



Cisco CallManager Release 4.01 and Cisco Emergency Responder 1.2(3) -PBX Interoperability: NEC 2400 ICS using a Cisco Catalyst 6608 Gateway with T1 PRI as MGCP

DISCLAIMER/NOTICE

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS DOCUMENT ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS DOCUMENT ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE CUSTOMER ASSUMES ALL RESPONSIBILITY FOR PROPERLY CONFIGURING THE CISCO EMERGENCY RESPONDER. CISCO HEREBY DISCLAIMS ANY AND ALL LIABILITY ARISING FROM OR IN CONNECTION WITH A USER'S INABILITY TO ACCESS EMERGENCY SERVICE RESPONDERS (INCLUDING INABILITY TO REACH A PUBLIC SAFETY ANSWERING POINT) OR THE INABILITY OF EMERGENCY SERVICE RESPONDERS TO IDENTIFY A USER'S LOCATION. CISCO STRONGLY RECOMMENDS THAT ALL CUSTOMERS VERIFY AND TEST CONFIGURATION OF THE CISCO EMERGENCY RESPONDER IMMEDIATELY FOLLOWING INITIAL CONFIGURATION AND ON A PERIODIC BASIS THEREAFTER. CISCO FURTHER RECOMMENDS THAT ALL CUSTOMERS PROVIDE ADEQUATE TRUNK AND BANDWIDTH CAPACITY TO ENSURE THAT AUDIO PATHS ARE AVAILABLE FOR EMERGENCY CALLS.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

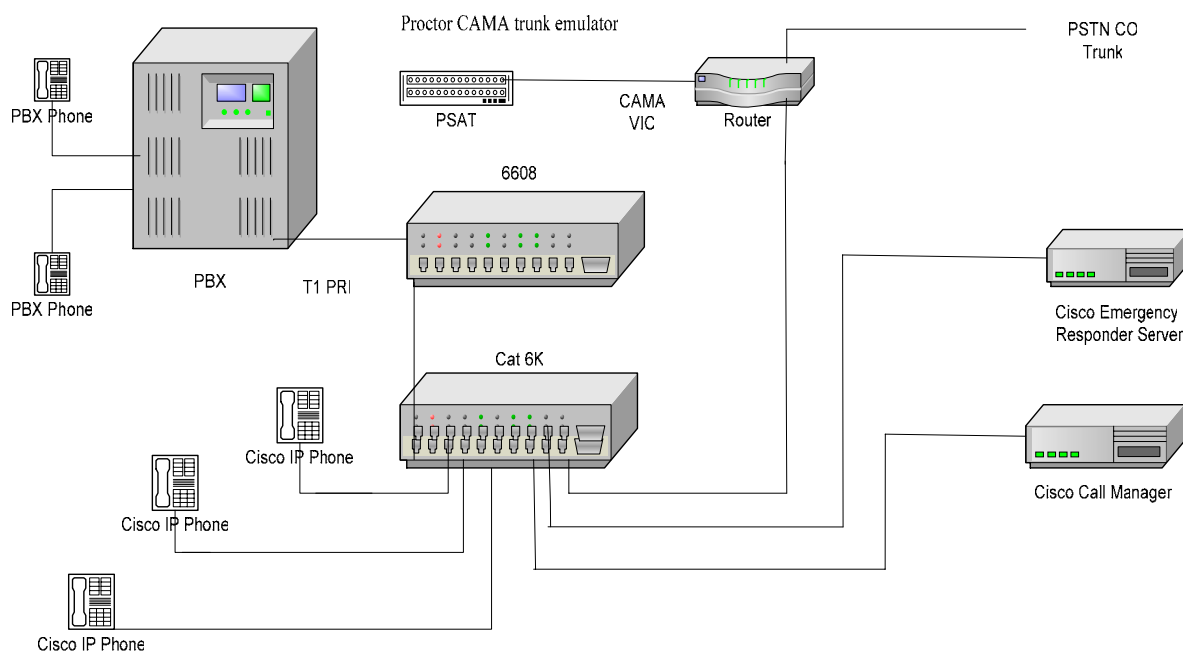
Introduction

- The following is an application note for interoperability of a Cisco CallManager, Cisco Emergency Responder and Cisco 2600XM CAMA interface with an NEC 2400 ICS PBX using a Cisco Catalyst 6608 Gateway-T1 PRI as a MGCP
- The Network Topology diagram (figure 1) shows the test set-up for interoperability between the Cisco CallManager and Cisco Emergency Responder connected to the PBX via a T1 PRI trunk using Cisco Catalyst 6608 Gateway
- Emergency 911 calls made from an NEC 2400 PBX utilizing a T1 PRI trunk configured as NI2, 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.



Network Topology

Figure 1. Network Topology



Limitations

- Though the NEC 2400 PBX can be configured as either “network side” (master) or “user side” (slave), configuration as “network side” is not recommended. The NEC TAC center will not resolve a case presented with the NEC PBX configured as “network side”.
- 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 Hardware
 - Cisco Catalyst 6608 Gateway with T1 Ports installed in a Cisco Cat6K switch
 - Cisco 2611XM with CAMA interface
 - Cisco Cat6K switch
 - Cisco CallManager
 - Cisco Emergency Responder
- NEC 2400 ICS PBX
 - Hardware: PA-24PRTB

Software Requirements

- Cisco CallManager Release 4.01
- PBX software release :

	VERSION	ISSUE	DATE	
J	05.80	00/06/20	Generic	
F	01.00	96/04/26	Boot ROM	
- Cisco IOS Release Release c2600-ipvoice-mz.123-10
- Cisco Emergency Responder 1.2(3)

Features

- Calling Number
- E911 ERL DID number passed to PSAP
- Incoming DID routing to disconnected 911 caller origination



Configuration

Configuring the Cisco CallManager

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Cisco CallManager Configuration

[Add a New Cisco CallManager](#)
[Configure server \(172.20.16.250\)](#)
[Trace Configuration](#)
[Back to Find/List Cisco CallManagers](#)
[Dependency Records](#)

Cisco CallManager: 172.20.16.250 (172.20.16.250) on 172.20.16.250
CTI ID: 1
Status: Ready

Copy Update Delete Reset Devices

Server Information

Cisco CallManager Name*
Description

Auto-registration Information

Starting Directory Number*
Ending Directory Number*
Partition
External Phone Number Mask

Auto-registration Disabled on this Cisco CallManager

Cisco CallManager TCP Port Settings for this Server

Ethernet Phone Port*
Digital Port*
Analog Port*
MGCP Listen Port*
MGCP Keep-alive Port*

* indicates required item.



