<b>1</b>	<b>0</b>	
550		11			06060000000002501060011000	0	1	0	
551		101			07070000000002501070011000	0	1	0	
560		11			06060000000002501060011000	0	1	0	
650		100			17070000000002501070011000	0	1	0	
666		100			07070000000002501070011000	0	1	0	
777		101			15050000000002501050010010	0	1	0	
9		101			15050000000002501050010010	0	2	0	

END



## Exchange ID (System ID)

For Path Replacement, Exchange IDs need to be unique. Change System ID by using the following commands:

```
<SYIDE;
```

```
EXECUTED
```

```
<SYIDI:EXGID=888;
```

```
EXECUTED
```

## For Ericsson node

```
<SYIDP;
```

```
PRIVATE NETWORK EXCHANGE IDENTITY IS
```

```
888
```

```
END
```



### Route Number Data Print – Private Exchange Number Prefix

A prefix can be added to the outgoing number (as connected number) by setting the EXNOPR parameter. This should be left blank. This is accomplished by using the RONDE command.

```
<RONDE:ROU=100;
```

```
EXECUTED
```

It can be checked with the RONDP command.

### For Ericsson node

Route and Access Code for the trunk Information- Note Routes 100 & 101 are for the PRI trunks.

```
<RONDP:ROU=ALL;  
ROUTE NUMBER DATA
```

ROU	PRE	ROUDIR	EXNOPU	EXNOPR	TERAC
1					
6					
8					
11				6-777	
12				6-777	
13					
39					
40					
<b>100</b>					
<b>101</b>					
END					



## Number Analysis Summary

### For Ericsson node

#### <NADAP;

#### NUMBER ANALYSIS DATA

TYPE OF SERIES	NUMBER SERIES
EXTENSION NUMBER SERIES	1001 - 1199
	4500 - 4508

EXTERNAL DESTINATION CODE	122
	125
	21
	235
	25
	30 - 38
	40
	42
	50
	550 - 560
	650
	666
	777
	9

ABBREVIATED COMMON NUMBER SERIES 1200

OWN EXCHANGE NUMBER SERIES 888

TYPE OF SERVICE CODE	SERVICE CODE
----------------------	--------------

#### EXTERNAL NUMBER LENGTH DATA

EXTERNAL NUMBER	NUMBER LENGTH
122	4 - 4
125	4 - 4
235	7 - 7
40	4 - 4
42	4 - 4
50	4 - 4
550	4
551	3
554	4 - 10
650	10 - 10
666	3 - 7
777	4 - 4
9	8 - 8

#### PROCEED TO SEND SIGNAL DATA

EXTERNAL NUMBER	POS.	TYPE
-----------------	------	------

#### CALL DISCRIMINATION DATA

EXTERNAL/INTERNAL NUMBER	CAT
--------------------------	-----



END



Overlap/Enbloc sending

```
First remove access code
<NANLR:EXL=50;
To do overlap sending
<NANLS:EXL=50,MIN=2,MAX=4;
To do Enbloc sending
<NANLS:EXL=50,MIN=4,MAX=4;
```

Key System Directory

For Ericsson node

```
<KSDDP:DIR=ALL;
KEY SYSTEM DIRECTORY DATA
```

DIR	CUST	EQU	CAT	ADN	ODN	CALALT	TIMER
1151		001-0-20-00	-			1	0
1152		001-0-20-01	-			1	0
<b>1153</b>		<b>001-0-20-02</b>	-			<b>1</b>	<b>0</b>
1154		001-0-20-03	-			1	0
1155		001-0-20-04	-			1	0
<b>1156</b>		<b>001-0-20-05</b>	-			<b>1</b>	<b>0</b>
1157		001-0-20-06	-			1	0
1158		001-0-20-07	-			1	0
1159		001-0-20-08	-			1	0
1160		001-0-20-09	-			1	0
1161		001-0-20-10	-			1	0
1162		001-0-20-11	-			1	0
1163		001-0-20-12	-			1	0
1164		001-0-20-13	-			1	0
1165		001-0-20-14	-			1	0

END



Calling/Connected Name and Number Restrictions

For Ericsson node

<KSCAP:DIR=ALL;

KEY SYSTEM CATEGORY PRINT

DIR	TRAF	SERV	CDIV	ROC	ITYPE	TRM	ADC	LANG	BSEC
1151	03151515	0211120700	011151111	720004	19	0	00100013010000	0	0
1152	03151515	0211120700	011151111	720004	19	0	00100013010000	0	0
<b>1153</b>	<b>00151515</b>	<b>0202720500</b>	<b>011151111</b>	<b>000001</b>	<b>19</b>	<b>0</b>	<b>00100013010000</b>	<b>0</b>	<b>0</b>
1154	03151515	0211120700	111151111	720004	20	0	00100013001000	0	0
1155	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
<b>1156</b>	<b>00151515</b>	<b>0202720500</b>	<b>011151111</b>	<b>000001</b>	<b>19</b>	<b>0</b>	<b>00100013010000</b>	<b>0</b>	<b>0</b>
1157	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1158	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1159	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1160	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1161	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1162	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1163	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1164	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0
1165	00151515	0202720500	011151111	000001	19	0	00100013010000	0	0





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="ONE",PRES=20; //ADD NAME
```

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

#### For Ericsson node

```
<NIINP:DIR=ALL;  
EXTENSION NAMES
```

DIR	NAME1	NAME2	PRES	INFO
1051	REAL MOFO		11	
1063	V-MAIL P-1		11	
1064	V-MAIL P-2		11	
1151	MX-ONE TSW-SP2	ONE	10	
1152	MX-ONE TSW-SP2	TWO	10	
<b>1153</b>	<b>ZORGON</b>		10	
1154	MX-ONE TSW-SP2	FOUR	10	
1155	MX-ONE TSW-SP2	FIVE	10	
<b>1156</b>	<b>reav</b>		10	
1157	MX-ONE TSW-SP2	SEVEN	10	
1158	MX-ONE TSW-SP2	EIGHT	10	
1159	MX-ONE TSW-SP2	NINE	10	
1160	MX-ONE TSW-SP2	ZERO	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.
```

To print parameter's value, use the following command:

### For Ericsson node

```
<ASPAP:PARNUM=66;  
APPLICATION SYSTEM PARAMETERS  
PARNUM      PARVAL  
    66        1  
END
```

## Call Diversion on Busy/No Reply

### For Ericsson node

```
<CDIDP:DIR=ALL;  
CALL DIVERSION INDIVIDUAL DATA  
DIR          DIV  
1152         4500  
1154         4500  
1155         4500  
1157         4500  
1158         4500  
1159         4500  
1160         4500  
1161         4500  
1162         4500  
1163         4500  
1164         4500  
1165         4500  
END
```

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

```
<CDINI:DIR=1153,DIV=5001; // CALL DIVERSION INDIVIDUAL NUMBER INITIATE
```

```
<CDINE:DIR=1153; // 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
```

### For Ericsson node

```
<ASUVP:PARNUM=121;
APPLICATION SYSTEM PARAMETER VALUES FOR UNIT
PARNUM CHA PARVAL MINVAL MAXVAL UNIT REMARK
121 YES 12 0 255 RMP
END
```

```
<ASPAP:PARNUM=121;
APPLICATION SYSTEM PARAMETERS
PARNUM PARVAL
121 12
END
```

## Network Services

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

### For Ericsson node

```
<ASPAP:PARNUM=223;
APPLICATION SYSTEM PARAMETERS
PARNUM PARVAL
223 7
END
```



Ericsson MD-110 Software Version

**For Ericsson node**

```
CADAP ;  
CALENDAR DATA  
IDENTITY=ACM1  
VERSION=CXP1010101/4/TSWSP03/R4A
```

```
16:43:21  
MON 16 JUL 2007  
END
```



## Configuring the Cisco Unified Communications Manager 6.0

Software Version

Software Version – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco Unified CM Administration Go

**Cisco Unified CM Administration**  
System version: 6.0.1.1000-37

Username

Password

Login Reset

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This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

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If you require further assistance please contact us by sending email to [export@cisco.com](mailto:export@cisco.com).



