



Cisco EGW2200-PBX Interoperability: Avaya G650 Gateway and Avaya S8700 Server using Q.SIG PRI with MGCP

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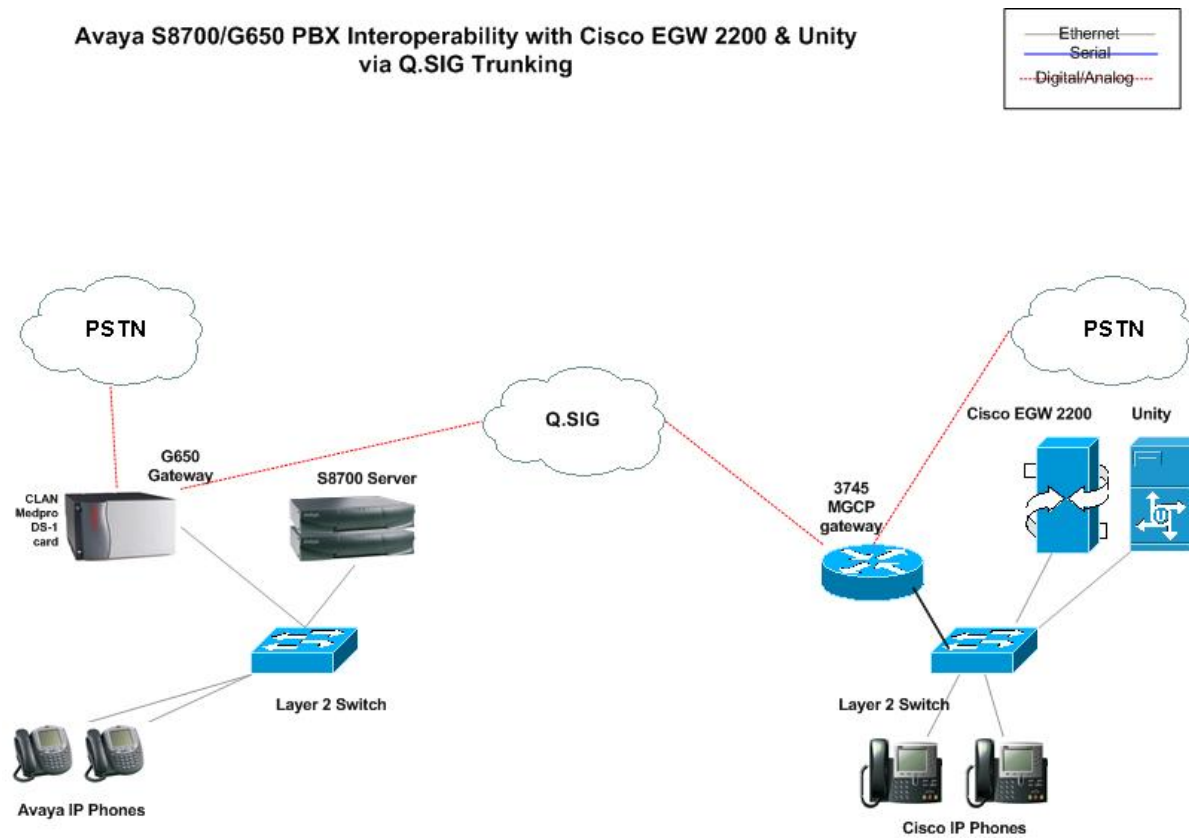
Introduction

- This document contains an example of the steps to configure Q.SIG PRI trunks between the Avaya S8700/G650 and Cisco EGW 2200 with a Unity server.
- The Avaya configuration screen captures have been done using the standard Emulation tool and the Avaya Site Administration (ASA) tool. The commands and output display are the same in both cases.



Network Topology

Figure 1. Network Topology



System Components

Hardware Requirements

- Cisco EGW 2200 server
- Cisco 3745 gateway with NM-HDV module
- Avaya S8700 server
- Avaya G650 gateway
- Avaya 4610SW and 4620 IP phones

Software Requirements

- Cisco EGW 1.1(2) 4-1
- Cisco IOS Software Release 12.3(8)T5
- Avaya Communication Manager 2.0
- Avaya IP Phone Firmware Version 2.01



Features Supported

The following features are supported between the Avaya S8700/G600 Communication Manager 2.0 using a Q.SIG PRI trunk to the Cisco EGW 2200 and Unity server:

- Direct Dialing to voicemail pilot number
- DTMF
- Caller ID information

Configuration

Configuration Sequence and Tasks

1. Configure the Avaya S8700/G650
2. Configure the Cisco EGW IPT Platform
3. Configure the Cisco EGW Administration
4. Configure the Cisco Unity Server
5. Configure the Cisco 3745 Gateway



Configuration Menus and Commands

Configure the Avaya S8700/G650

1. Log in to the Avaya S8700 server. Make sure that all the necessary Q.SIG features are enabled on the Avaya S8700 server by running the “display system-parameters customer” feature.

```
cancel  refresh  enter  clear  help  go to page  next page  prev page
display system-parameters customer-options Page 8 of 11
      QSIG OPTIONAL FEATURES
                Basic Call Setup? y
          Basic Supplementary Services? y
                Centralized Attendant? y
                Interworking with DCS? y
Supplementary Services with Rerouting? y
          Transfer into QSIG Voice Mail? y
                Value-Added (VALU)? y

(NOTE: You must logoff & login to effect the permission changes.)
```



2. Configure the DS-1 card for Q.SIG PRI

```
cancel  refresh  enter  clear  help  go to page  next page  prev page
display ds1 01A09                                     Page 1 of 2
DS1 CIRCUIT PACK
Location: 01A09                                         Name: QSIG
Bit Rate: 1.544                                         Line Coding: b8zs
Line Compensation: 1                                    Framing Mode: esf
Signaling Mode: isdn-pri                               Connect: pbx
TN-C7 Long Timers? n                                   Interface: peer-master
Interworking Message: PROGRESS                         Peer Protocol: Q-SIG
Interface Companding: mulaw                             Side: a
Idle Code: 11111111                                    CRC? n
DCP/Analog Bearer Capability: 3.1kHz

Slip Detection? n                                       Near-end CSU Type: other
Echo Cancellation? n
```