Partition Configuration

[Add a New Partition](#)
[Back to Find/List Partitions](#)
[Dependency Records](#)

Partition: E911Phones

Status: Ready

Partition Name*

Description

* indicates required item



Calling Search Space Configuration

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

Calling Search Space: E911CSS (in use)

Status: Ready

Calling Search Space Information

Calling Search Space Name*

Description

Route Partitions for this Calling Search Space

Find Partitions containing

Available Partitions



Selected Partitions*
(ordered by highest priority)



* indicates required item



Route/Hunt List Detail Configuration

[Add a new Route/Hunt List](#)
[Configure Route Group \(E911\)](#)
[Back to Route/Hunt List Configuration](#)
[Back to Find/List Route/Hunt Lists](#)

Route/Hunt List Details

E911

Route/Hunt List: E911
Route Group: E911

Status: Ready

The settings on this page override the settings of the same name on the Route Pattern/Hunt Pilot page. These settings are used for calls routed through this member of the current Route/Hunt List only.

Details for E911

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Called Party Transformations

Dial Plan*

Discard Digits
(Using North American Numbering Plan)

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

* indicates required item



Route/Hunt List Configuration

[Add a new Route/Hunt List](#)
[Back to Find/List Route/Hunt Lists](#)
[Dependency Records](#)

Route/Hunt List Details

E911

Route/Hunt List: E911

Status: Ready

Route/Hunt List Information

Route/Hunt List Name*

Description

Cisco CallManager Group*

Enable this Route/Hunt List (change effective on Update; no reset required)

Route/Hunt List Member Information

Selected Groups*
(ordered by highest priority)

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

* indicates required item



Route Group Configuration

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

Route Group Members

- AALN/S1/SU0/0@2611XM
 -CAMA
- AALN/S1/SU0/1@2611XM
 -CAMA

Route Group: E911

Status: Ready

Route Group Information

Route Group Name*

Distribution Algorithm*

Route Group Member Information

Find Devices to Add to Route Group

Device Name contains

Available Devices
(select device, then
select port below)

- AALN/S1/SU1/0@2611XM-CAMA
- AALN/S1/SU1/1@2611XM-CAMA

Port(s)

Current Route Group Members

Selected Devices*
(ordered by highest
priority)

- AALN/S1/SU0/0@2611XM-CAMA (All Ports)
- AALN/S1/SU0/1@2611XM-CAMA (All Ports)

Removed Devices
(to be removed from
Route Group when
you click Update)

* indicates required item



Gateway Configuration

[Back to main Gateway Configuration](#)
[Back to Find/List Gateways](#)
[Dependency Records](#)

Slot 1/ Sub-Unit 0	
1/0/0	
1/0/1	
Slot 1/ Sub-Unit 1	
1/1/0	2100
1/1/1	2101

Product : Cisco 26XX
Gateway : AALN/S1/SU0/0@2611XM-CAMA
Registration: Registered with Cisco CallManager 172.20.16.250
IP Address: 172.20.16.50

Status: Ready

Gateway Information

Description	AALN/S1/SU0/0@2611XM-CAMA
Device Pool*	Default
Calling Search Space	E911CSS
AAR Calling Search Space	< None >
Media Resource Group List	< None >
Location	< None >
AAR Group	< None >
Network Locale	United States

Multilevel Precedence and Preemption (MLPP) Information

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

Port Information

Port Direction*	Bothways
Attendant DN*	<input type="text"/>

Product Specific Configuration

Hookflash Timer (50-1550ms)*	<input type="text" value="50"/>
Inter-digit Duration Timer (50-500 ms)*	<input type="text" value="100"/>
Input Gain (-6-14 db)*	<input type="text" value="0"/>
Output Attenuation (0-14 db)*	<input type="text" value="3"/>
Echo Cancellation Enable*	Enable
Echo Cancellation Coverage (ms)*	Default



Find and List Route Patterns/Hunt Pilots

[Add a New Route Pattern/Hunt Pilot](#)

6 matching record(s) for Pattern begins with ""

Find Route Patterns/Hunt Pilots where

and show items per page

To list all items, click Find without entering any search text.

Matching record(s) 1 to 6 of 6

<input type="checkbox"/>	Route Pattern/Hunt Pilot	Partition	Description	Route Filter	Gateway/Route List	Copy
<input type="checkbox"/>	100911.	E911Phones	default		E911	
<input type="checkbox"/>	101911.	E911Phones	High School ...		E911	
<input type="checkbox"/>	102911.	E911Phones	Education Ce...		E911	
<input type="checkbox"/>	103911.	E911Phones	Elementary I...		E911	
<input type="checkbox"/>	104911.	E911Phones	NEC PRI		E911	
<input type="checkbox"/>	30XX	E911Phones	NEC T1 PRI		S0/DS1-0@SDA0001C...	

[First](#) [Previous](#) [Next](#) [Last](#)

Page of 1



Route Pattern/Hunt Pilot Configuration

[Add a New Route Pattern/Hunt Pilot](#)
[Back to Find/List Route Patterns and Hunt Pilots](#)

Route Pattern/Hunt Pilot: 100911.

Status: Ready

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

Pattern Definition

Route Pattern/Hunt Pilot*	<input type="text" value="100911."/>	
Partition	<input type="text" value="E911Phones"/>	
Description	<input type="text" value="default"/>	
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>	
Route Filter	<input type="text" value=" < None >"/>	
MLPP Precedence	<input type="text" value="Default"/>	
Gateway or Route/Hunt List*	<input type="text" value="E911"/> (Edit)	
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value=" - Not Selected -"/>	
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input type="checkbox"/> Allow Overlap Sending	<input type="checkbox"/> Urgent Priority

Calling Party Transformations

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

Connected Party Transformations

Connected Line ID Presentation	<input type="text" value="Default"/>
Connected Name Presentation	<input type="text" value="Default"/>

Called Party Transformations

Discard Digits	<input type="text" value="PreDot"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text" value="4089997000"/>

ISDN Network-Specific Facilities Information Element

Carrier Identification Code	<input type="text"/>				
Network Service Protocol	<input type="text" value=" - Not Selected -"/>				
Network Service	<input type="text" value=" - Not Selected -"/>	Service Parameter Name	<input type="text" value=" < Not Exist >"/>	Service Parameter Value	<input type="text"/>

* indicates required item.



