Avaya Definity G3 version 12 using T1 QSIG to Cisco Emergency Responder 1.3 and Cisco Unified Communications Manager 5.0

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December 20, 2007 Revision 4

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Introduction

- The following is an Application Note for Interoperability of a Cisco Unified Communications Manager 5.0, Cisco Emergency Responder 1.3 and Cisco3845 w/ CAMA interface and T1-QSIG trunk with an AVAYA CM Definity PBX interconnected via VWIC-2MFT-T1
- 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 T1 QSIG trunk using Cisco3845 MGCP Gateway
Network Topology

Figure 1. Network Topology or Test Setup

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 Hardware
- Cisco 3845 Gateway with NM-HD/VWIC-2MFT-T1 (QSIG trunk) and NM-HD-V2/VIC2-4FXO (CAMA trunk)
- Cisco Cat6K switch
- Cisco Unified Communications Manager server
- Cisco Emergency Responder server
- AVAYA Definity PBX

Software Requirements
- IOS Software releases “c3845-ipvoice-mz.123-14.T4”.
- PBX Software: G3 version 12
- Cisco Unified Communications Manager 5.0 (1.51-346)
- Cisco Emergency Responder 1.3 (0.105)
Features

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 3845 MGCP gateway, and was correctly associated to the appropriate Emergency Response Location. The call was connected through the Cisco 3845 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 an AVAYA CM 2.0 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 the Cisco Unified Communications Manager

Partitions
### Phone Partition

**Partition Configuration**

<table>
<thead>
<tr>
<th>Status: Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Partition Name</strong></td>
</tr>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Time Schedule</strong></td>
</tr>
<tr>
<td><strong>Time Zone</strong></td>
</tr>
</tbody>
</table>

- Status: indicates required item.
E911 Partition

Calling Search Space
### CSS phones

#### Calling Search Space Configuration

<table>
<thead>
<tr>
<th>Status</th>
<th>Status: Ready</th>
</tr>
</thead>
</table>

**Calling Search Space Information**

<table>
<thead>
<tr>
<th>Name</th>
<th>PhonesCSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>PhonesCSS</td>
</tr>
</tbody>
</table>

**Route Partitions for this Calling Search Space**

<table>
<thead>
<tr>
<th>Available Partitions</th>
<th>E911</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Selected Partitions (Ordered by highest priority)</th>
<th>Phones</th>
</tr>
</thead>
</table>

- Save  Delete  Copy  Add New

* - indicates required item.
CSS E911

Cisco CallManager Administration  For Cisco IP Telecommunication Solutions

Calling Search Space Configuration

Status
Status: Ready

Calling Search Space Information
Name: E911CSS
Description:

Route Partitions for this Calling Search Space
Available Partitions:

Selected Partitions
(Ordered by highest priority)
E911
Phones

- Save  Delete  Copy  Add New

* - indicates required item.
### Association Information

<table>
<thead>
<tr>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status: Ready</td>
<td></td>
</tr>
</tbody>
</table>

#### Phone Type

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

#### Device Information

- **Registration:** Registered with Cisco CallManager CM-BARZA
- **IP Address:** 172.20.110.223
- **MAC Address:** 00:D4:18:B9:63:19
- **Description:** Auto 4202
- **Device Pool:** Default
- **Phone Button Template:** Default
- **Softkey Template:** Default
- **Common Phone Profile:** Standard 7960 SCCP
- **Calling Search Space:** Standard Common Phone Profile
- **AAR Calling Search Space:** Standard Common Phone Profile
- **Media Resource Group List:** Standard Common Phone Profile
- **User Hold Audio Source:** Standard Common Phone Profile
- **Network Hold Audio Source:** Standard Common Phone Profile
- **Location:** Hub_None
- **User Locale:** Default
- **Network Locale:** Default
- **Built In Bridge:** Default
- **Privacy:** Default
- **Owner User ID:** Default
- **Phone Load Name:**

- **Retry Video Call as Audio:**
- **Ignore Presentation Indicators (internal calls only):**
- **Allow Control of Device from CTI:**
### Protocol Specific Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packet Capture Mode</td>
<td>None</td>
</tr>
<tr>
<td>Packet Capture Duration</td>
<td>0</td>
</tr>
<tr>
<td>Presence Group</td>
<td>Standard Presence group</td>
</tr>
<tr>
<td>SCCP Phone Security Profile</td>
<td>Standard SCCP Profile for Auto Registration</td>
</tr>
<tr>
<td>SUBSCRIBE Calling Search Space</td>
<td>(&lt; Name &gt;)</td>
</tr>
<tr>
<td>Unattended Port</td>
<td></td>
</tr>
<tr>
<td>Require DTMF Reception</td>
<td></td>
</tr>
<tr>
<td>RFC2833 Disabled</td>
<td></td>
</tr>
</tbody>
</table>

### Expansion Module Information

<table>
<thead>
<tr>
<th>Module</th>
<th>Load Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Module 2</td>
<td>&lt; Name &gt;</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Information</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory</td>
<td></td>
</tr>
<tr>
<td>Messages</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td></td>
</tr>
<tr>
<td>Authentication Server</td>
<td></td>
</tr>
<tr>
<td>Proxy Server</td>
<td></td>
</tr>
<tr>
<td>Idle</td>
<td></td>
</tr>
<tr>
<td>Idle Timer (seconds)</td>
<td></td>
</tr>
</tbody>
</table>

### Extension Information

- Enable Extension Mobility
- Log Out Profile: Not Selected
- Login User ID: < Name >
- Login Time: < Name >
- Log out Time: < Name >

### Certification Authority Proxy Function (CAPF) Information

- Certificate Operation: No Pending Operation
- Authentication String

- Operation Completes By: 2006-01-15 12:00
- Certificate Operation Status: None
### Extension Information
- **Enable Extension Mobility**
- **Log Out Profile**
- **Login User ID**
- **Log In Time**
- **Log Out Time**

### Certification Authority Proxy Function (CAPF) Information
- **Certificate Operation**
- **Authentication String**
- **Generate String**
- **Operation Completes By**

### MLPP Information
- **MLPP Domain**
- **MLPP Indication**
- **MLPP Preemption**

### Secure Shell Information
- **Secure Shell User**
- **Secure Shell Password**

### Product Specific Configuration
- **Disable Speakerphone**
- **Disable Speakerphone and Headset**
- **PC Port**
- **Settings Access**
- **Gratuitous ARP**
- **PC Voice VLAN Access**
- **Video Capabilities**
- **Auto Line Select**
- **Web Access**
Directory Number Configuration

**Status**

Status: Ready

Note: Changes to Line or Directory Number settings require restart.