3. Configure a trunk group. Type “**add trunk-group #**” where # is the desired trunk group. The next three screen captures relate to the trunk configuration. Once the trunk group is created, add the 23 DS0 channels to the group. The following is an example of the port assignment: 01A0901 would mean: Gateway# 1, Cabinet A, Slot# 9, DS0 channel# 1.

```
cancel  refresh  enter  clear  help  go to page  next page  prev page
display trunk-group 1                                     Page 1 of 22
TRUNK GROUP
Group Number: 1          Group Type: isdn          CDR Reports: n
  Group Name: QSIG TRUNKING      COR: 90      TN: 1      TAC: *01
  Direction: two-way      Outgoing Display? y      Carrier Medium: PRI/BRI
  Dial Access? y          Busy Threshold: 99      Night Service:
Queue Length: 0
Service Type: tie          Auth Code? n          TestCall ITC: rest
                          Far End Test Line No:
TestCall BCC: 4
TRUNK PARAMETERS
  Codeset to Send Display: 0      Codeset to Send National IEs: 6
  Max Message Size to Send: 260
  Supplementary Service Protocol: b      Digit Handling (in/out): enbloc/enbloc
Trunk Hunt: ascend          QSIG Value-Added? y
                          Digital Loss Group: 13
Calling Number - Delete:      Insert:          Numbering Format: pub-unk
                          Bit Rate: 1200      Synchronization: async      Duplex: full
Disconnect Supervision - In? y  Out? y
Answer Supervision Timeout: 0
```



```
display trunk-group 1                                     Page 2 of 22
TRUNK FEATURES
  ACA Assignment? n      Measured: internal  Wideband Support? n
                        Internal Alert? n      Maintenance Tests? y
                        Data Restriction? n     NCA-TSC Trunk Member: 10
                        Send Name: y           Send Calling Number: y
                        Hop Dgt? y
  Used for DCS? n
  Suppress # Outpulsing? n  Numbering Format: public
  Outgoing Channel ID Encoding: exclusive  UUI IE Treatment: service-provider

                        Replace Restricted Numbers? n
                        Replace Unavailable Numbers? n
                        Send Called/Busy/Connected Number: y

  Send UUI IE? y
  Send UCID? y
  Send Codeset 6/7 LAI IE? y      Ds1 Echo Cancellation? n

  Path Replacement with Retention? y

                        SBS? n  Network (Japan) Needs Connect Before Disconnect? y
```

```
display trunk-group 1                                     Page 6 of 22
TRUNK GROUP
  Administered Members (min/max): 1/23
  Total Administered Members: 23
GROUP MEMBER ASSIGNMENTS
  Port      Code Sfx Name      Night      Sig Grp
1: 01A0901  TN464  G
2: 01A0902  TN464  G
3: 01A0903  TN464  G
4: 01A0904  TN464  G
5: 01A0905  TN464  G
6: 01A0906  TN464  G
7: 01A0907  TN464  G
8: 01A0908  TN464  G
9: 01A0909  TN464  G
10: 01A0910  TN464  G
11: 01A0911  TN464  G
12: 01A0912  TN464  G
13: 01A0913  TN464  G
14: 01A0914  TN464  G
15: 01A0915  TN464  G
```



4. Add signaling group and point to the trunk group created in the previous step.

```
display signaling-group 1
SIGNALING GROUP
Group Number: 1          Group Type: isdn-pri
Associated Signaling? y   Max number of NCA TSC: 10
Primary D-Channel: 01A0924 Max number of CA TSC: 10
Trunk Group for Channel Selection: 1 Trunk Group for NCA TSC: 1
Supplementary Service Protocol: b    X-Mobility/Wireless Type: NONE
Network Call Transfer? n
```

Command: █



5. Add a route pattern and point it to the signaling group. This route pattern needs to be created for the Unity voicemail pilot number 2200. In this example, the route pattern 22 points to signaling group# 1 that was created in the previous step.

display route-pattern 22 send (return) help (f5) cancel (esc) enter (f3) schedule (f9) next (f7) previous (f8)

1 | 2 | 3 |

Pattern Number: 22 Pattern Name:
Secure SIP? n

Grp	FRL	NPA	Pfx	Hop	Toll	No.	Inserted	DCS/	IXC
No			Mrk	Lmt	List	Del	Digits	QSIG	
							Dgts	Intw	
1:	1	0	408		4			n	user
2:								n	user
3:								n	user
4:								n	user
5:								n	user
6:								n	user

BCC	VALUE	TSC	CA-TSC	ITC	BCIE	Service/Feature	BAND	No.	Numbering	LAR
0	1	2	3	4	W			Dgts	Format	
								Subaddress		
1:	y	y	y	y	y	n	n		rest	none
2:	y	y	y	y	y	n	n		rest	none
3:	y	y	y	y	y	n	n		rest	none
4:	y	y	y	y	y	n	n		rest	none
5:	y	y	y	y	y	n	n		rest	none
6:	y	y	y	y	y	n	n		rest	none



6. Add an entry into the AAR table to use the route pattern above to route calls. In this example, calls to Cisco Unity voicemail pilot number 2200 are using the AAR table entry starting with 2200, which in turn points to route pattern# 22.

change aar analysis 22
send [return]
help (f5)
cancel (esc)
enter (f3)
schedule (f9)
next (

1
2

AAR DIGIT ANALYSIS TABLE

Percent Full

Dialed String	Total Min	Total Max	Route Pattern	Call Type	Node Num	ANI Req'd
2200	4	4	22	aar		n
222	7	7	10	aar	2	n
3	4	4	10	aar		n
3	7	7	999	aar		n
3000	4	4	4	aar		n
4	4	4	20	aar		y
4	7	7	999	aar		n
4001	4	4	4	aar		y
4008	4	4	4	aar		y
4015	4	4	4	aar		n
44	4	4	4	aar		y
5	4	4	10	aar		n
5	7	7	999	aar		n
5001	4	4	25	aar		n
5050	4	4	10	aar		n



