



# Nortel CS1000 R 4.0 using T1 QSIG to Cisco Unified Communications Manager 5.1.2 and Cisco Emergency Responder 2.0.

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## Table of Contents

Introduction .....	2
Network Topology.....	2
Limitations.....	3
System Components .....	3
Hardware Requirements .....	3
Software Requirements .....	3
Features .....	3
Conclusion.....	3
Configuration.....	4
Configuring Cisco Communications Manager .....	4
Configuring Cisco Emergency Responder .....	41
Configuring Nortel CS1000 PBX with Succession 4.0 Software Release.....	71
Acronyms .....	78



## Introduction

The following is an Application Note for E911 Interoperability of a Cisco Unified Communications Manager (CUCM) 5.1.2 and Cisco Emergency Responder (CER) 2.0 to a Nortel CS1000 R 4.0 via a Cisco 3825 T1-QSIG trunk as MGCP gateway. The CUCM system is connected to a simulated E911 Public Safety Answering Point (PSAP) via a Cisco 3825 w/ CAMA trunk registered using H323.

The Network Topology diagram shows the test set-up for interoperability between the Cisco Unified Communications Manager and Cisco Emergency Responder connected to the PBX via a Cisco 3825 (MGCP gateway) T1 QSIG trunk and connected to E911 PSAP using a Cisco 3825 H323 gateway via a CAMA trunk.

This Application Note uses the C3825 IOS-voice-gateway, however other Cisco voice gateways are also an option to use since the voice gateway implementation does not depend on the platform. Here is a list of Cisco Products capable of voice gateway functionality: Care must be taken when selecting a voice gateway platform depending of the capacity required for the intended deployments

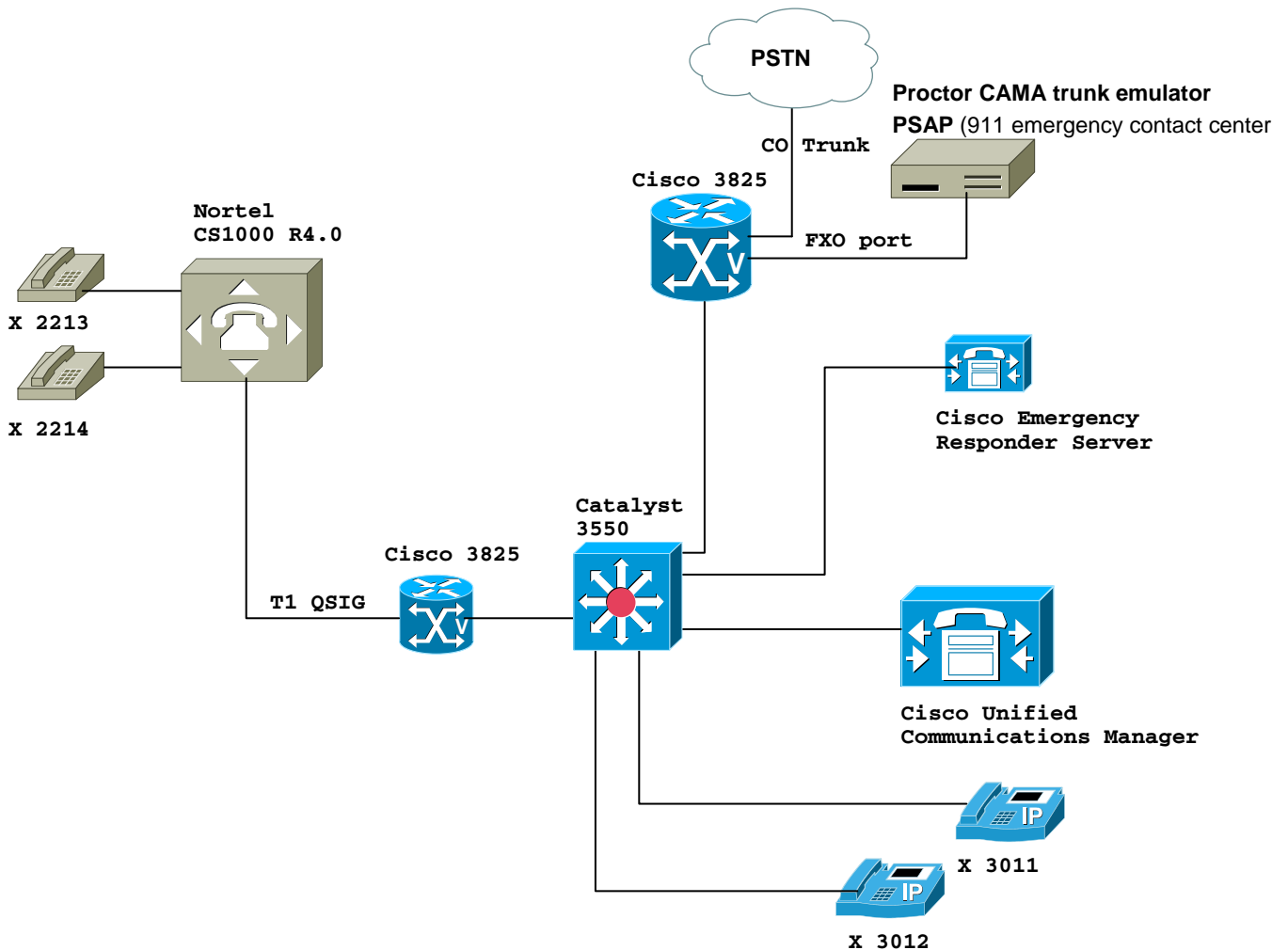
[Cisco 2800 Series Integrated Services Routers](#)

[Cisco 3800 Series Integrated Services Routers](#)

[Cisco 2600XM Series Multiservice Platforms](#)

[Cisco 3700 Series Routers](#)

## Network Topology





## Limitations

Unique DID numbers must be used to associate with each Emergency Response Location to allow the return call if the 911 caller is disconnected.

Each available calling party that might dial 911 from the PBX side must have that calling party number configured in the Manually Configured Phones screen of the Cisco Emergency Responder.

## System Components

### Hardware Requirements

Cisco 3825 Gateway with VIC2-4FXO (CAMA trunk)

Cisco 3825 Gateway with VWIC-2MFT-T1 (QSIG)

Cisco Cat3500 switch

Cisco Unified Communications Manager server

Cisco Emergency Responder server

Nortel CS1000 PBX

### Software Requirements

IOS Software release "C3825-ipvoiceK9-m.12.4 (15)T1"

IOS Software release "C3825-ADVENTERPRISEK9\_IVS-M .12.4(11).T1

Cisco Unified Communications Manager 5.1.2

Cisco Emergency Responder 2.0

PBX Software: Release 4.0

## Features

### Key features supported

Calling Number

E911 ERL DID number passed to PSAP

Incoming DID calling to disconnected 911 originating caller

## Conclusion

Test emergency 911 call from a PBX digital station was routed to the T1 QSIG trunk, of the Cisco Voice MGCP gateway, and was correctly associated to the appropriate Emergency Response Location. The call was connected through the Cisco 3825 CAMA trunk to the PSAP Emulator. The Emergency Response Location associated the ten digit DID call back number (ELIN) correctly and sent it to the PSAP, audio connection was also achieved. The PBX digital station was then disconnected.

A return call was originated from an incoming trunk (PSTN side) in the same Cisco Unified Communications Manager Partition. The number dialed was the DID digits of the 10 digit call back number sent to the PSAP on the previous 911 call (ELIN number). The call was routed through to the PBX digital station that had originated the E911 call. The call was disconnected and an alternate trunk was used to dial the same DID number and the call was routed through, again, to the PBX digital station that had originated the E911 call.

Test emergency 911 calls were made from each PBX digital station and Cisco IP phone. All calls were confirmed to select its associated Emergency Response Location and the associated 10 digit DID call back number. In each case, the call was disconnected and the call back number was confirmed to reach the phone that had originated the E911 call.

Emergency 911 calls made from a Nortel CS1000 PBX utilizing a T1 QSIG trunk configured as ISO, associates with the correct Emergency Response Location and routes to the associated PSAP with the correctly formatted 10 digit DID call back number.

The call back DID number routes the return call to the correct phone that had originated the E911 call from the PBX digital phone.



## Configuration

### Configuring Cisco Communications Manager

#### Partitions

The screenshot shows the Cisco Unified CallManager Administration interface. The top navigation bar includes 'Navigation', 'Cisco Unified CallManager Administration', and a 'Go' button. Below this, the page title is 'Cisco Unified CallManager Administration For Cisco Unified Communications Solutions' and the user is logged in as 'CCMAdministrator'. A secondary navigation bar contains various menu items: System, Call Routing, Media Resources, Voice Mail, Device, Application, User Management, Bulk Administration, and Help, along with a 'Log Off' button.

The main content area is titled 'Find and List Partitions'. It features a search interface with the following elements:

- Status:** 2 records found.
- Search Options:** A search box with a dropdown menu set to 'Name', a 'begins with' dropdown, and a 'Find' button. A checkbox for 'Search Within Results' is also present.
- Search Results:** A table with two columns: 'Partition Name' and 'Description'. The results are as follows:

Partition Name	Description
<a href="#">E911</a>	E911
<a href="#">Phones</a>	Phones

Below the search results table, there are several action buttons: 'Add New', 'Select All', 'Clear All', and 'Delete Selected'. A 'Rows per Page' dropdown menu is set to '50'.