Route Pattern/Hunt Pilot Configuration

[Add a New Route Pattern/Hunt Pilot](#)
[Back to Find/List Route Patterns and Hunt Pilots](#)

Route Pattern/Hunt Pilot: 102911.

Status: Ready

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

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option
 Route this pattern
 Block this pattern

Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation

Calling Name Presentation

Connected Party Transformations

Connected Line ID Presentation

Connected Name Presentation

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>

* indicates required item.



Route Pattern/Hunt Pilot Configuration

[Add a New Route Pattern/Hunt Pilot](#)
[Back to Find/List Route Patterns and Hunt Pilots](#)

Route Pattern/Hunt Pilot: 104911.

Status: Ready

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

Pattern Definition

Route Pattern/Hunt Pilot*

Partition

Description

Numbering Plan*

Route Filter

MLPP Precedence

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

Route Option
 Route this pattern
 Block this pattern

Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation

Calling Name Presentation

Connected Party Transformations

Connected Line ID Presentation

Connected Name Presentation

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Carrier Identification Code

Network Service Protocol

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="— Not Selected —"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>

* indicates required item.



Find and List Translation Patterns

[Add a New Translation Pattern](#)

1 matching record(s) for Pattern begins with ""

Find Translation patterns where begins with
and show items per page

To list all items, click Find without entering any search text.

Matching record(s) 1 to 1 of 1

<input type="checkbox"/>	Translation Pattern	Partition	Description	Route Filter	Copy
<input type="checkbox"/>	 7XXX	E911Phones			

Delete Selected

First Previous Next Last

Page of 1



Translation Pattern Configuration

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

Translation Pattern: 7XXX

Status: Ready

Pattern Definition

Translation Pattern	<input type="text" value="7XXX"/>
Partition	<input type="text" value="E911Phones"/>
Description	<input type="text"/>
Numbering Plan*	<input type="text" value="North American Numbering Plan"/>
Route Filter	<input type="text" value="< None >"/>
Calling Search Space	<input type="text" value="E911CSS"/>
MLPP Precedence	<input type="text" value="Default"/>
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern <input type="text" value="-- Not Selected --"/>
<input checked="" type="checkbox"/> Provide Outside Dial Tone	<input checked="" type="checkbox"/> Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask

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

Connected Party Transformations

Connected Line ID Presentation	<input type="text" value="Default"/>
Connected Name Presentation	<input type="text" value="Default"/>

Called Party Transformations

Discard Digits	<input type="text" value="< None >"/>
Called Party Transform Mask	<input type="text"/>
Prefix Digits (Outgoing Calls)	<input type="text" value="913"/>

* indicates required item.



Find and List CTI Route Points

[Add a New CTI Route Point](#)

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

Find CTI Route Points where begins with

and show items per page

To list all items, click Find without entering any search text, or use "Device Name is not empty" as the search criteria.

Matching record(s) 1 to 2 of 2

Real-time Information Service returned information for 2 of 2 devices listed below.

<input type="checkbox"/>	Device Name	Description	Device Pool	Status	IP Address	Copy
<input type="checkbox"/>	RP911	RP911	Default	172.20.16.250	172.20.16.250	
<input type="checkbox"/>	RP913	RP913	Default	172.20.16.250	172.20.16.250	

First Previous Next Last

Page of 1



CTI Route Point Configuration

[Add a New CTI Route Point](#)
[Back to Find/List CTI Route Points](#)
[Dependency Records](#)

Directory Numbers

- Line 1 - 911 in E911Phones
- Line 2 - Add DN

Device: RP911 (RP911)

Registration: Registered with Cisco CallManager 172.20.16.250

IP Address: 172.20.16.250

Status: Ready

CTI Route Point Configuration

Device Information

Device Name*	<input type="text" value="RP911"/>
Description	<input type="text" value="RP911"/>
Device Pool*	<input type="text" value="Default"/> (View details)
Calling Search Space	<input type="text" value="E911CSS"/>
Location	<input type="text" value="< None >"/>
Media Resource Group List	<input type="text" value="< None >"/>
User Hold Audio Source	<input type="text" value="< None >"/>
Network Hold Audio Source	<input type="text" value="< None >"/>

* indicates a required item.



Directory Number Configuration

[Configure Device \(RP911\)](#)
[Dependency Records](#)

Associated With

RP911 (Line 1)

Directory Number: 911 (E911Phones)

Status: Ready

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

Directory Number

Directory Number*

911

Partition

E911Phones

Directory Number Settings

Voice Mail Profile

< None >

(Choose <None> to use default)

Calling Search Space

E911CSS

AAR Group

< None >

User Hold Audio Source

< None >

Network Hold Audio Source

< None >

Auto Answer

Not available on this device.

Call Forward and Pickup Settings

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

MLPP Alternate Party Settings

Target (Destination)	
Calling Search Space	< None >
No Answer Ring Duration	(seconds)

Line Settings for this Device

Display (Internal Caller ID)	
Line Text Label	Not available on this device.
External Phone Number Mask	
Message Waiting Lamp Policy	Not available on this device.
Ring Setting (Phone Idle)	Not available on this device.
Ring Setting (Phone Active)**	Not available on this device.

Multiple Call / Call Waiting Settings

Maximum Number of Calls*	5000 (1 - 10000)
Busy Trigger*	4500 (<= Max. Calls)

Forwarded Call Information Display

<input checked="" type="checkbox"/> Caller Name	<input checked="" type="checkbox"/> Caller Number
<input type="checkbox"/> Redirected Number	<input type="checkbox"/> Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.

Note:

If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong character set is selected. (English characters are included in all character sets.)