**Directory Number Information**

- **Directory Number**
  - Value: 4200

- **Route Partition**
  - Value: Phones

- **Description**
  - Value: 

- **Alerting Name**
  - Value: Rafa Marquez

- **ASCI Alerting Name**
  - Value: Rafa Marquez

- **Allow Control of Device from CTI**
  - Value: Checked

- **Associated Devices**
  - Value: SEP000A416B8539

- **Edit Device**

- **Edit Line Appearance**

**Directory Number Settings**

- **Voice Mail Profile**
  - Value: <None>

- **Calling Search Space**
  - Value: <None>

- **Presence Group**
  - Value: Standard Presence group

- **AAR Group**
  - Value: <None>

- **User Hold Audio Source**
  - Value: <None>

- **Network Hold Audio Source**
  - Value: <None>

- **Auto Answer**
  - Value: Auto Answer Off

**Call Forward and Call Pickup Settings**

- **Voice Mail Destination**

- **Calling Search Space**
### Call Forward and Call Pickup Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Voice Mail Destination</th>
<th>Calling Search Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Calling Search Space for Forward All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward Busy Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward Busy External</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward No Answer Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward No Answer External</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Coverage Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward No Coverage External</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward on CTI Failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Answer Ring Duration (seconds)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Call Pickup Group</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### MLPP Alternate Party Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLPP Calling Search Space</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>MLPP No Answer Ring Duration (seconds)</td>
<td></td>
</tr>
</tbody>
</table>

### Line 1 on Device SEP000A116B0539

<table>
<thead>
<tr>
<th>Feature</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display (Internal Caller ID)</td>
<td>John Doe</td>
</tr>
<tr>
<td>ASCII Display (Internal Caller ID)</td>
<td>John Doe</td>
</tr>
<tr>
<td>Line Test Label</td>
<td>John Doe</td>
</tr>
<tr>
<td>ASCII Line Test Label</td>
<td>John Doe</td>
</tr>
<tr>
<td>External Phone Number/Mail</td>
<td>John Doe</td>
</tr>
<tr>
<td>Message Waiting Lamp Policy*</td>
<td>Use System Policy</td>
</tr>
<tr>
<td>Ring Setting (Phone [G9])*</td>
<td>Use System Default</td>
</tr>
<tr>
<td>Ring Setting (Phone Active)</td>
<td>Use System Default</td>
</tr>
</tbody>
</table>

---

**Multiple Call/Call Waiting Settings on Device SEP000A116B0539**

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

---

### Forwarded Call Information Display on Device SEP000A116B0539

- **Caller Name**
- **Redirected Number**
- **Dialed Number**
### CTI Route Points

#### Cisco CallManager Administration

*For Cisco IP Telecommunication Solutions*

Logged in as: CCMAdmin

**Find and List CTI Route Points:**

- **Status:**
  - 2 records found

**Search Options**

Find CTI Route Point where **Device Name** begins with **Find**

Search Results:

<table>
<thead>
<tr>
<th>Device Name</th>
<th>Description</th>
<th>Device Pool</th>
<th>Calling Search Space</th>
<th>Status</th>
<th>IP Address</th>
<th>Copy</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCD11</td>
<td>RP911</td>
<td>Default</td>
<td>ED11CSX</td>
<td>Registered with CM-BAPZA</td>
<td>172.20.110.254</td>
<td>0</td>
</tr>
<tr>
<td>RPELIN913</td>
<td>RPELIN913</td>
<td>Default</td>
<td>ED11CSX</td>
<td>Registered with CM-BAPZA</td>
<td>172.20.110.254</td>
<td>0</td>
</tr>
</tbody>
</table>

Add New | Select All | Clear All | Delete Selected | Reset Selected | Rows per page **50**
## CTI Route Point 911

### Device Information
- **Registration**: Registered with Cisco CallManager CM:MARZA
- **IP Address**: 172.20.110.254
- **Device Name**: RP911
- **Description**: RP911
- **Device Pool**: Default (View Details)
- **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**:

---

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### Directory Number Configuration

- **Status**: Ready  
  Note: Changes to Line or Directory Number settings require restart.

#### Directory Number Information
- **Directory Number**: 911
- **Route Partition**: Phones
- **Description**: 
- **Alerting Name**: 
- **ASCII Alerting Name**: 
- **Associated Devices**: 
  - RR811
  - 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
- **ANR Group**: <None>
- **User Hold Audio Source**: <None>
- **Network Hold Audio Source**: <None>

#### Call Forward and Call Pickup Settings
- **Forward All**: 
  - Voice Mail/Destination
  - Calling Search Space: <None>
- **Secondary Calling Search Space for Forward All**: <None>
### Call Pickup Group Settings

- **No Answer Ring Duration (seconds)**: 
  - Value: <None>  
- **Call Pickup Group**: 
  - Value: <None>

### Alternate Party Settings

- **Target (Destination)**: 
  - Value: 
- **MLPP Alternate Party Settings**
  - **MLPP Calling Search Space**: 
    - Value: <None>
  - **MLPP No Answer Ring Duration (seconds)**: 
    - Value: <None>

### Line 1 on Device 8941

- **Display (Internal Caller ID)**: 
  - Value: 
- **ASCII Display (Internal Caller ID)**: 
  - Value: 
- **External Phone Number Mask**: 
  - Value: 