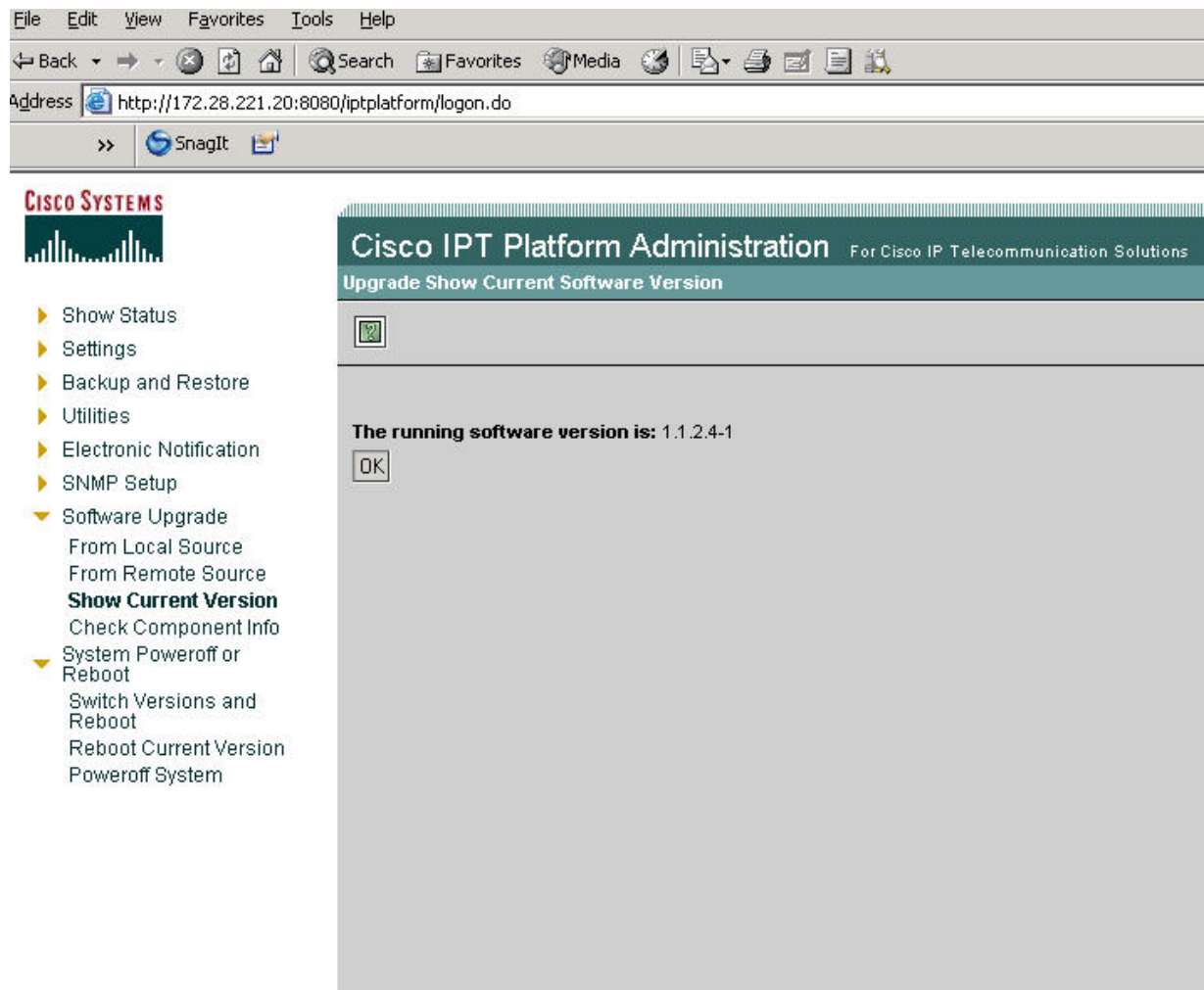
7. Ensure caller ID is enabled on each IP phone to send the calling party name.

```
display station 7007                                     Page 2 of 4
STATION
FEATURE OPTIONS
  LWC Reception: spe                                     Auto Select Any Idle Appearance? n
  LWC Activation? y                                     Coverage Msg Retrieval? y
  LWC Log External Calls? n                             Auto Answer: none
  CDR Privacy? n                                       Data Restriction? n
  Redirect Notification? y                             Idle Appearance Preference? n
  Per Button Ring Control? n                           Restrict Last Appearance? y
  Bridged Call Alerting? n
  Active Station Ringing: continuous
  H.320 Conversion? y                                 Per Station CPN - Send Calling Number? y
  Service Link Mode: as-needed
  Multimedia Mode: enhanced
  MWI Served User Type: qsig-mwi
  Audible Message Waiting? n
  Display Client Redirection? n
  Select Last Used Appearance? n
  Coverage After Forwarding? s
  Multimedia Early Answer? n
  Direct IP-IP Audio Connections? y
  IP Audio Hairpinning? y
Emergency Location Ext: 7007
```



Configure the Cisco EGW: IPT Platform

1. Log in to the Cisco EGW 2200 IPT Platform page to verify the current version running.





2. If the version needs to be upgraded, the new software version can be transferred using FTP into the /var/tmp directory and then specified within the IPT Platform page for the upgrade.

Cisco IPT Platform Administration For Cisco IP Telecommunication Solutions

Upgrade Local Check First

Welcome to Local Source Software Upgrade Home Page

Please insert CD/DVD and enter upgrade software directory on CD/DVD below.

Upgrade Software Directory on CD/DVD (/mnt/cdrom/...):

Platform:



Configure the Cisco EGW: Administration

1. Log in to the Cisco EGW 2200 administration page.

file Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media Print Copy Paste

Address http://172.28.221.20:8080/egw/welcome.do

SnagIt

CISCO SYSTEMS

EGW Administration

Welcome to EGW Administration

Please enter your User ID and Password:

User ID:

Password:

Login Clear



2. Add an IP route to the MGCP gateway (in this example, the gateway is a Cisco 3745).

Update IP Route

*** = Required Fields**

IPRoute Name: serialmgcp

Priority: *

Status: In Service

Network Information

Dest.Network: *

Network Mask: *

Next Hop: *

Local Interface: *

3. Add the Cisco 3745 as the MGCP gateway. The next three screen captures show the information entered for the various fields within the configuration.

EGW Administration

Logout: administrator [Help](#)

EGW Home

Platform

[Platform Status](#)

Routes

[IP Route](#)

Gateway Interfaces

[Media Gateways](#)

Call Manager Interfaces

[H323](#)

[CTI Managers](#)

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Unity Interfaces

Media Gateways

Select	Gateway Name	Gateway Type
☐	mgcp3745	C3745



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[Platform Status](#)

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[Standard Route Plans](#)

[Time of Day Route Plans](#)

[Dial Plans](#)

Diagnostics

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Update Gateway Configuration

*** = Required Fields**

\$ = See online help for details

Name: mgcp3745

Description: * MGCP 3745

Gateway Type: C3745

Protocol Variant: QSIG

Dial Plan: unit

Network Information

First IP Address: \$ 25.0.0.1

IP Route: serialmgcp

Second IP Address: \$

IP Route: Local Route

Gateway Host Name(Inc. Domain if needed): CCME_CUE_3745

MGCP Port: 2427

Session Set/Association Port: 7000



Network Information

First IP Address: \$ 25.0.0.1
IP Route: serialmgcp
Second IP Address: \$
IP Route: Local Route
Gateway Host Name(Inc. Domain if needed): CCME_CUE_3745
MGCP Port: 2427
Session Set/Association Port: 7000

Links

MGCP Status

Transport Link 1(mgcp3745-mgcp-ip1): Out Of Service

Backhaul Status

Transport Link 1(mgcp3745-bh-sess-1): IS

Call Limiting

Limit(number of calls) Disable

Update

Properties



4. Add the T-1 span information for the MGCP gateway. Both the MGCP gateway and the trunk (in this case the T-1 PRI) need to register with the Cisco EGW:

EGW Administration

[Logout: administrator](#)[Help](#)

T1/E1 Spans on gateway

Gateway Name:mgcp3745

Select	Signaling Slot	Signaling Port	
☐	1	1	details...