Character Set



CTI Route Point Configuration

[Add a New CTI Route Point](#)
[Back to Find/List CTI Route Points](#)
[Dependency Records](#)

Directory Numbers

- 7718 Line 1 - 913XXXX in
7719 E911Phones
- 7718 Line 2 - Add DN
7719

Device: RP913 (RP913)

Registration: Registered with Cisco CallManager 172.20.16.250

IP Address: 172.20.16.250

Status: Ready

CTI Route Point Configuration

Device Information

Device Name*	<input type="text" value="RP913"/>
Description	<input type="text" value="RP913"/>
Device Pool*	<input type="text" value="Default"/> (View details)
Calling Search Space	<input type="text" value="E911CSS"/>
Location	<input type="text" value="< None >"/>
Media Resource Group List	<input type="text" value="< None >"/>
User Hold Audio Source	<input type="text" value="< None >"/>
Network Hold Audio Source	<input type="text" value="< None >"/>

* indicates a required item.



Directory Number Configuration

[Configure Device \(RP913\)](#)
[Dependency Records](#)

Associated With

RP913 (Line 1)

Directory Number: 913XXXX (E911Phones)

Status: Ready

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

Directory Number

Directory Number*
Partition

Directory Number Settings

Voice Mail Profile
(Choose <None> to use default)
Calling Search Space
AAR Group
User Hold Audio Source
Network Hold Audio Source
Auto Answer Not available on this device.

Call Forward and Pickup Settings

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

MLPP Alternate Party Settings

Target (Destination)
Calling Search Space
No Answer Ring Duration (seconds)

Line Settings for this Device

Display (Internal Caller ID)
Line Text Label Not available on this device.
External Phone Number Mask
Message Waiting Lamp Policy Not available on this device.
Ring Setting (Phone Idle) Not available on this device.
Ring Setting (Phone Active)** Not available on this device.

Multiple Call / Call Waiting Settings

Maximum Number of Calls* (1 - 10000)
Busy Trigger* (<= Max. Calls)

Forwarded Call Information Display

Caller Name Caller Number
 Redirected Number Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.

Note:
If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong character set is selected. (English characters are included in all character sets.)

Character Set



Configuring the Cisco Emergency Responder

Cisco Emergency Responder Administration
For Cisco IP Telephony Solutions





Cisco Emergency Responder Administration

[Details](#)

Copyright (C) 2002-2003 Cisco Systems, Inc. All rights reserved.

[Cisco ER System Administration](#)

[Cisco ER Network Administration](#)

[Cisco ER ERL Administration](#)

[Cisco ER User](#)

Microsoft Internet Explorer

 When reporting or troubleshooting a problem, please give the following information to Technical Assistance:

Cisco Emergency Responder Administration version: 1.2 (3)
Cisco Emergency Responder System version: 1.2 (3)



Telephony settings

Specify the values for the configuration attributes and then press Update settings.

Status :Ready

UDP Port Begin *	<input type="text" value="32000"/>
Inter Cisco ER Group Route Pattern	<input type="text"/>
PSAP Callback Route Point Pattern *	<input type="text" value="913XXXX"/>
ELIN Digit Strip Pattern *	<input type="text" value="913"/>
Route Point for Primary Cisco ER Server *	<input type="text" value="911"/>
Route Point for Standby Cisco ER Server	<input type="text" value="912"/>

* indicates required item

Update Settings

Cancel Changes



Cisco Emergency Responder Administration

For Cisco IP Telephony Solutions



Onsite Alert Settings

SNMP Settings

Find and List ERLs

[Export ERL data](#)
[Import ERL data](#)

Find Details of ERLs Where contains

and show items per page

To list all items, click Find without entering any search text.

[Configure Default ERL](#)
[Add New ERL](#)

Status : Ready

[Click on record to view/edit.](#)

Matching Records 1 to 5 of 5

ERL Name	Route/Translation Pattern--ELIN	Onsite Alert Ids.	Street Name	Community Name	State	Copy	Delete	Audit Trail
Default	100911--7000		Tasman	cisco	ca			view..
Education Center	102911--7002		Tasman	Big Sky	TX			view..
Elementary	103911--7003		Rain	Big Cloud	TX			view..
High School	101911--7001		Rain	Big Cloud	TX			view..
NEC-PR12	104911--7004		NEC	NEC Location	TX			view..

[First](#) | [Previous](#) | [Next](#) | [Last](#)

Page of 1

[Configure Default ERL](#)
[Add New ERL](#)



Cisco Emergency Responder Administration

For Cisco IP Telephony Solutions



Configure Unlocated Phones Configure Synthetic Phones

Find and List Manually Configured Phones

[Add new Manual phone](#)

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

Find phones where extension

and show items per page

To list all items, click Find without entering any search text.

List Manually Configured Phones

Status: Ready

Matching record(s) 1 to 2 of 2

Line Number	ERL Name	IP Address	MAC Address	Delete
3050	NEC-PR12			
3054	NEC-PR12			

First Previous Next Last

Page of 1



ERL Information for NEC-PRI2

* indicates required item



Help for this screen

ERL Name * **NEC-PRI2**

Notes

Test ERL (Select if this ERL is used for Synthetic Testing)

ELIN Settings

Route/Translation pattern

Add

Update

ELIN

Remove

Onsite Alert Settings

Available Onsite Alert IDs

Onsite Alert IDs for the ERL



ERL Address

[ALI Details](#)

Update

Copy

Cancel Changes

Close



ALI Information for NEC-PRI2



* indicates required item

Help for this screen

Fill all prevalidated fields from validation file by selecting a tag.

