

Application Note

Cisco CallManager Release 4.01 and Cisco Emergency Responder 1.2(3)-PBX Interoperability: Avaya CM 2.0 PBX Using a Cisco 6608 with T1 PRI as an MGCP Gateway

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Introduction

The following is an Application Note for Interoperability of a Cisco CallManager, Cisco Emergency Responder and Cisco 2600XM CAMA interface with an Avaya CM 2.0 PBX using a Cisco 6608-T1 PRI as an MGCP gateway.

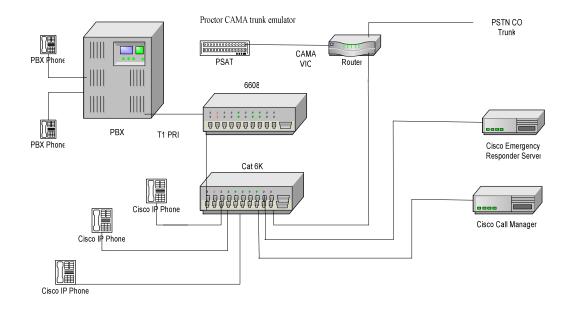
The network-topology diagram shows interoperability between the Cisco CallManager and Cisco Emergency Responder connected to the PBX via a T1 PRI trunk using a 6608 MGCP gateway.



Application Note

Network Topology

Figure 1. Network Topology



Limitations

- Unique DID numbers must be used to associate with each emergency response location to allow the return call if the 911 caller is disconnected.
- Each available calling party that might dial 911 from the PBX side must have that calling-party number configured in the Manually Configured Phones screen of the Cisco Emergency Responder.

System Components

Hardware Requirements

- Cisco hardware
 - Cisco 6608 gateway with T1 ports installed in a Cisco Cat6K switch
 - Cisco Cat6K switch
 - Cisco CallManager 4.01
 - Cisco Emergency Responder
 - Cisco 2611XM with CAMA
- PBX hardware: Avaya CM 2.0 PBX



Software Requirements

- Cisco CallManager 4.0(1)
- PBX software Version 2.0
- Cisco IOS Release "c2600-ipvoice-mz.123-10" (for the gateway)
- Cisco Emergency Responder 1.2(3)

Features

Key Features Supported

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

Configuration

Configuring the Avaya CM 2.0

| display trunk-group 14 | | | Page 1 of 10 |
|-----------------------------|-------------------|------------------|---------------------|
| | TRUNK GROUP | | |
| Group Number: 14 | Group Type: | isdn | CDR Reports: v |
| Group Name: PRI Ni2 Trunk | | | TAC: 614 |
| Direction: two-way | Outgoing Display? | y Carr | ier Medium: PRI/BRI |
| Dial Access? y | Busy Threshold: | 99 Nigh | t Service: |
| Queue Length: O | | | |
| Service Type: tie | Auth Code? | n T | estCall ITC: rest |
| Far | End Test Line No: | | |
| TestCall BCC: 4 | | | |
| TRUNK PARAMETERS | | | |
| Codeset to Send Dis | play: 0 Codeset | t to Send Natio: | nal IEs: 6 |
| Max Message Size to | Send: 260 Charge | Advice: automa | tic |
| Supplementary Service Prot | ocol: a Digit N | Handling (in/ou | t): enbloc/overlap |
| | | | |
| Trunk Hunt: asce | nd | QSIG Val | ue-Added? n |
| | | Digital Lo: | ss Group: 13 |
| Calling Number - Delete: | Insert: | Numberin | g Format: unk-unk |
| Bit Rate: 1200 | Synchroni | zation: async | Duplex: full |
| Disconnect Supervision - In | ? y Out? y | | |
| Answer Supervision Timeout: | 0 | | |



| display trunk-group 14 | Page 2 of 10 |
|----------------------------|--|
| TRUNK FEATURES | |
| ACA Assignment? n | Measured: none Wideband Support? n |
| | Internal Alert? n Maintenance Tests? y |
| | Data Restriction? n NCA-TSC Trunk Member: |
| | Send Name: y Send Calling Number: y |
| Used for DCS? n | |
| | Numbering Format: unknown |
| | : preferred UUI IE Treatment: service-provider |
| Charge Conversion: 1 | |
| Decimal Point: none | |
| Currency Symbol: | Replace Unavailable Numbers? n |
| Charge Type: unit | ts Send Connected Number: y |
| Send UUI IE? v | |
| Send UCID? n | |
| Send Codeset 6/7 LAI IE? n | Ds1 Echo Cancellation? n |
| | |
| | US NI Delayed Calling Name Update? n |
| | |
| SBS? n I | Network (Japan) Needs Connect Before Disconnect? n |
| | |
| | |

| display trunk | -group 14 | | | | Page | 3 of 10 |
|---------------|-----------|--------------|---------|-------------|----------|---------|
| | | ICOMING CALL | HANDLIN | G TREATMENT | | |
| Service/ | Called | Called | Del | Insert | Per Call | Night |
| Feature | Len | Number | | | CPN/BN | Serv |
| | | | | | | |
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| lisplay trunk- | -group | 14 | | Page | 4 of | 10 |
|----------------|---------|----------|-------------|--------------------------|------|----|
| | | | TRUNK GROUP | | | |
| | | | Adminis | cered Members (min/max): | 1/23 | |
| ROUP MEMBER A | ASSIGNM | IENTS | Tota | al Administered Members: | 23 | |
| | | | | | | |
| Port | Code | Sfx Name | Night | Sig Grp | | |
| 1: 01A1401 | TN464 | F | | 14 | | |
| 2: 01A1402 | TN464 | F | | 14 | | |
| 3: 01A1403 | TN464 | F | | 14 | | |
| 4: 01A1404 | TN464 | F | | 14 | | |
| 5: 01A1405 | TN464 | F | | 14 | | |
| 6: 01A1406 | TN464 | F | | 14 | | |
| 7: 01A1407 | TN464 | F | | 14 | | |
| 8: 01A1408 | TN464 | F | | 14 | | |
| 9: 01A1409 | TN464 | F | | 14 | | |
| 10: 01A1410 | TN464 | F | | 14 | | |
| 11: 01A1411 | TN464 | F | | 14 | | |
| 12: 01A1412 | TN464 | F | | 14 | | |
| 13: 01A1413 | TN464 | F | | 14 | | |
| 14: 01A1414 | TN464 | F | | 14 | | |
| 15: 01A1415 | TN464 | F | | 14 | | |