Add New

Delete Selected



[Logout](#): administrator

Edit Span

Signaling Path State(mgcp3745-1-1-path):

Call Trace[30 minutes]:

Trunks

Trunk	Call State	Connection to Endpoint
1	IDLE	CXN_IS
2	IDLE	CXN_IS
3	IDLE	CXN_IS
4	IDLE	CXN_IS
5	IDLE	CXN_IS
6	IDLE	CXN_IS
7	IDLE	CXN_IS
8	IDLE	CXN_IS
9	IDLE	CXN_IS
10	IDLE	CXN_IS
11	IDLE	CXN_IS
12	IDLE	CXN_IS
13	IDLE	CXN_IS
14	IDLE	CXN_IS
15	IDLE	CXN_IS
16	IDLE	CXN_IS



5. Specify the SIP parameters for the Cisco EGW.

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SIP

*** = Required Fields**

Dial Plan:

Enable Virtual IP Address: false

Links

Transport Link 1 (sip-link1):

Call Trace[30 minutes]:

Properties

MGCdomain:

Call Limiting

Limit(number of calls)



6. Enter the information for the SIP trunk to the Cisco Unity server. The next two screen captures relate to this information.

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Unity Interfaces
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Unity/Proxy Servers

Select	Unity/Proxy Server	DNS Name or IP Address
☐	unity	172.28.221.21

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Update Unity/Proxy Server

*** = Required Fields**

Server Name:

DNS Name or IP Address: *

SIP Port Number: *

SIP Version:



7. The next step is to add standard route plans. Two route plans will be added: one for Unity and one for the MGCP gateway.

EGW Administration

[Logout: administrator](#)

Standard Route Plans

Select	Existing Route Plans
☐	mgcproute-std
☐	unity-std

Add NewDelete Selected

8. The next step is to add dial plans to route calls to the Unity server (and to the MGCP gateway to account for situations where a Unity subscriber exiting out of a voicemail box may wish to dial another subscriber). Here the digit string 2200 is for the Unity voicemail pilot number and uses the unity-std route plan while any digit string starting with a 7 is routed using the MGCProute-std route plan.



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Edit Route Plan

*** = Required Fields**

Name: mgcproute-std

Random Distribution: ☐

Available Routes:

rt-h323-a

rt-mgcp3745-1-1

unity

Update



**EGW Administration**

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[Dial Plans](#)
Diagnose

Edit Route Plan

*** = Required Fields**

Name:

Random Distribution: ☐

Available Routes:

rt-h323-a
rt-mgcp3745-1-1
unity



9. The final step is to return to the MGCP gateway and Unity panels to update the dial plan field. In this example, only a single dial plan was created so the same dial plan name will be applied to both.

[Add more numbers](#)

Called Numbers

Delete	Digit String	Digits to Remove	Prefix Digit String	CCM MWI	Min Digits	Max Digits	Route Plan
☐	2200	0		☐	1	20	unity-std
☐	7	0		☐	1	20	mgcproute-std
				☐	1	20	
				☐	1	20	
				☐	1	20	

[Add more numbers](#)