Select a tag

—Not Selected—

Save your validation file as **C:\Program Files\Cisco Systems\CiscoER\nea_msag_records\validate.txt** on CER-P

For sample validation file refer **C:\Program Files\Cisco Systems\CiscoER\nea_msag_records\samplevalidate.txt** on CER-I

House Number *	<input type="text" value="2400"/>	House Number Suffix	<input type="text"/>
Street Name *	<input type="text" value="NEC"/>	Prefix Directional	<input type="text"/>
Street Suffix	<input type="text" value="EXT"/> <input type="text" value="-Select one-"/>	Post Directional	<input type="text"/>
Community Name *	<input type="text" value="NEC Location"/>	State *	<input type="text" value="TX"/>
Main NPA	<input type="text"/>	Main Telephone No	<input type="text" value="9997000"/>
Class Of Service *	<input type="text" value="Business PBX"/>	Type of Service *	<input type="text" value="Non-Pub FX in 911 area"/>
Exchange	<input type="text"/>	Customer Name *	<input type="text" value="School District"/>
Order Number	<input type="text"/>	Extract Date	<input type="text" value="102904"/>
County ID	<input type="text"/>	Company ID *	<input type="text" value="45678"/>
Zip Code	<input type="text"/>	Zip Code Extension	<input type="text"/>
Customer Code *	<input type="text" value="123"/>	Comments	<input type="text"/>
Longitude	<input type="text"/>	Latitude	<input type="text"/>
Elevation	<input type="text"/>	TAR Code	<input type="text"/>
Location	<input type="text"/>	Reserved (for Service Provider use)	<input type="text"/>

Update ALI Info

Cancel Changes

Close



ERL Information for Education Center

* indicates required item



Help for this screen

ERL Name * **Education Center**

Notes

Test ERL (Select if this ERL is used for Synthetic Testing)

ELIN Settings

Route/Translation pattern

Add

Update

Remove

ELIN

Onsite Alert Settings

Available Onsite Alert IDs



Onsite Alert IDs for the ERL

ERL Address

[ALI Details](#)

Update

Copy

Cancel Changes

Close



ALI Information for Education Center

* indicates required item

Help for this screen

Fill all prevalidated fields from validation file by selecting a tag.

Select a tag

—Not Selected—

Save your validation file as C:\Program Files\Cisco Systems\CiscoER\ena_msag_records\validate.txt on CER-P

For sample validation file refer C:\Program Files\Cisco Systems\CiscoER\ena_msag_records\samplevalidate.txt on CEI

House Number *	<input type="text" value="1150"/>	House Number Suffix	<input type="text"/>
Street Name *	<input type="text" value="Tasman"/>	Prefix Directional	<input type="text"/>
Street Suffix	<input type="text" value="DR"/> <input type="text" value="—Select one—"/>	Post Directional	<input type="text"/>
Community Name *	<input type="text" value="Big Sky"/>	State *	<input type="text" value="TX"/>
Main NPA	<input type="text"/>	Main Telephone No	<input type="text"/>
Class Of Service *	<input type="text" value="Business"/>	Type of Service *	<input type="text" value="FX in 911 area"/>
Exchange	<input type="text"/>	Customer Name *	<input type="text" value="School District"/>
Order Number	<input type="text"/>	Extract Date	<input type="text" value="101404"/>
County ID	<input type="text"/>	Company ID *	<input type="text" value="12345"/>
Zip Code	<input type="text" value="95134"/>	Zip Code Extension	<input type="text"/>
Customer Code *	<input type="text" value="123"/>	Comments	<input type="text"/>
Longitude	<input type="text"/>	Latitude	<input type="text"/>
Elevation	<input type="text"/>	TAR Code	<input type="text"/>
Location	<input type="text"/>	Reserved (for Service Provider use)	<input type="text"/>

Update ALI Info

Cancel Changes

Close



Switch Port Details

Find **Configure** Export Import

View Switch Port Information

Find ports where All Any of the conditions are satisfied

ERL Name contains

Find More

[Edit Table View](#)

Matching record(s) 1 to 50 of 51

ERL Name	Switch IP Address	IfName	Location	Phone Extension	Phone IP Address	Phone Type	Port Name
	172.20.43.20	1/1	View				
	172.20.43.20	1/2	View				
	172.20.43.20	15/1	View				
	172.20.43.20	3/1	View				
	172.20.43.20	3/2	View				
	172.20.43.20	3/3	View				
	172.20.43.20	3/4	View				
	172.20.43.20	3/5	View				
	172.20.43.20	3/6	View				
	172.20.43.20	3/7	View				
	172.20.43.20	3/8	View				
	172.20.43.20	3/9	View				
	172.20.43.20	3/10	View				
	172.20.43.20	3/11	View				
	172.20.43.20	3/12	View				
	172.20.43.20	3/13	View				
	172.20.43.20	3/14	View				
	172.20.43.20	3/15	View				
	172.20.43.20	3/16	View				
	172.20.43.20	3/17	View				
	172.20.43.20	3/18	View				
	172.20.43.20	3/19	View				
	172.20.43.20	3/20	View				
	172.20.43.20	3/21	View				



	172.20.43.20	3/22	View				
	172.20.43.20	3/23	View				
	172.20.43.20	3/24	View				
Education Center	172.20.43.20	3/25	Education Cente.. View	2002	172.20.16.102	Cisco 7960	
Education Center	172.20.43.20	3/26	Education Cente.. View				
Education Center	172.20.43.20	3/27	Education Cente.. View				
Education Center	172.20.43.20	3/28	Education Cente.. View				
Elementary	172.20.43.20	3/29	router port View				
Elementary	172.20.43.20	3/30	Elementary View				
Elementary	172.20.43.20	3/31	Elementary View				
Elementary	172.20.43.20	3/32	Elementary View	2003	172.20.16.101	Cisco 7940	
High School	172.20.43.20	3/33	High School View				
High School	172.20.43.20	3/34	High School View	2001	172.20.16.103	Cisco 7960	
High School	172.20.43.20	3/35	High School View				
High School	172.20.43.20	3/36	High School View				
	172.20.43.20	3/37	View				
	172.20.43.20	3/38	View				
	172.20.43.20	3/39	View				
	172.20.43.20	3/40	View				
	172.20.43.20	3/41	View				
	172.20.43.20	3/42	View				
	172.20.43.20	3/43	View				
	172.20.43.20	3/44	View				
	172.20.43.20	3/45	View				
	172.20.43.20	3/46	View				
	172.20.43.20	3/47	View				

First Previous [Next](#) [Last](#)

Page of 2

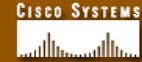
[Edit Table View](#)



Cisco 6608 MGCP Gateway Configuration

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions



Gateway Configuration

[Back to Find/List Gateways](#)
[Dependency Records](#)