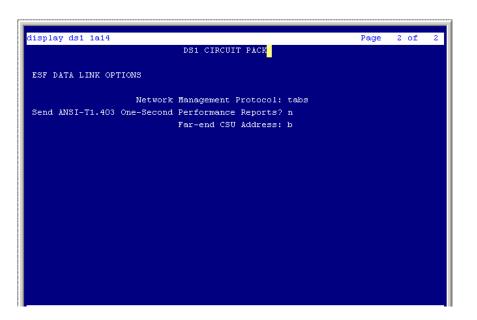
| display trun | c-group 14 | Page | 5 of | 10 |
|--------------|---------------|---------------------------------|------|----|
| | | TRUNK GROUP | | |
| | | Administered Members (min/max): | 1/23 | |
| GROUP MEMBER | ASSIGNMENTS | Total Administered Members: | 23 | |
| | | | | |
| Port | Code Sfx Name | Night Sig Grp | | |
| 16: 01A1416 | TN464 F | 14 | | |
| 17: 01A1417 | TN464 F | 14 | | |
| 18: 01A1418 | TN464 F | 14 | | |
| 19: 01A1419 | TN464 F | 14 | | |
| 20: 01A1420 | TN464 F | 14 | | |
| 21: 01A1421 | TN464 F | 14 | | |
| 22: 01A1422 | TN464 F | 14 | | |
| 23: 01A1423 | TN464 F | 14 | | |
| 24: | | | | |
| 25: | | | | |
| 26: | | | | |
| 27: | | | | |
| 28: | | | | |
| 29: | | | | |
| 30: | | | | |
| | | | | |



| isplay signaling-q | group 14 | | Pag | ye | 1 of | 5 |
|--------------------|-------------------------|---------|-------------------|-------|-------|------|
| | SIGNALING | GROUP | | | | |
| Group Number: 14 | Group Type: | isdn-pr | i | | | |
| | Associated Signaling? | У | Max number of | NCA | TSC: | 0 |
| | Primary D-Channel: | 01A1424 | | | | 0 |
| | | | Trunk Group for | | | |
| Trunk Group | for Channel Selection: | 14 | X-Mobility/Wirele | 288 ' | Type: | NONE |
| Supplemen | ntary Service Protocol: | a | | | | |
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| display ds1 1a14 | | | Page | 1 of | 2 |
|-----------------------|----------|------------------------------|--------|------|---|
| | | DS1 CIRCUIT PACK | | | |
| Location: | 01214 | Name: | | | |
| Bit Rate: | | | berg | | |
| | | Line Coding: | | | |
| Line Compensation: | | Framing Mode: | est | | |
| Signaling Mode: | | | | | |
| Connect: | network | | | | |
| TN-C7 Long Timers? | n | Country Protocol: | 1 | | |
| Interworking Message: | PROGress | Protocol Version: | a | | |
| Interface Companding: | mulaw | CRC? | n | | |
| Idle Code: | 11111111 | | | | |
| | I | CP/Analog Bearer Capability: | 3.1kHz | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Slip Detection? | | Near-end CSU Type: | othor | | |
| STIP Dececcion? | 11 | Mear-end Coo Type. | Dener | | |
| | | | | | |
| | | | | | |
| | | | | | |







Configuring the Cisco CallManager

| System Route Plan Service | Feature Device User Application Help |
|---|--|
| Cisco CallManager For Cisco IP Telephony Solutions | Administration |
| Cisco CallMana | Add a New Cisco CallManager Configure Server (172.20.16.250) Irace Configuration Back to Find/List Cisco CallManagers Dependency Records |
| Cisco CallManager: 172.20 CTI ID: 1 | .16.250 (172.20.16.250) on 172.20.16.250 |
| Status: Ready | |
| Copy Update Delete | Reset Devices |
| Server Information | |
| Cisco CallManager Name* | 172.20.16.250 |
| Description | 172.20.16.250 |
| Auto-registration Informati | on |
| Starting Directory Number* | 2000 |
| Ending Directory Number* | 2010 |
| Partition | E911Phones 💌 |
| External Phone Number Mask | |
| 🗖 Auto-registration Disabled | on this Cisco CallManager |
| Cisco CallManager TCP Port | Settings for this Server |
| Ethernet Phone Port* | 2000 |
| Digital Port* | 2008 |
| Analog Port* | 2010 |
| MGCP Listen Port* | 2427 |
| MGCP Keep-alive Port* | 2428 |
| * indicates required item. | |

| Custom Doute Plan Comise Foot | Device User Application | 11-1- |
|--|-------------------------|--|
| System Route Plan Service Feat Cisco CallManager Ad For Cisco IP Telephony Solutions | | Help Cisco Systems |
| Partition Configur | ation | <u>Add a New Partition</u> Back to Find/List Partitions Dependency Records |
| Status: Ready Update Delete Restart Devi | Ces | |
| Partition Name* | E911Phones | |
| Description | E911Phones | |
| * indicates required item | | |



| System Route Plan Service Feature Device User Appl | ication Help |
|---|--|
| Cisco CallManager Administration For Cisco IP Telephony Solutions | Cisco Systems antilitianantilitian |
| Calling Search Space Configuration | <u>Add New Calling Search Space</u> <u>Back to Find/List Calling Search Spaces</u> <u>Dependency Records</u> |
| Calling Search Space: E911CSS (in use) Status: Ready Copy Update Delete | |
| Calling Search Space Information | |
| Calling Search Space Name* E911CSS | |
| Description | |
| Route Partitions for this Calling Search Space | |
| Find Partitions containing | Find |
| Available Partitions | |
| ▼▲ | |
| Selected Partitions* [E911Phones] | \$ |
| * indicates required item | |

| System Route Plan Se | ervice Feature Device | User Application | Help | |
|---|---|---|---|-------------------------------|
| Cisco CallMana For Cisco IP Telephony Solution | ager Administra | tion | | IISCO SYSTEMS |
| Route/Hunt Configuratio | | | <u>Add a new Rot</u> <u>Configure Route (</u> Back to Route/Hunt List (Back to Find/List Rout | Group (E911) Configuration |
| Route/Hunt List Details | | age override the se ge. These settings : | attings of the same name on are used for calls routed thro ny. | |
| | Details for E911 Galling Party Transfor Use Calling Party's Ext Number Mask Calling Party Transfor Prefix Digits (Outgoing Dial Plan* Discard Digits Called Party Transfor Prefix Digits (Outgoing | n Mask | American Numbering Plan | y y |
| | * indicates required item | | | |



| System Route Plan Serv Cisco CallManas For Cisco IP Telephony Solution | zer Administration |
|--|--|
| Route/Hunt | List Configuration |
| Route/Hunt List Details | Route/Hunt List: E911 Status: Ready Copy Update Delete Reset |
| | Route/Hunt List Information Route/Hunt List Name* E911 |
| | Description E911 Cisco CallManager Group* Default |
| | Enable this Route/Hunt List (change effective on Update; no reset required) Route/Hunt List Member Information |
| | Add Route Group Add Line Group |
| | Selected Groups* (ordered by highest priority) E911[non-OSIG] |
| | |
| | Removed Groups (to be removed from Route/Hunt List when you click Update) |
| | * indicates required item |