ECMA Parameter

**ECMA Service Parameter – 1 of 1.**

Clusterwide Parameters (Device - PRI and MGCP Gateway)		
<a href="#">ASN.1 ROSE OID Encoding</a> *	Use Global Value (ECMA) <input type="button" value="v"/>	Use Local Value
<a href="#">QSIG Variant</a> *	ECMA (Protocol Profile 0x91) <input type="button" value="v"/>	ISO (Protocol Profile 0x9F)



## Voice Gateways

### Cisco Unified Voice Gateways – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

administrator | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

#### Find and List Gateway

Add New Select All Clear All Delete Selected Reset Selected

**Status**  
 1 records found

#### Gateways (1 - 1 of 1)

Rows per Page: 50

Find Gateways where  begins with  Hide endpoints Find Clear Filter

<input type="checkbox"/>	Device Name	Description	Device Pool	Calling Search Space	Extension	Partition	Route Group	Priority	Port	Device Type	Status	IP Address
<input type="checkbox"/>	<a href="#">2851_pbx</a>	2851_pbx								Cisco 2851	<a href="#">See Endpoints</a>	

Add New Select All Clear All Delete Selected Reset Selected





## Cisco Unified Voice Gateway 2851 – 1 of 2.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Gateway Configuration** Related Links:

---

**Status**

Status: Ready

---

**Gateway Details**

Product	Cisco 2851
Gateway	2851_pbx
Protocol	MGCP
Domain Name*	<input type="text" value="2851_pbx"/>
Description	<input type="text" value="2851_pbx"/>
Cisco Unified Communications Manager Group*	<input type="text" value="Default"/>

---

**Configured Slots, VICs and Endpoints**

Module in Slot 0	<input type="text" value="&lt; None &gt;"/>		
Module in Slot 1	<input type="text" value="NM-HD-2VE"/>		
Subunit 0	<input type="text" value="VWIC-2MFT-E1"/>	1/0/ 0	1/0/ 1
Subunit 1	<input type="text" value="&lt; None &gt;"/>		
Module in Slot 2	<input type="text" value="&lt; None &gt;"/>		

---

**Product Specific Configuration Layout**



## Cisco Unified Voice Gateway 2851 – 2 of 2.

**Cisco Unified CM Administration** Navigation Cisco Unified CM Administration   
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**Gateway Configuration** Related Links:

**Configured Slots, VICs and Endpoints**

Module in Slot 0	< None >		
Module in Slot 1	NM-HD-2VE	Subunit 0	VWIC-2MFT-E1 1/0/ 0
		Subunit 1	< None >
Module in Slot 2	< None >		1/0/ 1

**Product Specific Configuration Layout** ?

Global ISDN Switch Type	primary-qsig
Switchback Timing*	Graceful
Switchback uptime-delay (min)	10
Switchback schedule (hh:mm)	12:00
Type Of DTMF Relay*	Current GW Config

\*- indicates required item.



## Cisco 2851 E1 PRI QSIG Trunk 1/0/0- 1 of 5.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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Gateway Configuration Related Links:

---

**Status**

Status: Ready

---

**Device Information**

Product	Cisco MGCP E1 Port
Gateway	2851_pbx
Device Protocol	Digital Access PRI
Registration	Registered with Cisco Unified Communications Manager CM-SATURN
IP Address	172.20.33.128
End-Point Name *	S1/SU0/DS1-0@2851_pbx
Description	<input type="text" value="S1/SU0/DS1-0@2851_pbx"/>
Device Pool*	<input type="text" value="Default"/>
Common Device Configuration	<input type="text" value="&lt; None &gt;"/>
Call Classification*	<input type="text" value="Use System Default"/>
NetworkLocale	<input type="text" value="&lt; None &gt;"/>
Packet Capture Mode*	<input type="text" value="None"/>
Packet Capture Duration	<input type="text" value="0"/>
Media Resource Group List	<input type="text" value="&lt; None &gt;"/>
Location*	<input type="text" value="Hub_None"/>
ADP Group	<input type="text" value=""/>



## Cisco 2851 E1 PRI QSIG Trunk 1/0/0- 2 of 5.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Gateway Configuration** Related Links:

Media Resource Group List	< None >
Location*	Hub_None
AAR Group	< None >
Load Information	

Transmit UTF-8 for Calling Party Name  
 V150 (subset)

---

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

MLPP Domain	< None >
-------------	----------

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*	Timeslot Number
PCM Type*	A-law
Delay for first restart (1/8 sec ticks)*	32



### Cisco 2851 E1 PRI QSIG Trunk 1/0/0- 3 of 5.

**Cisco Unified CM Administration** Navigation: Cisco Unified CM Administration Go  
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**Gateway Configuration** Related Links: Back to MGCP Configuration Go

Save  Delete  Reset

PCM Type\*   
Delay for first restart (1/8 sec ticks)\*   
Delay between restarts (1/8 sec ticks)\*   
 Inhibit restarts at PRI initialization  
 Enable status poll  
 Unattended Port

**Call Routing Information - Inbound Calls**

Significant Digits\*   
Calling Search Space   
AAR Calling Search Space   
Prefix DN

**Call Routing Information - Outbound Calls**

Calling Party Presentation\*   
Calling Party Selection\*   
Called party IE number type unknown\*   
Calling party IE number type unknown\*   
Called number type unknown\*



### Cisco 2851 E1 PRI QSIG Trunk 1/0/0- 4 of 5.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Gateway Configuration** Related Links: Back to MGCP Configuration Go

Save Delete Reset

Called party IE number type unknown*	Subscriber
Calling party IE number type unknown*	Subscriber
Called Numbering Plan*	Private
Calling Numbering Plan*	Private
Number of digits to strip*	0
Caller ID DN	
SMDI Base Port*	0

**PRI Protocol Type Specific Information**

- Display IE Delivery
- Redirecting Number IE Delivery - Outbound
- Redirecting Number IE Delivery - Inbound
- Send Extra Leading Character in Display IE\*\*\*
- Setup non-ISDN Progress Indicator IE Enable\*\*\*\*
- MCDN Channel Number Extension Bit Set to Zero\*\*
- Send Calling Name In Facility IE
- Interface Identifier Present\*\*

Interface Identifier Value\*\*



Cisco 2851 E1 PRI QSIG Trunk 1/0/0- 5 of 5.

**Cisco Unified CM Administration**  
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**Gateway Configuration** Related Links: Back to MGCP Configuration Go

Save Delete Reset

Interface Identifier Present\*\*  
Interface Identifier Value\*\* 0  
Connected Line ID Presentation (QSIG Inbound Call)\* Default

**UUIE Configuration**  
 Passing Precedence Level Through UUIE  
Security Access Level\* 2

**Product Specific Configuration Layout** ?

Line Coding\* HDB3  
Framing\* CRC4  
Clock\* External  
Input Gain (-6..14 db)\* 0  
Output Attenuation (-6..14 db)\* 0  
Echo Cancellation Enable\* Enable  
Echo Cancellation Coverage (ms)\* 24



## Route Patterns

### Route Patterns – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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Find and List Route Patterns

**Status**

i 7 records found

**Route Patterns** (1 - 7 of 7) Rows per Page 50 ▾

Find Route Patterns where Pattern ▾ begins with ▾ Find Clear Filter

<input type="checkbox"/>	Pattern ^	Description	Partition	Route Filter	Associated Device	Copy
<input type="checkbox"/>	<a href="#">11XX</a>	to Ericsson 2			<a href="#">S1/SU0/DS1-0@2851_pbx</a>	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">12XX</a>	to Ericsson 1			<a href="#">S1/SU0/DS1-1@2851_pbx</a>	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">42XX</a>	to pstn			<a href="#">S1/SU0/DS1-0@2851_pbx</a>	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">4500</a>	route to Ericsson VM			<a href="#">S1/SU0/DS1-0@2851_pbx</a>	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">777</a>	to Ericsson 1 node ID			<a href="#">S1/SU0/DS1-1@2851_pbx</a>	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">888</a>	to Ericsson 2 node ID			<a href="#">S1/SU0/DS1-0@2851_pbx</a>	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">9.X</a>	overlap to Ericsson 2			<a href="#">S1/SU0/DS1-0@2851_pbx</a>	<input type="button" value="Copy"/>





### 11xx ENBLOC Route Pattern – 1 of 3.

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#### Route Pattern Configuration

Related Links: Back To Find/List Go

Save Delete Copy Add New

**Status**  
Status: Ready

**Pattern Definition**

Route Pattern*	11XX
Route Partition	< None >
Description	ko Ericsson 2
Numbering Plan	-- Not Selected --
Route Filter	< None >
MLPP Precedence*	Default
Gateway/Route List*	S1/SU0/DS1-0@2851_pbx <a href="#">(Edit)</a>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="No Error"/>
Call Classification*	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*	0



### 11xx ENBLOC Route Pattern – 2 of 3.

**Cisco Unified CM Administration**  
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#### Route Pattern Configuration

Related Links: Back To Find/List Go

Save Delete Copy Add New

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)



### 11xx ENBLOC Route Pattern – 3 of 3.

**Cisco Unified CM Administration**  
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**Route Pattern Configuration** Related Links:

---

**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**

Network Service Protocol

Carrier Identification Code

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"/>

---

\*- indicates required item.