Product : Cisco Catalyst 6000 T1 VoIP Gateway
Gateway : S0/DS1-0@SDA0001C9D93A98
Device Protocol: Digital Access PRI
Registration: Registered with Cisco CallManager 172.20.16.250
IP Address: [172.20.16.100](#)

Status: Ready

Device Information

MAC Address*	<input type="text" value="0001C9D93A98"/>
Description	<input type="text" value="6608 T1 PRI"/>
Device Pool*	<input type="text" value="Default"/>
Network Locale	<input type="text" value="United States"/>
Media Resource Group List	<input type="text" value="< None >"/>
Location	<input type="text" value="< None >"/>
AAR Group	<input type="text" value="< None >"/>
Load Information	<input type="text"/>

Multilevel Precedence and Preemption (MLPP) Information

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

Interface Information

PRI Protocol Type*	<input type="text" value="PRI NI2"/>
Protocol Side*	<input type="text" value="Network"/>
Channel Selection Order*	<input type="text" value="Bottom Up"/>
Channel IE Type*	<input type="text" value="Use Number when 1B"/>
PCM Type*	<input type="text" value="µ-law"/>
Delay for first restart (1/8 sec ticks)	<input type="text" value="32"/>
Delay between restarts (1/8 sec ticks)	<input type="text" value="4"/>
<input checked="" type="checkbox"/> Inhibit restarts at PRI initialization	
<input type="checkbox"/> Enable status poll	



Product Specific Configuration



Clock Reference*	<input type="text" value="Network"/>
TX-Level CSU*	<input type="text" value="0dB"/>
FDL Channel*	<input type="text" value="ATT 54016"/>
Framing*	<input type="text" value="ESF"/>
Audio Signal Adjustment into IP Network*	<input type="text" value="NoDbPadding"/>
Audio Signal Adjustment from IP Network*	<input type="text" value="NoDbPadding"/>
Yellow Alarm*	<input type="text" value="Bit2"/>
Zero Suppression*	<input type="text" value="B8ZS"/>
Digit On Duration(50-500ms)*	<input type="text" value="100"/>
Interdigit Duration(50-500msec)*	<input type="text" value="100"/>
SNMP Community String	<input type="text" value="public"/>
Disable SNMP Set operations*	<input type="checkbox"/>
Debug Port Enable*	<input checked="" type="checkbox"/>
Hold Tone Silence Duration*	<input type="text" value="0"/>
Port Used for Voice Calls*	<input checked="" type="checkbox"/>
Port Used for Modem Calls*	<input checked="" type="checkbox"/>
Port Used for Fax Calls*	<input checked="" type="checkbox"/>

Fax and Modem Parameters

Fax Relay Enable*	<input checked="" type="checkbox"/>
Fax Error Correction Mode Override*	<input checked="" type="checkbox"/>
Maximum Fax Rate*	<input type="text" value="14400bps"/>
Fax Payload Size*	<input type="text" value="20"/>
Non Standard Facilities Country Code*	<input type="text" value="65535"/>
Non Standard Facilities Vendor Code*	<input type="text" value="65535"/>
Fax/Modem Packet Redundancy*	<input type="checkbox"/>
NSE Type*	<input type="text" value="Non-IOS Gateways"/>

Playout Delay Parameters

Initial Playout Delay*	<input type="text" value="40"/>
Minimum Playout Delay*	<input type="text" value="20"/>
Maximum Playout Delay*	<input type="text" value="150"/>



Call Routing Information	
Inbound Calls	
Significant Digits*	All
Calling Search Space	E911CSS
AAR Calling Search Space	< None >
Prefix DN	
Outbound Calls	
Calling Line ID Presentation*	Default
Calling Party Selection*	Originator
Called party IE number type unknown*	Cisco CallManager
Calling party IE number type unknown*	Cisco CallManager
Called Numbering Plan*	Cisco CallManager
Calling Numbering Plan*	Cisco CallManager
Number of digits to strip*	0
Caller ID DN	
SMDI Base Port*	0
PRI Protocol Type Specific Information	
<input type="checkbox"/> Display IE Delivery	
<input type="checkbox"/> Redirecting Number IE Delivery - Outbound	
<input type="checkbox"/> Redirecting Number IE Delivery - Inbound	
<input checked="" type="checkbox"/> Send Extra Leading Character In DisplayIE****	
<input type="checkbox"/> Setup non-ISDN Progress Indicator IE Enable****	
<input type="checkbox"/> MCDN Channel Number Extension Bit Set to Zero**	
<input type="checkbox"/> Send Calling Name In Facility IE	
<input type="checkbox"/> Interface Identifier Present**	
Interface Identifier Value**	0
Connected Line ID Presentation (QSIG Inbound Call)*	Default
Connected PBX Model	None
Echo Canceller Configuration	
Echo TailLength (ms)*	32 ms
Minimum ERL (db)*	6 db
* indicates required item	
** applicable to DMS-100 protocol only	
*** applicable to DMS-100 protocol and DMS-250 protocol only	
**** may be required to force ringback from some PBXs	

[Back to Find/List Gateways](#)



S0/DS1-0@SDA0001C9D93A98

Cisco Catalyst 6000 T1 VoIP Gateway

[Device Configuration](#)

[Network Configuration](#)

[Registration Status](#)

[Device Status](#)

[Port Status](#)

[TCP/IP Statistics](#)

[D-Channel Statistics](#)

[Facility Data Link](#)

Device Configuration

Device Protocol	Digital Access PRI
Protocol Side	Network
D-Channel Enabled	Yes
Framing	ESF
CSU Gain	0dB
WAN Voice Encoding	u-law
WAN Bit Encoding	B8ZS
Yellow Alarm Encoding	Bit2
Facility Data Link	ATT 54016
Transmit Clock Source	Slaved to Span 1 Rx Clock
Localization	United_States
Load Information	D00404000009
Call Manager 1	172.20.16.250
Call Manager 2	
Call Manager 3	

[Change Configuration](#)

[Page Help](#)



Configuring the Cisco 2611XM MGCP Gateway

System Route Plan Service Feature Device User Application Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions



Gateway Configuration

[Back to Find/List Gateways](#)