| System Route Plan Servio | ce Feature Device | User Application | Help | |
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| Cisco CallManage For Cisco IP Telephony Solutions | er Administra | ation | 0 | cisco Systems autiliticadalitica |
| Route Group (| Configurat | ion | Back to Find/List F | Route Group Route Groups Pricy Records |
| Route Group Members AALN/S1/SU0/0@2611XM MGCP -CAMA RCM AALN/S1/SU0/1@2611XM | Route Group: E91 Status: Ready Update Delete | 1 | | |
| MGCP -CAMA | Route Group Infor | mation | | |
| | Route Group Name* | E911 | | |
| | Distribution Algorith | m* Top Down | | • |
| | Route Group Mem | ber Information | | |
| | Find Devices to Ad | dd to Route Group | | |
| | Device Name conta | ins 🛛 | | Find |
| | Available Devices (select device, then select port below) | AALN/S1/SU1/0@2611 AALN/S1/SU1/1@2611 | | |
| | Port(s) | None Available 🔻 | Add to Route Group | |
| | Current Route Gro | up Members | | |
| | | Reverse Order | r of Selected Devices | |
| | Selected Devices* (ordered by highest priority) | AALN/S1/SU0/0@2611 AALN/S1/SU0/1@2611 | | * |
| | | | ▼ ▲ | |
| | Removed Devices (to be removed from Route Group when you click Update) | | | |
| | * indicates required ite | m | | |



| Cisco | Route Plan Service F CallManager A P Telephony Solutions | | ce User Applicat | ion Help | | O SYSTEMS |
|---|---|---|---|-----------------|---|---|
| Find | and List Ro | ute Pat | terns/Hi | unt Pi | | <u>lew Route</u> 'Hunt Pilot |
| 6 m | atching record(s) f | or Pattern | begins with ' | | | |
| Find F | Route Patterns/Hunt Pilo | ts where Pa | attern 💌 begir | ns with 💌 | F | ind |
| and s | how 20 💌 items per p | - | | | | |
| To list all items, click Find without entering any search text. | | | | | | |
| | To li: | st all items, click | entern | ig any searcr | rtext. | |
| Match | To ling record(s) 1 to | | , Find without entern | ig any searcr | rtext. | |
| Match | | | Description | Route Filter | Gateway/Route List | Сору |
| Match | ing record(s) 1 to Route Pattern/Hunt | 6 of 6 | Description | Route | | Сору |
| | ing record(s) 1 to Route Pattern/Hunt Pilot | 6 of 6 Partition E911Phones | Description | Route | Gateway/Route List | |
| | ing record(s) 1 to Route Pattern/Hunt Pilot 100911. | 6 of 6 Partition E911Phones E911Phones | Description default | Route | Gateway/Route List | Ľ₽ |
| | ing record(s) 1 to Route Pattern/Hunt Pilot 100911. 101911. | 6 of 6 Partition E911Phones E911Phones E911Phones | Description default High School | Route | Gateway/Route List E911 E911 | B ² |
| | ing record(s) 1 to Route Pattern/Hunt Pilot 100911. 101911. 102911. | 6 of 6 Partition E911Phones E911Phones E911Phones E911Phones | Description default High School Education Ce | Route | Gateway/Route List E911 E911 E911 | s s s s |
| | ing record(s) 1 to Route Pattern/Hunt Pilot 100911. 101911. 102911. 103911. | 6 of 6 Partition E911Phones E911Phones E911Phones E911Phones E911Phones | Description default High School Education Ce Elementary I | Route | Gateway/Route List E911 E911 E911 E911 | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |



| System Route Plan Service I | Feature Device User Application Helj | 2 |
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| Cisco CallManager | Administration | CISCO SYSTEMS |
| For Cisco IP Telephony Solutions | i ation | ամինու |
| Route Pattern/H Configuration | | .dd a New Route Pattern/Hunt Pilot List Route Patterns and Hunt Pilots |
| Route Pattern/Hunt Pilot: 10 Status: Ready Note: Any update to this Route Patter Copy Update Delete | 0911. rn or Hunt Pilot automatically resets the associat | ed gateway or Route/Hunt List |
| Pattern Definition | | |
| Route Pattern/Hunt Pilot* | 100911. | |
| Partition | E911Phones | |
| Description | default | |
| Numbering Plan* | North American Numbering Plan | |
| Route Filter | < None > | |
| MLPP Precedence | Default | |
| Gateway or Route/Hunt List* | E911 💽 (E | <u>dit</u>) |
| Route Option | Route this pattern | |
| | C Block this pattern - Not Selected - | |
| Provide Outside Dial Tone | Allow Overlap Sending | 🗖 Urgent Priority |
| Calling Party Transformations | 5 | |
| Use Calling Party's External | l Phone Number Mask | |
| Calling Party Transform Mask | | |
| Prefix Digits (Outgoing Calls) | | |
| Calling Line ID Presentation | Default | |
| Calling Name Presentation | Default 💽 | |
| Connected Party Transformat | tions | |
| Connected Line ID Presentation | Default | |
| Connected Name Presentation | Default | |
| Called Party Transformations | | |
| Discard Digits | PreDot 💌 | |
| Called Party Transform Mask | | |
| Prefix Digits (Outgoing Calls) | 4089997000 | |
| ISDN Network-Specific Facilit | ies Information Element | |
| Carrier Identification Code | | |
| Network Service Protocol | - Not Selected - | |
| Network Service | Service Parameter Name | Service Parameter Value |
| - Not Selected - | Not Exist > | |
| * indicates required item. | | |

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| System Route Plan Service | Feature Device User Application Help |
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| Cisco CallManager | Administration Cisco Systems |
| For Cisco IP Telephony Solutions | |
| Route Pattern/I | Add a New Route Pattern/Hunt Pilot Back to Find/List Route Patterns and Hunt Pilots |
| Configuration | back to him/List Route Patterns and Hunt Priots |
| Route Pattern/Hunt Pilot: 10 | 12911. |
| Status: Ready Note: Any update to this Route Patte | rn or Hunt Pilot automatically resets the associated gateway or Route/Hunt List |
| Copy Update Delete | |
| Pattern Definition | |
| Route Pattern/Hunt Pilot* | 102911. |
| Partition | E911Phones |
| Description | Education Center IP Phone |
| Numbering Plan* | North American Numbering Plan 🔹 |
| Route Filter | < None > |
| MLPP Precedence | Default 🔹 |
| Gateway or Route/Hunt List* | E911 (Edit) |
| Route Option | Route this pattern |
| | C Block this pattern Not Selected — |
| Provide Outside Dial Tone | 🗖 Allow Overlap Sending 🔲 Urgent Priority |
| Calling Party Transformation | |
| Use Calling Party's Externa | a Phone Number Mask |
| Calling Party Transform Mask | |
| Prefix Digits (Outgoing Calls) | |
| Calling Line ID Presentation | Default |
| Calling Name Presentation | Default |
| Connected Party Transforma Connected Line ID Presentation | |
| Connected Name Presentation | Default |
| Called Party Transformations | |
| Discard Digits | PreDot |
| Called Party Transform Mask | |
| Prefix Digits (Outgoing Calls) | 4089997002 |
| ISDN Network-Specific Facilit | ies Information Element |
| Carrier Identification Code | |
| Network Service Protocol | - Not Selected - |
| Network Service | Service Parameter Name Service Parameter Value |
| - Not Selected - | ✓ Not Exist > |

* indicates required item.