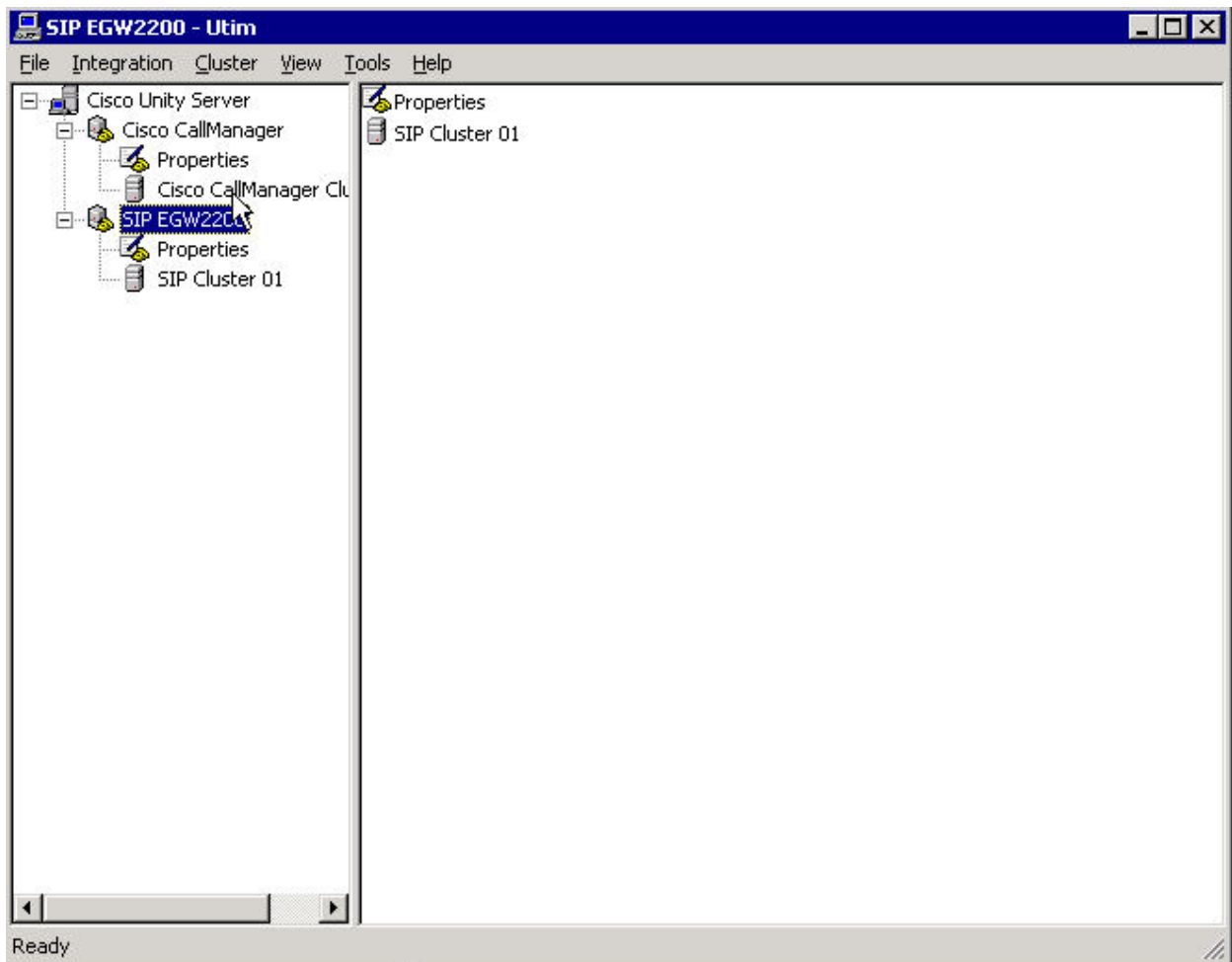
Holidays

Date (yyyy.mm.dd):