## Phone Partition

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdministrator

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

**Partition Configuration** Related Links:

**Status**

Status: Ready

**Partition Information**

Name\*

Description

Time Schedule

Time Zone  Originating Device  Specific Time Zone

\*- indicates required item.



## E911 Partition

Navigation Cisco Unified CallManager Administration Go

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdministrator

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

Partition Configuration Related Links: Back To Find/List Go

Status  
Status: Ready

Partition Information

Name\* E911

Description E911

Time Schedule -- Not Selected --

Time Zone  Originating Device  
 Specific Time Zone Greenwich Standard Time

Save Delete Reset Add New

\*- indicates required item.

## Calling Search Space

Navigation Cisco Unified CallManager Administration Go

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdministrator

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

Find and List Calling Search Spaces

Status  
2 records found

Search Options

Find where Name begins with Find  Search Within Results  
(name begins with any)

Search Results

	CSS Name	Description	Copy
<input type="checkbox"/>	<a href="#">E911css</a>	E911css	
<input type="checkbox"/>	<a href="#">Phoneness</a>	Phoneness	

Add New Select All Clear All Delete Selected Rows per Page 50



CSS phones

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

Calling Search Space Configuration Related Links:

**Status**  
Status: Ready

**Calling Search Space Information**  
Name\* Phonecss  
Description Phonecss

**Route Partitions for this Calling Search Space**  
Available Partitions\*\* E911  
Selected Partitions Phones

**i** \*- indicates required item.  
**i** \*\*Selected Partitions are ordered by highest priority



CSS E911

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAdministrator

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

Calling Search Space Configuration Related Links:

**Status**  
 Status: Ready

**Calling Search Space Information**  
Name\*   
Description

**Route Partitions for this Calling Search Space**  
Available Partitions\*\*   
Selected Partitions

\*- indicates required item.





CUCM IP phones

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

Phone Configuration Related Links:

**Status**  
Status: Ready

**Association Information**

- Line [1] - 3011 in Phones
- Line [2] - Add a new DN
- Add a new SD
- Add a new SD
- Add a new SD
- Add a new SD
- Unassigned Associated Items -----  
Add a new SD
- Add a new SURL
- Add a new BLF SD
- Privacy
- None

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

**Device Information**

Registration	Registered with Cisco Unified CallManager CM-Titanic
IP Address	172.20.230.21
MAC Address*	00170EE67E8E
Description	CER SCCP 3011
Device Pool*	Default <a href="#">View Details</a>
Phone Button Template*	Standard 7961 SCCP
Softkey Template	Standard Feature
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	Phonecss
AAR Calling Search Space	< None >
Media Resource Group List	Titanic-MRGL
User Hold MOH Audio Source	< None >
Network Hold MOH Audio Source	< None >
Location*	Hub_None
User Locale	< None >



Network Locale	< None >
Built In Bridge*	Default
Privacy*	Default
Owner User ID	< None >
Phone Load Name	
<input checked="" type="checkbox"/> Retry Video Call as Audio	
<input type="checkbox"/> Ignore Presentation Indicators (internal calls only)	
<input checked="" type="checkbox"/> Allow Control of Device from CTI	
<b>Protocol Specific Information</b>	
Packet Capture Mode*	None
Packet Capture Duration	0
Presence Group*	Standard Presence group
Device Security Profile*	Cisco 7961 - Standard SCCP Non-Secure Profile
SUBSCRIBE Calling Search Space	< None >
<input type="checkbox"/> Unattended Port	
<input type="checkbox"/> Require DTMF Reception	
<input type="checkbox"/> RFC2833 Disabled	
<b>Certification Authority Proxy Function (CAPF) Information</b>	
Certificate Operation*	No Pending Operation
Authentication Mode*	By Null String
Authentication String	
<input type="button" value="Generate String"/>	
Key Size (Bits)*	1024
Operation Completes By	2007 9 6 12 (YYYY:MM:DD:HH)
Certificate Operation Status: None	
Note: Security Profile Contains Addition CAPF Settings.	
<b>Expansion Module Information</b>	



<b>Expansion Module Information</b>	
Module 1	< None >
Module 1 Load Name	
Module 2	< None >
Module 2 Load Name	
<b>External Data Locations Information (Leave blank to use default)</b>	
Information	
Directory	
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	
<b>Extension Information</b>	
<input checked="" type="checkbox"/> Enable Extension Mobility	
Log Out Profile	-- Not Selected --
Login in User ID	< None >
Log in Time	< None >
Log out Time	< None >
<b>MLPP Information</b>	
MLPP Domain	< None >
MLPP Indication*	Default
MLPP Preemption*	Default
<b>Secure Shell Information</b>	
Secure Shell User	



<b>MLPP Information</b>	
MLPP Domain	< None >
MLPP Indication*	Default
MLPP Preemption*	Default
<b>Secure Shell Information</b>	
Secure Shell User	
Secure Shell Password	
<b>Product Specific Configuration Layout</b>	
?	
<input type="checkbox"/> Disable Speakerphone	
<input type="checkbox"/> Disable Speakerphone and Headset	
Forwarding Delay*	Disabled
PC Port *	Enabled
Settings Access*	Enabled
Gratuitous ARP*	Enabled
PC Voice VLAN Access*	Enabled
Video Capabilities*	Disabled
Auto Line Select*	Enabled
Web Access*	Enabled
Span to PC Port*	Disabled
Logging Display*	PC Controlled
Load Server	
Recording Tone*	Disabled
Recording Tone Local Volume*	100
Recording Tone Remote Volume*	50
Recording Tone Duration	



Web Access*	Enabled
Span to PC Port*	Disabled
Logging Display*	PC Controlled
Load Server	
Recording Tone*	Disabled
Recording Tone Local Volume*	100
Recording Tone Remote Volume*	50
Recording Tone Duration	
RTCP*	Disabled
"more" Soft Key Timer	5
Auto Call Select*	Enabled
Log Server	
Advertise G.722 Codec*	Use System Default
Wideband Headset UI Control*	Enabled
Wideband Handset UI Control*	Enabled
Wideband Headset*	Enabled
Wideband Handset*	Use Phone Default
Peer Firmware Sharing*	Disabled
Cisco Discovery Protocol (CDP): Switch Port*	Enabled
Cisco Discovery Protocol (CDP): PC Port*	Enabled

Save Delete Copy Reset Add New

- \*- indicates required item.
- \*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.
- \*\*\*Note: Security Profile Contains Addition CAPF Settings.

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

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

**Status**  
 Status: Ready

**Directory Number Information**

Directory Number\* 3011

Route Partition Phones

Description CER SCCP 3011

Alerting Name CER Alert 3011

ASCII Alerting Name CER Alert 3011

Allow Control of Device from CTI

Associated Devices SEP00170EE67E8E

[Edit Device](#)

[Edit Line Appearance](#)

Dissociate Devices

**Directory Number Settings**

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

Calling Search Space Phonecss

Presence Group\* Standard Presence group



AAR Group	< None >	
User Hold MOH Audio Source	< None >	
Network Hold MOH Audio Source	< None >	
Auto Answer*	Auto Answer Off	

Call Forward and Call Pickup Settings			
	Voice Mail	Destination	Calling Search Space
Forward All	<input type="checkbox"/> or		< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or		< None >
Forward Busy External	<input type="checkbox"/> or		< None >
Forward No Answer Internal	<input type="checkbox"/> or		< None >
Forward No Answer External	<input type="checkbox"/> or		< 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 >
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 1 on Device SEP00170EE67E8E	
Display (Internal Caller ID)	CER SCCP 3011
ASCII Display (Internal Caller ID)	CER SCCP 3011

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.



MLPP No Answer Ring Duration (seconds)

---

**Line 1 on Device SEP00170EE67E8E**

Display (Internal Caller ID)	CER SCCP 3011	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)	CER SCCP 3011	
Line Text Label	CER SCCP 3011	
ASCII Line Text Label	CER SCCP 3011	
External Phone Number Mask		
Message Waiting Lamp Policy*	Use System Policy	
Ring Setting (Phone Idle)*	Use System Default	
Ring Setting (Phone Active)	Use System Default	Applies to this line when any line on the phone has a call in progress.

---

**Multiple Call/Call Waiting Settings on Device SEP00170EE67E8E**

Note: The range to select the Max Number of calls is: 1-200

Maximum Number of Calls*	4	
Busy Trigger*	2	(Less than or equal to Max. Calls)

---

**Forwarded Call Information Display on Device SEP00170EE67E8E**

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

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



## CTI Route Points

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

### Find and List CTI Route Points

**Status**  
 2 records found

**Search Options**  
Find CTI Route Point where Device Name  begins with    Search Within Results  
Select item or enter search text   
(device.name begins with any)

**Search Results**

Device Name	Description	Device Pool	Calling Search Space	Status	IP Address	Copy
<input type="checkbox"/> <a href="#">RP911</a>	RP911	<a href="#">Default</a>	<a href="#">E911css</a>	Registered with CM-Titanic	172.20.140.254	<input type="button" value="Copy"/>
<input type="checkbox"/> <a href="#">RPELIN913</a>	RPELIN913	<a href="#">Default</a>	<a href="#">E911css</a>	Registered with CM-Titanic	172.20.140.254	<input type="button" value="Copy"/>

Rows per Page





## CTI Route Point 911

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAdministrator

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

**CTI Route Point Configuration** Related Links:

**Status**  
Status: Ready

**Device Information**

Registration	Registered with Cisco Unified CallManager CM-Titanic
IP Address	172.20.140.254
Device Name*	RP911
Description	RP911
Device Pool*	Default <a href="#">View Details</a>
Calling Search Space	E911css
Location*	Hub_None
User Locale	< None >
Media Resource Group List	< None >
Network Hold MOH Audio Source	< None >
User Hold MOH Audio Source	< None >

**Association Information**

- Line [1] - 911 in Phones
- Line [2] - Add a new DN

\*- indicates required item.