### 9.X Overlap Route Pattern – 1 of 3.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Route Pattern Configuration** Related Links: Back To Find/List Go

Save Delete Copy Add New

**Status**  
Update successful

**Pattern Definition**

Route Pattern\* 9,X

Route Partition < None >

Description overlap to Ericsson 2

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence\* Default

Gateway/Route List\* S1/SU0/DS1-0@2851\_pbx (Edit)

Route Option  
 Route this pattern  
 Block this pattern No Error

Call Classification\* OffNet

Allow Device Override  Provide Outside Dial Tone  Allow Overlap Sending  Urgent Priority

Require Forced Authorization Code

Authorization Level\* 0



### 9.X Overlap Route Pattern – 2 of 3.

**Cisco Unified CM Administration**  
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#### Route Pattern Configuration

Related Links: Back To Find/List Go

Save Delete Copy Add New

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)



### 9.X Overlap Route Pattern – 3 of 3.

**Cisco Unified CM Administration**  
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#### Route Pattern Configuration

Related Links: Back To Find/List Go

Save Delete Copy Add New

**Connected Party Transformations**

Connected Line ID Presentation\* Default  
Connected Name Presentation\* Default

**Called Party Transformations**

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

**ISDN Network-Specific Facilities Information Element**

Network Service Protocol -- Not Selected --  
Carrier Identification Code

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

Save Delete Copy Add New

\*- indicates required item.



## Calling Line ID Restriction

### CLIR on 11xx Route Pattern – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Route Pattern Configuration** Related Links:

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)



## Translation Patterns

### List Translation Patterns – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

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#### Find and List Translation Patterns

Add New

**Status**  
 2 records found

#### Translation patterns (1 - 2 of 2) Rows per Page: 50 ▾

Find Translation patterns where  begins with

<input type="checkbox"/>		Translation Pattern ^	Partition	Description	Route Filter	Copy
<input type="checkbox"/>		<a href="#">235.XXXX</a>		235.XXXX		
<input type="checkbox"/>		<a href="#">5010</a>		translation pattern for Connected Restriction		





## Translation Pattern 5010 – 1 of 2.

**Cisco Unified CM Administration**  
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**Translation Pattern Configuration** Related Links:

---

**Status**

Status: Ready

---

**Pattern Definition**

Translation Pattern	<input type="text" value="5010"/>
Partition	<input type="text" value="&lt; None &gt;"/>
Description	<input type="text" value="translation pattern for Connected Restriction"/>
Numbering Plan	<input type="text" value="&lt; None &gt;"/>
Route Filter	<input type="text" value="&lt; None &gt;"/>
MLPP Precedence*	<input type="text" value="Default"/>
Calling Search Space	<input type="text" value="&lt; None &gt;"/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="No Error"/>
<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



## Translation Pattern 5010 – 2 of 2.

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**Translation Pattern Configuration** Related Links:

**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)

\*- indicates required item.



## Connected Line ID Restriction

### Translation Pattern 5010 - Connected Name / Number Restriction for 5001 – 1 of 1.

**Cisco Unified CM Administration**  
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**Translation Pattern Configuration** Related Links: Back To Find/List Go

Save Delete Copy Add New

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)

Save Delete Copy Add New

**i** \*- indicates required item.



## Call Back

### Call Back Service Parameters – 1 of 1.

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Service Parameter Configuration Related Links: Parameters for All Servers Go

Save Set to Default Condensed

Clusterwide Parameters (Feature - Call Back)		
Call Back Enabled Flag *	True	True
Call Back Notification Audio File Name *	CallBack.raw	CallBack.raw
Connection Proposal Type *	Connection Retention	Connection Retention
Connection Response Type *	Default to Connection Retention	Default to Connection Retention
Call Back Request Protection T1 Timer *	10	10
Call Back Recall T3 Timer *	20	20
Call Back Calling Search Space	< None >	
No Path Reservation *	True	True
Set Private Numbering Plan for Call Back *	False	False

Clusterwide Parameters (Feature - Call Recording)		
Play Recording Notification Tone To Observed Target *	False	False
Play Recording Notification Tone To Observed Connected Parties *	False	False

Clusterwide Parameters (Feature - Monitoring)		
Play Monitoring Notification Tone To Observed Target *	False	False
Play Monitoring Notification Tone To Observed Connected Parties *	False	False



## Soft Key Templates – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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### Find and List Softkey Templates

Add New

**Status**  
 7 records found

**Softkey Template (1 - 7 of 7)** Rows per Page: 50 ▾

Find Softkey Template where  begins with  and where softkey template is

<input type="checkbox"/>	Name ^	Description	Copy
<input type="checkbox"/>	<a href="#">Standard Assistant</a>	Standard template for assistant phones	
<input type="checkbox"/>	<a href="#">Standard Feature</a>	Standard Softkey Template for CM Combined Feature	
<input type="checkbox"/>	<a href="#">Standard Manager</a>	Standard template for proxy mode manager phones	
<input type="checkbox"/>	<a href="#">Standard Shared Mode Manager</a>	Standard template for shared mode manager phones	
<input type="checkbox"/>	<a href="#">Standard User</a>	Standard Softkey Template for CallManager only	
<input type="checkbox"/>	<a href="#">Standard User iDivert</a>	Standard Softkey Template for CCM w/ iDivert	
<input type="checkbox"/>	<a href="#">Standard User CB</a>	Standard Softkey Template for CallManager only	



## Call Back Soft Key – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Softkey Template Configuration** Related Links:

---

**Status**

Status: Ready

---

**Softkey Template Information**

Name*	<input type="text" value="Standard User_CB"/>
Description	<input type="text" value="Standard Softkey Template for CallManager only"/>
Applications*	<input type="text" value="Cisco CallManager"/>

Default Softkey Template

---

---

\*- indicates required item.



## Call Back Soft Key Layout – On hook – 1 of 1.

**Cisco Unified CM Administration**  
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### Softkey Template Configuration

Related Links: Softkey Template Configuration Go

Save Reset

**Status**  
Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User\_CB  
Select a call state to configure: On Hook

Unselected Softkeys	Selected Softkeys (ordered by position)**
Conference List (ConfList) Direct Transfer (DirTrfr) Group Pick Up (GPickUp) HLog (HLog) Immediate Divert (iDivert) Join (Join) Meet Me (MeetMe) Mobility (Mobility) Other Pickup (oPickup) Pick Up (PickUp) Quality Report Tool (QRT) Remove Last Conference Party (RmLstC) Select (Select) Toggle Do Not Disturb (DND) Undefined (Undefined) Video Mode Command (VidMode)	Redial (Redial) **NewCall (NewCall) Forward All (CfwdAll) Call Back (CallBack)

Save Reset



### Call Back Soft Key Layout – Ring out – 1 of 1.

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**Softkey Template Configuration** Related Links: Softkey Template Configuration Go

Save Reset

**Status**  
Status: Ready

**Softkey Layout Configuration**  
Softkey Template: Standard User\_CB  
Select a call state to configure: Ring Out

Unselected Softkeys	Selected Softkeys (ordered by position)**
Toggle Do Not Disturb (DND) Undefined (Undefined)	Undefined (Undefined) End Call (EndCall) Call Back (CallBack)

Save Reset





## Phone x5001 set up for Call Back (Call Back Softkey Template Applied) – 1 of 1.

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Phone Configuration Related Links:

**Status**  
Status: Ready

**Association Information**

1	<a href="#">Line [1] - 5001 (no partition)</a>
2	<a href="#">Line [2] - 1221 (no partition)</a>
3	<a href="#">Add a new SD</a>
4	<a href="#">Add a new SD</a>
5	<a href="#">Add a new SD</a>
6	<a href="#">Add a new SD</a>
----- Unassigned Associated Items -----	
7	<a href="#">Line [3] - Add a new DN</a>
8	<a href="#">Add a new SD</a>
9	<a href="#">Add a new SURL</a>
10	<a href="#">Add a new BLF SD</a>

**Phone Type**  
Product Type: Cisco 7960  
Device Protocol: SCCP

**Device Information**

Registration	Registered with Cisco Unified Communications Manager CM-SATURN
IP Address	<a href="#">172.20.235.101</a>
MAC Address*	<input type="text" value="0003E362FED4"/>
Description	<input type="text" value="Auto 5001"/>
Device Pool*	<input type="text" value="Default"/> <a href="#">View Details</a>
Common Device Configuration	<input type="text" value="&lt; None &gt;"/> <a href="#">View Details</a>
Phone Button Template*	<input type="text" value="Standard 7960 SCCP"/>
Softkey Template	<input type="text" value="Standard User_CB"/>
Common Phone Profile*	<input type="text" value="Standard Common Phone Profile"/>
Calling Search Space	<input type="text" value="&lt; None &gt;"/>
AAR Calling Search Space	<input type="text" value="&lt; None &gt;"/>



## Route Optimization

### Path Replacement Service Parameter – 1 of 1.

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Service Parameter Configuration Related Links: Parameters for All Servers Go

Save Set to Default Condensed

**Clusterwide Parameters (Feature - Path Replacement)**

Path Replacement Enabled *	True	False
Path Replacement on Tromboned Calls *	True	True
Start Path Replacement Minimum Delay Time *	20	0
Start Path Replacement Maximum Delay Time *	30	0
Path Replacement T1 Timer *	30	30
Path Replacement T2 Timer *	15	15
Path Replacement PINX ID	235	
Path Replacement Calling Search Space	< None >	

**Clusterwide Parameters (Feature - Call Back)**

Call Back Enabled Flag *	True	True
Call Back Notification Audio File Name *	CallBack.raw	CallBack.raw
Connection Proposal Type *	Connection Retention	Connection Retention
Connection Response Type *	Default to Connection Retention	Default to Connection Retention
Call Back Request Protection T1 Timer *	10	10
Call Back Recall T3 Timer *	20	20
Call Back Calling Search Space	< None >	



## Reroute Service Parameter – 1 of 1.

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### Service Parameter Configuration

Related Links: Parameters for All Servers Go

Save | Set to Default | Advanced

Advanced Ad Hoc Conference Enabled \* False False

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

**Clusterwide Parameters (Feature - Forward)**

<u>Forward Maximum Hop Count</u> *	12	12
<u>Forward No Answer Timer</u> *	12	12
<u>Max Forward Hops to DN</u> *	12	12
<u>Retain Forward Information</u> *	False	False
<u>Forward By Reroute Enabled</u> *	True	False
<u>Transform Forward by Reroute Destination</u> *	True	True
<u>Always Forward Switch Voice Mail Calls</u> *	True	True
<u>Forward By Reroute T1 Timer</u> *	10	10
<u>Include Original Called Info for Q.SIG Call Diversions</u> *	Only after the first diversion	Only after the first diversion
<u>Max Forward UnRegistered Hops to DN</u> *	0	0
<u>CFA CSS Activation Policy</u> *	With Configured CSS	With Configured CSS

There are hidden parameters in this group. Click on Advanced button to see hidden parameters.