| Cisco CallManager A For Cisco IP Telephony Solutions | Administration |
|---|---|
| Route Pattern/H | Add a New Route Pattern/Hunt Pilot Back to Find/List Route Patterns and Hunt Pilots |
| Configuration | |
| Route Pattern/Hunt Pilot: 10 | 4911. |
| Status: Ready Note: Any update to this Route Patter | n or Hunt Pilot automatically resets the associated gateway or Route/Hunt List |
| Copy Update Delete | |
| Pattern Definition | |
| Route Pattern/Hunt Pilot* | 104911. |
| Partition | E911Phones |
| Description | Avaya CM 2.0 PRI |
| Numbering Plan* | North American Numbering Plan |
| Route Filter | <none></none> |
| MLPP Precedence | Default |
| Gateway or Route/Hunt List* | E911 (Edit) |
| Route Option | Route this pattern |
| | C Block this pattern - Not Selected - |
| ☑ Provide Outside Dial Tone | Allow Overlap Sending Urgent Priority |
| Calling Party Transformations | |
| Use Calling Party's Externa | I Phone Number Mask |
| Calling Party Transform Mask | |
| Prefix Digits (Outgoing Calls) | |
| Calling Line ID Presentation | Default |
| Calling Name Presentation | Default |
| Connected Party Transformat | |
| Connected Line ID Presentation | |
| Connected Name Presentation Called Party Transformations | |
| Discard Digits | PreDot |
| Called Party Transform Mask | |
| , Prefix Digits (Outgoing Calls) | 4089997004 |
| ISDN Network-Specific Faciliti | |
| Carrier Identification Code | |
| Network Service Protocol | Not Selected - |
| Network Service | Service Parameter Name Service Parameter Value |
| - Not Selected - | Not Exist > |
| * indicates required item. | |



| System Route Plan Service Featu | re Device User Ap | plication Help | | |
|---|-------------------|----------------|----------------------|------------------|
| Cisco CallManager Adr For Cisco IP Telephony Solutions | ninistration | | Cisci ili | D SYSTEMS |
| Find and List Trans | lation Pat | terns 🤤 | Add a New Translatio | <u>n Pattern</u> |
| 1 matching record(s) fo | r Pattern begins | with "" | | |
| Find Translation patterns where and show 20 💽 items per par To list all | je | begins with 💌 | Find |] |
| Matching record(s) 1 to 1 of | 1 | | | |
| Translation Pattern | Partition | Description | Route Filter | Сору |
| 🗖 🐹 7XXX | E911Phones | | | ⊡ ∮ |
| Delete Selected | First Previo | us Next Last | Page 1 | of 1 |



| System Route Plan Service I | Feature Device User Application Help |
|---|--|
| Cisco CallManager A For Cisco IP Telephony Solutions | Administration |
| Translation Patt | ern Configuration |
| Translation Pattern: 7XXX Status: Ready | Back to Find/List Translation Patterns |
| Copy Update Delete | |
| Pattern Definition | |
| Translation Pattern | |
| Partition | E911Phones |
| Description | |
| Numbering Plan* | North American Numbering Plan |
| Route Filter | < None > |
| Calling Search Space | E911CSS |
| MLPP Precedence | Default |
| Route Option | • Route this pattern |
| | C Block this pattern - Not Selected - |
| Provide Outside Dial Ton | e 🔽 Urgent Priority |
| Calling Party Transformation | s |
| 🔲 Use Calling Party's Externa | al Phone Number Mask |
| Calling Party Transform Mask | |
| Prefix Digits (Outgoing Calls) | |
| Calling Line ID Presentation | Default |
| Calling Name Presentation | Default |
| Connected Party Transforma | tions |
| Connected Line ID Presentation | |
| Connected Name Presentation | Default |
| Called Party Transformations | |
| Discard Digits | None > |
| Called Party Transform Mask | |
| Prefix Digits (Outgoing Calls) | 913 |
| * indicates required item. | |



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| System | Route Plan Sei | rvice Feature C | evice User Appl | ication Help | | |
|---|--|-----------------|-----------------|---------------|-------------------------|------------------|
| | CallMana IP Telephony Solutio | iger Admini | stration | | Cisco illi | SYSTEMS |
| Find | l and List | t CTI Rou | te Points | ; | <u>Add a New CTI Ro</u> | <u>ute Point</u> |
| 2 n | natching reco | rd(s) for Devi | ce Name beg | ins with "" | | |
| and To li Matc | Find CTI Route Points where Device Name Device Name Device Name Device Name Device Name Device Name State St | | | | | |
| | Device Name | e Description | Device Pool | Status | IP Address | Copy |
| | 🛓 RP911 | RP911 | Default | 172.20.16.250 | 172.20.16.250 | ⊡ ⊊ |
| | 🛓 RP913 | RP913 | Default | 172.20.16.250 | 172.20.16.250 | D\$ |
| Delete Selected Reset Selected First Previous Next Last Page 1 of 1 | | | | | | |
| | | | | | | |

Cisco CallManager Administration For Cisco IP Telephony Solutions

System Route Plan Service Feature Device User Application Help

CTI Route Point Configuration

| | | | Dependency Records |
|--|---|------------------------------------|-------------------------|
| rectory Numbers Line 1 - 911 in 9 E911Phones | Device: RP911 (RP911) Registration: Registered IP Address: 172.20.16.25 | with Cisco CallManager 172.2 50 | 20.16.250 |
| Line 2 - Add DN | Status: Ready Copy Update Delete CTI Route Point Configura | Reset | |
| | Device Information | | |
| | Device Name* | RP911 | |
| | Description | RP911 | |
| | Device Pool* | Default | (<u>View details</u>) |
| | Calling Search Space | E911CSS | • |
| | Location | < None > | • |
| | Media Resource Group List | < None > | |
| | User Hold Audio Source | < None > | • |
| | Network Hold Audio Source | < None > | • |
| | * indicates a required item. | | |
| | | | |

CISCO SYSTEMS

Add a New CTI Route Point Back to Find/List CTI Route Points



| System Route Plan Serv | vice Feature Device User A | pplication Help |
|--|--|--|
| Cisco CallMana | or Administration | Cisco Systems |
| For Cisco IP Telephony Solution | ger Administration | |
| Part of the second seco | | |
| Directory Nu | mber Configurat | tion Configure Device (RP911) Dependency Records |
| Associated With | Directory Number: 911 (E9 | 11Phones) |
| 🍓 RP911 (Line 1) | Status: Ready Note: Apy update to this Directory | Number automatically resets the associated devices |
| | Update Remove from D | |
| | Directory Number | |
| | Directory Number* | 911 |
| | Partition | E911Phones |
| | Directory Number Settings | |
| | Voice Mail Profile | < None > |
| | | (Choose <none> to use default)</none> |
| | 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 Set | tings I Destination Calling Search Space |
| | Forward All | <pre></pre> |
| | | |
| | | <none></none> |
| | Forward No Answer | <none></none> |
| | Forward On Failure | < None > 💌 |
| | No Answer Ring Duration | (seconds) |
| | Call Pickup Group | < None > 💌 |
| | MLPP Alternate Party Settin | gs |
| | 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) Ring Setting (Phone Active)** | Not available on this device. |
| | Multiple Call / Call Waiting S | |
| | Maximum Number of Calls* | 5000 (1 - 10000) |
| | Busy Trigger* | 4500 (<= Max. Calls) |
| | Forwarded Call Information | |
| | Caller Name | Caller Number |
| | Redirected Number | Dialed Number |
| | * indicates required item; changes | to Line or Directory Number settings require restart. |
| | Label text, make sure the correct of | han English for Display (Internal Caller ID) or Line Text character set (shown below) is selected. Text displays et is selected. (English characters are included in all |
| | Character Set Western Europ | ean (Latin 1) 💌 |