Navigation Cisco Unified CallManager Administration Go

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdministrator

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

**Directory Number Configuration** Related Links: [Back To Find/List](#) Go

**Status**  
 ⓘ Status: Ready

**Directory Number Information**

Directory Number\* 911

Route Partition Phones

Description

Alerting Name

ASCII Alerting Name

Associated Devices RP911

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

Dissociate Devices

**Directory Number Settings**

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

Calling Search Space E911css

Presence Group\* Standard Presence group

Presence Group\* Standard Presence group

AAR Group < None >

User Hold MOH Audio Source < None >

Network Hold MOH Audio Source < None >

**Call Forward and Call Pickup Settings**

	Voice Mail	Destination	Calling Search Space
Forward All	<input type="checkbox"/> or		<span style="margin-left: 10px;">&lt; None &gt;</span>
Secondary Calling Search Space for Forward All			<span style="margin-left: 10px;">&lt; None &gt;</span>
Forward Busy Internal	<input checked="" type="checkbox"/> or	912	<span style="margin-left: 10px;">E911css</span>
Forward Busy External	<input checked="" type="checkbox"/> or	912	<span style="margin-left: 10px;">E911css</span>
Forward No Answer Internal	<input checked="" type="checkbox"/> or	912	<span style="margin-left: 10px;">E911css</span>
Forward No Answer External	<input checked="" type="checkbox"/> or	912	<span style="margin-left: 10px;">E911css</span>
Forward No Coverage Internal	<input checked="" type="checkbox"/> or		<span style="margin-left: 10px;">&lt; None &gt;</span>
Forward No Coverage External	<input checked="" type="checkbox"/> or		<span style="margin-left: 10px;">&lt; None &gt;</span>
Forward on CTI Failure	<input checked="" type="checkbox"/> or	912	<span style="margin-left: 10px;">E911css</span>
No Answer Ring Duration (seconds)			
Call Pickup Group	<span style="margin-left: 10px;">&lt; None &gt;</span>		

**MLPP Alternate Party Settings**

Target (Destination)

MLPP Calling Search Space < None >

MLPP No Answer Ring Duration (seconds)

**Line 1 on Device RP911**

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



No Answer Ring Duration (seconds) \_\_\_\_\_  
Call Pickup Group

---

**MLPP Alternate Party Settings**  
Target (Destination) \_\_\_\_\_  
MLPP Calling Search Space   
MLPP No Answer Ring Duration (seconds) \_\_\_\_\_

---

**Line 1 on Device RP911**  
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) \_\_\_\_\_  
External Phone Number Mask

---

**Multiple Call/Call Waiting Settings on Device RP911**  
Note: The range to select the Max Number of calls is: 1-10000  
Maximum Number of Calls\*   
Busy Trigger\*  (Less than or equal to Max. Calls)

---

**Forwarded Call Information Display on Device RP911**  
 Caller Name  
 Caller Number  
 Redirected Number  
 Dialed Number

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



## CTI Route Point 913

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAdministrator

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

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

**Status**  
Status: Ready

**Device Information**

Registration	Registered with Cisco Unified CallManager CM-Titanic
IP Address	172.20.140.254
Device Name*	RPELIN913
Description	RPELIN913
Device Pool*	Default <a href="#">View Details</a>
Calling Search Space	E911css
Location*	Hub_None
User Locale	< None >
Media Resource Group List	< None >
Network Hold MOH Audio Source	< None >
User Hold MOH Audio Source	< None >

**Association Information**

- Line [1] - 913XXXXXXXXX in E911
- Line [2] - Add a new DN

Save Delete Copy Reset Add New

\*- indicates required item.



Navigation Cisco Unified CallManager Administration Logged in as: CCMAdministrator

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

### Directory Number Configuration

Related Links: Back To Find/List Go

**Status**  
Status: Ready

**Directory Number Information**

Directory Number\* 913XXXXXXXXX

Route Partition E911

Description

Alerting Name

ASCII Alerting Name

Associated Devices RPELIN913

[Edit Device](#)

[Edit Line Appearance](#)

Dissociate Devices

**Directory Number Settings**

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

Calling Search Space E911css

Presence Group\* Standard Presence group

Presence Group\* Standard Presence group

AAR Group < None >

User Hold MOH Audio Source < None >

Network Hold MOH Audio Source < None >

**Call Forward and Call Pickup Settings**

	Voice Mail	Destination	Calling Search Space
Forward All	<input type="checkbox"/> or		< None >
Secondary Calling Search Space for Forward All			< None >
Forward Busy Internal	<input type="checkbox"/> or		< None >
Forward Busy External	<input type="checkbox"/> or		< None >
Forward No Answer Internal	<input type="checkbox"/> or		< None >
Forward No Answer External	<input type="checkbox"/> or		< 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 >
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 1 on Device RPELIN913**

Display (Internal Caller ID) 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



No Answer Ring Duration (seconds)

Call Pickup Group

---

**MLPP Alternate Party Settings**

Target (Destination)

MLPP Calling Search Space

MLPP No Answer Ring Duration (seconds)

---

**Line 1 on Device RPELIN913**

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)

External Phone Number Mask

---

**Multiple Call/Call Waiting Settings on Device RPELIN913**

Note: The range to select the Max Number of calls is: 1-10000

Maximum Number of Calls\*

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

---

**Forwarded Call Information Display on Device RPELIN913**

Caller Name

Caller Number

Redirected Number

Dialed Number

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

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

Note: A Backup CER server was not used during testing therefore CTI route point for 912 was not created.



## CTI Port

Navigation Cisco Unified CallManager Administration Go

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAdministrator

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

Phone Configuration Related Links: Back To Find/List Go

**Status**  
Status: Ready

**Association Information**

- 1 [7715 Line \[1\] - 6050 in Phones](#)
- 2 [7715 Line \[2\] - Add a new DN](#)

**Phone Type**  
Product Type: CTI Port  
Device Protocol: SCCP

**Device Information**

Registration	Registered with Cisco Unified CallManager CM-Titanic
IP Address	172.20.8.50
Device Name*	CERSec1
Description	
Device Pool*	Default <a href="#">View Details</a>
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	Phonecss
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
User Locale	< None >

Calling Search Space Phonecss

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

User Locale < None >

Network Locale < None >

Privacy\* Default

Owner User ID < None >

Ignore Presentation Indicators (internal calls only)

**Protocol Specific Information**

Presence Group*	Standard Presence group
Device Security Profile*	Cisco CTI Port - Standard SCCP Non-Secure Profil
SUBSCRIBE Calling Search Space	< None >

Unattended Port

**MLPP Information**

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

Save Delete Copy Reset Add New

\*- indicates required item.

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

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



Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

**Directory Number Configuration** Related Links:

---

**Status**  
 Status: Ready

---

**Directory Number Information**

Directory Number\*

Route Partition

Description

Alerting Name

ASCII Alerting Name

Associated Devices

v v

Dissociate Devices

---

**Directory Number Settings**

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

Calling Search Space

---

Presence Group\*

AAR Group

User Hold MOH Audio Source

Network Hold MOH Audio Source

---

**Call Forward and Call Pickup Settings**

	Voice Mail	Destination	Calling Search Space
Forward All	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Secondary Calling Search Space for Forward All			<input type="text" value="&lt; None &gt;"/>
Forward Busy Internal	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Forward Busy External	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Forward No Answer Internal	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Forward No Answer External	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Forward No Coverage Internal	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Forward No Coverage External	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
Forward on CTI Failure	<input type="checkbox"/> or <input type="text"/>	<input type="text"/>	<input type="text" value="&lt; None &gt;"/>
No Answer Ring Duration (seconds)	<input type="text"/>		
Call Pickup Group	<input type="text" value="&lt; None &gt;"/>		

---

**MLPP Alternate Party Settings**

Target (Destination)

MLPP Calling Search Space

MLPP No Answer Ring Duration (seconds)

---

**Line 1 on Device CERSec1**

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.





MLPP Calling Search Space

MLPP No Answer Ring Duration (seconds)

---

**Line 1 on Device CERSec1**

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

External Phone Number Mask

Message Waiting Lamp Policy\*

---

**Multiple Call/Call Waiting Settings on Device CERSec1**

Note: The range to select the Max Number of calls is: 1-200

Maximum Number of Calls\*

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

---

**Forwarded Call Information Display on Device CERSec1**

Caller Name

Caller Number

Redirected Number

Dialed Number

---

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

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



## Route Patterns for ELINs

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdminstrat

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

### Find and List Route Patterns

Status  
5 records found

Search Options  
Find Route Patterns where Pattern begins with Find Search Within Results  
(numplan.dnorpattern begins with any)

Search Results

Pattern	Description	Partition	Route Filter	Associated Device	Copy
<input type="checkbox"/> <a href="#">10.911</a>		<a href="#">E911</a>		<a href="#">172.20.192.102</a>	
<input type="checkbox"/> <a href="#">11.911</a>		<a href="#">E911</a>		<a href="#">172.20.192.102</a>	
<input type="checkbox"/> <a href="#">13.911</a>		<a href="#">E911</a>		<a href="#">172.20.192.102</a>	
<input type="checkbox"/> <a href="#">3333</a>				<a href="#">172.20.192.102</a>	
<input type="checkbox"/> <a href="#">4XXX</a>	NEC route 4xxx			<a href="#">S1/SU0/DS1-0@RI-3825</a>	

Add New Select All Clear All Delete Selected Rows per Page 50



## Route Pattern 10911

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdmin

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

**Route Pattern Configuration** Related Links: [Back To Find/List](#)

**Status**  
Status: Ready

**Pattern Definition**

Route Pattern\* 10.911

Route Partition E911

Description

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence\* Default

Gateway/Route List\* 172.20.192.102 (Edit) Find

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

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\* Allowed

Calling Name Presentation\* Default

**Connected Party Transformations**

Connected Line ID Presentation\* Default

Connected Name Presentation\* Default

**Called Party Transformations**

Discard Digits PreDot

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

**ISDN Network-Specific Facilities Information Element**

Network Service Protocol PRI N12

Carrier Identification Code < Not Configurable >

Network Service	Service Parameter Name	Service Parameter Value
Foreign Exchange Selection	Foreign Exchange	

Save Delete Copy Add New

\* - indicates required item.