### Multiple Call/Call Waiting Settings on Device 8941

- **Maximum Number of Calls**: 
  - Value: 5000
- **Busy Trigger**
  - Value: 450

### Forwarded Call Information Display on Device 8941

- **Caller Name**
- **Redirected Number**
- **Dialled Number**

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

**Busy Trigger**

<table>
<thead>
<tr>
<th>Value</th>
<th>(Less than or equal to Max. Calls)</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates required item.
CTI Route Point 913

### Device Information
- **Registration**: Registered with Cisco CallManager CM-AP12AZA
- **IP Address**: 172.20.110.254
- **Device Name**: RFELIN812
- **Description**: RFELIN813
- **Device Pool**: Default
- **Calling Search Space**: EB1CSS
- **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: $123XXXXXXX in E911**
- **Line 2: Add a new DN**

- Save | Delete | Copy | Reset | Add New

* indicates required item.
### Directory Number Configuration

**Status**
- Status: Ready

Note: Changes to Line or Directory Number settings require restart.

#### Directory Number Information
- Directory Number:* 913000000000X
- Route Partition: E911
- Description:
- Alerting Name:
- ASCII Alerting Name:
- Associated Devices:
  - RPELIMB13

**Associated Devices**

**Directory Number Settings**
- Voice Mail Profile: < None >
- Calling Search Space: E911CSS
- Presence Group:* Standard Presence group
- AAR Group: < None >
- User Hold Audio Source: < None >
- Network Hold Audio Source: < None >
Note: A Backup CER server was not used during testing therefore CTI route point for 913 was not created.
### CTI Port

**Cisco CallManager Administration**  For Cisco IP Telecommunication Solutions

Logged in as: CCM/Administrator

**Phone Configuration**

**Status**
- Status: Ready

**Device Information**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>Registered with Cisco CallManager CM-BARZA 172.20.55.50</td>
</tr>
<tr>
<td>Device Name</td>
<td>CERSectl</td>
</tr>
<tr>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>Device Pool</td>
<td>Default</td>
</tr>
<tr>
<td>Common Phone Profile</td>
<td>Standard Common Phone Profile</td>
</tr>
<tr>
<td>Calling Search Space</td>
<td>PhonesCSS</td>
</tr>
<tr>
<td>AAR Calling Search Space</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Media Resource Group List</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>User Hold Audio Source</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Network Hold Audio Source</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Location</td>
<td>Hub_Name</td>
</tr>
<tr>
<td>User Locale</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Network Locale</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Owner User ID</td>
<td>&lt; Name &gt;</td>
</tr>
<tr>
<td>Ignore Presentation Indicators (internal calls only)</td>
<td>Checkbox Selected</td>
</tr>
</tbody>
</table>

**Protocol Specific Information**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence Group*</td>
<td>Standard Presence group</td>
</tr>
<tr>
<td>SCCP Phone Security Profile*</td>
<td>Standard SCCP Profile for Auto Registration</td>
</tr>
<tr>
<td>SUBSCRIBE Calling Search Space</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>[Unattended Port]</td>
<td></td>
</tr>
</tbody>
</table>

**MLPP Information**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLPP Domain</td>
<td>&lt; Name &gt;</td>
</tr>
</tbody>
</table>
**Directory Number Configuration**

### Status
- Status: Ready

**Note:** Changes to Line or Directory Number settings require restart.

#### Directory Number Information
- **Directory Number:** 12345
- **Route Partition:** Phones
- **Description:**
- **Alerting Name:**
- **ASCII Alerting Name:**

**Associated Devices**
- **CERSec1**

#### Directory Number Settings
- **Voice Mail Profile:** (Choose <None> to use system default)
- **Calling Search Space:** PhonesCSS
- **Presence Group:** Standard Presence group
- **AAR Group:** <None>
- **User Hold Audio Source:** <None>
- **Network Hold Audio Source:** <None>

#### Call Forward and Call Pickup Settings
- **Forward All**
- **Secondary Calling Search Space for Forward All**

**Voice Mail Destination** **Calling Search Space**
- **or**
- **< None >**

**Find**
### Call Forward and Call Pickup Settings

<table>
<thead>
<tr>
<th>Destination</th>
<th>Calling Search Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward All</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Secondary Calling Search Space for Forward All</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward Busy Internal</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward Busy External</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward No Answer Internal</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward No Answer External</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward No Coverage Internal</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward No Coverage External</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Forward on CTI Failure</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>No Answer Ring Duration (seconds)</td>
<td></td>
</tr>
</tbody>
</table>

**Call Pickup Group**: < None >

### MLPP Alternate Party Settings

<table>
<thead>
<tr>
<th>Destination</th>
<th>Calling Search Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target (Destination)</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>MLPP Calling Search Space</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>MLPP No Answer Ring Duration (seconds)</td>
<td></td>
</tr>
</tbody>
</table>

### Line 1 on Device CERSec1

- **Display** (Internal Call 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.
- **ASCIIDisplay** (Internal Caller ID):
- **ExternalPhone Number Mask**:

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

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

### Forwarded Call Information Display on Device CERSec1

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

**Indicates required field.**
Route Patterns for ELINs

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Description</th>
<th>Partition</th>
<th>Route Filter</th>
<th>Associated Device</th>
<th>Copy</th>
</tr>
</thead>
<tbody>
<tr>
<td>11911</td>
<td></td>
<td>E911</td>
<td></td>
<td>64N/L5/10/10/10@tany3945</td>
<td><img src="ellipsis" alt="Copy" /></td>
</tr>
<tr>
<td>11911</td>
<td></td>
<td>E911</td>
<td></td>
<td>44N/L5/10/10/10@tany3945</td>
<td><img src="ellipsis" alt="Copy" /></td>
</tr>
<tr>
<td>40XX</td>
<td></td>
<td>E911</td>
<td></td>
<td>80/SUO/10/10@tany3945</td>
<td><img src="ellipsis" alt="Copy" /></td>
</tr>
</tbody>
</table>

Find and List Route Patterns

Status
1+ records found

Search Options
Find Route Patterns where Pattern begins with
(numplan/divorpattern begins with any)