Di





CTI Route Point Configuration

Add a New CTI Route Point Back to Find/List CTI Route Points Dependency Records

| rectory Numbers | Device: RP913 (RP913) | | | | |
|-----------------------------------|--|--------------------------------------|-------------------------|--|--|
| Eine 1 - 913XXXX in E911Phones | Registration: Registered IP Address: 172.20.16.25 | with Cisco CallManager 172.20. i0 | 16.250 | | |
| Line 2 - Add DN | Status: Ready | | | | |
| | Copy Update Delete | Reset | | | |
| | CTI Route Point Configura | tion | | | |
| | Device Information | | | | |
| | Device Name* | RP913 | | | |
| | Description | RP913 | | | |
| | Device Pool* | Default | (<u>View details</u>) | | |
| | Calling Search Space | E911CSS | • | | |
| | Location | < None > | • | | |
| | Media Resource Group List | <none></none> | • | | |
| | User Hold Audio Source | <none></none> | • | | |
| | Network Hold Audio Source | < None > | • | | |
| | * indicates a required item. | | | | |
| | | | | | |



| System Route Plan Ser | vice Feature Device User A | pplication Help | |
|---------------------------------|---|--|--|
| C. LO INT | A d | | CISCO SYSTEMS |
| For Cisco IP Telephony Solution | ger Administration | | |
| COLUMN ST P | | | |
| Directory Nu | mber Configura | tion Configure Depe | Device (RP913) ndency Records |
| Associated With | Directory Number: 913XXX | X (E911Phones) | |
| (Line 1) | Status: Ready | | |
| _ | | Number automatically resets the associat | ed devices |
| | Update Remove from D | evice Reset Devices | |
| | Directory Number | | |
| | Directory Number* | 913>>>>> | |
| | Partition | E911Phones - | |
| | Directory Number Settings | | |
| | Voice Mail Profile | (Choose <none> to use default</none> | 、 、 |
| | 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 Set | il Destination Calling Search Sp | ace |
| | Forward All | <pre></pre> | |
| | | | |
| | Forward Busy | <none></none> | |
| | Forward No Answer | < None > 💌 | |
| | Forward On Failure | < None > - | |
| | No Answer Ring Duration | (seconds) | |
| | Call Pickup Group | < None > - | |
| | MLPP Alternate Party Settin | ngs | |
| | Target (Destination) | | |
| | Calling Search Space | < None > | |
| | No Answer Ring Duration | | |
| | Line Settings for this Device | (seconds) | |
| | Display (Internal Caller ID) | | |
| | Line Text Label | Not available on this device. | |
| | External Phone Number Mask | Not available off this device. | |
| | Message Waiting Lamp Policy | Not available on this device. | |
| | Ring Setting (Phone Idle) | Not available on this device. | |
| | | * Not available on this device. | |
| | Multiple Call / Call Waiting | | |
| | Maximum Number of Calls* | 5000 (1 - 10000) | |
| | Busy Trigger* | 4500 (<= Max. Calls) | |
| | Forwarded Call Information | n Display | |
| | Caller Name | 🗖 Caller Number | |
| | Redirected Number | 🗹 Dialed Number | |
| | Note: | s to Line or Directory Number settings req | |
| | If you are using a language other Label text, make sure the correct incorrectly if the wrong characters character sets.) | than English for Display (Internal Caller I character set (shown below) is selected. 7 et is selected. (English characters are inc | D) or Line Text Fext displays luded in all |
| | Character Set Western Europ | pean (Latin 1) 📃 | |
| | | | |



Configuring the Cisco Emergency Responder

| Cisco Emergency Respon For Cisco IP Telephony Solutions | nder Administra | ation | CISCO SYSTEMS |
|--|-----------------|--|-------------------------|
| Details |] | n der Administration Systems, Inc. All rights re | served. |
| | Cisco Eme | Explorer orting or troubleshooting a problem, ing information to Technical Assista rgency Responder Administration v. rgency Responder System version: | nce: ersion: 1.2 (3) |
| Cisco ER System Administration | | OK | |
| Cisco ER Network Administration | | | |
| Cisco ER ERL Administration | | | |
| <u>Cisco ER User</u> | | | |
| | | | |
| | | | |
| | | | |

| Cisco ER Groups | ERL | Phone Tracking | ERL Membership | Reports | Tools | Help | Logout |
|-------------------------------|----------|----------------|----------------|----------|-------|------|-------------------|
| Cisco Em For Cisco IP Tele | erge | ency Respor | nder Adminis | stration | | | Cisco Systems |
| 🖣 Cisco ER Group |) Settin | igs | | | | | Server Settings 🕨 |
| | | | | | | | |

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 * | 913XXXX |
| ELIN Digit Strip Patter | rn * | 913 |
| Route Point for Primar | ry Cisco ER Server * | 911 |
| Route Point for Stand | by Cisco ER Server | 912 |
| * indicates required item | | |
| | | |
| Update Settings | Cancel Changes | |