Product: Cisco 26XX

Gateway : 2611XM-CAMA

Status: Ready

Domain Name*

Description

Cisco CallManager Group*

Installed Voice Interface Cards

Endpoint Identifiers

Module in slot	Module	Subunit	Interface	TS	POTS
Module in slot 0	< None >				
Module in slot 1	NM-2V				
		Subunit 0	VIC-2FXO	(1/0/0) TS	(1/0/1) TS
		Subunit 1	VIC-2FXS	(1/1/0) POTS	(1/1/1) POTS

Product Specific Configuration



Switchback Timing*

Switchback uptime-delay (min)

Switchback schedule (hh:mm)

* indicates required item

[Back to Find/List Gateways](#)



Gateway Configuration

[Back to main Gateway Configuration](#)

[Back to Find/List Gateways](#)

[Dependency Records](#)

Slot 1 / Sub-Unit 0

LS	1/0/0	
LS	1/0/1	

Product : Cisco 26XX

Gateway : AALN/S1/SU0/0@2611XM-CAMA

Registration: Registered with Cisco CallManager 172.20.16.250

IP Address: 172.20.16.50

Slot 1 / Sub-Unit 1

POTS	1/1/0	2100
POTS	1/1/1	2101

Status: Ready

Gateway Information

Description	AALN/S1/SU0/0@2611XM-CAMA
Device Pool*	Default
Calling Search Space	E911CSS
AAR Calling Search Space	< None >
Media Resource Group List	< None >
Location	< None >
AAR Group	< None >
Network Locale	United States

Multilevel Precedence and Preemption (MLPP) Information

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

Port Information

Port Direction*	Outbound
Attendant DN*	2000

Product Specific Configuration

Hookflash Timer (50-1550ms)*	50
Inter-digit Duration Timer (50-500 ms)*	100
Input Gain (-6-14 db)*	0
Output Attenuation (0-14 db)*	3
Echo Cancellation Enable*	Enable
Echo Cancellation Coverage (ms)*	Default



```
2611XM-CAMA#sho ver
Cisco Internetwork Operating System Software
IOS (tm) C2600 Software (C2600-IPVOICE-M), Version 12.3(10), RELEASE SOFTWARE (fc3)
Copyright (c) 1986-2004 by cisco Systems, Inc.
Compiled Tue 17-Aug-04 05:11 by kellythw
Image text-base: 0x80008098, data-base: 0x81805F0C
```

```
ROM: System Bootstrap, Version 12.2(7r) [cmong 7r], RELEASE SOFTWARE (fc1)
```

```
2611XM-CAMA uptime is 3 days, 1 hour, 11 minutes
System returned to ROM by power-on
System image file is "flash:c2600-ipvoice-mz.123-10.bin"
```

```
cisco 2611XM (MPC860P) processor (revision 0x100) with 61440K/4096K bytes of memory.
Processor board ID JAD07060AU8 (1524871317)
M860 processor: part number 5, mask 2
Bridging software.
X.25 software, Version 3.0.0.
2 FastEthernet/IEEE 802.3 interface(s)
2 Voice FXO interface(s)
2 Voice FXS interface(s)
32K bytes of non-volatile configuration memory.
49152K bytes of processor board System flash (Read/Write)
```

```
Configuration register is 0x2102
```

```
2611XM-CAMA#show running-config
Building configuration...
```

```
Current configuration : 2174 bytes
```

```
!
```



```
version 12.3
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname 2611XM-CAMA
!
boot-start-marker
boot-end-marker
!
no logging on
!
clock timezone gmt -8
no network-clock-participate slot 1
no network-clock-participate wic 0
no aaa new-model
ip subnet-zero
ip cef
ip tcp synwait-time 13
!
no ip domain lookup
no ftp-server write-enable
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server 172.20.16.250
ccm-manager config
!
interface FastEthernet0/0
ip address 172.20.16.50 255.255.255.0
no ip route-cache cef
no ip route-cache
```



```
no ip mroute-cache
duplex auto
speed 100
no keepalive
no cdp enable
no clns route-cache
!
interface FastEthernet0/1
no ip address
no ip route-cache cef
no ip route-cache
no ip mroute-cache
shutdown
speed 100
full-duplex
no clns route-cache
!
ip classless
ip route 0.0.0.0 0.0.0.0 FastEthernet0/0
no ip http server
!
no logging trap
!
voice-port 1/0/0
signal cama KP-NPD-NXX-XXXX-ST
dial-type mf
!
voice-port 1/0/1
signal cama KP-NPD-NXX-XXXX-ST
dial-type mf
!
voice-port 1/1/0
```



```
!  
voice-port 1/1/1  
!  
mgcp  
mgcp call-agent 172.20.16.250 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  
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  
!  
dial-peer voice 100 pots  
  application mgcpapp  
  port 1/0/0  
!  
dial-peer voice 101 pots  
  application mgcpapp  
  port 1/0/1  
!  
dial-peer voice 110 pots  
  application mgcpapp  
  port 1/1/0
```



```
!  
dial-peer voice 999100 pots  
  application mgcpapp  
  port 1/0/0
```

```
!  
dial-peer voice 999101 pots  
  application mgcpapp  
  port 1/0/1
```

```
!  
dial-peer voice 999110 pots  
  application mgcpapp  
  port 1/1/0
```

```
!  
dial-peer voice 999111 pots  
  application mgcpapp  
  port 1/1/1
```

```
!  
line con 0  
  exec-timeout 0 0  
  login
```

```
line aux 0
```

```
line vty 0 4  
  login
```

```
!  
end
```

```
2611XM-CAMA#sho voice port 1/0/0
```

```
Foreign Exchange Office (CAMA) 1/0/0 Slot is 1, 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 not set

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 8 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 200 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 18

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-NPD-NXX-XXXX-ST

NPD to NPA mapping is :

NPD	NPA
-----	-----

0	0
---	---

1	0
---	---

2	0
---	---

3	0
---	---

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 400 ms

Configuring the NEC 2400 ICS PBX

The NEC 2400 ICS 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 NEC information below is directed to NEC techs. The switch settings and software references in this document assume a familiarity with the NEC 2400. It is highly recommended to have a NEC ISDN certified technician setup the NEC portion.

Configure in the following sequence:

Install the Circuit Card

Configure all software

Configuring the Circuit Card (PA-24PRTB)

Switch	Position	Description	Settings
MB		Make Busy	Down
LB	0	Internal Loop Back	Off
	1	External Loop Back	Off
	2	Payload Loop Back	Off
	3	Dch Control Block MBR	Off
SENSE (Rotary)		Protocol 0 = CCIS (NEC proprietary) 1 = NI2 3 = INS1500 5 = AT&T (#4 & #5 ESS) 7 = Nortel DMS100/DMS250 A = Q.SIG	1
SW0	1	ON = Impedance 100 ohms OFF = Impedance 110 ohms	ON
	2	XMT XFMR Ground	OFF
	3	RCV XFMR Ground	OFF
	4	Fixed On	ON
SW1	1	Digital PAD ROM Count Off = 2 ROM chips on board On = 3 ROM chips on board	OFF
	2	Fixed On	ON
	3	ON = 24B OFF = 23B + D	OFF
	4	D-Channel Packet Service	OFF
SW2	1	Equalizer	ON
	2	Equalizer	ON
	3	Equalizer	ON
	4	12/24 Multiframe	ON
	5	AMI/B8ZS	ON
	6	4K Data Link Control	ON
	7	4K Data Link Control	OFF
	8	Fixed ON	ON
SW3	1	RMT Alarm	OFF



	2	RMT Alarm	OFF
	3	Fixed Off	OFF
	4	All "1" Supervision	OFF
	5	Fixed On	ON
	6	Fixed On	ON
	7	Fixed On	ON
	8	Fixed On	ON
SW4	1	Fixed Off (Protocol Selection)	OFF
	2	ON = User OFF = Network	ON
	3	Dch Signal Logic	OFF
	4	Dch Speed Selection	ON
	5	Dch Speed Selection	ON
	6	Fixed On	ON
	7	Fixed On	ON
	8	Fixed On	ON
SW5	1	PAD	ON
	2	PAD	ON
	3	PAD	ON
	4	PAD	ON
	5	PAD	ON
	6	PAD	ON
	7	PAD	ON
	8	Idle Code	OFF

Configuring the (ARDT) Route Settings

Below are the Route settings found in ARTD. Route 7 is the B channel and Route 8 is the D channel. Please refer to EDCS-207455 for complete details for configuration.

[LRTD]

CISCO TEST FACILITY

02/05/10

PAGE: 3

* ROUTE CLASS DATA LIST *