## Route Pattern 11911

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdmin

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

**Route Pattern Configuration** Related Links: [Back To Find/List](#)

Status  
Status: Ready

**Pattern Definition**

Route Pattern\* 11.911

Route Partition E911

Description

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence\* Default

Gateway/Route List\* 172.20.192.102 (Edit) Find

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

Require Client Matter Code



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)

---

**ISDN Network-Specific Facilities Information Element**

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
Foreign Exchange Selection	<input type="text" value="Foreign Exchange"/>	<input type="text"/>

\*- indicates required item.



Route Pattern 13911

Navigation Cisco Unified CallManager Administration  
Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdmin

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

**Route Pattern Configuration** Related Links: [Back To Find/List](#)

**Status**  
Status: Ready

**Pattern Definition**

Route Pattern\* 13.911  
Route Partition E911  
Description  
Numbering Plan -- Not Selected --  
Route Filter < None >  
MLPP Precedence\* Default  
Gateway/Route List \* 172.20.192.102 (Edit) Find  
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  
 Require Client Matter Code

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\* Allowed  
Calling Name Presentation\* Default

**Connected Party Transformations**

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

**Called Party Transformations**

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

**ISDN Network-Specific Facilities Information Element**

Network Service Protocol PRI NI2  
Carrier Identification Code < Not Configurable >  
Network Service Service Parameter Name Service Parameter Value  
Foreign Exchange Selection Foreign Exchange

Save Delete Copy Add New

\*- indicates required item.



## Translation Pattern for ELINs

Navigation Cisco Unified CallManager Administration  
Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdmin

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

### Translation Pattern Configuration

Related Links: [Back To Find/List](#)

**Status**  
Status: Ready

**Pattern Definition**

Translation Pattern: 408527XXXX

Partition: E911

Description:

Numbering Plan: < None >

Route Filter: < None >

MLPP Precedence\*: Default

Calling Search Space: E911css

Route Option:  
 Route this pattern  
 Block this pattern No Error

Provide Outside Dial Tone  
 Urgent Priority

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask  
Calling Party Transform Mask:



MLPP Precedence\* Default

Calling Search Space E911css

Route Option

Route this pattern

Block this pattern No Error

Provide Outside Dial Tone

Urgent Priority

---

**Calling Party Transformations**

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation\* Default

Calling Name Presentation\* Default

---

**Connected Party Transformations**

Connected Line ID Presentation\* Default

Connected Name Presentation\* Default

---

**Called Party Transformations**

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls) 913

\*- indicates required item.





## PSAP Gateway configuration (CAMA TRUNK)

Navigation Cisco Unified CallManager Administration Go

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

**Gateway Configuration** Related Links: Back To Find/List Go

**Status**  
Status: Ready

**Device Information**

Product	H.323 Gateway
Device Protocol	H.225
Registration	Unknown
IP Address	172.20.192.102
Device Name*	172.20.192.102
Description	172.20.192.102
Device Pool*	Default
Call Classification*	Use System Default
Media Resource Group List	< None >
Packet Capture Mode*	None
Packet Capture Duration	0
Location*	Hub_None
AAR Group	< None >
Tunneled Protocol*	None
Signaling Port*	1720

Tunneled Protocol\* None

Signaling Port\* 1720

Media Termination Point Required

Retry Video Call As Audio

Wait for Far End H.245 Terminal Capability Set

Path Replacement Support

Transmit UTF-8 for Calling Party Name

SRTP Allowed - When this flag is checked, IPSec needs to be configured in the network to provide end to end security. Failure to do so will expose keys and other information.

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

MLPP Domain < None >

MLPP Indication Not available on this device

MLPP Preemption Not available on this device

**Call Routing Information - Inbound Calls**

Significant Digits\* All

Calling Search Space E911css

AAR Calling Search Space < None >

Prefix DN

Redirecting Number IE Delivery - Inbound

Enable Inbound FastStart



Redirecting Number IE Delivery - Inbound  
 Enable Inbound FastStart

---

**Call Routing Information - Outbound Calls**

Calling Party Selection\*

Calling Party Presentation\*

Called party IE number type unknown\*

Calling party IE number type unknown\*

Called Numbering Plan\*

Calling Numbering Plan\*

Caller ID DN

Display IE Delivery  
 Redirecting Number IE Delivery - Outbound  
 Enable Outbound FastStart  
Codec For Outbound FastStart

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

### Cisco Unified Communications Manager User

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

**End User Configuration** Related Links:

**Status**  
**i** Status: Ready

**User Information**

User ID\*

Password\*

Confirm Password\*

PIN\*

Confirm PIN\*

Last name\*

Middle name

First name

Telephone Number

Mail ID

Manager User ID

Department



Manager User ID	
Department	
User Locale	< None >
Associated PC	
Digest Credentials	
Confirm Digest Credentials	
<b>Device Associations</b>	
Controlled Devices	CERSec1 RP911 RPELIN913
	<a href="#">Device Association</a>
<b>Extension Mobility</b>	
Available Profiles	
Controlled Profiles	
Default Profile	-- Not Selected --
Presence Group*	Standard Presence group

Presence Group*	Standard Presence group
SUBSCRIBE Calling Search Space	< None >
<input checked="" type="checkbox"/> Allow Control of Device from CTI	
<b>Directory Number Associations</b>	
Primary Extension	< None >
<b>CAPF Information</b>	
Associated CAPF Profiles	
	<a href="#">View Details</a>
<b>Permissions Information</b>	
Groups	Standard CTI Allow Calling Number Modification Standard CTI Enabled
	<a href="#">View Details</a>
Roles	Standard CTI Allow Calling Number Modification Standard CTI Enabled
	<a href="#">View Details</a>
<a href="#">Save</a>	<a href="#">Delete</a> <a href="#">Add New</a>
*	indicates required item.



## T1-QSIG Gateway

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdminstrator

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

### Gateway Configuration

Related Links: Back To Find/List Go

**Status**  
Status: Ready

**Gateway Details**

Product	Cisco 3825
Gateway	Ri-3825
Protocol	MGCP
Domain Name*	Ri-3825
Description	MGCP 3825
Cisco Unified CallManager Group*	Default

**Configured Slots, VICs and Endpoints**

Module in Slot 0	< None >
Module in Slot 1	NM-HDV
Subunit 0	VVIC-2MFT-T1
Module in Slot 2	< None >

1/0/0 1/0/1

**Product Specific Configuration Layout**

Protocol	MGCP
Domain Name*	Ri-3825
Description	MGCP 3825
Cisco Unified CallManager Group*	Default

**Configured Slots, VICs and Endpoints**

Module in Slot 0	< None >
Module in Slot 1	NM-HDV
Subunit 0	VVIC-2MFT-T1
Module in Slot 2	< None >

1/0/0 1/0/1

**Product Specific Configuration Layout**

Global ISDN Switch Type	NI2
Switchback Timing*	Graceful
Switchback uptime-delay (min)	10
Switchback schedule (hh:mm)	12:00
Type Of DTMF Relay*	Current GW Config
Fax mode*	Fax Relay
Modem Passthrough*	Enable

Save Delete Reset Add New

\*- indicates required item.