**Clusterwide Parameters (Feature - Hold Reversion)**

<u>Hold Reversion Duration</u> *	0	0
----------------------------------	---	---



IP Phones

IP Phones – 1 of 1.

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**Find and List Phones** Related Links: Actively Logged In Device Report Go

+ Add New Select All Clear All Delete Selected Reset Selected

**Status**  
8 records found

**Phone (1 - 8 of 8)** Rows per Page 50

Find Phone where Device Name begins with Find Clear Filter + -  
Select item or enter search text

<input type="checkbox"/>	Device Name(Line) ^	Description	Device Pool	Device Protocol	Status	IP Address	Copy	Super Copy
<input type="checkbox"/>	<a href="#">SEP0002FD06DF77</a>	Auto 5002	<a href="#">Default</a>	SCCP	Registered with CM-SATURN	<a href="#">172.20.235.100</a>		
<input type="checkbox"/>	<a href="#">SEP0003E362FED4</a>	Auto 5001	<a href="#">Default</a>	SCCP	Registered with CM-SATURN	<a href="#">172.20.235.101</a>		
<input type="checkbox"/>	<a href="#">SEP000B5FD22FE8</a>	SEP000B5FD22FE8	<a href="#">Default</a>	SIP	Unknown	Unknown		
<input type="checkbox"/>	<a href="#">SEP000BBEF9E87D</a>	SEP000BBEF9E87D	<a href="#">Default</a>	SIP	Unknown	Unknown		
<input type="checkbox"/>	<a href="#">SEP00124362B4C5</a>	Auto 5003	<a href="#">Default</a>	SCCP	Registered with CM-SATURN	<a href="#">172.20.235.105</a>		
<input type="checkbox"/>	<a href="#">SEP00170EEE3279</a>	Auto 5006	<a href="#">Default</a>	SIP	Registered with CM-SATURN	<a href="#">172.20.235.111</a>		
<input type="checkbox"/>	<a href="#">SEP00170EEE32C6</a>	Auto 5007	<a href="#">Default</a>	SIP	Unregistered	<a href="#">172.20.235.110</a>		
<input type="checkbox"/>	<a href="#">SEP003094C32A35</a>	Auto 5000	<a href="#">Default</a>	SCCP	Registered with CM-SATURN	<a href="#">172.20.235.106</a>		

Add New Select All Clear All Delete Selected Reset Selected



## Cisco Unified IP Phone 7960, x5001, SCCP – 1 of 7.

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Status**  
Status: Ready

**Association Information**  
Modify Button Items

1	Line [1] - 5001 (no partition)
2	Line [2] - 1221 (no partition)
3	Add a new SD
4	Add a new SD
5	Add a new SD
6	Add a new SD
----- Unassigned Associated Items -----	
7	Line [3] - Add a new DN
8	Add a new SD
9	Add a new SURL
10	Add a new BLF SD

**Phone Type**  
Product Type: Cisco 7960  
Device Protocol: SCCP

**Device Information**

Registration	Registered with Cisco Unified Communications Manager CM-SATURN
IP Address	172.20.235.101
MAC Address*	0003E362FED4
Description	Auto 5001
Device Pool*	Default <a href="#">View Details</a>
Common Device Configuration	< None > <a href="#">View Details</a>
Phone Button Template*	Standard 7960 SCCP
Softkey Template	< None >
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	< None >
AAR Calling Search Space	< None >





## Cisco Unified IP Phone 7960, x5001, SCCP – 2 of 7.

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Phone Configuration Related Links: Back To Find/List Go

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9	<a href="#">Add a new SURF</a>
10	<a href="#">Add a new BLF SD</a>
11	<a href="#">Add a new BLF Directed Call Park</a>
12	Privacy
13	None

Common Phone Profile: Standard Common Phone Profile

Calling Search Space: < None >

AAR Calling Search Space: < None >

Media Resource Group List: < None >

User Hold MOH Audio Source: < None >

Network Hold MOH Audio Source: < None >

Location\*: Hub\_None

AAR Group: < None >

User Locale: < None >

Network Locale: < None >

Built In Bridge\*: Default

Privacy\*: Default

Device Mobility Mode\*: Default [View Current Device](#)

[Mobility Settings](#)

Owner User ID: < None >

Phone Load Name:

Retry Video Call as Audio

Ignore Presentation Indicators (internal calls only)



## Cisco Unified IP Phone 7960, x5001, SCCP – 3 of 7.

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Phone Configuration Related Links: Back To Find/List Go

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- Retry Video Call as Audio
- Ignore Presentation Indicators (internal calls only)
- Allow Control of Device from CTI
- Logged Into Hunt Group
- Remote Device

**Protocol Specific Information**

Packet Capture Mode\* None

Packet Capture Duration 0

Presence Group\* Standard Presence group

Device Security Profile\* Cisco 7960 - Standard SCCP Non-Secure Profile

SUBSCRIBE Calling Search Space < None >

- Unattended Port
- Require DTMF Reception
- RFC2833 Disabled

**Certification Authority Proxy Function (CAPF) Information**

Certificate Operation\* No Pending Operation

Authentication Mode\*



Cisco Unified IP Phone 7960, x5001, SCCP – 4 of 7.

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Certification Authority Proxy Function (CAPF) Information**

Certificate Operation\* No Pending Operation

Authentication Mode\* By Null String

Authentication String

Generate String

Key Size (Bits)\* 1024

Operation Completes By 2007 6 30 12 (YYYY:MM:DD:HH)

Certificate Operation Status: None

Note: Security Profile Contains Addition CAPF Settings.

**Expansion Module Information**

Module 1 < None >

Module 1 Load Name

Module 2 < None >

Module 2 Load Name

**External Data Locations Information (Leave blank to use default)**

Information

Directory





Cisco Unified IP Phone 7960, x5001, SCCP – 5 of 7.

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Phone Configuration Related Links: Back To Find/List Go

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**External Data Sources Information (leave blank to use default)**

Information	<input type="text"/>
Directory	<input type="text"/>
Messages	<input type="text"/>
Services	<input type="text"/>
Authentication Server	<input type="text"/>
Proxy Server	<input type="text"/>
Idle	<input type="text"/>
Idle Timer (seconds)	<input type="text"/>

**Extension Information**

Enable Extension Mobility

Log Out Profile: -- Use Current Device Settings --

Log in Time: < None >

Log out Time: < None >

**MLPP Information**

MLPP Domain: < None >

MLPP Indication\*: Default



## Cisco Unified IP Phone 7960, x5001, SCCP – 6 of 7.

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**MLPP Information**

MLPP Domain	< None >
MLPP Indication*	Default
MLPP Preemption*	Default

**Do Not Disturb**

Do Not Disturb

DND Option*	Ringer Off
DND Incoming Call Alert	< None >

**Product Specific Configuration Layout**

Disable Speakerphone

Disable Speakerphone and Headset

PC Port *	Enabled
Settings Access*	Enabled
Gratuitous ARP*	Enabled
PC Voice VLAN Access*	Enabled
Video Capabilities*	Disabled



## Cisco Unified IP Phone 7960, x5001, SCCP – 7 of 7.

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

### Product Specific Configuration Layout

Disable Speakerphone

Disable Speakerphone and Headset

PC Port \* Enabled

Settings Access\* Enabled

Gratuitous ARP\* Enabled

PC Voice VLAN Access\* Enabled

Video Capabilities\* Disabled

Auto Line Select\* Disabled

Web Access\* Enabled

Save Delete Copy Reset Add New

**i** \*- indicates required item.

**i** \*\*-. Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

**i** \*\*\*Note: Security Profile Contains Addition CAPF Settings.



Line 5001 – 1 of 6.