Search Results

Add New  Select All  Clear All  Delete Selected  Rows per Page 60
### Route Pattern 13911

**Cisco CallManager Administration**  
For Cisco IP Telecommunication Solutions  
Logged in as: CCMAdministrator  

**Route Pattern Configuration**  
Related Links: Back To FindList  

<table>
<thead>
<tr>
<th>Status</th>
<th>Status: Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern Definition</td>
<td>Route Pattern: 13911</td>
</tr>
<tr>
<td></td>
<td>Route Partition: 8911</td>
</tr>
<tr>
<td></td>
<td>Description:</td>
</tr>
<tr>
<td>Numbering Plan*</td>
<td>NANP</td>
</tr>
<tr>
<td>ROLE Filter*</td>
<td>Default</td>
</tr>
<tr>
<td>MUP Precedence*</td>
<td>Default</td>
</tr>
<tr>
<td>Gateway/Route List*</td>
<td>AALNS2/820@tony3845</td>
</tr>
<tr>
<td>Route Option</td>
<td>Route this pattern</td>
</tr>
<tr>
<td></td>
<td>Block this pattern: No Error</td>
</tr>
<tr>
<td>Call Classification*</td>
<td>OffNet</td>
</tr>
<tr>
<td>Allow Device Override</td>
<td></td>
</tr>
<tr>
<td>Provide Outside Dial Tone</td>
<td></td>
</tr>
<tr>
<td>Allow Overlap Sending</td>
<td></td>
</tr>
<tr>
<td>Urgent Priority</td>
<td></td>
</tr>
<tr>
<td>Require Forced Authorization Code</td>
<td>Check box</td>
</tr>
<tr>
<td>Authorization Level*</td>
<td>0</td>
</tr>
<tr>
<td>Require Client Matter Code</td>
<td>Check box</td>
</tr>
</tbody>
</table>

#### 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: PreDot
- Long Digits: PreDot
- Called Party Transform Mask: 
- Prefix Digits (Outgoing Calls): 009994303

#### ISDN Network-Specific Facilities Information Element
- Network Service Protocol: - Not Selected -
- Carrier Identification Code: 
- Network Service: 
- Service Parameter Name: 
- Service Parameter Value: 

- Save  
- Delete  
- Copy  
- Add Now

- * indicates required item.
Translation Pattern for ELINs

<table>
<thead>
<tr>
<th>Translation Pattern Configuration</th>
<th>Related Links</th>
<th>Back To FindList</th>
<th>Go</th>
</tr>
</thead>
</table>

**Status:** Ready

**Pattern Definition**

- **Translation Pattern:** 4089990000X
- **Partition:** E511
- **Description:**
- **Numbering Plan:** < None >
- **Route Filter:** < None >
- **MLPP Precedence:** Default
- **Calling Search Space:** E511CSS
- **Route Option:**
  - Provide Outside Dial Tone
  - Block this pattern
  - No Error
  - 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:**

**Called Party Transformations**

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

**Options:**

- Save
- Delete
- Copy
- Add New
PSAP Gateway configuration (CAMA TRUNK)

<table>
<thead>
<tr>
<th>Device Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
<tr>
<td>Device Protocol</td>
</tr>
<tr>
<td>Registration</td>
</tr>
<tr>
<td>IP Address</td>
</tr>
<tr>
<td>End-Point Name *</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Device Pool</td>
</tr>
<tr>
<td>Media Resource Group List</td>
</tr>
<tr>
<td>Calling Search Space</td>
</tr>
<tr>
<td>AAR Calling Search Space</td>
</tr>
<tr>
<td>Location *</td>
</tr>
<tr>
<td>AAR Group</td>
</tr>
<tr>
<td>Transmit UTF-8 for Calling Party Name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Multilevel Precedence and Preemption (MLPP) Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLPP Domain</td>
</tr>
<tr>
<td>MLPP Indication</td>
</tr>
<tr>
<td>MLPP Preemption</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port Information (Loop Start)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Direction *</td>
</tr>
<tr>
<td>Attendant DN *</td>
</tr>
<tr>
<td>Unattended Port</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Specific Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hookflash Timer (50-1550ms) *</td>
</tr>
<tr>
<td>Inter-digit Duration Timer (50-500 ms) *</td>
</tr>
<tr>
<td>Input Gain (-6.14 db) *</td>
</tr>
<tr>
<td>Output Attenuation (0.14 db) *</td>
</tr>
<tr>
<td>Echo Cancellation Enable *</td>
</tr>
<tr>
<td>Echo Cancellation Coverage (ms) *</td>
</tr>
</tbody>
</table>

---

* - indicates required item.
** - device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.
### Extension Mobility

**Available Profiles**

---

**Controlled Profiles**

---

**Default Profile**
- < None >

**Presence Group**
- Standard Presence group

**SUBSCRIBE Calling Search Space**
- < None >

**Allow Control of Device from CTI**

---

### Directory Number Associations

**Primary Extension**
- < None >

---

### CAPF Information

**Associated CAPF Profiles**

---

### Permissions Information

**Groups**
- Standard CTI Allow Calling Number Modification
- Standard CTI Enabled

**Roles**
- Standard CTI Allow Calling Number Modification
- Standard CTI Enabled

---

**Save** | **Delete** | **Add New**
---

* indicates required item.
## T1-QSIG Gateway

### Cisco CallManager Administration

**Gateway Configuration**

<table>
<thead>
<tr>
<th>Status</th>
<th>Status: Ready</th>
</tr>
</thead>
</table>