Navigation Cisco Unified CallManager Administration Go

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCMAAdministrator

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

Gateway Configuration Related Links: [Back to MGCP Configuration](#) Go

**Status**  
Status: Ready

**Device Information**

Product	Cisco MGCP T1 Port
Gateway	Ri-3825
Device Protocol	Digital Access PRI
Registration	Registered with Cisco Unified CallManager CM-Titanic
IP Address	172.20.192.21
End-Point Name *	S1/SU0/DS1-0@Ri-3825
Description	S1/SU0/DS1-0@MGCP 3825
Device Pool*	Default
Call Classification*	Use System Default
NetworkLocale	< None >
Packet Capture Mode*	None
Packet Capture Duration	0
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	Off
MLPP Preemption	Disabled

**Interface Information**

PRI Protocol Type*	PRI ISO QSIG T1
Protocol Side*	Network
Channel Selection Order*	Bottom Up
Channel IE Type*	Timeslot Number
PCM Type*	μ-law
Delay for first restart (1/8 sec ticks)*	32
Delay between restarts (1/8 sec ticks)*	4

Inhibit restarts at PRI initialization  
 Enable status poll  
 Unattended Port

**Call Routing Information - Inbound Calls**

Significant Digits*	All
Calling Search Space	Phoneccs
AAR Calling Search Space	< None >
Prefix DN	

**Call Routing Information - Outbound Calls**



<b>Call Routing Information - Outbound Calls</b>	
Calling Party Presentation*	Default
Calling Party Selection*	Originator
Called party IE number type unknown*	Cisco CallManager
Calling party IE number type unknown*	Cisco CallManager
Called Numbering Plan*	Cisco CallManager
Calling Numbering Plan*	Cisco CallManager
Number of digits to strip*	0
Caller ID DN	
SMDI Base Port*	0

<b>PRI Protocol Type Specific Information</b>	
<input type="checkbox"/> Display IE Delivery	
<input checked="" type="checkbox"/> Redirecting Number IE Delivery - Outbound	
<input checked="" type="checkbox"/> Redirecting Number IE Delivery - Inbound	
<input type="checkbox"/> Send Extra Leading Character in Display IE***	
<input type="checkbox"/> Setup non-ISDN Progress Indicator IE Enable****	
<input type="checkbox"/> MCDN Channel Number Extension Bit Set to Zero**	
<input type="checkbox"/> Send Calling Name In Facility IE	
<input type="checkbox"/> Interface Identifier Present**	
Interface Identifier Value**	0
Connected Line ID Presentation (QSIG Inbound Call)*	Default

<b>UUIE Configuration</b>	
<input type="checkbox"/> Passing Precedence Level Through UUIE	
Security Access Level*	2

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

<b>UUIE Configuration</b>	
<input type="checkbox"/> Passing Precedence Level Through UUIE	
Security Access Level*	2

<b>Product Specific Configuration Layout</b>	
Line Coding*	B8ZS
Framing*	ESF
Clock*	External
Input Gain (-6..14 db)*	0
Output Attenuation (-6..14 db)*	0
Echo Cancellation Enable*	Enable
Echo Cancellation Coverage (ms)*	8

- \*- indicates required item.
- \*\*- applies to DMS-100 protocol only.
- \*\*\*- applies to DMS-100 protocol and DMS-250 protocol only.
- \*\*\*\*- may be required to force ringback from some PBXs.
- \*\*\*\*\*- Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.



## Route Pattern to QSIG Trunk

Navigation Cisco Unified CallManager Administration [Go](#)

Cisco Unified CallManager Administration For Cisco Unified Communications Solutions Logged in as: CCAdministrator

System [Call Routing](#) [Media Resources](#) [Voice Mail](#) [Device](#) [Application](#) [User Management](#) [Bulk Administration](#) [Help](#) [Log Off](#)

**Route Pattern Configuration** Related Links: [Back To Find/List](#) [Go](#)

**Status**  
 Status: Ready

**Pattern Definition**

Route Pattern\* 2XXX

Route Partition < None >

Description Route to Nortel cs101 2213 14 Avaya 2004 06

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence\* Default

Gateway/Route List \* S1/SU0/DS1-0@Ri-3825 [\(Edit\)](#) [Find](#)

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

Require Client Matter Code



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)

---

**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.

Note: For detailed information regarding QSIG interoperability between CUCM and Nortel CS1000 PBX go to:  
[http://www.cisco.com/warp/public/779/largeent/avid/inter\\_operability/flash/portal.html](http://www.cisco.com/warp/public/779/largeent/avid/inter_operability/flash/portal.html)

SNMP service must be active

Performance and Monitoring Services	
Service Name	Activation Status
<input checked="" type="checkbox"/> Cisco Serviceability Reporter	Activated
<input checked="" type="checkbox"/> Cisco CallManager SNMP Service	Activated

---

Security Services	
Service Name	Activation Status
<input checked="" type="checkbox"/> Cisco CTL Provider	Activated
<input checked="" type="checkbox"/> Cisco Certificate Authority Proxy Function	Activated

---

Directory Services	
Service Name	Activation Status
<input checked="" type="checkbox"/> Cisco DirSync	Activated

While deactivating a service, make sure to deactivate all of the services that are dependent on this service. Please refer to on-line help for service dependencies for single-server and multi-server configuration

\* - indicates required item.





## Configuring Cisco Emergency Responder

### Cisco Unified Communications Manager Details

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

Logged in as: CERAdministrator | [About](#) | [Logout](#)

---

**Cisco Unified Communications Manager Clusters**

**Status**  
Please enter any change for the current Cisco Unified Communications Manager

**Modify Cisco Unified Communications Manager Cluster**

Cisco Unified Communications Manager \* **172.20.140.254** [Cisco Unified Communications Managers List](#)

CTI Manager \*

CTI Manager User Name \*

CTI Manager Password \*

BackUp CTI Manager 1

BackUp CTI Manager 2

Telephony Port Begin Address

Number of Telephony Ports

**Secure Connection Parameters**

Enable Secure Connection \*\*

TFTP Server IP Address \*\*

TFTP Server Port \*\*

Backup TFTP Server IP Address

CAPF Server IP Address \*\*

CAPF Server Port \*\*

Instance ID for Publisher\*\*

Secure Authentication String for Publisher \*\*

---

**Cisco Unified Communications Manager Clusters**

Cisco Unified Communications Manager	Edit	Delete
<a href="#">172.20.140.254</a>		

**i** \* indicates required item \*\* required if Secure Connection is Enabled



## Cisco Emergency Responder Server group

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Cisco ER Group Settings

**Status**  
Ready

**Specify server group attributes**

Cisco ER Group Name *	<input type="text" value="CERServerGroup"/>
Peer TCP Port *	<input type="text" value="17001"/>
Heart beat Count *	<input type="text" value="3"/>
Heart beat Interval (in sec) *	<input type="text" value="30"/>
Active Call Time out (in min) *	<input type="text" value="180"/>
SMTP Mail Server	<input type="text"/>
Source Mail ID	<input type="text"/>
System Administrator Mail ID	<input type="text"/>
SysLog	<input type="text" value="disable"/>
Syslog Server	<input type="text"/>
Notes	<input type="text"/>

**i** \* indicates required item \*\* required if SMTP Mail Server is configured \*\*\* required if SysLog is enabled



## Telephony Settings

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Telephony settings

**Status**  
Ready

**Specify telephony attributes**

Route Point for Primary Cisco ER Server *	<input type="text" value="911"/>
Route Point for Standby Cisco ER Server	<input type="text" value="912"/>
PSAP Callback Route Point Pattern *	<input type="text" value="913XXXXXXXXXX"/>
ELIN Digit Strip Pattern *	<input type="text" value="913"/>
UDP Port Begin *	<input type="text" value="32000"/>
Inter Cisco ER Group Route Pattern	<input type="text"/>
IP Type of service ( 00-FF ) *	<input type="text" value="0x b8"/>
Onsite Alert Prompt Repeat Count *	<input type="text" value="2"/>
Use IP Address from call signaling	<input type="checkbox"/> Enable (Effective only for Cisco Unified Communications Manager 6.0 and above)

\* indicates required item



## Server Settings

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Server Settings for CERServerGroup

**Status**  
Ready

**Select Server**  
 [\\_Publisher \(primary\)](#)

**Modify Server Settings**

Server Name \*

Host Name

**Debug Package List**

<input checked="" type="checkbox"/> CER_DATABASE	<input checked="" type="checkbox"/> CER_SYSADMIN
<input checked="" type="checkbox"/> CER_REMOTEUPDATE	<input checked="" type="checkbox"/> CER_TELEPHONY
<input checked="" type="checkbox"/> CER_PHONETRACKINGENGINE	<input checked="" type="checkbox"/> CER_AGGREGATOR
<input checked="" type="checkbox"/> CER_ONSITEALERT	<input checked="" type="checkbox"/> CER_GROUP
<input checked="" type="checkbox"/> CER_CALLENGINE	<input checked="" type="checkbox"/> CER_CLUSTER

**Trace Package List**

<input checked="" type="checkbox"/> CER_DATABASE	<input checked="" type="checkbox"/> CER_SYSADMIN
<input checked="" type="checkbox"/> CER_REMOTEUPDATE	<input checked="" type="checkbox"/> CER_TELEPHONY
<input checked="" type="checkbox"/> CER_PHONETRACKINGENGINE	<input checked="" type="checkbox"/> CER_AGGREGATOR
<input checked="" type="checkbox"/> CER_ONSITEALERT	<input checked="" type="checkbox"/> CER_GROUP
<input checked="" type="checkbox"/> CER_CALLENGINE	<input checked="" type="checkbox"/> CER_CLUSTER

\* indicates required item



ERLs List

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

**Find ERL Data** [Export](#) [Import](#)

**Status**  
Updated successfully.

**ERL Search Parameters**  
Find ERL where  contains   and show  items per page


**ERL (1 - 4 of 4)**

ERL Name	Route/Translation Pattern--ELIN	Onsite Alert Ids.	Street Name	Community Name	State	Edit	Copy	Delete	Audit Trail
<a href="#">Default</a>	<a href="#">100911--4000</a>		<a href="#">tasman</a>	<a href="#">cisco</a>	<a href="#">ca</a>				<a href="#">view..</a>
<a href="#">Test 1</a>	<a href="#">10911--4085272....</a>		<a href="#">tasman</a>	<a href="#">big sky</a>	<a href="#">ca</a>				<a href="#">view..</a>
<a href="#">test 2</a>	<a href="#">11911--4085272....</a>		<a href="#">tasman</a>	<a href="#">cisco</a>	<a href="#">ca</a>				<a href="#">view..</a>
<a href="#">test 3</a>	<a href="#">13911--4085273....</a>		<a href="#">tasmsan</a>	<a href="#">cisco</a>	<a href="#">ca</a>				<a href="#">view..</a>