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Directory Number Configuration Related Links: Configure Device (SEP0003E362FED4) Go

Save Delete Reset Add New

**Status**  
Status: Ready

**Directory Number Information**

Directory Number\* 5001

Route Partition < None >

Description

Alerting Name A5001

ASCII Alerting Name A5001

Allow Control of Device from CTI

Associated Devices SEP0003E362FED4

[Edit Device](#)

[Edit Line Appearance](#)

▼ ▲

Dissociate Devices



Line 5001 – 2 of 6.

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**Directory Number Configuration** Related Links: Configure Device (SEP0003E362FED4) Go

Save Delete Reset Add New

---

**Directory Number Settings**

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

Calling Search Space: < None >

Presence Group\*: Standard Presence group

User Hold MOH Audio Source: < None >

Network Hold MOH Audio Source: < None >

Auto Answer\*: Auto Answer Off

---

**AAR Settings**

	Voice Mail	AAR Destination Mask	AAR Group
AAR	<input type="checkbox"/> or		< None >

Retain this destination in the call forwarding history

---

**Call Forward and Call Pickup Settings**

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default



Line 5001 – 3 of 6.

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Directory Number Configuration Related Links: Configure Device (SEP0003E362FED4) Go

Save Delete Reset Add New

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default
Forward All	<input type="checkbox"/> or	<input type="text"/>	< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Busy External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward on CTI Failure	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered External	<input type="checkbox"/> or	<input type="text"/>	< None >
No Answer Ring Duration (seconds)		<input type="text"/>	
Call Pickup Group			< None >



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Directory Number Configuration Related Links: Configure Device (SEP0003E362FED4) Go

Save Delete Reset Add New

Call Pickup Group: < None >

**MLPP Alternate Party Settings**

Target (Destination):

MLPP Calling Search Space: < None >

MLPP No Answer Ring Duration (seconds):

**Line Settings for All Devices**

Hold Reversion Ring Duration (seconds):  Setting the Hold Reversion Ring Duration to zero will disable the feature

Hold Reversion Notification Interval (seconds):  Setting the Hold Reversion Notification Interval to zero will disable the feature

**Line 1 on Device SEP0003E362FED4**

Display (Internal Caller ID):  Display text for a line appearance is intended for displaying text such as a name instead of a directory number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.

ASCII Display (Internal Caller ID):

Line Text Label:

ASCII Line Text Label:





Line 5001 – 5 of 6.

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Directory Number Configuration Related Links: Configure Device (SEP0003E362FED4) Go

Save Delete Reset Add New

Line Text Label	<input type="text" value="Phone5001"/>
ASCII Line Text Label	<input type="text" value="Phone5001"/>
External Phone Number Mask	<input type="text"/>
Visual Message Waiting Indicator Policy*	<input type="text" value="Use System Policy"/>
Ring Setting (Phone Idle)*	<input type="text" value="Ring"/>
Ring Setting (Phone Active)	<input type="text" value="Use System Default"/> Applies to this line when any line on the phone has a call in progress.
Call Pickup Group Audio Alert Setting(Phone Idle)	<input type="text" value="Use System Default"/>
Call Pickup Group Audio Alert Setting(Phone Active)	<input type="text" value="Use System Default"/>
Monitoring Calling Search Space	<input type="text" value="&lt; None &gt;"/>

**Multiple Call/Call Waiting Settings on Device SEP0003E362FED4**

Note: The range to select the Max Number of calls is: 1-196

Maximum Number of Calls*	<input type="text" value="4"/>
Busy Tripper*	<input type="text" value="2"/> (Less than or equal to Max. Calls)





Line 5001 – 6 of 6.

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**Directory Number Configuration** Related Links: Configure Device (SEP0003E362FED4) Go

Save Delete Reset Add New

**Multiple Call/Call Waiting Settings on Device SEP0003E362FED4**

Note: The range to select the Max Number of calls is: 1-196

Maximum Number of Calls\*

Busy Trigger\*  (Less than or equal to Max. Calls)

**Forwarded Call Information Display on Device SEP0003E362FED4**

- Caller Name
- Caller Number
- Redirected Number
- Dialed Number

**Users Associated with Line**

Associate End Users

Save Delete Reset Add New

**i** \*- indicates required item.

**i** \*\* - Changes to Line or Directory Number settings require restart.



## Cisco Unified IP Phone 7961, x5007, SIP – 1 of 8.

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Status**  
Status: Ready

**Association Information**  
Modify Button Items

1	Line [1] - 5007 (no partition)
2	Line [2] - Add a new DN
3	Add a new SD
4	Add a new SD
5	Add a new SD
6	Add a new SD
----- Unassigned Associated Items -----	
7	Add a new SD
8	Add a new SURL
9	Add a new BLF SD
10	Add a new BLF Directed Call Park

**Phone Type**  
Product Type: Cisco 7961  
Device Protocol: SIP

**Device Information**

Registration	Registered with Cisco Unified Communications Manager CM-SATURN
IP Address	172.20.235.110
MAC Address*	00170EEE32C6
Description	Auto 5007
Device Pool*	Default <a href="#">View Details</a>
Common Device Configuration	< None > <a href="#">View Details</a>
Phone Button Template*	Standard 7961 SIP
Softkey Template	< None >
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	< None >
AAR Calling Search Space	< None >



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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

9	<a href="#">Add a new BLF SD</a>
10	<a href="#">Add a new BLF Directed Call Park</a>
11	<a href="#">Intercom [1] - Add a new Intercom</a>
12	Do Not Disturb
13	Privacy
14	None

Common Phone Profile: Standard Common Phone Profile

Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
User Hold MOH Audio Source	< None >
Network Hold MOH Audio Source	< None >
Location*	Hub_None
AAR Group	< None >
User Locale	< None >
Network Locale	< None >
Built In Bridge*	Default
Privacy*	Default
Device Mobility Mode*	Default
Owner User ID	< None >
Phone Personalization*	Default
Phone Load Name	

Ignore Presentation Indicators (internal calls only)

[View Current Device](#)

[Mobility Settings](#)



### Cisco Unified IP Phone 7961, x5007, SIP – 3 of 8.

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Phone Configuration Related Links:

Phone Load Name

Ignore Presentation Indicators (internal calls only)  
 Allow Control of Device from CTI  
 Logged Into Hunt Group  
 Remote Device

**Protocol Specific Information**

Packet Capture Mode*	<input type="text" value="None"/>
Packet Capture Duration	<input type="text" value="0"/>
Presence Group*	<input type="text" value="Standard Presence group"/>
SIP Dial Rules	<input type="text" value="&lt; None &gt;"/>
MTP Preferred Originating Codec*	<input type="text" value="711ulaw"/>
Device Security Profile*	<input type="text" value="Cisco 7961 - Standard SIP Non-Secure Profile"/>
Rerouting Calling Search Space	<input type="text" value="&lt; None &gt;"/>
SUBSCRIBE Calling Search Space	<input type="text" value="&lt; None &gt;"/>
SIP Profile*	<input type="text" value="Standard SIP Profile"/>
Digest User	<input type="text" value="&lt; None &gt;"/>

Media Termination Point Required



Cisco Unified IP Phone 7961, x5007, SIP – 4 of 8.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

Digest User: < None >

Media Termination Point Required

Unattended Port

Require DTMF Reception

**Certification Authority Proxy Function (CAPF) Information**

Certificate Operation\*: No Pending Operation

Authentication Mode\*: By Null String

Authentication String:

Key Size (Bits)\*: 1024

Operation Completes By: 2007 6 30 12 (YYYY:MM:DD:HH)

Certificate Operation Status: None

Note: Security Profile Contains Addition CAPF Settings.

**External Data Locations Information (Leave blank to use default)**

Information:

Directory:

Messages:



Cisco Unified IP Phone 7961, x5007, SIP – 5 of 8.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

Directory	<input type="text"/>
Messages	<input type="text"/>
Services	<input type="text"/>
Authentication Server	<input type="text"/>
Proxy Server	<input type="text"/>
Idle	<input type="text"/>
Idle Timer (seconds)	<input type="text"/>

**Extension Information**

Enable Extension Mobility

Log Out Profile: -- Use Current Device Settings --

Log in Time: < None >

Log out Time: < None >

**MLPP Information**

MLPP Domain: < None >

**Do Not Disturb**



Cisco Unified IP Phone 7961, x5007, SIP – 6 of 8.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

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Phone Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

Next Domain: < None >

**Do Not Disturb**

Do Not Disturb

DND Option\* Ringer Off

DND Incoming Call Alert < None >

**Secure Shell Information**

Secure Shell User

Secure Shell Password

**Product Specific Configuration Layout**

Disable Speakerphone

Disable Speakerphone and Headset

PC Port \* Enabled

Settings Access\* Enabled

Gratuitous ARP\* Disabled

PC Voice VLAN Access\* Enabled





Cisco Unified IP Phone 7961, x5007, SIP – 7 of 8.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

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Phone Configuration Related Links:

Gratuitous ARP*	<input type="text" value="Disabled"/>
PC Voice VLAN Access*	<input type="text" value="Enabled"/>
Video Capabilities*	<input type="text" value="Disabled"/>
Auto Line Select*	<input type="text" value="Disabled"/>
Web Access*	<input type="text" value="Enabled"/>
Span to PC Port*	<input type="text" value="Disabled"/>
Logging Display*	<input type="text" value="PC Controlled"/>
Load Server	<input type="text"/>
Recording Tone*	<input type="text" value="Disabled"/>
Recording Tone Local Volume*	<input type="text" value="100"/>
Recording Tone Remote Volume*	<input type="text" value="50"/>
Recording Tone Duration	<input type="text"/>
RTCP*	<input type="text" value="Disabled"/>
"more" Soft Key Timer	<input type="text" value="5"/>
Auto Call Select*	<input type="text" value="Enabled"/>
Log Server	<input type="text"/>
Advertise G.722 Codec*	<input type="text" value="Use System Default"/>
Wideband Headset UI Control*	<input type="text"/>





## Cisco Unified IP Phone 7961, x5007, SIP – 8 of 8.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

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Phone Configuration Related Links:

"more" Soft Key Timer	<input type="text" value="5"/>
Auto Call Select*	<input type="text" value="Enabled"/>
Log Server	<input type="text"/>
Advertise G.722 Codec*	<input type="text" value="Use System Default"/>
Wideband Headset UI Control*	<input type="text" value="Enabled"/>
Wideband Handset UI Control*	<input type="text" value="Enabled"/>
Wideband Headset*	<input type="text" value="Enabled"/>
Wideband Handset*	<input type="text" value="Use Phone Default"/>
Peer Firmware Sharing*	<input type="text" value="Disabled"/>
Cisco Discovery Protocol (CDP): Switch Port*	<input type="text" value="Enabled"/>
Cisco Discovery Protocol (CDP): PC Port*	<input type="text" value="Enabled"/>

**i** \*- indicates required item.

**i** \*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.

**i** \*\*\*Note: Security Profile Contains Addition CAPF Settings.



Line 5007 – 1 of 6.

**Cisco Unified CM Administration**  
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Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

**Status**  
Status: Ready

**Directory Number Information**

Directory Number*	5007
Route Partition	< None >
Description	
Alerting Name	A5007
ASCII Alerting Name	A5007
<input checked="" type="checkbox"/> Allow Control of Device from CTI	
Associated Devices	SEP00170EEE32C6
Dissociate Devices	

[Edit Device](#)  
[Edit Line Appearance](#)



Line 5007 – 2 of 6.

**Cisco Unified CM Administration**  
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Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

---

**Directory Number Settings**

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

Calling Search Space: < None >

Presence Group\*: Standard Presence group

User Hold MOH Audio Source: < None >

Network Hold MOH Audio Source: < None >

Auto Answer\*: Auto Answer Off

---

**AAR Settings**

	Voice Mail	AAR Destination Mask	AAR Group
AAR	<input type="checkbox"/>		< None >

Retain this destination in the call forwarding history

---

**Call Forward and Call Pickup Settings**

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default



Line 5007 – 3 of 6.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default
Forward All	<input type="checkbox"/> or	<input type="text"/>	< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Busy External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward on CTI Failure	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered External	<input type="checkbox"/> or	<input type="text"/>	< None >
No Answer Ring Duration (seconds)		<input type="text"/>	
Call Pickup Group			< None >



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**Cisco Unified CM Administration**  
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System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help

Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

Call Pickup Group < None >

**MLPP Alternate Party Settings**

Target (Destination)

MLPP Calling Search Space < None >

MLPP No Answer Ring Duration (seconds)

**Line Settings for All Devices**

Hold Reversion Ring Duration (seconds)  Setting the Hold Reversion Ring Duration to zero will disable the feature

Hold Reversion Notification Interval (seconds)  Setting the Hold Reversion Notification Interval to zero will disable the feature

**Line 1 on Device SEP00170EEE32C6**

Display (Internal Caller ID)  Display text for a line appearance is intended for displaying text such as a name instead of a directory number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.

ASCII Display (Internal Caller ID)

Line Text Label

ASCII Line Text Label



Line 5007 – 5 of 6.

**Cisco Unified CM Administration**  
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Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

Line Text Label	<input type="text" value="Phone5007"/>
ASCII Line Text Label	<input type="text" value="Phone5007"/>
External Phone Number Mask	<input type="text"/>
Visual Message Waiting Indicator Policy*	<input type="text" value="Use System Policy"/>
Audible Message Waiting Indicator Policy*	<input type="text" value="Off"/>
Ring Setting (Phone Idle)*	<input type="text" value="Use System Default"/>
Ring Setting (Phone Active)	<input type="text" value="Use System Default"/> Applies to this line when any line on the phone has a call in progress.
Call Pickup Group Audio Alert Setting(Phone Idle)	<input type="text" value="Use System Default"/>
Call Pickup Group Audio Alert Setting(Phone Active)	<input type="text" value="Use System Default"/>
Recording Option*	<input type="text" value="Call Recording Disabled"/>
Recording Profile	<input type="text" value="&lt; None &gt;"/>
Monitoring Calling Search Space	<input type="text" value="&lt; None &gt;"/>



Line 5007 – 6 of 6.

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Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

Monitoring Calling Search Space: < None >

**Multiple Call/Call Waiting Settings on Device SEP00170EEE32C6**  
Note: The range to select the Max Number of calls is: 1-200

Maximum Number of Calls*	<input type="text" value="4"/>
Busy Trigger*	<input type="text" value="2"/> (Less than or equal to Max. Calls)

**Forwarded Call Information Display on Device SEP00170EEE32C6**

- Caller Name
- Caller Number
- Redirected Number
- Dialed Number

**Users Associated with Line**

Associate End Users

Save Delete Reset Add New





## Call Forwarding

Call Forwarding: line 5007 set up to forward to 5002 – 1 of 1.

**Cisco Unified CM Administration**  
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Directory Number Configuration Related Links: Configure Device (SEP00170EEE32C6) Go

Save Delete Reset Add New

### Call Forward and Call Pickup Settings

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default
Forward All	<input type="checkbox"/> or		< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or	5002	< None >
Forward Busy External	<input type="checkbox"/> or	5002	< None >
Forward No Answer Internal	<input type="checkbox"/> or	5002	< None >
Forward No Answer External	<input type="checkbox"/> or	5002	< None >
Forward No Coverage Internal	<input type="checkbox"/> or		< None >
Forward No Coverage External	<input type="checkbox"/> or		< None >
Forward on CTI Failure	<input type="checkbox"/> or		< None >
Forward Unregistered Internal	<input type="checkbox"/> or	5002	< None >
Forward Unregistered External	<input type="checkbox"/> or	5002	< None >
No Answer Ring Duration (seconds)			
Call Pickup Group			< None >





## Cisco Unity Integration

### List Hunt Pilots – 1 of 1.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration Go

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#### Find and List Hunt Pilots

+ Add New | Select All | Clear All | Delete Selected

**Status**  
1 records found

#### Hunt Pilots (1 - 1 of 1)

Rows per Page: 50

Find Hunt Pilots where: Pattern begins with [ ] Find Clear Filter + -

<input type="checkbox"/>	Pattern ^	Description	Partition	Route Filter	Hunt List	Copy
<input type="checkbox"/>	5090	VM Hunt Pilot			<a href="#">UnityVM_HL</a>	

Add New | Select All | Clear All | Delete Selected



### Hunt Pilot 5090 – 1 of 3.

**Cisco Unified CM Administration** Navigation Cisco Unified CM Administration Go  
For Cisco Unified Communications Solutions administrator | About | Logout

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**Hunt Pilot Configuration** Related Links: Back To Find/List Go

Save  Delete  Copy  Add New

**Status**  
Status: Ready

**Pattern Definition**

Hunt Pilot\*   
Route Partition   
Description   
Numbering Plan   
Route Filter   
MLPP Precedence\*   
 Hunt List\*  [\(Edit\)](#)  
Route Option  
 Route this pattern  
 Block this pattern   
 Provide Outside Dial Tone  Urgent Priority

**Hunt Forward Settings**

	Use Personal Preferences	Destination	Calling Search Space
Forward Hunt No Answer	<input type="checkbox"/> or	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>



### Hunt Pilot 5090 – 2 of 3.

**Cisco Unified CM Administration**  
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**Hunt Pilot Configuration** Related Links:

**Hunt Forward Settings**

	Use Personal Preferences	Destination	Calling Search Space
Forward Hunt No Answer	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Hunt Busy	<input type="checkbox"/> or	<input type="text"/>	< None >
Maximum Hunt Timer	<input type="text"/>		

**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:



### Hunt Pilot 5090 – 3 of 3.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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#### Hunt Pilot Configuration Related Links:

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)

---

#### AAR Group Settings

AAR Group

External Number Mask

---

\*- indicates required item.