**Device Information**

<table>
<thead>
<tr>
<th>Product</th>
<th>Cisco MGCP T1 Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway</td>
<td>10xx384S</td>
</tr>
<tr>
<td>Device Protocol</td>
<td>Digital Access PRI</td>
</tr>
<tr>
<td>Registration</td>
<td>Registered with Cisco CallManager CM-8ARZA</td>
</tr>
<tr>
<td>IP Address</td>
<td>192.20.110.1004</td>
</tr>
<tr>
<td>End-point Name*</td>
<td>505/0/0/0181-0010x384S</td>
</tr>
<tr>
<td>Description</td>
<td>SMD/MGIP</td>
</tr>
<tr>
<td>Device Pool*</td>
<td>Default</td>
</tr>
<tr>
<td>Call Classification*</td>
<td>Use System Default</td>
</tr>
<tr>
<td>Network/Local</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Media Resource Group List</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Location*</td>
<td>Hub None</td>
</tr>
<tr>
<td>AAR Group</td>
<td>&lt; None &gt;</td>
</tr>
<tr>
<td>Load Information</td>
<td></td>
</tr>
</tbody>
</table>

- [ ] Transmit UTF-8 for Calling Party Name
- [ ] IPv6 (subset)

### Multilevel Precedence and Preemption (MLPP) Information

<table>
<thead>
<tr>
<th>MLPP Domain</th>
<th>&lt; None &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLPP Indication*</td>
<td>Off</td>
</tr>
<tr>
<td>MLPP Preemption*</td>
<td>Disabled</td>
</tr>
</tbody>
</table>

### Interface Information

<table>
<thead>
<tr>
<th>PRI Protocol Type*</th>
<th>PRI ISO QSIG T1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol Side*</td>
<td>Network</td>
</tr>
<tr>
<td>Channel Selection Order*</td>
<td>Top Down</td>
</tr>
<tr>
<td>Channel IE Type*</td>
<td>Timeslot Number</td>
</tr>
<tr>
<td>PCM Type*</td>
<td>j</td>
</tr>
<tr>
<td>Delay for first restart (1/8 sec ticks)*</td>
<td>32</td>
</tr>
</tbody>
</table>

---

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Page 33 of 63
### Call Routing Information - Inbound Calls

<table>
<thead>
<tr>
<th>Field</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant Digits</td>
<td>All</td>
</tr>
<tr>
<td>AAR Calling Search space</td>
<td>&lt;None&gt;</td>
</tr>
<tr>
<td>Prefix DN</td>
<td></td>
</tr>
</tbody>
</table>

### Call Routing Information - Outbound Calls

<table>
<thead>
<tr>
<th>Field</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calling Party Presentation</td>
<td>Default</td>
</tr>
<tr>
<td>Called party IE number type</td>
<td>Unknown</td>
</tr>
<tr>
<td>Calling party IE number type</td>
<td>Unknown</td>
</tr>
<tr>
<td>Calling Numbering Plan</td>
<td>Unknown</td>
</tr>
<tr>
<td>Caller ID DN</td>
<td></td>
</tr>
<tr>
<td>SMDI Base Port</td>
<td></td>
</tr>
</tbody>
</table>

### PRI Protocol Type Specific Information

<table>
<thead>
<tr>
<th>Field</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redirecting Number IE Delivery</td>
<td>Outbound</td>
</tr>
<tr>
<td>Redirecting Number IE Delivery</td>
<td>Inbound</td>
</tr>
<tr>
<td>Send Extra Leading Character in Display IE</td>
<td></td>
</tr>
<tr>
<td>Setup non-ISDN Progress Indicator IE Enable</td>
<td></td>
</tr>
<tr>
<td>NCID Channel Number Extension Bit Set to Zero</td>
<td></td>
</tr>
<tr>
<td>Send Calling Name In Facility IE</td>
<td></td>
</tr>
<tr>
<td>Interface Identifier Present</td>
<td></td>
</tr>
<tr>
<td>Interface Identifier Value</td>
<td></td>
</tr>
</tbody>
</table>

### QSIG Configuration

<table>
<thead>
<tr>
<th>Field</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected Line ID Presentation</td>
<td>Default</td>
</tr>
</tbody>
</table>
## UUTE Configuration
- Passing Precedence Level Through UUTE
- Security Access Level

## Product Specific Configuration
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Coding</td>
<td>B8ZS</td>
</tr>
<tr>
<td>Framing</td>
<td>ESF</td>
</tr>
<tr>
<td>Clock</td>
<td>External</td>
</tr>
<tr>
<td>Input Gain (-6..14 db)</td>
<td>0</td>
</tr>
<tr>
<td>Output Attenuation (-6..14 db)</td>
<td>0</td>
</tr>
<tr>
<td>Echo Cancellation Enable</td>
<td>Enable</td>
</tr>
<tr>
<td>Echo Cancellation Coverage (ms)</td>
<td>0</td>
</tr>
</tbody>
</table>

* 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 PEXs.
***** Device reset is not required for changes to Packet Capture Mode and Packet Capture Duration.
Route Pattern to QSIG Trunk

Note: For detailed information regarding QSIG interoperability between CCM and Avaya PBX go to:

SNMP service must be active

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Status</th>
<th>Activation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco Serviceability Reporter</td>
<td>Started</td>
<td>Activated</td>
</tr>
<tr>
<td>Cisco CallManager SNMP Service</td>
<td>Started</td>
<td>Activated</td>
</tr>
</tbody>
</table>
**Configuring the Cisco Emergency Responder**

Cisco Unified Communications Manager Details

![Cisco CallManager Details](image)

<table>
<thead>
<tr>
<th>Cisco CallManagers</th>
<th>172.20.110.254</th>
</tr>
</thead>
</table>

**Modify Cisco CallManager**

<table>
<thead>
<tr>
<th><strong>Status:</strong></th>
<th>Please enter any change for the current Cisco CallManager</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Option</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cisco CallManager</td>
<td>172.20.110.254</td>
</tr>
<tr>
<td>CTI Manager</td>
<td>172.20.110.254</td>
</tr>
<tr>
<td>CTI Manager User Name</td>
<td>ctest</td>
</tr>
<tr>
<td>CTI Manager Password</td>
<td>**********</td>
</tr>
<tr>
<td>BackUp CTI Manager 1</td>
<td></td>
</tr>
<tr>
<td>BackUp CTI Manager 2</td>
<td></td>
</tr>
<tr>
<td>Telephony Port Begin Address</td>
<td>4250</td>
</tr>
<tr>
<td>Number of Telephony Ports</td>
<td>2</td>
</tr>
</tbody>
</table>