```

----- R O U T E   N U M B E R -----
CDN FUNCTION   6       7       8       9       10

1  OSGS        0       2       2       2       2
2  ONSG        2       3       3       3       3
3  ISGS        0       2       2       2       2
4  INSG        2       3       3       3       3
5  TF          3       3       3       3       3

6  TCL         4       4       4       4       4
7  L/T         1       1       1       1       1
8  RLP         2       2       2       2       2
9  TQ          0       0       0       0       0

```



10	SMDR	0	1	1	1	0
11	TD	0	0	0	0	0
12	DR	0	0	0	0	0
13	AC	1	1	1	1	1
14	TNT	0	0	0	0	0
15	LSG	13	12	13	12	13
16	SMDR2	0	0	0	0	0
17	H/M	0	0	0	0	0
18	MC	0	0	0	0	0
19	ANI	0	0	0	0	0
20	D	0	0	0	0	0
21	MSB	0	0	0	0	0
22	MSW	0	0	0	0	0
23	TR	0	0	0	0	0
24	OC	0	0	0	0	0
25	R/L	0	0	0	0	0
26	RVSD	0	0	0	0	0
27	TL	0	0	0	0	0
28	ANS	0	1	1	1	0
29	TELP	0	0	0	0	0
30	PAD	7	4	7	4	7
31	OGRL	0	1	0	1	0
32	ICRL	0	1	0	1	0
33	HD	0	0	0	0	0
34	GUARD	0	1	0	1	0
35	WINK	0	0	0	0	0
36	VAD	0	0	0	0	0
37	CLD	0	0	0	0	0
38	FA	0	0	0	0	0



CDN FUNCTION	6	7	8	9	10
39 BC	0	0	0	0	0
40 TCM	0	0	0	0	0
41 TDMQ	0	0	0	0	0
42 TRSC	0	0	0	0	0
43 BT	0	1	1	0	0
44 PRV	0	0	0	0	0
45 A/D	1	1	1	1	1
46 CW	0	0	0	0	0
47 TPQ	0	0	0	0	0
48 BL	0	0	0	0	0
49 TRKS	1	0	0	0	0
50 DPLY	1	1	0	1	0
51 ACD	0	0	0	0	0
52 2W/4W	0	0	0	0	0
53 FAAT	0	0	0	0	0
54 GW	0	0	0	0	0
55 TCMA	0	0	0	0	0
56 SMDR3	0	0	0	0	0
57 HDT	0	0	0	0	0
58 CD	0	0	0	0	0
59 CCH	0	0	0	0	0
60 TC/EC	0	0	0	0	0
61 IRE	0	0	0	0	0
62 SCR	0	0	0	0	0
63 LYER1	0	0	0	0	0
64 NET	0	0	0	0	0
65 INT	10	1	1	1	1



66	DC	4	4	4	4	4
67	HKS	0	0	0	0	0
68	SCF	0	0	0	0	0
69	SMDR4	0	0	0	0	0

NEC Software Release:

DISS 02/05/10 16:06 CISCO TEST FACILITY

MM

VERSION	ISSUE	DATE	
J	05.80	00/06/20	Generic

MM

VERSION	ISSUE	DATE	
F_	01.00	96/04/26	Boot ROM

DISS END 02/05/10 16:07



Important Information

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International
BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
Capital Tower
168 Robinson Road
#22-01 to #29-01
Singapore 068912
www.cisco.com
Tel: +65 317 7777
Fax: +65 317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Web site at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2005 Cisco Systems, Inc. All rights reserved. CCSP, the Cisco Square Bridge logo, Follow Me Browsing, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Access Registrar, Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, ProConnect, RateMUX, ScriptShare, SlideCast, SMARTnet, StrataView Plus, SwitchProbe, TeleRouter, The Fastest Way to Increase Your Internet Quotient, TransPath, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0501R)

Printed in the USA