## Hunt List – 1 of 2.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

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**Hunt List Configuration** Related Links:

---

**Status**  
 Status: Ready

---

**Hunt List Information**

Name\*

Description

Cisco Unified Communications Manager Group\*

Enable this Hunt List (change effective on Save; no reset required)

For Voice Mail Usage

---

**Hunt List Member Information**

**Add Line Group**

Selected Groups\*\*

Removed Groups\*\*\*



## Hunt List – 2 of 2.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration

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### Hunt List Configuration

Related Links:

#### Add Line Group

Selected Groups\*\*

Removed Groups\*\*\*

#### Hunt List Details

- \*- indicates required item.
- \*\*ordered by highest priority
- \*\*\*will be removed from Hunt List when you click Save



### Line Group – 1 of 3.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Line Group Configuration** Related Links:

---

**Line Group Information**

Line Group Name\*

RNA Reversion Timeout\*

Distribution Algorithm\*

**Hunt Options**

No Answer\*

Busy\*\*

Not Available\*\*

---

**Line Group Member Information**

**Find Directory Numbers to Add to Line Group**

Partition

Directory Number Contains

Available DN/Route Partition

1221
1222
4200
4201
4202



### Line Group – 2 of 3.

**Cisco Unified CM Administration**  
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**Line Group Configuration** Related Links:

**Find Directory Numbers to Add to Line Group**

Partition:

Directory Number Contains:

Available DN/Route Partition:

1221
1222
4200
4201
4202

**Current Line Group Members**

Selected DN/Route Partition:

5091
5092
5093
5094

Removed DN/Route Partition:

--





### Line Group – 3 of 3.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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#### Line Group Configuration

Related Links: Back To Find/List Go

Save Delete Add New

5093  
5094

Removed DN/Route Partition

#### Directory Numbers

- 5091 (no partition)
- 5092 (no partition)
- 5093 (no partition)
- 5094 (no partition)

Save Delete Add New

**i** \*- indicates required item.  
**i** \*\*Fields marked with a \*\* are required when the Distribution Algorithm is set to Top Down or Circular, and are not used when the Distribution Algorithm is set to Longest Idle or Broadcast. The No Answer setting is used for Longest Idle and Broadcast.



### Line Group Line 5091 – 1 of 4.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

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Directory Number Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Status**  
Status: Ready

**Directory Number Information**

Directory Number*	5091
Route Partition	< None >
Description	
Alerting Name	VoiceMail
ASCII Alerting Name	
Line Group	SaturnUM1_LG <a href="#">Edit Line Group</a>
Associated Devices	SaturnUM1-VI1 <a href="#">Edit Device</a> <a href="#">Edit Line Appearance</a>
Dissociate Devices	



Line Group Line 5091 – 2 of 4.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

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Directory Number Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

**Directory Number Settings**

Voice Mail Profile	NoVoiceMail	(Choose <None> to use system default)
Calling Search Space	< None >	
Presence Group*	Standard Presence group	
User Hold MOH Audio Source	< None >	
Network Hold MOH Audio Source	< None >	
Auto Answer*	Auto Answer Off	

**AAR Settings**

	Voice Mail	AAR Destination Mask	AAR Group
AAR	<input type="checkbox"/> or		< None >
<input checked="" type="checkbox"/> Retain this destination in the call forwarding history			

**Call Forward and Call Pickup Settings**

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default



### Line Group Line 5091 – 3 of 4.

**Cisco Unified CM Administration**  
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Directory Number Configuration Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default
Forward All	<input type="checkbox"/> or	<input type="text"/>	< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Busy External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Answer External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward No Coverage External	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward on CTI Failure	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered Internal	<input type="checkbox"/> or	<input type="text"/>	< None >
Forward Unregistered External	<input type="checkbox"/> or	<input type="text"/>	< None >
No Answer Ring Duration (seconds)		<input type="text"/>	
Call Pickup Group			< None >



## Line Group Line 5091 – 4 of 4.

**Cisco Unified CM Administration**  
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### Directory Number Configuration

Related Links: Back To Find/List Go

Save Delete Copy Reset Add New

Forward Unregistered External  or  < None >

No Answer Ring Duration (seconds)

Call Pickup Group < None >

#### MLPP Alternate Party Settings

Target (Destination)

MLPP Calling Search Space < None >

MLPP No Answer Ring Duration (seconds)

#### Line Settings for All Devices

Hold Reversion Ring Duration (seconds)  Setting the Hold Reversion Ring Duration to zero will disable the feature

Hold Reversion Notification Interval (seconds)  Setting the Hold Reversion Notification Interval to zero will disable the feature

Save Delete Copy Reset Add New

**i** \*- indicates required item.

**i** \*\*-. Changes to Line or Directory Number settings require restart.



## Voice Mail Profiles – 1 of 1.

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### Find and List Voice Mail Profiles

Add New

**Status**

3 records found

---

**Voice Mail Profile (1 - 3 of 3)** Rows per Page 50 ▾

Find Voice Mail Profile where Voice Mail Profile Name

	Name ^	Description	Pilot	Calling Search Space	Copy
<input type="checkbox"/>	<a href="#">Default</a>	Default voice messaging profile			
<input type="checkbox"/>	<a href="#">NoVoiceMail</a>	No Voice Mail			
	<a href="#">UnityVM_Profile</a>	Unity VM Profile	5090		



## Unity Voice Mail Profile – 1 of 1.

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

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**Voice Mail Profile Configuration** Related Links: [Back To Find/List](#)

---

**Status**

Status: Ready

---

**Voice Mail Profile Information**

Voice Mail Profile UnityVM\_Profile (used by 10 devices)

Voice Mail Profile Name\*

Description

Voice Mail Pilot\*\*

Voice Mail Box Mask

Make this the default Voice Mail Profile for the System

---

---

\*- indicates required item.

\*\*- The Voice Mail Pilot is comprised of the Voice Mail Pilot Number and it's corresponding Calling Search Space Name (< Voice Mail Pilot Number >/< Calling Search Space >).



Voice Mail Pilots – 1 of 1.

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### Find and List Voice Mail Pilots

Add New

**Status**

**i** 3 records found

---

**Voice Mail Pilot (1 - 3 of 3)** Rows per Page 50 ▾

Find Voice Mail Pilot where Voice Mail Pilot Number ▾ begins with ▾

		Pilot Number ^	Description	Calling Search Space
<input type="checkbox"/>			<a href="#">Default</a>	
<input type="checkbox"/>			<a href="#">No Voice Mail</a>	
<input checked="" type="checkbox"/>		5090	<a href="#">VM Pilot</a>	





## Voice Mail Pilot 5090 – 1 of 1.

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**Voice Mail Pilot Configuration** Related Links:

**Status**

Status: Ready

**Voice Mail Pilot Information**

Voice Mail Pilot Number:

Calling Search Space:  ▾

Description:

Make this the default Voice Mail Pilot for the system

\*- indicates required item.



## Voice Mail Ports – 1 of 1.

**Cisco Unified CM Administration** For Cisco Unified Communications Solutions

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### Find and List Voice Mail Ports

Add New

**Status**

**i** 4 records found

---

**Voice Mail Port (1 - 4 of 4)** Rows per Page 50 ▾

Find Voice Mail Port where Device Name ▾ begins with ▾

<input type="checkbox"/>	Device Name ▲	Description	Device Pool	Device Security Mode	Calling Search Space	Ext.	Partition	Status	IP Address	Copy
<input type="checkbox"/>	<a href="#">SaturnUM1-VI1</a>	VM Port	<a href="#">Default</a>	Non Secure Voice Mail Port		<a href="#">5091</a>		Registered with CM-SATURN	172.20.239.252	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">SaturnUM1-VI2</a>	VM Port	<a href="#">Default</a>	Non Secure Voice Mail Port		<a href="#">5092</a>		Registered with CM-SATURN	172.20.239.252	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">SaturnUM1-VI3</a>	VM Port	<a href="#">Default</a>	Non Secure Voice Mail Port		<a href="#">5093</a>		Registered with CM-SATURN	172.20.239.252	<input type="button" value="Copy"/>
<input type="checkbox"/>	<a href="#">SaturnUM1-VI4</a>	VM Port	<a href="#">Default</a>	Non Secure Voice Mail Port		<a href="#">5094</a>		Registered with CM-SATURN	172.20.239.252	<input type="button" value="Copy"/>



iDivert

### iDivert Softkey Template – 1 of 1.

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**Softkey Template Configuration** Related Links:

---

**Status**

Status: Ready

---

**Softkey Template Information**

Name*	<input type="text" value="Standard User iDivert"/>	
Description	<input type="text" value="Standard Softkey Template for CCM w/ iDivert"/>	
Applications*	<input type="text" value="Cisco CallManager"/>	<input type="button" value="Add Application"/> <input type="button" value="Remove Application"/>

Default Softkey Template

---

---

\*- indicates required item.