* indicates required item
Cisco Emergency Responder Server group

**Cisco ER Group Settings**

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

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Ready</td>
</tr>
<tr>
<td>Cisco ER Group Name *</td>
<td>CERServerGroup</td>
</tr>
<tr>
<td>Peer TCP Port *</td>
<td>17001</td>
</tr>
<tr>
<td>Heart Beat Count *</td>
<td>3</td>
</tr>
<tr>
<td>Heart Beat Interval (in sec) *</td>
<td>30</td>
</tr>
<tr>
<td>Active Call Time out (in min) *</td>
<td>180</td>
</tr>
<tr>
<td>SMTP Mail Server</td>
<td></td>
</tr>
<tr>
<td>Source Mail ID (mandatory if SMTP Server configured)</td>
<td></td>
</tr>
<tr>
<td>System Administrator Mail ID</td>
<td></td>
</tr>
<tr>
<td>Calling Party Modification</td>
<td></td>
</tr>
<tr>
<td>SysLog</td>
<td></td>
</tr>
<tr>
<td>SysLog Server (mandatory if SysLog enabled) (eg:logservser.cisco.com)</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td></td>
</tr>
</tbody>
</table>

* indicates required item

- [Update Settings](#)
- [Cancel Changes](#)
### Telephony settings

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

- **Status**: Ready
- **UDP Port Begin**: 32000
- **Inter Cisco ER Group Route Pattern**: 
- **PSAP Callback Route Point Pattern**: 913
- **ELIN Digit Strip Pattern**: 913
- **Route Point for Primary Cisco ER Server**: 911
- **Route Point for Standby Cisco ER Server**: 912

* indicates required item
Server Settings for CERServerGroup

Status: Ready

Modify Server Settings

- Update
- Delete
- Cancel Changes

Server Name: Publisher
Host Name: CER-P

Debug Package List
- CER_DATABASE
- CER_SYSADMIN
- CER_REMOTEUPDATE
- CER_TELEPHONY
- CER_PHONETRACKINGENGINE
- CER_AGREGATOR
- CER_ONSITEALERT
- CER_GROUP
- CER_CALLENGINE
- CER_CLUSTER

* indicates required item
Find and List ERLs

Find Details of ERLs Where

and show 20 items per page

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

Configure Default ERL
Add New ERL

Status: Deleted successfully.

Click on record to view/edit

Matching Records 1 to 4 of 4

<table>
<thead>
<tr>
<th>ERL Name</th>
<th>Route/Translation Pattern--ELIN</th>
<th>Onsite Alert Ids.</th>
<th>Street Name</th>
<th>Community Name</th>
<th>State</th>
<th>Copy</th>
<th>Delete</th>
<th>Audit Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default</td>
<td>100911--4000</td>
<td></td>
<td>Tasman</td>
<td>cisco</td>
<td>ca</td>
<td></td>
<td></td>
<td>view..</td>
</tr>
<tr>
<td>Test1</td>
<td>10911--4059994...</td>
<td></td>
<td>Tasman</td>
<td>Big Sky</td>
<td>TX</td>
<td></td>
<td></td>
<td>view..</td>
</tr>
<tr>
<td>Test2</td>
<td>11911--4059994...</td>
<td></td>
<td>Tasman</td>
<td>Big Sky</td>
<td>TX</td>
<td></td>
<td></td>
<td>view..</td>
</tr>
<tr>
<td>Test3</td>
<td>13911--4059994...</td>
<td></td>
<td>Tasman</td>
<td>Big Sky</td>
<td>TX</td>
<td></td>
<td></td>
<td>view..</td>
</tr>
</tbody>
</table>

First | Previous | Next | Last

Configure Default ERL
Add New ERL
ERL Information for Test1

* indicates required item

Help for this screen

ERL Name * Test1

Notes

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

ELIN Settings

Route/Translation pattern

<table>
<thead>
<tr>
<th>10911</th>
<th>Add</th>
<th>10911-403994200</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELIN</td>
<td>Update</td>
<td>Remove</td>
</tr>
<tr>
<td>403994200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Onsite Alert Settings

Available Onsite Alert IDs

Onsite Alert IDs for the ERL

ERL Address

ALL Details

Update Copy Cancel Changes Close
ERL Information for Test2

* indicates required item

Help for this screen

ERL Name * Test2

Notes

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

ELIN Settings

Route/Translation pattern

11911

ELIN

4089994201

Add

Update

Remove

Onsite Alert Settings

Available Onsite Alert IDs

Onsite Alert IDs for the ERL

ERL Address

All Details

Update Copy Cancel Changes Close
ERL Information for Test3

* indicates required item

Help for this screen

ERL Name * Test3
Notes

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

ELIN Settings

Route/Translation pattern
ELIN
Add
Update
Remove

13911-4089954203

Onsite Alert Settings

Available Onsite Alert IDs
Onsite Alert IDs for the ERL

ERL Address

ALL Details
Update Copy Cancel Changes Close
SNMP Settings

- Entries can be added in any order
- IP Address can consist of a wild card "*" or range of values like 20-30 or an exact number.
- Entry that is the closest match will be used for a given switch or Cisco CallManager.
- If no match is found, public will be used as the default Read Community string.
- Some valid IP examples: 64.20.x.9, 64.20-30 30-60.* *.*.*.*

Status: Please enter any change for the current SNMP Setting

<table>
<thead>
<tr>
<th>Modify SNMP Setting</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Address/Host Name</td>
<td>Timeout(in sec)</td>
<td>Retries</td>
<td>Read Community</td>
</tr>
<tr>
<td>172.20.8.20</td>
<td>10</td>
<td>2</td>
<td>public</td>
</tr>
</tbody>
</table>

* indicates required item

Click on a record to view or modify

<table>
<thead>
<tr>
<th>IP Address/Host Name</th>
<th>Timeout (in sec)</th>
<th>Retries</th>
<th>Read Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>172.20.8.20</td>
<td>10</td>
<td>2</td>
<td>public</td>
</tr>
</tbody>
</table>