Go 1 of 1



ERL 1



## Cisco Emergency Responder Administration

For Cisco Unified Communications Solutions

### ERL Information for Test 1

#### ERL Settings

ERL Name \* **Test 1**

Description

Test ERL (Used for Synthetic Testing)

#### ELIN Settings

Route/Translation pattern

ELIN

Add

Update

Remove

10911--4985272213

#### Onsite Alert Settings

Available Onsite Alert IDs

Onsite Alert IDs for the ERL

Add

Remove

#### ERL Address

ALI Details

Edit ALI

Update

Copy


Cancel Changes

Close

\* indicates required item



ERL 2




## Cisco Emergency Responder Administration

For Cisco Unified Communications Solutions

---

### ERL Information for test 2



---

#### ERL Settings

ERL Name \* **test 2**

Description

Test ERL (Used for Synthetic Testing)

---

#### ELIN Settings

Route/Translation pattern

ELIN

Add

Update

Remove

11911--4085272214

---

#### Onsite Alert Settings

Available Onsite Alert IDs

Onsite Alert IDs for the ERL

Add

Remove

---

#### ERL Address

ALI Details

---


Update

Copy

Cancel Changes

Close

---

 \* indicates required item

ERL 3

### ERL Information for test 3

---

#### ERL Settings

ERL Name \* **test 3**

Description

Test ERL (Used for Synthetic Testing)

---

#### ELIN Settings

Route/Translation pattern <input type="text"/>	<input type="button" value="Add"/>	13911--4085273011
ELIN <input type="text"/>	<input type="button" value="Update"/>	
	<input type="button" value="Remove"/>	

---

#### Onsite Alert Settings


Available Onsite Alert IDs <input type="text"/>	<input type="button" value="Add"/>	Onsite Alert IDs for the ERL <input type="text"/>
	<input type="button" value="Remove"/>	

---

#### ERL Address

ALI Details

---

 \* indicates required item





## SNMP connection

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### SNMP Settings

**Status**  
Please enter any change for the current SNMP Setting

---

**Modify SNMP Community Setting**

IP Address/Host Name *	172.20.230.250
Timeout (in seconds) *	<input type="text" value="10"/>
Maximum Retry Attempts *	<input type="text" value="2"/>
Read Community	<input type="text" value="public"/>

---

### SNMP Settings

IP Address/Host Name	Timeout (in seconds)	Maximum Retry Attempts	Read Community	Delete
<a href="#">172.20.230.250</a>	<a href="#">10</a>	<a href="#">2</a>	<a href="#">public</a>	

\* indicates required item



## LAN Switch identifying

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration Go

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

---

### LAN Switch Details

[Export](#) [Import](#)

**Status**  
Please enter any change for the current LAN Switch

---

**LAN Switch Details**

Switch Host Name / IP Address \* **172.20.230.250**

Description

Enable CAM based Phone Tracking

---

### LAN Switches

Switch Host Name / IP Address	Edit	Delete
<a href="#">172.20.230.250</a>		

---

\* indicates required item



## Switch Port Details

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Switch Port Details

[Export](#) [Import](#)

**Status**  
Ready

**Switch Port Search Parameters**  
Find ports where  All  Any ERL Name ▾ contains ▾   show 50 ▾ per page

---

**Switch Ports (1 to 48 of 48)** *Last phone tracking was done at August 27, 2007 5:42:05 PM PD*

Assign ERL to Selected Switch Ports

<input type="checkbox"/>	ERL Name	Switch IP Address	IfName	Location	Phone Extension	Phone IP Address	Phone Type
<input type="checkbox"/>		172.20.230.250	Fa0/1	<a href="#">View</a>			
<input type="checkbox"/>		172.20.230.250	Fa0/2	<a href="#">View</a>			
<input type="checkbox"/>		172.20.230.250	Fa0/3	<a href="#">View</a>			
<input type="checkbox"/>		172.20.230.250	Fa0/4	<a href="#">View</a>			
<input type="checkbox"/>		172.20.230.250	Fa0/5	<a href="#">View</a>			
<input type="checkbox"/>	<a href="#">test_3</a>	172.20.230.250	Fa0/6	<a href="#">View</a>	3011	172.20.230.21	Cisco 7961
<input type="checkbox"/>		172.20.230.250	Fa0/7	<a href="#">View</a>			



**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Switch Port Details

[Export](#) [Import](#)

IP Address	Port	View	MAC Address	Model
172.20.230.250	Fa0/8	<a href="#">View</a>		
172.20.230.250	Fa0/9	<a href="#">View</a>		
172.20.230.250	Fa0/10	<a href="#">View</a>		
172.20.230.250	Fa0/11	<a href="#">View</a>		
172.20.230.250	Fa0/12	<a href="#">View</a>		
172.20.230.250	Fa0/13	<a href="#">View</a>		
172.20.230.250	Fa0/14	<a href="#">View</a>		
172.20.230.250	Fa0/15	<a href="#">View</a>		
172.20.230.250	Fa0/16	<a href="#">View</a>		
172.20.230.250	Fa0/17	<a href="#">View</a>		
172.20.230.250	Fa0/18	<a href="#">View</a>		
172.20.230.250	Fa0/19	<a href="#">View</a>		
172.20.230.250	Fa0/20	<a href="#">View</a>		
172.20.230.250	Fa0/21	<a href="#">View</a>		
172.20.230.250	Fa0/22	<a href="#">View</a>		
172.20.230.250	Fa0/23	<a href="#">View</a>		
<a href="#">test_3</a>	Fa0/24	<a href="#">View</a>	3012	Cisco 7961
172.20.230.250	Fa0/25	<a href="#">View</a>		
172.20.230.250	Fa0/26	<a href="#">View</a>		
172.20.230.250	Fa0/27	<a href="#">View</a>		
172.20.230.250	Fa0/28	<a href="#">View</a>		



**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Switch Port Details [Export](#) [Import](#)

	IP Address	Port	View	MAC	VLAN	Device
<input type="checkbox"/>	172.20.230.250	Fa0/29	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/30	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/31	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/32	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/33	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/34	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/35	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/36	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/37	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/38	<a href="#">View</a>	6008	172.20.230.32	Cisco 7961
<input type="checkbox"/>	172.20.230.250	Fa0/39	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/40	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/41	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/42	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/43	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/44	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/45	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/46	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/47	<a href="#">View</a>			
<input type="checkbox"/>	172.20.230.250	Fa0/48	<a href="#">View</a>			

Go 1 of 1



### Defining Manual Phones (PBX Stations)

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

**Find and List Manually Configured Phones** [Export](#) [Import](#)

---

**Status**  
Ready

---

**Manual Phone Search Parameters**  
Find manual phones where Line Number    and show  items per page

---

**Manually Configured Phones (1 - 2 of 2)**

Line Number	ERL Name	IP Address	MAC Address	Location	Edit	Delete
<a href="#">2213</a>	<a href="#">Test 1</a>					
<a href="#">2214</a>	<a href="#">test 2</a>					

Go 1 of 1



**Cisco Emergency Responder Administration**  
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Navigation Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Modify Manual Phone

**Status**  
Please enter any change for the current Manual Phone

**Modify Manual Phone**

Line Number *	2213
MAC Address	<input type="text"/>
IP Address	<input type="text"/>
Phone Type	<input type="text"/>
Version	<input type="text"/>
Location	<input type="text"/>
ERL Name *	Test 1 <input type="button" value="Search ERL"/>

\* indicates required item

**Cisco Emergency Responder Administration**  
For Cisco Unified Communications Solutions

Navigation Cisco ER Administration

Logged in as: CERAdministrator | [About](#) | [Logout](#)

System ▾ ERL ▾ Phone Tracking ▾ ERL Membership ▾ User Management ▾ Reports ▾ Tools ▾ Help ▾

### Modify Manual Phone

**Status**  
Please enter any change for the current Manual Phone

**Modify Manual Phone**

Line Number *	2214
MAC Address	<input type="text"/>
IP Address	<input type="text"/>
Phone Type	<input type="text"/>
Version	<input type="text"/>
Location	<input type="text"/>
ERL Name *	test 2 <input type="button" value="Search ERL"/>



## Cisco CMM IOS Gateway MGCP Configuration for QSIG Connectivity

**Ri-3825#sh ver**

Cisco IOS Software, 3800 Software (C3825-IPVOICEK9-M), Version 12.4(15)T1, RELEA  
SE SOFTWARE (fc2)

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

Copyright (c) 1986-2007 by Cisco Systems, Inc.

Compiled Wed 18-Jul-07 11:23 by prod\_rel\_team

ROM: System Bootstrap, Version 12.3(11r)T2, RELEASE SOFTWARE (fc1)

Ri-3825 uptime is 4 weeks, 6 days, 23 hours, 15 minutes

System returned to ROM by reload at 17:08:17 UTC Tue Jul 24 2007

System image file is "flash:c3825-ipvoicek9-mz.124-15.T1.bin"

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.

A summary of U.S. laws governing Cisco cryptographic products may be found at:

<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

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

Cisco 3825 (revision 1.0) with 224256K/37888K bytes of memory.

Processor board ID FTX0946A1BT

2 Gigabit Ethernet interfaces

48 Serial interfaces

2 Channelized T1/PRI ports

2 Voice FXS interfaces





DRAM configuration is 64 bits wide with parity enabled.  
479K bytes of NVRAM.  
62720K bytes of ATA System CompactFlash (Read/Write)

Configuration register is 0x2102

**Ri-3825#sh run**

Building configuration...