## iDivert Softkey Template Layout – Connected – 1 of 1.

**Cisco Unified CM Administration**  
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**Softkey Template Configuration** Related Links: [Softkey Template Configuration](#)

---

**Status**  
 Status: Ready

---

**Softkey Layout Configuration**  
Softkey Template: Standard User iDivert  
Select a call state to configure:

Unselected Softkeys	Selected Softkeys (ordered by position)**
HLog (HLog) Mobility (Mobility) Quality Report Tool (QRT) Toggle Do Not Disturb (DND) Undefined (Undefined)	Immediate Divert (iDivert) Hold (Hold) End Call (EndCall) Transfer (Trnsfer) Park (Park) Conference (Confrn) Conference List (ConfList) Select (Select) Join (Join) Direct Transfer (DirTrfr) Video Mode Command (VidMode) Redirect (Redirect) Remove Last Conference Party (RmLstC) Transfer to Voice Mail (TrnsfVM) Toggle Malicious Call Trace (MCID)



## iDivert Softkey Template Layout – Hold – 1 of 1.

**Cisco Unified CM Administration**  
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**Softkey Template Configuration** Related Links: [Softkey Template Configuration](#)

---

**Status**  
 Status: Ready

---

**Softkey Layout Configuration**  
Softkey Template: Standard User iDivert  
Select a call state to configure:

Unselected Softkeys	Selected Softkeys (ordered by position)**
Toggle Do Not Disturb (DND) Undefined (Undefined)	**Resume (Resume) Immediate Divert (iDivert) NewCall (NewCall) Direct Transfer (DirTrfr) Select (Select) Join (Join) Redirect (Redirect) Transfer to Voice Mail (TrnsfVM)



## iDivert Softkey Template Layout – Ring in – 1 of 1.

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**Softkey Template Configuration** Related Links: [Softkey Template Configuration](#)

---

**Status**  
 Status: Ready

---

**Softkey Layout Configuration**  
Softkey Template: Standard User iDivert  
Select a call state to configure: Ring In ▾

Unselected Softkeys	Selected Softkeys (ordered by position)**
Toggle Do Not Disturb (DND) Undefined (Undefined)	Immediate Divert (iDivert) Answer (Answer) Redirect (Redirect) Transfer to Voice Mail (TrnsfVM)



## iDivert Service Parameters set for Legacy – 1 of 1.

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### Service Parameter Configuration

Related Links: Parameters for All Servers Go

Save Set to Default Advanced

<a href="#">SIP Dual Mode Alert Timer</a> *	1500	1500
<a href="#">Enable Enterprise Feature Access</a> *	False	False
<a href="#">Enable Mobile Voice Access</a> *	False	False
<a href="#">Mobile Voice Access Number</a>		
<a href="#">Matching Caller ID with Remote Destination</a> *	Complete Match	Complete Match
<a href="#">Number of Digits for Caller ID Partial Match</a> *	10	10
<a href="#">System Remote Access Blocked Numbers</a>		

**Clusterwide Parameters (Feature - Immediate Divert)**

<a href="#">Use Legacy Immediate Divert</a> *	True	True
<a href="#">Allow QSIG during iDivert</a> *	True	False
<a href="#">Immediate Divert User Response Timer</a> *	5	5

Save Set to Default Advanced

**i** \*- indicates required item.  
**i** \*\*Set-to-Default button only applies to the modifiable parameters.



## iDivert Service Parameters set for \*50 (data-pass-through) – 1 of 1.

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Service Parameter Configuration Related Links: Parameters for All Servers Go

Save Set to Default Advanced

<a href="#">SIP Dual Mode Alert Timer</a> *	1500	1500
<a href="#">Enable Enterprise Feature Access</a> *	False	False
<a href="#">Enable Mobile Voice Access</a> *	False	False
<a href="#">Mobile Voice Access Number</a>		
<a href="#">Matching Caller ID with Remote Destination</a> *	Complete Match	Complete Match
<a href="#">Number of Digits for Caller ID Partial Match</a> *	10	10
<a href="#">System Remote Access Blocked Numbers</a>		

**Clusterwide Parameters (Feature - Immediate Divert)**

<a href="#">Use Legacy Immediate Divert</a> *	False	True
<a href="#">Allow QSIG during iDivert</a> *	True	False
<a href="#">Immediate Divert User Response Timer</a> *	5	5

Save Set to Default Advanced

**i** \*- indicates required item.  
**i** \*\*Set-to-Default button only applies to the modifiable parameters.





## Configuring the Cisco Unified IOS Gateway 2851

sho ver

Cisco IOS Software, 2800 Software (C2800NM-IPVOICE-M), Version 12.4(11)T, RELEASE SOFTWARE (fc2)

Technical Support: <http://www.cisco.com/techsupport>

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Compiled Sat 18-Nov-06 17:16 by prod\_rel\_team

ROM: System Bootstrap, Version 12.3(8r)T7, RELEASE SOFTWARE (fc1)

2851\_pbx uptime is 4 weeks, 1 minute

System returned to ROM by power-on

System image file is "flash:c2800nm-ipvoice-mz.124-11.T.bin"

Cisco 2851 (revision 53.51) with 251904K/10240K bytes of memory.

Processor board ID FTX1002C063

2 Gigabit Ethernet interfaces

49 Serial interfaces

2 Channelized E1/PRI ports

DRAM configuration is 64 bits wide with parity enabled.

239K bytes of non-volatile configuration memory.

62720K bytes of ATA CompactFlash (Read/Write)

Configuration register is 0x2102



```
2851_pbx# show run
```

```
Building configuration...
```

```
Current configuration : 3397 bytes
```

```
!
```

```
version 12.4
```

```
service timestamps debug datetime msec
```

```
service timestamps log datetime msec
```

```
no service password-encryption
```

```
!
```

```
hostname 2851_pbx
```

```
!
```

```
boot-start-marker
```

```
boot-end-marker
```

```
!
```

```
logging buffered 1000000
```

```
enable secret 5 $1$Aof0$VpNFzm5wFXJFI.udPvRnm/
```

```
enable password cisco
```

```
!
```

```
no aaa new-model
```

```
network-clock-participate slot 1
```

```
ip tcp synwait-time 13
```

```
!
```

```
!
```

```
ip cef
```

```
!
```

```
no ip domain lookup
```

```
ip host CM-SATURN 172.20.235.254
```



```
ip name-server 172.20.235.254
multilink bundle-name authenticated
!
isdn switch-type primary-qsig
isdn gateway-max-interworking
!
voice-card 0
no dspfarm
!
voice-card 1
dspfarm
!
!
!
!
username pbx privilege 15 secret 5 $1$Dby8$s6cwlUG35kFpoBqcoZocH/
username cisco password 0 cisco
!
!
controller E1 1/0/0
pri-group timeslots 1-31 service mgcp
!
controller E1 1/0/1
pri-group timeslots 1-18 service mgcp
!
!
!
!
interface GigabitEthernet0/0
```



```
description $ETH-LAN$$ETH-SW-LAUNCH$$INTF-INFO-GE 0/0$
ip address 172.20.33.128 255.255.255.0

duplex auto

speed auto

!

interface GigabitEthernet0/1

no ip address

shutdown

duplex auto

speed auto

!

interface Serial1/0/0:15

no ip address

encapsulation hdlc

isdn switch-type primary-qsig

isdn incoming-voice voice

isdn bind-13 ccm-manager

isdn bchan-number-order ascending

no cdp enable

!

interface Serial1/0/1:15

no ip address

encapsulation hdlc

isdn switch-type primary-qsig

isdn incoming-voice voice

isdn bind-13 ccm-manager

isdn bchan-number-order ascending

no cdp enable

!
```



```
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/0
ip route 0.0.0.0 0.0.0.0 172.20.33.1
!
!
ip http server
ip http authentication local
ip http timeout-policy idle 5 life 86400 requests 10000
!
!
!
!
control-plane
!
!
!
voice-port 1/0/0:15
echo-cancel coverage 24
voice-port 1/0/1:15
echo-cancel coverage 24
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server 172.20.235.254
ccm-manager config
!
mgcp
mgcp call-agent CM-SATURN 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
no mgcp package-capability fxr-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 cor custom
```

```
!
```

```
!
```

```
!
```

```
!
```

```
banner login ^C
```

-----

Cisco Router and Security Device Manager (SDM) is installed on this device.

This feature requires the one-time use of the username "cisco"  
with the password "cisco".

Please change these publicly known initial credentials using SDM or the Cisco IOS CLI.

Here are the Cisco IOS commands.

```
username <myuser> privilege 15 secret 0 <mypassword>
no username cisco
```



Replace <myuser> and <mypassword> with the username and password you want to use.

For more information about SDM please follow the instructions in the QUICK START GUIDE for your router or go to <http://www.cisco.com/go/sdm>

```
-----  
^C  
!  
line con 0  
line aux 0  
line vty 0 4  
privilege level 15  
login local  
transport input telnet  
line vty 5 15  
privilege level 15  
login local  
transport input telnet  
!  
scheduler allocate 20000 1000  
!  
end
```



## Acronyms

<b>Acronym</b>	<b>Definitions</b>
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
CCM	Cisco Unified Call Manager
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
CNIP	Calling Name Identification Presentation
CNIR	Calling Name Identification Restriction
COLP	Connected Line (Number) Identification Presentation





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