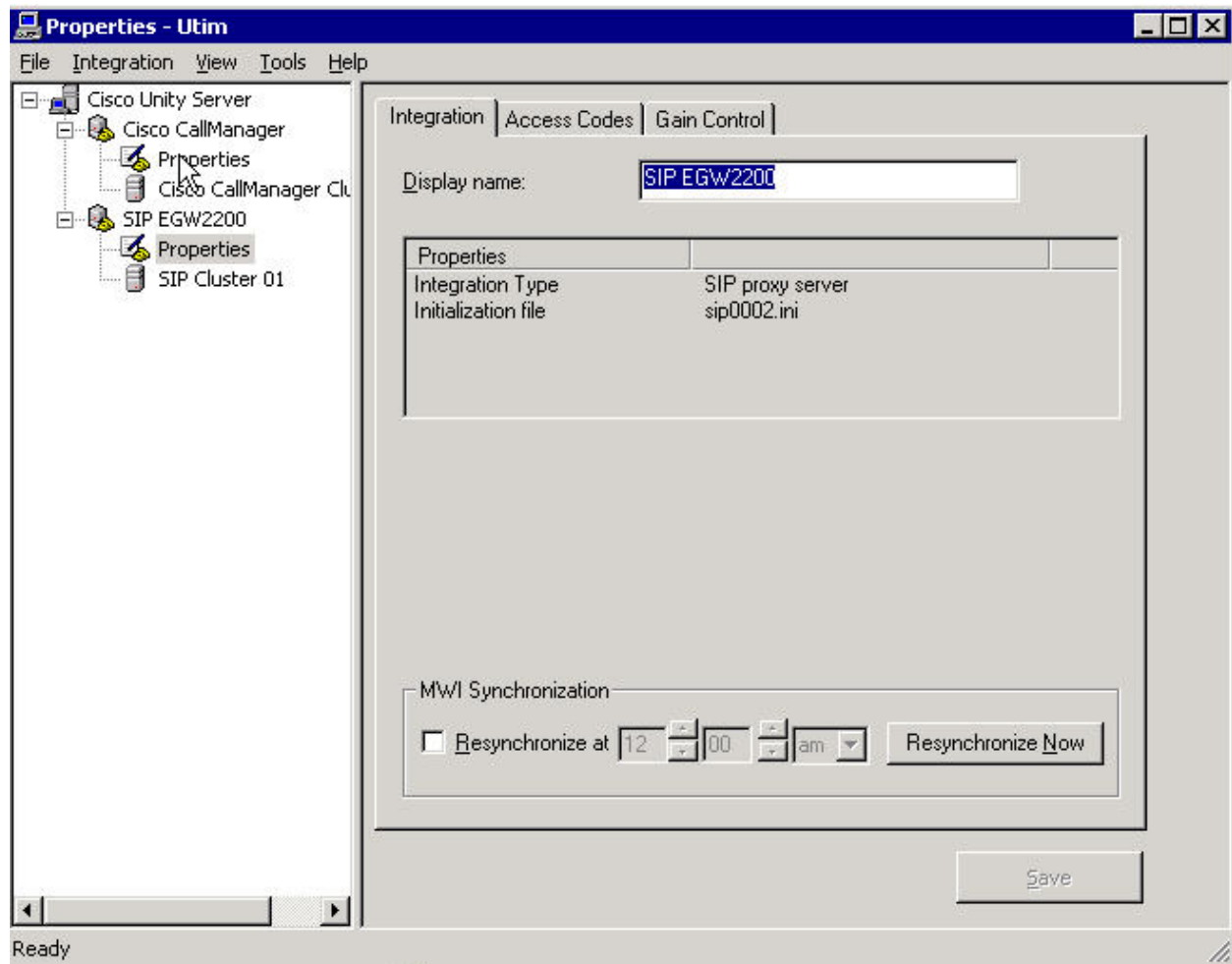
Cisco Unity Server Configuration

1. Within the Cisco Unity Tools Depot, launch the UTIM utility. Select the SIP EGW 2200 tree.



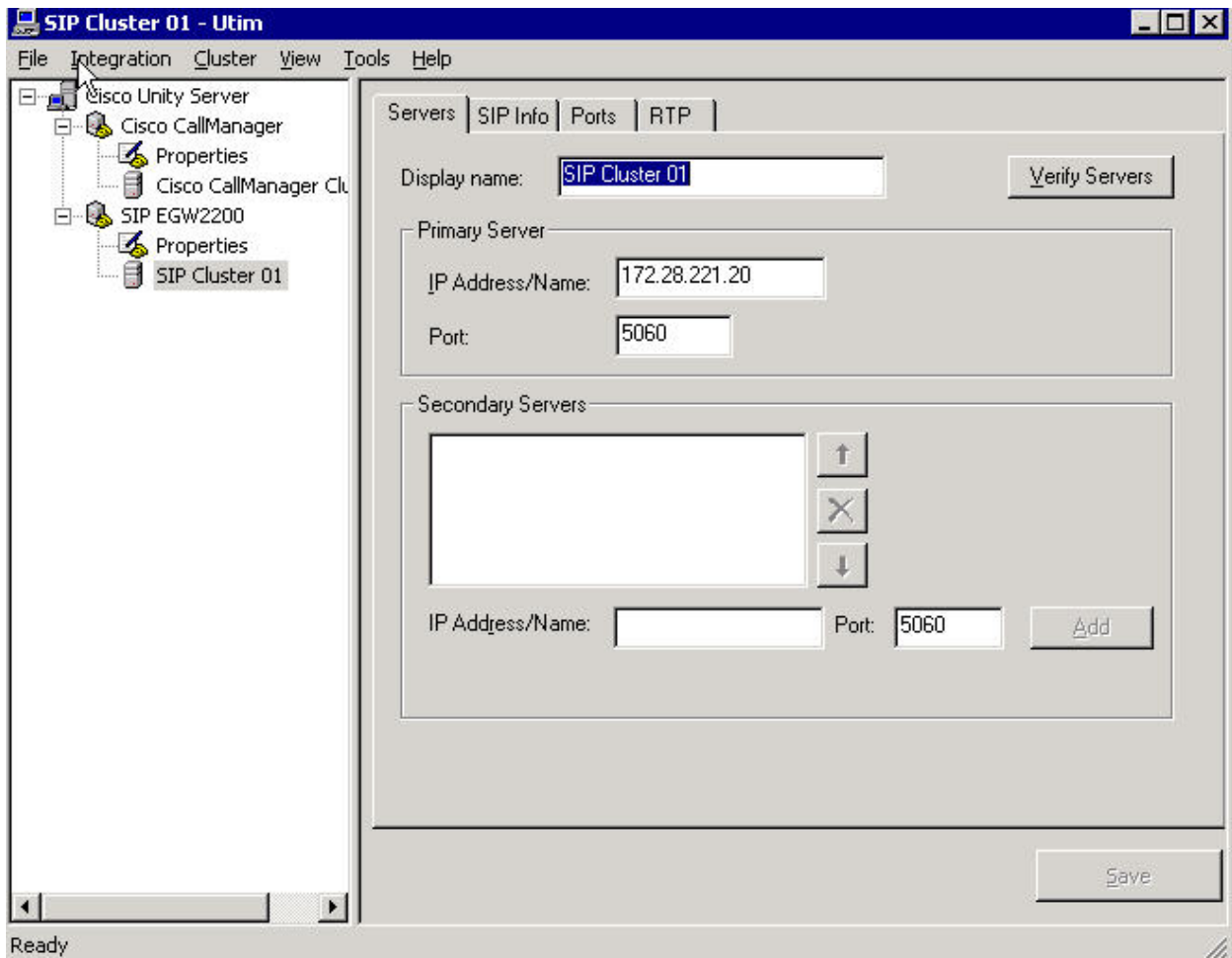


2. Under the SIP EGW 2200 tree, select the Properties branch.





3. Select the SIP cluster and specify the IP address of the EGW and port number under the servers tab.





4. Specify the codec type and other information under the SIP info tab.

The screenshot shows the 'SIP Cluster 01 - Utim' configuration window. The left pane displays a tree view with the following structure:

- Cisco Unity Server
 - Cisco CallManager
 - Properties
 - Cisco CallManager Cl...
 - SIP EGW2200
 - Properties
 - SIP Cluster 01

The right pane has tabs for 'Servers', 'SIP Info', 'Ports', and 'RTP'. The 'SIP Info' tab is selected, showing the following fields:

Contact Information

- Contact Line Name: 2200
- Cisco Unity SIP Port: 5060
- Preferred Codec: G.711 (mu-law)
- Preferred Transport Protocol: UDP

