



Configuring a Media Gateway to Communicate with the Cisco EGW 2200

Updated 6/2/05

Current through Release 1.1(2)

This topic describes how to configure the following types of media gateways and provides an example configuration for each one:

- A Digital Private Network Signaling System (DPNSS) media gateway used in an IP PBX Cisco CallManager application or Cisco Unity messaging application
- A QSIG or PRI media gateway used in a Cisco Unity messaging application or in a PSTN Interconnect application

Configuring a DPNSS Media Gateway to Communicate with the Cisco EGW 2200

Before You Begin

The media gateway should be installed and configured with a basic configuration.

Perform the following steps on the media gateway to configure communication with the Cisco EGW 2200:

-
- Step 1** Configure and verify MGCP:
- Refer to “Configuring Media Gateway Control Protocol and Related Protocols” at http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/products_configuration_guide_chapter09186a0080080abd.html
- Step 2** Configure and verify DPNSS backhaul (Digital Access Signaling System (DASS) User Adaptation (DUA) over Stream Control Transmission Protocol (SCTP)). Refer to “Digital Private Network Signaling System Backhaul” at http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/products_feature_guide09186a0080182322.html.

An example of the resulting configuration is shown in [Example 1](#).



Corporate Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Copyright © 2004 Cisco Systems, Inc. All rights reserved.



Note This document describes implementing DPNSS backhaul to a Cisco PGW 2200, and is associated with Cisco IOS software Release 12.2 special and early deployments. The procedure is equally applicable to the Cisco EGW and later Cisco IOS software releases.

DPNSS Media Gateway Configuration Examples

Example 1 DPNSS Media Gateway Configuration Example

```

router# show configuration
Using 2110 out of 155640 bytes
!
! Last configuration change at 12:56:48 est Thu Mar 25 2004
! NVRAM config last updated at 12:56:48 est Thu Mar 25 2004
!
version 12.2
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname va-3745-8
!
boot system flash c3745-js-mz.122-15.ZJ.bin
logging queue-limit 100
enable password cisco
!
clock timezone est -5
voice-card 1
  dspfarm
!
voice-card 2
  dspfarm
!
ip subnet-zero
!
no ip domain lookup
ip host egw-16 10.82.81.47 10.82.80.27 10.82.81.46 10.82.80.26 ! mpls ldp logging
neighbor-changes isdn switch-type primary-dpnss ! ! ! ! ! ! ! ! no voice hpi capture
buffer no voice hpi capture destination
!
!
mta receive maximum-recipients 0
iua
  AS 3745-8 10.82.81.27 9900
  ASP egw-15 AS 3745-8 10.82.81.46 10.82.80.26 9900
  ASP egw-16 AS 3745-8 10.82.81.47 10.82.80.27 9900
!
controller E1 1/0
  framing NO-CRC4
  pri-group timeslots 1-31 service mgcp
!
controller E1 1/1
  framing NO-CRC4
  pri-group timeslots 1-31 service mgcp
!
controller E1 2/0
!
controller E1 2/1

```

```

!
!
!
interface FastEthernet0/0
 ip address 10.82.81.27 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/1
 ip address 10.82.80.14 255.255.255.0
 duplex auto
 speed auto
!
interface Serial1/0:15
 no ip address
 no logging event link-status
 isdn switch-type primary-dpss
 isdn incoming-voice voice
 isdn bind-13 iua-backhaul 3745-8
 isdn dpss pbxA
 no cdp enable
!
interface Serial1/1:15
 no ip address
 no logging event link-status
 isdn switch-type primary-dpss
 isdn incoming-voice voice
 isdn bind-13 iua-backhaul 3745-8
 isdn dpss pbxA
 no cdp enable
!
ip http server
ip classless
ip route 0.0.0.0 0.0.0.0 10.82.81.1
!
call rsvp-sync
!
voice-port 1/0:15
!
voice-port 1/1:15
!
mgcp
mgcp call-agent egw-16 service-type mgcp version 1.0
mgcp rtp unreachable timeout 10000
!
mgcp profile default
!
dial-peer cor custom
!
line con 0
 exec-timeout 0 0
 logging synchronous
line aux 0
line vty 0 4
 exec-timeout 0 0
 password cisco
 logging synchronous
 login
!
ntp clock-period 17175919
ntp server 10.82.71.210
End

```

Configuring a QSIG or PRI Media Gateway to Communicate with Cisco EGW

You configure the media gateway the same way for both QSIG or PRI interworking.