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Page 45 of 63
## LAN Switch Details

### LAN Switches

<table>
<thead>
<tr>
<th>Export</th>
<th>Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>172.20.8.20</td>
<td><strong>LAN Switch</strong></td>
</tr>
</tbody>
</table>

### Modify LAN Switch

<table>
<thead>
<tr>
<th>Switch Host Name / IP Address *</th>
<th>172.20.8.20</th>
</tr>
</thead>
</table>

**Notes**

- **Enable CAM based Phone Tracking**

* indicates required item
### Switch Port Details

<table>
<thead>
<tr>
<th>ERL Name</th>
<th>Port</th>
<th>View</th>
<th>ERL Version</th>
<th>View</th>
<th>ERL Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>172.20.8.20</td>
<td>3/23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.20.8.20</td>
<td>3/24</td>
<td>View</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.20.8.20</td>
<td>3/25</td>
<td>View</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.20.8.20</td>
<td>3/26</td>
<td>View</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.20.8.20</td>
<td>3/27</td>
<td>View</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.20.8.20</td>
<td>3/28</td>
<td>View</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test3</td>
<td>172.20.8.20</td>
<td>3/29</td>
<td>View</td>
<td>4201</td>
<td>172.20.110.252</td>
</tr>
<tr>
<td>Test3</td>
<td>172.20.8.20</td>
<td>3/30</td>
<td>View</td>
<td>4200</td>
<td>172.20.110.253</td>
</tr>
<tr>
<td></td>
<td>172.20.8.20</td>
<td>3/31</td>
<td>View</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Find and List Manually Configured Phones

Find phones where extension contains and show 20 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**

<table>
<thead>
<tr>
<th>Line Number</th>
<th>ERL Name</th>
<th>IP Address</th>
<th>MAC Address</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>4059</td>
<td>Test2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4060</td>
<td>Test1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

First  Previous  Next  Last
Add/Modify Phones

Status: Please enter any change for the current Manual Phone

Modify Phones

New  Update  Cancel Changes

Line Number *  4060
Phone Type
Version
IP Address
MAC Address
ERL Name *
Test1

* indicates required item
Cisco 3845 IOS Gateway Configuration

```
tony3845#sh run
Building configuration...

Current configuration : 3087 bytes
!
Version 12.3
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname tony3845
!
boot-start-marker
boot system flash:c3845-ipvoice-mz.123-14.T4.bin
boot-end-marker
```
enable password cisco
!
no aaa new-model
!
resource policy
!
no network-clock-participate slot 3
no network-clock-participate slot 4
network-clock-participate wic 0
voice-card 0
no dspfarm
!
voice-card 3
no dspfarm
!
voice-card 4
dspfarm
!
ip subnet-zero
ip cef
!
no ip dhcp use vrf connected
!
!
ip host CM-GUANATOS 172.20.8.254
ip host CM-BARZA 172.20.110.254
no ftp-server write-enable
isdn switch-type primary-4ess
!
!
!
!
!
!
!
!
!
!
!
!
!
controller T1 0/0/0
framing esf
linecode b8zs
pri-group timeslots 1-24 service mgcp
!
controller T1 0/0/1
framing esf
linecode b8zs
!
controller E1 4/0/0
shutdown
pri-group timeslots 1-31 service mgcp
!
controller E1 4/0/1
!
!
interface GigabitEthernet0/0
    ip address 172.20.8.26 255.255.255.0
duplex half
speed 100
media-type rj45
negotiation auto
!
interface GigabitEthernet0/1
    ip address 172.20.110.104 255.255.255.0
shutdown
duplex auto
speed auto
media-type rj45
negotiation auto
!
interface Serial0/0/0:23
    no ip address
isdn switch-type primary-qsig
isdn protocol-emulate network
isdn incoming-voice voice
isdn T310 120000
isdn bind-l3 ccm-manager
no cdp enable
!
interface Serial4/0/0:15
    no ip address
shutdown
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-l3 ccm-manager
no cdp enable
!
ip default-gateway 172.20.8.1
ip classless
ip route 0.0.0.0 0.0.0.0 172.20.8.1
!
ip http server
!
!
! control-plane
!

voice-port 0/0/0:23
!
voice-port 3/0/0
  signal cama KP-NPD-NXX-XXXX-ST
  dial-type mf
  timing hookflash-out 500

voice-port 3/0/1
  dial-type mf
  timing hookflash-out 500

voice-port 3/0/2
  dial-type mf
  timing hookflash-out 500

voice-port 3/0/3
  dial-type mf
  timing hookflash-out 500

voice-port 3/1/0
!
voice-port 3/1/1
!
voice-port 4/0/0:15
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server CM-GUANATOS
ccm-manager config
!
mgcp
mgcp call-agent CM-GUANATOS 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 rtp-package
mgcp package-capability sst-package
no mgcp package-capability fxr-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
!
mgcp profile default
!
!
!
dial-peer voice 999300 pots
  service mgcpapp
  port 3/0/0
!
dial-peer voice 999301 pots
  service mgcpapp
  port 3/0/1
!
dial-peer voice 999310 pots
  service mgcpapp
  port 3/1/0
!
dial-peer voice 999311 pots
  service mgcpapp
  port 3/1/1
!
dial-peer voice 999302 pots
  service mgcpapp
  port 3/0/2
!
dial-peer voice 999303 pots
  service mgcpapp
  port 3/0/3
!
line con 0
  password cisco
  stopbits 1
line aux 0
  stopbits 1
line vty 0 4
  password cisco
  login
  !
scheduler allocate 20000 1000
!
End

Tony3845#sh ver
Cisco IOS Software, 3800 Software (C3845-IPVOICE-M), Version 12.3(14)T4, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by Cisco Systems, Inc.
Compiled Thu 08-Sep-05 21:49 by kehsiao
tony3845 uptime is 1 week, 2 days, 5 hours, 15 minutes
System returned to ROM by power-on
System image file is "flash:c3845-ipvoice-mz.123-14.T4.bin"