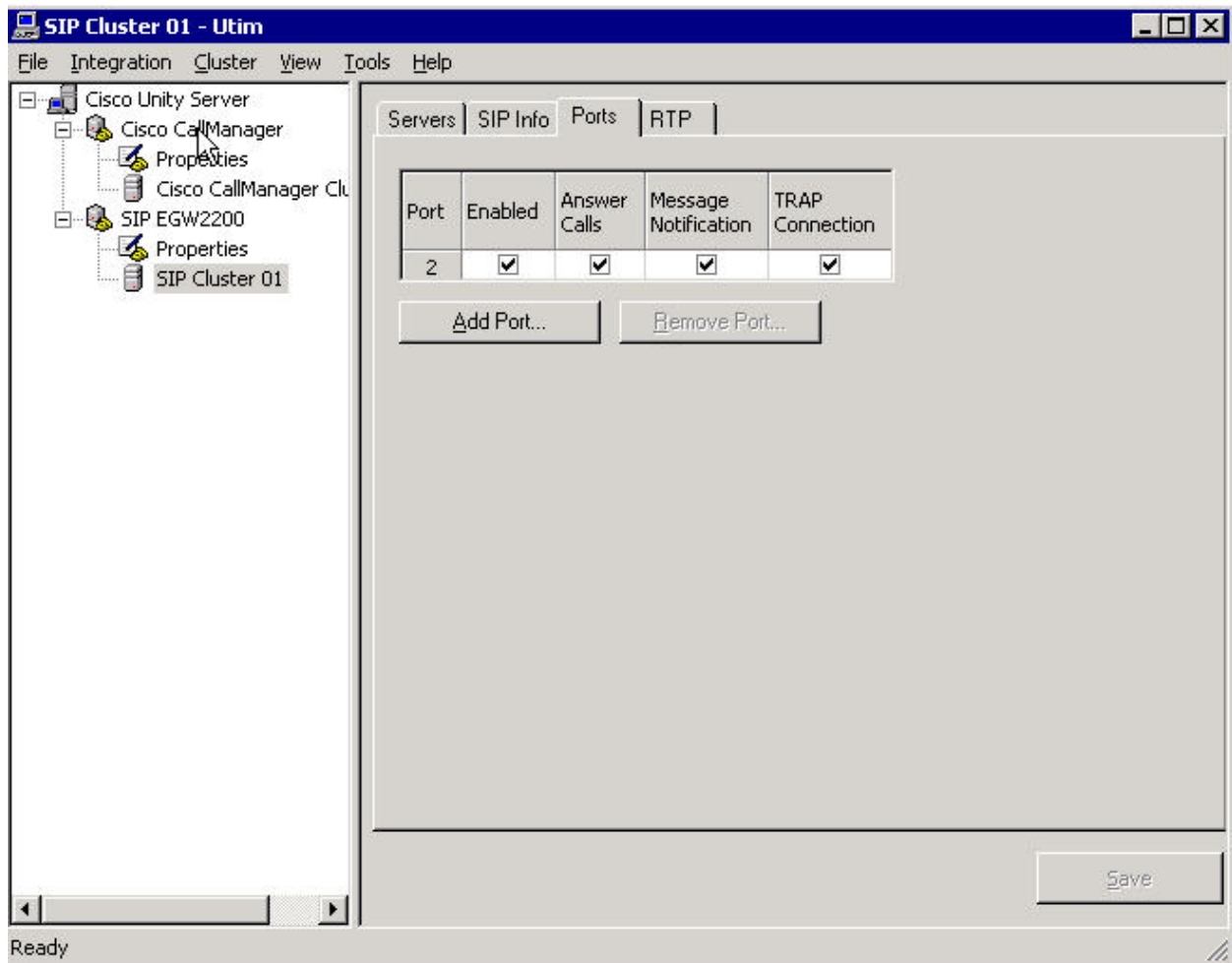
Security

- ☐ Authenticate with the SIP proxy server
 - Name:
 - Password:
- ☐ Register with Proxy Server

A 'Save' button is located at the bottom right of the window. The status bar at the bottom left indicates 'Ready'.

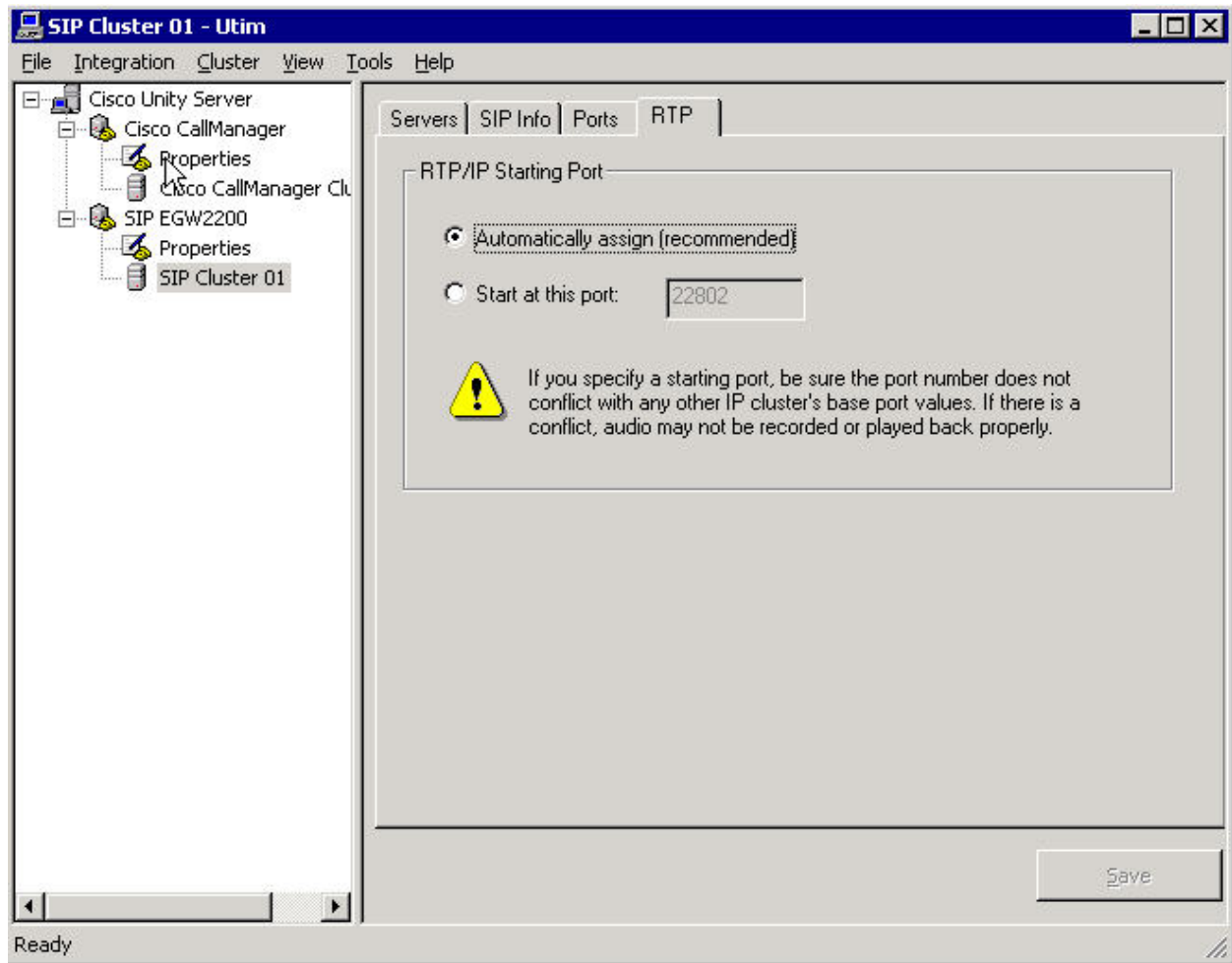


5. Under the ports, check the necessary options.





- Under the RTP tab, select the “Automatically assign” option.





Cisco 3745 Gateway Configuration

Included below is the show version and show running-configuration on the Cisco 3745 MGCP device. Controller T1 1/1 on the Cisco 3745 is connected to the Avaya S8700/G650 DS1 PRI card. Q.SIG signaling is configured on PRI link between the Cisco 3745 and the Avaya S8700/G650.

Router# **show version**

Cisco IOS Software, 3700 Software (C3745-IPVOICE-M), Version 12.3(8)T5, RELEASE SOFTWARE (fc2)

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

Copyright (c) 1986-2004 by Cisco Systems, Inc.

Compiled Wed 20-Oct-04 15:01 by cmong

ROM: System Bootstrap, Version 12.2(8r)T2, RELEASE SOFTWARE (fc1)

ROM: 3700 Software (C3745-IS-M), Version 12.2(15)ZJ3, EARLY DEPLOYMENT RELEASE SOFTWARE (fc2)

CCME_CUE_3745 uptime is 2 weeks, 3 days, 8 hours, 48 minutes

System returned to ROM by reload

System image file is "flash:c3745-ipvoice-mz.123-8.T5.bin"

Cisco 3745 (R7000) processor (revision 2.0) with 245760K/16384K bytes of memory.