Current configuration : 2419 bytes

```
!  
version 12.4  
service timestamps debug datetime msec  
service timestamps log datetime msec  
no service password-encryption  
!  
hostname Ri-3825  
!  
boot-start-marker  
boot-end-marker  
!  
enable password cisco  
!  
no aaa new-model  
network-clock-participate slot 1  
no network-clock-participate slot 2  
network-clock-select 1 T1 1/0/0  
voice-card 0  
no dspfarm  
!  
voice-card 1  
dspfarm  
!  
voice-card 2  
no dspfarm  
!
```



```
ip cef
!
!
!
!
no ip domain lookup
ip host CM-Titanic 172.20.140.254 >=====Active Host
ip host CM-SPURS 172.20.192.254
multilink bundle-name authenticated
!
isdn switch-type primary-qsig
!
!
!
!
!
!
!
!
!
!
archive
log config
hidekeys
!
!
controller T1 1/0/0
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 1/0/1
shutdown
framing esf
linecode b8zs
cablelength short 399
pri-group timeslots 1-24 service mgcp
```



```
!  
!  
!  
!  
!  
interface GigabitEthernet0/0  
ip address 172.20.192.21 255.255.255.0  
duplex auto  
speed auto  
media-type rj45  
!  
interface GigabitEthernet0/1  
no ip address  
shutdown  
duplex auto  
speed auto  
media-type rj45  
!  
interface Serial1/0/0:23  
no ip address  
encapsulation hdlc  
isdn switch-type primary-qsig  
isdn timer T310 120000  
isdn protocol-emulate network  
isdn incoming-voice voice  
isdn bind-l3 ccm-manager  
no cdp enable  
!  
interface Serial1/0/1:23  
no ip address  
encapsulation hdlc  
shutdown  
isdn switch-type primary-qsig  
isdn incoming-voice voice  
isdn bind-l3 ccm-manager  
no cdp enable
```



```
!  
ip route 0.0.0.0 0.0.0.0 172.20.192.1  
!  
!  
ip http server  
no ip http secure-server  
!  
!  
!  
!  
control-plane  
!  
!  
!  
voice-port 1/0/0:23  
!  
voice-port 1/0/1:23  
!  
voice-port 2/0/0  
!  
voice-port 2/0/1  
!  
ccm-manager mgcp  
ccm-manager music-on-hold  
ccm-manager config server CM-Titanic  
ccm-manager config  
!  
mgcp  
mgcp call-agent CM-Titanic 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  
mgcp package-capability sst-package  
mgcp package-capability pre-package  
no mgcp package-capability res-package
```



```
no mgcp package-capability fxr-package
```

```
no mgcp timer receive-rtcp
```

```
mgcp sdp simple
```

```
mgcp fax t38 inhibit
```

```
mgcp rtp payload-type g726r16 static
```

```
!
```

```
mgcp profile default
```

```
!
```

```
!
```

```
!
```

```
!
```

```
!
```

```
line con 0
```

```
password cisco
```

```
login
```

```
stopbits 1
```

```
line aux 0
```

```
stopbits 1
```

```
line vty 0 4
```

```
password cisco
```

```
login
```

```
!
```

```
scheduler allocate 20000 1000
```

```
!
```

```
end
```

### **Cisco 3825 IOS Gateway H323 configuration for CAMA trunk connectivity**

```
Router#sh ver
```

```
Cisco IOS Software, 3800 Software (C3825-ADVENTERPRISEK9_IVS-M), Version 12.4(11
```

```
)T1, RELEASE SOFTWARE (fc5)
```

```
Technical Support: http://www.cisco.com/techsupport
```

```
Copyright (c) 1986-2007 by Cisco Systems, Inc.
```

```
Compiled Thu 25-Jan-07 17:16 by prod_rel_team
```

```
ROM: System Bootstrap, Version 12.3(11r)T2, RELEASE SOFTWARE (fc1)
```

```
Router uptime is 1 week, 3 days, 17 hours, 23 minutes
```

```
System returned to ROM by power-on
```



System image file is "flash:c3825-adventerprisek9\_ivs-mz.124-11.T1.bin"

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.

A summary of U.S. laws governing Cisco cryptographic products may be found at:  
<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

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

Cisco 3825 (revision 1.0) with 223232K/38912K bytes of memory.

Processor board ID FTX0946A1BV

2 Gigabit Ethernet interfaces

24 Serial interfaces

1 Channelized T1/PRI port

1 Virtual Private Network (VPN) Module

2 Voice FXO interfaces

2 Voice FXS interfaces

DRAM configuration is 64 bits wide with parity enabled.

479K bytes of NVRAM.

62720K bytes of ATA System CompactFlash (Read/Write)

Configuration register is 0x2102



**Router#sh run**

Building configuration...

Current configuration : 2545 bytes

!

version 12.4

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname Router

!

boot-start-marker

boot system flash:c3825-adventerprisek9\_ivs-mz.124-11.T1.bin

boot-end-marker

!

logging buffered 10000000

no logging console

enable password cisco

!

no aaa new-model

no network-clock-participate slot 1

voice-card 0

dspfarm

dsp services dspfarm

!

voice-card 1

dspfarm

!

ip cef

!

!

!

!

!



```
multilink bundle-name authenticated
!
isdn switch-type primary-dms100
!
!
!
voice service voip
  allow-connections h323 to h323=====H323 protocol
  allow-connections h323 to sip
  allow-connections sip to h323
  allow-connections sip to sip
  h323
  sip
!
!
!
voice class codec 1
  codec preference 1 g729r8
!
!
!
!
!
!
!
controller T1 1/0/0
  framing esf
  linecode b8zs
  pri-group timeslots 1-24
!
!
!
!
!
```





```
interface GigabitEthernet0/0
ip address 172.20.192.102 255.255.255.0
duplex auto
speed auto
media-type rj45
no keepalive
!
interface GigabitEthernet0/1
no ip address
shutdown
duplex auto
speed auto
media-type rj45
no keepalive
!
interface Serial1/0/0:23
no ip address
encapsulation hdlc
isdn switch-type primary-dms100
isdn incoming-voice voice
no cdp enable
!
ip default-gateway 172.20.192.1
ip route 0.0.0.0 0.0.0.0 172.20.192.1
!
!
ip http server
no ip http secure-server
!
!
!
!
!
!
!
```



```
control-plane
!
!
!
voice-port 0/0/0 ==>CAMA signaling
signal cama KP-0-NPA-NXX-XXXX-ST
dial-type mf
timing hookflash-out 500
description CAMA
!
voice-port 0/0/1
!
voice-port 0/2/0
station-id name Test Analog
station-id number 7055
!
voice-port 0/2/1
station-id name RI-NGUYEN
station-id number 4085261122
caller-id enable
!
voice-port 1/0/0:23
!
!
!
sccp local GigabitEthernet0/0
sccp ccm 172.20.8.254 identifier 1 version 4.1
sccp
!
sccp ccm group 1
associate ccm 1 priority 1
associate profile 1 register mtp0015f90d1590
!
dspfarm profile 1 mtp
codec g711ulaw
```



```
maximum sessions software 10
associate application SCCP
shutdown
!
!
dial-peer voice 911 pots
destination-pattern 911
no digit-strip
port 0/0/0
forward-digits all
!
dial-peer voice 999 voip
description call in PSTN simulation
destination-pattern .T
session target ipv4:172.20.140.254
!
!
gateway
timer receive-rtcp 1200
!
sip-ua
retry options 0
!
!
!
gatekeeper
shutdown
!
!
line con 0
exec-timeout 0 0
password cisco
login
stopbits 1
line aux 0
```



```
stopbits 1
line vty 0 4
exec-timeout 0 0
password cisco
login
line vty 5 10
exec-timeout 0 0
password cisco
login
!
scheduler allocate 20000 1000
!
end
```



## CAMA voice-port config

**Router#sh voice port 0/0/0**

Foreign Exchange Office 0/0/0 Slot is 0, Sub-unit is 0, Port is 0

Type of VoicePort is FXO

Operation State is DORMANT

Administrative State is UP

The Last Interface Down Failure Cause is Administrative Shutdown

Description is CAMA

Noise Regeneration is enabled

Non Linear Processing is enabled

Non Linear Mute is disabled

Non Linear Threshold is -21 dB

Music On Hold Threshold is Set to -38 dBm

In Gain is Set to 0 dB

Out Attenuation is Set to 3 dB

Echo Cancellation is enabled

Echo Cancellation NLP mute is disabled

Echo Cancellation NLP threshold is -21 dB

Echo Cancel Coverage is set to 64 ms

Echo Cancel worst case ERL is set to 6 dB

Playout-delay Mode is set to adaptive

Playout-delay Nominal is set to 60 ms

Playout-delay Maximum is set to 250 ms

Playout-delay Minimum mode is set to default, value 40 ms

Playout-delay Fax is set to 300 ms

Connection Mode is normal

Connection Number is not set

Initial Time Out is set to 10 s

Interdigit Time Out is set to 10 s

Call Disconnect Time Out is set to 60 s

Ringing Time Out is set to 180 s

Wait Release Time Out is set to 30 s

Companding Type is u-law

Region Tone is set for US



Analog Info Follows:

Currently processing none

Maintenance Mode Set to None (not in mtc mode)

Number of signaling protocol errors are 9

Impedance is set to 600r Ohm

Station name None, Station number None

Translation profile (Incoming):