| Consider of the deployment Solutions Consider of the deployment Solutions Image: Consider of the deployment Solutions Source of the deployment Solutions Image: Consider of the deployment Solutions Source of the deployment of the | Cisco ER Groups | ERL P | hone Tracking | ERL Members | hip Rep | oorts Tool | s He | lp | Logout | |
|---|---|---|---|--------------|---|---|-------------------------------|------|---------|--|
| Find and List ERLs Find Details of ERLs Where ERL Name Contains Find Contains Find | Cisco Eme For Cisco IP Teleph | rgenc | cy Respon | nder Adm | inistra | tion | | | 1 | |
| End Find Find Details of ERLs Where ERL Name Contains Find and show 20 items per page To list all items, click Find without entering any search text. Find Configure Default ERL Add New ERL Status : Ready Click on record to view/edit. Status : Ready Click on record to view/edit. Matching Records 1 to 5 of 5 ERL Name Community state Copy Delete Audit Trail Avaya MC 2-0 1049117004 Avaya MC Ca Image: View. Default 1009117002 Tasman Big Sky TX Image: View. Elementary 1039117003 Rain Big Cloud TX Image: View. High School 1019117001 Rain Big Cloud TX Image: View. | Onsite Alert Set | tings | | | | | | S | NMP Set | tings 🕨 |
| and show 20 views 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 Onsite Alert Street Name Name State Copy Delete Audit PatternELIN Ids. Name Name View State Copy Delete Audit Trail Avaya MC 2-0 1049117004 Avaya MC ca view. Default 1009117004 Tasman cisco ca View. Elementary 1039117003 Rain Big Cloud TX View. Elementary 1039117001 Rain Big Cloud TX View. | Find and | List | ERLs | | | | | | | |
| Add New ERL Status : Ready Click on record to view/edit. Matching Records 1 to 5 of 5 Rel Name Route/Translation Ids. Street Name Community State Copy Delete Audit Trail Avaya MC 2-0 1049117004 Avaya MC ca Image: Second Colspan="2">View. Default 1009117000 Tasman cisco ca Image: Second Colspan="2">View. Education Center 1029117002 Tasman Big Sky TX Image: Second Colspan="2">View. Elementary 1039117003 Rain Big Cloud TX Image: Second Colspan="2">View. | and show 20 💌 it | ems per p | bage | , | ntains 🔽 | | | Fin | d | |
| PatternELIN Ios. Name Name Irali Avaya MC 2-0 1049117004 Avaya MC ca C | | | | | | | | | | |
| Default 1009117000 Tasman cisco ca 🗗 🕅 view Education Center 1029117002 Tasman Big Sky TX 🗗 🕤 view Elementary 1039117003 Rain Big Cloud TX 🗗 😭 view High School 1019117001 Rain Big Cloud TX 🗗 🈭 view | <u>Add New ERL</u> Status : Ready Matching Record | s 1 to 5 (| | Onsite Alert | Street | Community | | | | Audit |
| ilementary 1039117003 Rain Big Cloud TX 🗗 😭 view Iigh School 1019117001 Rain Big Cloud TX 🔂 🕄 view | Add New ERL Status : Ready Matching Record | s 1 to 5 (Route; | /Translation | | | | | Сору | Delete | Audit |
| lementary 1039117003 Rain Big Cloud TX 🗗 🕤 view igh School 1019117001 Rain Big Cloud TX 🗗 🕤 view | add New ERL tatus : Ready Iatching Record ERL Name vaya MC 2-0 | <mark>s 1 to 5</mark> Route, Patte 104911- | /Translation ernELIN -7004 | | Name Avaya | Name MC | State ca | Copy | Delete | Audit Trail view |
| ligh School 1019117001 Rain Big Cloud TX 🗗 🦉 view | Add New ERL tatus : Ready Matching Record ERL Name waya MC 2-0 pefault | s 1 to 5 Route, Patte 104911- 100911- | /Translation ernELIN -7004 -7000 | | Name Avaya Tasman | Name MC cisco | State ca ca | Сору | Delete | Audit Trail view view |
| | Add New ERL itatus : Ready Matching Record ERL Name Avaya MC 2-0 Default Education Center | s 1 to 5 Route, Patto 104911- 100911- 102911- | /Translation ernELIN -7004 -7000 -7002 | | Name Avaya Tasman Tasman | Name MC cisco Big Sky | State ca ca TX | Copy | Delete | Audit Trail view view |
| onfigure Default ERL | Add New ERL Status : Ready Matching Record ERL Name Avaya MC 2-0 Default Education Center Elementary | s 1 to 5 Route, Patta 104911- 100911- 102911- 103911- | /Translation ernELIN -7004 -7000 -7002 -7003 | | Name Avaya Tasman Tasman Rain | Name MC cisco Big Sky Big Cloud | State ca ca TX TX | Copy | Delete | Audit Trail view view view |



| Cisco ER Groups | ERL Ph | one Tracking | ERL Membership | Reports | Tools | Help | Logout |
|--------------------|------------------|----------------------------|-----------------------|----------|-------|--------------|------------------|
| Cisco Em | ergency | v Respon | der Admini | stration | | | CISCO SYSTEMS |
| For Cisco IP Telep | ohony Solutio | ns | | | | | ավիտավիտ |
| Configure Unlo | cated Phone | es | | | Cor | ifigure Sy | nthetic Phones 🕨 |
| | | | | | | <u>Add n</u> | ew Manual phone |
| Find and | I LIST | Manual | ly Configu | Ired Pl | ones | 5 | Export |
| | | | | _ | | | ₽ <u>Import</u> |
| | es where ex | , | contains 💌 | | | Find | |
| | 20 💌 items | · · · · | | | | | |
| To I | ist all items, o | lick Find without | entering any search t | ext. | | | |
| List Manually | Configur | ed Phones | | | | | |
| í. | <u> </u> | | | | | | |
| Status: Ready | | | | | | | |
| Matching record | (s) 1 to 2 c | | | | | | |
| Line Number | | ERL Name | | dress | MAC A | ddress | Delete |
| 2007 2008 | | Avaya MC 2- Avaya MC 2- | | | | | 8 |
| | | Avaya MC 21 | 0 | | | | |
| First Previous | Next Last | | | | | | Page 1 of 1 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |



| ERL Information for Avaya MC 2-0 | |
|---|---|
| * indicates required item ? Help for this screen | ? |
| ERL Name * Avaya MC 2-0 | |
| Notes T1 PRI | |
| Test ERL (Select if this ERL is used for Synthetic Testing) | |
| ELIN Settings | |
| Route/Translation pattern Add 104911-7004 104911 Update Independent of the second secon | |
| Onsite Alert Settings | |
| Available Onsite Alert IDs Onsite Alert IDs for the ERL | |
| ERL Address | |
| ALI Details Update Copy Cancel Changes Close | |



| ALI Informa | ation for Avaya | MC 2-0 | ę |
|--|---------------------------------------|--|------------------|
| * indicates required item ? Help for this screen Fill all prevalidated fields fi | rom validation file by selecting a ta | ag. Select a tag | -Not Selected- 💌 |
| | | ems\CiscoER\nena_msag_records' vstems\CiscoER\nena_msag_recor | |
| House Number * | 123 | House Number Suffix | |
| Street Name * | Avaya | Prefix Directional | |
| Street Suffix | EXT -Select one- | Post Directional | |
| Community Name * | MC | State * | са |
| Main NPA | | Main Telephone No | |
| Class Of Service * | Business PBX 💽 | Type of Service * | Non-Pub |
| Exchange | | Customer Name * | Avaya PBX |
| Order Number | | Extract Date | 111804 |
| County ID | | Company ID * | 45678 |
| Zip Code | | Zip Code Extension | |
| Customer Code * | 123 | Comments | |
| Longitude | | Latitude | |
| Elevation | | TAR Code | |
| Location | | Reserved (for Service Provider use) | |
| 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 102911-7002 Internation Update Internation Remove Remove Remove |
| Available Onsite Alert IDs Onsite Alert IDs for the ERL |
| ERL Address |
| ALI Details Update Copy Cancel Changes Close |



| ALI Informa | ation for Educa | tion Center | 1 |
|---|--------------------------------------|--|-----------------|
| * indicates required item 💡 Help for this screen | | | |
| Fill all prevalidated fields f | rom validation file by selecting a t | ag. Select a tag | -Not Selected- |
| | | ems\CiscoER\nena_msag_records ystems\CiscoER\nena_msag_reco | • |
| House Number * | 150 | House Number Suffix | |
| Street Name * | Tasman | Prefix Directional | |
| Street Suffix | DR -Select one- | Post Directional | |
| Community Name * | Big Sky | State * | TX |
| Main NPA | | Main Telephone No | |
| Class Of Service * | Business 💌 | Type of Service * | FX in 911 area |
| Exchange | | Customer Name * | School District |
| Order Number | | Extract Date | 101404 |
| County ID | | Company ID * | 12345 |
| Zip Code | 95134 | Zip Code Extension | |
| Customer Code * | 123 | Comments | |
| Longitude | | Latitude | |
| Elevation | | TAR Code | |
| Location | | Reserved (for Service Provider use) | |
| Update ALI Info | Cancel Changes Close | | |