Processor board ID JMX0814L3E2

R7000 CPU at 350MHz, Implementation 39, Rev 3.3, 256KB L2, 2048KB L3 Cache

2 FastEthernet interfaces

48 Serial interfaces

1 Serial(sync/async) interface

1 terminal line

2 Channelized T1/PRI ports



1 ATM AIM

2 Voice FXS interfaces

2 Voice E & M interfaces

1 cisco service engine(s)

DRAM configuration is 64 bits wide with parity disabled.

151K bytes of NVRAM.

125184K bytes of ATA System CompactFlash (Read/Write)

Configuration register is 0x2102

CCME_CUE_3745#

*Mar 26 05:20:28.664: %SYS-2-MALLOCFAIL: Memory allocation of 1716 bytes failed from 0x60416D28, alignment 32

Pool: I/O Free: 2760 Cause: Memory fragmentation

Alternate Pool: None Free: 0 Cause: No Alternate pool

-Process= "Pool Manager", ipl= 0, pid= 6

-Traceback= 60F90EF8 6000F2C4 600103C8 60416D30 600241E8 60024334

CCME_CUE_3745#

CCME_CUE_3745#wr t

Building configuration...



Current configuration : 4075 bytes

!

version 12.3

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname CCME_CUE_3745

!

boot-start-marker

boot system flash c3745-ipvoice-mz.123-8.T5.bin

boot-end-marker

!

!

no network-clock-participate slot 1

no network-clock-participate aim 0

no network-clock-participate aim 1

voice-card 1

dspfarm

!

voice-card 5

dspfarm



```
!  
  
no aaa new-model  
  
ip subnet-zero  
  
ip cef  
  
!  
  
!  
  
no ip domain lookup  
  
backhaul-session-manager  
  
    set set1 client nft  
  
    group egw2200 set set1  
  
    session group egw2200 172.28.221.20 7000 25.0.0.1 7000 1  
  
no ftp-server write-enable  
  
isdn switch-type primary-qsig  
  
!  
  
!  
  
controller T1 1/0  
  
    framing esf  
  
    linecode b8zs  
  
    pri-group timeslots 1-24 service mgcp  
  
!  
  
controller T1 1/1  
  
    framing esf  
  
    linecode b8zs
```



```
pri-group timeslots 1-24 service mgcp

!

interface FastEthernet0/0

description CCME-CUE-3745_to_cat3550

no ip address

duplex auto

speed auto

!

interface FastEthernet0/0.1

encapsulation dot1Q 99

!

interface FastEthernet0/0.2

description NEW_S8700_G650

encapsulation dot1Q 300

ip address 172.28.221.49 255.255.255.240

ip helper-address 172.28.221.22

ip helper-address 172.28.221.19

h323-gateway voip bind srcaddr 172.28.221.49

!

interface FastEthernet0/0.3

description MODULAR_MESSAGING_SOLUTION

encapsulation dot1Q 900

ip address 172.28.221.129 255.255.255.240
```



```
ip helper-address 172.28.221.22

ip helper-address 172.28.221.19

!

interface FastEthernet0/0.4

encapsulation dot1Q 301

ip address 10.1.3.1 255.255.255.128

ip helper-address 172.28.221.22

ip helper-address 172.28.221.19

!

interface FastEthernet0/0.5

encapsulation dot1Q 302

ip address 10.1.3.129 255.255.255.128

ip helper-address 172.28.221.22

ip helper-address 172.28.221.19

!

interface FastEthernet0/0.6

encapsulation dot1Q 90

ip address 90.1.1.254 255.255.255.0

ip helper-address 172.28.221.19

!

interface FastEthernet0/0.12

encapsulation dot1Q 1301

ip address 10.12.13.1 255.255.255.0
```



```
!  
  
interface Serial0/0  
  
  description CCME-CUE-3745_to_3600  
  
  ip address 25.0.0.1 255.0.0.0  
  
  no fair-queue  
  
  clockrate 256000
```

```
!  
  
interface FastEthernet0/1  
  
  no ip address  
  
  shutdown  
  
  duplex auto  
  
  speed auto
```

```
!  
  
interface Serial1/0:23  
  
  no ip address  
  
  no logging event link-status  
  
  isdn switch-type primary-qsig  
  
  isdn incoming-voice voice  
  
  isdn bind-13 ccm-manager  
  
  isdn bchan-number-order ascending  
  
  no cdp enable
```

```
!  
  
interface Serial1/1:23
```



```
no ip address

no logging event link-status

isdn switch-type primary-qsig

isdn incoming-voice voice

isdn bind-l3 backhaul set1

isdn bchan-number-order ascending

no cdp enable

!

interface Service-Engine2/0

no ip address

shutdown

!

router eigrp 100

network 10.0.0.0

network 25.0.0.0

network 90.0.0.0

network 172.28.0.0

auto-summary

!

ip classless

ip http server

!

control-plane
```



```
!  
voice-port 1/0:23  
!  
voice-port 1/1:23  
!  
voice-port 4/0/0  
!  
voice-port 4/0/1  
!  
voice-port 4/1/0  
!  
voice-port 4/1/1  
!  
mgcp  
mgcp call-agent 172.28.221.20 2427 service-type mgcp version 1.0  
mgcp dtmf-relay voip codec all mode nte-ca  
mgcp rtp unreachable timeout 10000  
mgcp package-capability rtp-package  
no mgcp package-capability res-package  
no mgcp package-capability fxr-package  
mgcp default-package gm-package  
no mgcp timer receive-rtcp  
!
```



```
mgcp profile default
```

```
!
```

```
!
```

```
dial-peer cor custom
```

```
!
```

```
!
```

```
dial-peer voice 9899 pots
```

```
destination-pattern 9T
```

```
direct-inward-dial
```

```
!
```

```
dial-peer voice 1125 voip
```

```
destination-pattern 1125
```

```
session target ipv4:172.28.221.146
```

```
!
```

```
dial-peer voice 1126 voip
```

```
destination-pattern 1126
```

```
session target ipv4:172.28.221.146
```

```
!
```

```
dial-peer voice 1 pots
```

```
application mgcpapp
```

```
port 1/0:23
```

```
!
```

```
dial-peer voice 2 pots
```



```
application mgcpapp

port 1/1:23

!

dial-peer voice 7002 voip

destination-pattern 7002

session target ipv4:172.28.221.53

!

dial-peer voice 999410 pots

application mgcpapp

port 4/1/0

!

!

line con 0

exec-timeout 60 0

password cisco

login

line 65

no activation-character

no exec

transport preferred none

transport input all

transport output all

line aux 0
```



```
line vty 0 4

exec-timeout 60 0

password cisco

login

!

end
```

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