Translation profile (Outgoing):

Voice card specific Info Follows:

Signal Type is cama

Cama Type is KP-0-NPA-NXX-XXXX-ST

Battery-Reversal is enabled

Number Of Rings is set to 1

Supervisory Disconnect is signal

Answer Supervision is inactive

Hook Status is On Hook

Ring Detect Status is inactive

Ring Ground Status is inactive

Tip Ground Status is inactive

Dial Out Type is mf

Digit Duration Timing is set to 75 ms

InterDigit Duration Timing is set to 65 ms

Pulse Rate Timing is set to 10 pulses/second

InterDigit Pulse Duration Timing is set to 750 ms

Percent Break of Pulse is 60 percent

GuardOut timer is 2000 ms

Minimum ring duration timer is 125 ms

Hookflash-in Timing is set to 600 ms

Hookflash-out Timing is set to 500 ms

Supervisory Disconnnct Timing is set to 350 ms

OPX Ring Wait Timing is set to 6000 ms



## Configuring Nortel CS1000 PBX with Succession 4.0 Software Release

The Nortel CS1000 Switch requires a substantial amount of programming and circuit card switch settings to properly install T1 PRI. It is beyond the scope of this document to provide the entire configuration, therefore the Nortel CS1000 information below is directed to Nortel techs

**The switch settings and software references in this document assume a familiarity with the Nortel CS1000. It is highly recommended to have a Nortel ISDN certified technician setup the Nortel portion.**

Common equipment:

```
REQ PRT
TYPE CEQU
```

CEQU

```
MPED 8D
SUPL 000 004 008 012
      016 032 036 040
      044 048 064 068
      072 V096 V100
TDS 000
CONF 029 030 031 062
      094 095
```

```
DLOP NUM DCH FRM TMDI LCMT YALM T1TE TRSH
PRI 02 23 ESF NO B8S FDL - 00
     04 24 ESF YES B8S DG2 0 00
     05 23 ESF NO B8S FDL - 00
     06 23 ESF NO B8S FDL - 00
     07 23 ESF NO B8S FDL - 00
```

```
PRI2 11
DTI2 12 13 21
MISP
```

### Configure D-Channel

```
>ld 22
PT2000
```

```
REQ prt
TYPE adan dch 5
```

```
ADAN DCH 5
CTYP MSDL
CARD 05
PORT 1
DES BARCLAYS1
USR PRI
DCHL 5
OTBF 32
PARM RS422 DTE
DRAT 64KC
CLOK EXT
IFC ISGF
PINK_CUST 0
```



```
ISDN_MCNT 300
CLID OPT0
CO_TYPE STD
SIDE NET
CNEG 1
RLS ID **
RCAP COLP NDI CCBI CCNI PRI DV3I CTI QMWI
PR_TRIGS DIV 2 3
      CNG 2 3
      CTR2 2 3

PR_RTN NO
MBGA NO
OVLN NO
OVLS NO
T310 120
T200 3
T203 10
N200 3
N201 260
K 7
```

### Configure Route Data Block

```
>ld 21
PT1000

REQ: prt
TYPE: rdb
CUST 0
ROUT 105

TYPE RDB
CUST 00
DMOD
ROUT 105
DES BARCLAYS1
TKTP TIE
NPID_TBL_NUM 0
ESN NO
CNVT NO
SAT NO
RCLS EXT
VTRK NO
NODE
DTRK YES
BRIP NO
DGTP PRI
ISDN YES
  MODE PRA
  IFC ISGF
  SBN NO
  PNI 00001
  NCNA NO
  NCRD NO
  CHTY BCH
  CTYP UKWN
  INAC NO
  ISAR NO
  CPFXS YES
  DAPC NO
  INTC NO
DSEL VOD
PTYP PRI
AUTO NO
DNIS NO
DCDR NO
```





```
ICOG IAO
SRCH RRB
TRMB YES
STEP
ACOD 205
TCPP NO
TARG 01
CLEN 1
BILN NO
OABS
INST
ANTK
SIGO STD
ICIS YES
TIMR ICF 512
      OGF 512
      EOD 13952
      NRD 10112
      DDL 70
      ODT 4096
      RGV 640
      GRD 896
      SFB 3
      NBS 2048
      NBL 4096

      IENB 5
      TFD 0
```

PAGE 002

```
      VSS 0
      VGD 6
DRNG NO
CDR NO
VRAT NO
MUS NO
FRL 0 0
FRL 1 0
FRL 2 0
FRL 3 0
FRL 4 0
FRL 5 0
FRL 6 0
FRL 7 0
OHQ NO
OHQT 00
CBQ NO
AUTH NO
TTBL 0
ATAN NO
PLEV 2
ALRM NO
ART 0
SGRP 0
AACR NO
```

### Configure Trunk

```
>ld 20

PT0000
REQ: prt
TYPE: tnb
TN 5 1
```



DATE  
PAGE  
DES

DES BARCLAYS1  
TN 005 01  
TYPE TIE  
CDEM SD  
CUST 0  
TRK PRI  
PDCA 1  
PCML MU  
NCOS 0  
RTMB 105 1  
B-CHANNEL SIGNALING  
TGAR 0  
AST NO  
IAPG 0  
CLS UNR DTN WTA LPR APN THFD HKD  
P10 VNL  
TKID  
AACR NO  
DATE 10 APR 2007  
NACT

### Software Release

>LD 22  
PT2000

REQ ISS

CALL SERVER/MAIN CAB  
VERSION 2121  
RELEASE 4  
ISSUE 00 T +  
IDLE\_SET\_DISPLAY NORTEL

### Software package Installed (Succession 4.0)

OPTF	1
CUST	2
CDR	4
CTY	5
RAN	7
TAD	8
DNDI	9
EES	10
INTR	11
ANI	12
ANIR	13
BRTE	14
DNDG	16
MSB	17
SS25	18
DDSP	19
ODAS	20
DI	21
CHG	23
CAB	24
BAUT	25
CASM	26
CASR	27
BQUE	28
NTRF	29
NCOS	32
CPRK	33



SSC	34
IMS	35
UST	35
UMG	35
ROA	36
NSIG	37
MCBQ	38
NSC	39
BACD	40
ACDB	41
ACDC	42
LMAN	43
MUS	44
ACDA	45
MWC	46
AAB	47
GRP	48
NFCR	49
LNK	51
FCA	52
SR	53
AA	54
HIST	55
AOP	56
BARS	57
NARS	58
CDP	59
PQUE	60
FCBQ	61
OHQ	62
NAUT	63
SNR	64
NXFR	67
HOT	70
DHLD	71
LSEL	72
SS5	73
DRNG	74
PBXI	75
DLDN	76
CSL	77
OOD	79
SCI	80
CCOS	81
CDRQ	83
TENS	86
FTDS	87
DSET	88
TSET	89
LNR	90
DLT2	91
PXLT	92
SUPV	93
CPND	95
DNIS	98
BGD	99
RMS	100
MR	101
AWU	102
PMSI	103
LLC	105
MCT	107
ICDR	108
APL	109
TVS	110
TOF	111
IDC	113



DCP	115
PAGT	116
CBC	117
CCDR	118
EMUS	119
PLDN	120
SCMP	121
FTC	125
BKI	127
DTI2	129
TBAR	132
ENS	133
FFC	139
DCON	140
MPO	141
ISDN	145
PRA	146
ISL	147
NTWK	148
IEC	149
DNXP	150
CDRE	151
FXS	152
IAP3P	153
PRI2	154
THF	157
FGD	158
NAS	159
FNP	160
ISDN_INTL_SUP	161
SAR	162
MINT	163
LAPW	164
GPRI	167
ARIE	170
CPGS	172
ECCS	173
AAA	174
NMS	175
EOVF	178
HVS	179
DKS	180
SACP	181
VNS	183
OVL	184
EDRG	185
POVR	186
SECL	191
ORC-RVQ	192
AINS	200
IPRA	202
XPE	203
XCT0	204
XCT1	205
MLWU	206
HSE	208
MLM	209
MAID	210
VAWU	212
EAR	214
ECT	215
BRI	216
IVR	218
MWI	219
MSDL	222
FC68	223
SSAU	229



BRIT	233
FCDR	234
BRIL	235
MCMO	240
MULTI_USER	242
ALRM_FILTER	243
SYS_MSG_LKUP	245
VMBA	246
CALL_ID	247
DPNA	250
SCDR	251
ARFW	253
PHTN	254
ADMINSET	256
ATX	258
CDRX	259
QSIG	263
NI-2	291
IPEX	295
MAT	296
CPP	301
QSIGGF	305
CPRKNET	306
PAGENET	307
CPCI	310
TATO	312
OPEN_ALARM	315
QSIG-SS	316
NGEN	324
RANBRD	327
MUSBRD	328
ESA	329
ESA_SUPP	330
ESA_CLMP	331
CNUMB	332
CNAME	333
NI-2_CBC	334
MEET	348
MC32	350
DBA	351
FDID	362
NMCE	364
STS_MSG	380
CDIR	381
VIRTUAL_OFFICE	382
ATAN	384
NI2NAME	385
M3900_PROD_ENH	386
VIR_OFF_ENH	387
OAS	394
ICON	397
PCA	398
H323_VTRK	399
LOCX	400
PVQM	401
SIP	406

REQ



## Acronyms

Acronym	Definitions
CAMA	Centralized Automatic Message Accounting
PSAP	Public Safety Answering Point
CER	Cisco Emergency Responder
CUCM	Cisco Unified Communications Manager



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