Cisco 3845 (revision 1.0) with 485376K/38912K bytes of memory.
Processor board ID FTX0933A1JA
2 Gigabit Ethernet interfaces
55 Serial interfaces
2 Channelized E1/PRI ports
2 Channelized T1/PRI ports
4 Voice FXO interfaces
2 Voice FXS interfaces
DRAM configuration is 64 bits wide with parity enabled.
479K bytes of NV/RAM.
125184K bytes of ATA System CompactFlash (Read/Write)

Configuration register is 0x2102

tony3845#

 Foreign Exchange Office 3/0/0 Slot is 3, 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 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 8
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:

<table>
<thead>
<tr>
<th>NPD</th>
<th>NPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

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 100 ms
InterDigit Duration Timing is set to 100 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 Disconnect Timing is set to 350 ms

#
CAT6k configuration

Console> (enable) sh snmp
SNMP: Enabled
RMON: Disabled
Extended RMON Netflow Enabled: None.
Memory usage limit for new RMON entries: 85 percent
EngineId: 00:00:00:09:00:01:97:31:c8:00:00:00
Chassis Alias:
Traps Enabled: None
Port Traps Enabled: None

Community-Access     Community-String
----------------     --------------------
read-only            public
read-write           private
read-write-all       secret

Additional-            Access-             Community-String     Access-Type Number View
Community-String     Access-Type    Number  View
-------------------- -------------- ------- -----------------------------------

Trap-Rec-Address Trap-Rec-Community Trap-Rec-Port Trap-Rec-Owner Trap-Rec-Index
---------------- ------------------ ------------- -------------- --------------

Console> (enable) sh cdp
CDP       : enabled
Message Interval : 60
Hold Time     : 180
Version      : V2
Device Id Format : Other
Console> (enable)

set interface sc0 109 172.20.8.20/255.255.255.0 172.20.8.255
### Configuring the Avaya Definity

**DS1 CIRCUIT PACK**

<table>
<thead>
<tr>
<th>display ds1 1a12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location:</strong> 01A12</td>
</tr>
<tr>
<td><strong>Bit Rate:</strong> 1.544</td>
</tr>
<tr>
<td><strong>Line Compensation:</strong> 1</td>
</tr>
<tr>
<td><strong>Signaling Mode:</strong> isdn-pri</td>
</tr>
<tr>
<td><strong>Connect:</strong> pbx</td>
</tr>
<tr>
<td><strong>TM-C7 Long Timers:</strong> n</td>
</tr>
<tr>
<td><strong>Interworking Message:</strong> PROGress</td>
</tr>
<tr>
<td><strong>Interface Companding:</strong> mulpax</td>
</tr>
<tr>
<td><strong>Idle Code:</strong> 11111111</td>
</tr>
</tbody>
</table>

**Slip Detection:** y  
**Near-end CSU Type:** other
**SIGNALING GROUP**

```plaintext
display signaling-group 12

SIGNALING GROUP

Group Number: 12   Group Type: isdn-pri
Associated Signaling? y
Primary D-Channel: 01A1224
Max number of MCA TSC: 5
Max number of CA TSC: 5
Trunk Group for MCA TSC: 12
Trunk Group for Channel Selection: 12
X-Mobility/Wireless Type: NONE
Supplementary Service Protocol: b
```
### TRUNK GROUP

**display trunk-group 12**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Number</td>
<td>12</td>
</tr>
<tr>
<td>Group Type</td>
<td>isdn</td>
</tr>
<tr>
<td>CDR Reports</td>
<td>y</td>
</tr>
<tr>
<td>Group Name</td>
<td>QSIG to CH-Neptune</td>
</tr>
<tr>
<td>CO:</td>
<td>1</td>
</tr>
<tr>
<td>TN:</td>
<td>1</td>
</tr>
<tr>
<td>TAC:</td>
<td>612</td>
</tr>
<tr>
<td>Direction</td>
<td>two-way</td>
</tr>
<tr>
<td>Outgoing Display</td>
<td>y</td>
</tr>
<tr>
<td>Busy Threshold</td>
<td>99</td>
</tr>
<tr>
<td>Carrier Medium</td>
<td>PRI/BRI</td>
</tr>
<tr>
<td>Dial Access</td>
<td>y</td>
</tr>
<tr>
<td>Night Service</td>
<td></td>
</tr>
<tr>
<td>Queue Length</td>
<td>0</td>
</tr>
<tr>
<td>Service Type</td>
<td>tie</td>
</tr>
<tr>
<td>Auth Code</td>
<td>n</td>
</tr>
<tr>
<td>TestCall ITC</td>
<td>rest</td>
</tr>
<tr>
<td>Far End Test Line No.</td>
<td></td>
</tr>
<tr>
<td>TestCall BCC</td>
<td>4</td>
</tr>
</tbody>
</table>

**TRUNK PARAMETERS**

- Codeset to Send Display: 0
- Codeset to Send National IEs: 6
- Max Message Size to Send: 260
- Charge Advice: none
- Supplementary Service Protocol: b
- Digit Handling (in/out): embloc/embloc
- Trunk Hunt: ascend
- QSIG Value-Added: y
- Digital Loss Group: 13
- Calling Number – Delete: Insert:
- Bit Rate: 1200
- Synchronization: async
- Duplex: Full
- Disconnect Supervision – In? y Out? y
- Answer Supervision Timeout: 0

### INCOMING CALL HANDLING TREATMENT

<table>
<thead>
<tr>
<th>Service/Feature</th>
<th>Called Len</th>
<th>Called Number</th>
<th>Del Len</th>
<th>Insert Number</th>
<th>Per Call</th>
<th>Night Call</th>
<th>CPM/BNoN</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMA</td>
<td>Analog “Centralized Automatic Message Accounting” E911 Trunk</td>
</tr>
<tr>
<td>PSAP</td>
<td>Public Service Answering Point</td>
</tr>
</tbody>
</table>
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