| 17 mm | RL Phone Trackin | g ERLM | embership | Reports | Tools | Help | Logout | | |
|-------------------------------------|--|--|---|---------|-------|--------|-----------------|-------|------|
| Cisco Emer For Cisco IP Telephon | gency Respo | onder A | Adminis | tration | | | Cisco Systems | | |
| LAN Switch Detail | s | | | | | Confi | qure IP Subnets | | |
| Switch Po | t Details | | | | | | 2 | | |
| | | | | | | | | | |
| Find <u>Configure</u> | Export Dimport | | | | | | | | |
| View Switch Port | | | | | | | | | |
| Find ports where | ● All ● Any of t | | ins are satis | fied | | 4 | | | |
| ERLName | contair | s 💌 | | | | | | | |
| Find More | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| Edit Table View | | | | | | | | | |
| Matching record(| s) 1 to 50 of 51 | | | | | | | | |
| ERL | Switch | IfName | Location | | Pho | ne | Phone | Phone | Port |
| Name | IP Address | | | | Ext | ension | IP Address | Туре | Name |
| | | | | | | | | | |
| | 172.20.43.20 | 1/1 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 | 1/1 1/2 | View View | | | | | | |
| | | | | | | | | | |
| | 172.20.43.20 | 1/2 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 | <u>View</u> <u>View</u> | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 | View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 | View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 | View View View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 | View View View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 | View View View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 | View View View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 | View View View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 3/10 | View View View View View View View View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 3/10 3/11 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/8 3/9 3/10 3/11 3/12 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 3/10 3/11 3/12 3/13 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 3/10 3/11 3/12 3/13 3/14 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/10 3/11 3/11 3/12 3/13 3/14 3/15 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 3/10 3/11 3/12 3/13 3/14 3/15 3/16 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/10 3/11 3/11 3/12 3/13 3/14 3/15 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/1 3/2 3/3 3/4 3/5 3/7 3/7 3/8 3/7 3/8 3/1 3/10 3/11 3/12 3/13 3/14 3/15 3/17 | View | | | | | | |
| | 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 172.20.43.20 | 1/2 15/1 3/2 3/3 3/4 3/5 3/6 3/7 3/8 3/9 3/10 3/11 3/12 3/13 3/14 3/15 3/16 3/17 3/18 | View View | | | | | | |



| | 172.20.43.20 | 3/22 | View | | | |
|---------------------|--------------|------|-----------------------------|------|---------------|--------------|
| | 172.20.43.20 | 3/23 | <u>View</u> | | | |
| | 172.20.43.20 | 3/24 | <u>View</u> | | | |
| Education Center | 172.20.43.20 | 3/25 | Education Cente <u>View</u> | 2002 | 172.20.16.102 | Cisco 7960 |
| Education Center | 172.20.43.20 | 3/26 | Education Cente <u>View</u> | | | |
| Education Center | 172.20.43.20 | 3/27 | Education Cente <u>View</u> | | | |
| Education Center | 172.20.43.20 | 3/28 | Education Cente <u>View</u> | | | |
| Elementary | 172.20.43.20 | 3/29 | router port <u>View</u> | | | |
| Elementary | 172.20.43.20 | 3/30 | Elementary <u>View</u> | | | |
| Elementary | 172.20.43.20 | 3/31 | Elementary <u>View</u> | | | |
| Elementary | 172.20.43.20 | 3/32 | Elementary <u>View</u> | 2003 | 172.20.16.101 | Cisco 7940 |
| High School | 172.20.43.20 | 3/33 | High School <u>View</u> | | | |
| High School | 172.20.43.20 | 3/34 | High School <u>View</u> | 2001 | 172.20.16.103 | Cisco 7960 |
| High School | 172.20.43.20 | 3/35 | High School <u>View</u> | | | |
| High School | 172.20.43.20 | 3/36 | High School <u>View</u> | | | |
| | 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 | <u>View</u> | | | |
| | 172.20.43.20 | 3/43 | <u>View</u> | | | |
| | 172.20.43.20 | 3/44 | <u>View</u> | | | |
| | 172.20.43.20 | 3/45 | View | | | |
| | 172.20.43.20 | 3/46 | View | | | |
| | 172.20.43.20 | 3/47 | View | | | |
| | | | | | | |
| First Previous Next | t Last | | | | | Page 1 of 2 |
| 101 | | | | | | rage (* Of 2 |

🔣 Edit Table View



Configuring the Cisco 6608 MGCP Gateway

| System Route Plan Serv | rice Feature Device User Applicatio | on Help | | | | |
|---|---|--|--|--|--|--|
| Cisco CallManag For Cisco IP Telephony Solutions | ger Administration | Cisco Systems antilitian antilitian | | | | |
| Gateway Configuration Back to Find/List Gateways Dependency Records | | | | | | |
| | Product : Cisco Catalyst 6000 T1 V Gateway : S0/D\$1-0@SDA0001C9 Device Protocol: Digital Access PR Registration: Registered with Cisc IP Address: <u>172.20.16.100</u> | D93A98 | | | | |
| | Status: Ready Update Delete Reset Gatewa | У | | | | |
| | Device Information | | | | | |
| | MAC Address* | 0001C9D93A98 | | | | |
| | Description | 6608 T1 PRI | | | | |
| | Device Pool* | Default | | | | |
| | Network Locale | United States | | | | |
| | Media Resource Group List | <none></none> | | | | |
| | Location | <none></none> | | | | |
| | AAR Group | <none></none> | | | | |
| | Load Information | | | | | |
| | Multilevel Precendence and Preem | ption (MLPP) Information | | | | |
| | MLPP Domain (e.g., "0000FF") | | | | | |
| | MLPP Indication | Default | | | | |
| | MLPP Preemption | Default | | | | |
| | | | | | | |
| | Interface Information | | | | | |
| | PRI Protocol Type* | PRI NI2 | | | | |
| | Protocol Side* | Network | | | | |
| | Channel Selection Order* | Bottom Up | | | | |
| | Channel IE Type* | Use Number when 1B | | | | |
| | PCM Type* | μ-law | | | | |
| | Delay for first restart (1/8 sec ticks) | 32 | | | | |
| | Delay between restarts (1/8 sec ticks) | 4 | | | | |
| | Inhibit restarts at PRI initializatio | n | | | | |
| | 🗖 Enable status poll | | | | | |
| | | | | | | |



| bound Calls | | |
|--|--|---|
| ignificant 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 | | |
| | 0 | |
| | 0 | |
| SMDI Base Port* | , | |
| SMDI Base Port* | , | |
| SMDI Base Port* PRI Protocol Type Specific Informa | ition | |
| SMDI Base Port* PRI Protocol Type Specific Informa Display IE Delivery | ntion Outbound | |
| SMDI Base Port* PRI Protocol Type Specific Informa Display IE Delivery Redirecting Number IE Delivery - | ition Outbound Inbound | |
| SMDI Base Port* PRI Protocol Type Specific Informa Display IE Delivery Redirecting Number IE Delivery - Redirecting Number IE Delivery - | ntion Outbound Inbound DisplayIE*** | |
| SMDI Base Port* PRI Protocol Type Specific Informat Display IE Delivery Redirecting Number IE Delivery - Redirecting Number IE Delivery - Send Extra Leading Character In | ntion Outbound Inbound DisplayIE*** :or IE Enable**** | |
| SMDI Base Port* PRI Protocol Type Specific Informat Display IE Delivery Redirecting Number IE Delivery - Redirecting Number IE Delivery - Send Extra Leading Character In Setup non-ISDN Progress Indicat | ntion Outbound Inbound DisplayIE*** :or IE Enable**** | |
| SMDI Base Port* PRI Protocol Type Specific Information Display IE Delivery Redirecting Number IE Delivery - Redirecting Number IE Delivery - Send Extra Leading Character In Setup non-ISDN Progress Indicat MCDN Channel Number Extension | ntion Outbound Inbound DisplayIE*** :or IE Enable**** | |
| SMDI Base Port* PRI Protocol Type Specific Informa Display IE Delivery Redirecting Number IE Delivery - Redirecting Number IE Delivery - Send Extra Leading Character In Setup non-ISDN Progress Indicat MCDN Channel Number Extension Send Calling Name In Facility IE | ntion Outbound Inbound DisplayIE*** :or IE Enable**** | |
| SMDI Base Port* PRI Protocol Type Specific Informat Display IE Delivery Redirecting Number IE Delivery - Send Extra Leading Character In Setup non-ISDN Progress Indicat MCDN Channel Number Extension Send Calling Name In Facility IE Interface Identifier Present** | ntion Outbound Inbound DisplayIE*** cor IE Enable**** Bit Set to Zero** | |



| roduct Specific Configuration | - | |
|---|------------------|----------|
| lock Reference* | Network | • |
| X-Level CSU* | 0dB | _ |
| DL Channel* | ATT 54016 | - |
| raming* | ESF | ▼ |
| udio Signal Adjustment into IP etwork* | NoDbPadding | |
| udio Signal Adjustment from IP etwork* | NoDbPadding | - |
| ellow Alarm* | Bit2 | - |
| ero Suppression* | B8ZS | - |
| igit On Duration(50-500ms)* | 100 | |
| nterdigit Duration(50-500msec)* | 100 | |
| NMP Community String | public | |
| isable SNMP Set operations* | | |
| ebug Port Enable* | | |
| old Tone Silence Duration* | 0 | |
| ort Used for Voice Calls* | V | |
| ort Used for Modem Calls* | | |
| ort Used for Fax Calls* | | |
| | | |
| ax and Modem Parameters | | |
| ax Relay Enable* | | |
| ax Error Correction Mode Override* | | |
| laximum Fax Rate* | 14400bps | |
| ax Payload Size* | 20 | |
| on Standard Facilities Country ode* | 65535 | |
| on Standard Facilities Vendor ode* | 65535 | |
| ax/Modem Packet Redundancy* | | |
| SE Туре* | Non-IOS Gateways | T |
| layout Delay Parameters | | |
| nitial Playout Delay* | 40 | |
| linimum Playout Delay* | 20 | |
| laximum Playout Delay* | 150 | |
| | | |
| cho Canceller Configuration | | |
| cho TailLength (ms)* | 32 ms | - |
| linimum ERL (db)* | 6 db | • |
| in disease meaning disease | | |
| indicates required item | | |
| * applicable to DMS-100 protocol only | | |



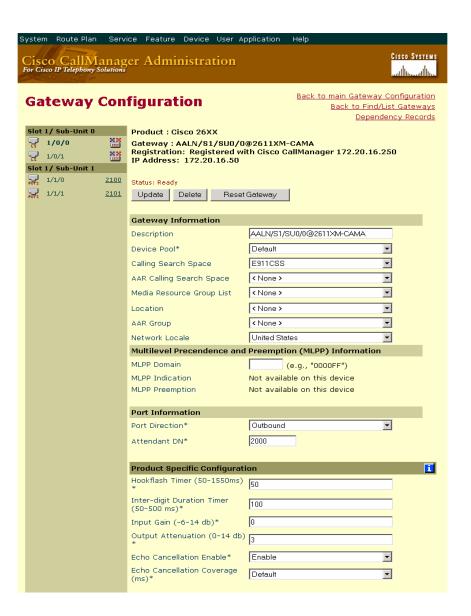
| CISCO SYSTEMS | S0/DS1-0@SDA0001C9D93A98 Cisco Catalyst 6000 T1 VoIP Gateway | | | | | | |
|-----------------------|---|---------------------------|--|--|--|--|--|
| Device Configuration | Device Configuration | | | | | | |
| Network Configuration | Device Protocol | Digital Access PRI | | | | | |
| Registration Status | Protocol Side | Network | | | | | |
| Device Status | D-Channel Enabled | Yes | | | | | |
| Port Status | Framing | ESF | | | | | |
| TCP/IP Statistics | CSU Gain | 0dB | | | | | |
| D-Channel Statistics | WAN Voice Encoding | u-law | | | | | |
| Facility Data Link | 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 | | | | | | |
| | <u>Page Help</u> | | | | | | |



Configuring the Cisco 2611XM MGCP Gateway

| System | Route Plan | Service | Feature | Device | User | Applicati | on Hel | lp | |
|--|-------------------------------|------------|---------------------|---------|----------|-----------|-----------------|--------|----------------------------|
| Cisco For Cisco | CallMa IP Telephony So | mager | Admi | nistra | tion | | | | Cisco Systems |
| Gat | eway (| Config | jurat | ion | | | | | Back to Find/List Gateways |
| | ct: Cisco 26) vay : 2611XM | | | | | | | | |
| Status: Upda Domair | | | Gateway 1XM-CAM/ | | | | | | |
| Descrip | ption | | 1XM-CAM | | | | | | |
| Cisco (| CallManager G | roup* De | fault | | | | • | | |
| Installed Voice Interface Cards Endpoint Identifiers | | | | | | | | | |
| | ied Voice Int e in slot 0 | _ | | | _1 | | Endpoir | nt Ide | ntifiers |
| | | < None | | | _ | | | | |
| Module | e in slot 1 | NM-2V | _ | | - | | | | |
| | | Subuni | | 1C-2FX0 | - | | <u>(1/0/ 0)</u> | | <u>(1/0/ 1)</u> ਵ |
| | | Subuni | t 1 🛛 | 1C-2FXS | - | | <u>(1/1/ 0)</u> | POTS | (<u>1/1/ 1)</u> pors |
| Produ | ct Specific C | onfigurati | on | | | | | | F |
| | back Timing* | - | | Grace | ful | | | | |
| Switch | back uptime- | delay (min |) | 10 | | | | | |
| Switch | ıback schedul | le (hh:mm) | | 12:00 | | | | | |
| * indica | ites required ite | m | | | | | | | Back to Find/List Gateways |





Cisco 2611XM MGCP Gateway Configuration

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
I.
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
```



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