Before You Begin

The media gateway should have been installed and configured with a basic configuration.

Perform the following steps on the media gateway.

-
- Step 1** Configure and verify MGCP:
- Refer to “Configuring Media Gateway Control Protocol and Related Protocols” at http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/products_configuration_guide_chapter_09186a0080080abd.html
- Step 2** Configure and verify QSIG (PRI/Q.931 Signaling) backhaul Cisco Reliable User Datagram Protocol (RUDP). Refer to “QSIG Backhaul (RUDP- based) for Cisco IOS Gateways” at http://cisco.com/en/US/products/sw/iosswrel/ps1839/products_feature_guide09186a00800b5dab.html.
- If you configure fault tolerance on the Cisco EGW 2200, configure the session set (backhaul session-manager) as fault tolerant (ft) on the gateway. If the Cisco EGW is standalone, configure the session set as no fault tolerance (nft). on the gateway.
- An example of the resulting configuration, with fault tolerance, is shown in [Example 2](#).



Note This document is associated with Cisco IOS software Release 12.2T. The procedure is equally applicable to later Cisco IOS software releases.

QSIG or PSTN (PRI) Media Gateway Configuration Example

Example 2 QSIG or PSTN (PRI) Media Gateway Configuration Example

```
router# show configuration
Using 2194 out of 520184 bytes
!
version 12.3
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname va-5350-28
!
boot-start-marker
boot system flash c5350-js-mz.123-5a.bin
no boot startup-test
boot-end-marker
!
enable password cisco
!
resource-pool disable
tdm clock priority 1 3/0
spe default-firmware spe-firmware-1
no aaa new-model
```

```

ip subnet-zero
no ip domain lookup
ip host egw15-16 10.82.81.46 10.82.80.26 10.82.81.47 10.82.80.27 ! ip cef
!
backhaul-session-manager
  set set1 client ft
  group egw-16 set set1
  group egw-15 set set1
  session group egw-15 10.82.80.26 7007 10.82.81.4 7007 1
  session group egw-15 10.82.81.46 7007 10.82.81.4 7007 0
  session group egw-16 10.82.80.27 7007 10.82.81.4 7007 1
  session group egw-16 10.82.81.47 7007 10.82.81.4 7007 0
isdn switch-type primary-qsig
!
controller E1 3/0
  framing NO-CRC4
  pri-group timeslots 1-31 service mgcp
!
controller E1 3/1
  framing NO-CRC4
  pri-group timeslots 1-31 service mgcp
!
interface FastEthernet0/0
  ip address 10.82.81.4 255.255.255.0
  duplex auto
  speed auto
!
interface FastEthernet0/1
  ip address 10.82.80.3 255.255.255.0
  duplex auto
  speed auto
!
interface Serial0/0
  no ip address
  shutdown
  clockrate 2000000
!
interface Serial0/1
  no ip address
  shutdown
  clockrate 2000000
!
interface Serial3/0:15
  no ip address
  isdn switch-type primary-qsig
  isdn protocol-emulate network
  isdn bind-13 backhaul set1
  no cdp enable
!
interface Serial3/1:15
  no ip address
  isdn switch-type primary-qsig
  isdn protocol-emulate network
  isdn bind-13 backhaul set1
  no cdp enable
!
interface Group-Async0
  no ip address
  no group-range
!
interface Group-Async1
  no ip address
  group-range 1/00 1/59
!

```

```
ip classless
ip route 0.0.0.0 0.0.0.0 10.82.81.1
no ip http server
!
voice-port 3/0:15
  compand-type a-law
!
voice-port 3/1:15
  compand-type a-law
!
mgcp
mgcp call-agent egw15-16 service-type mgcp version 1.0
!
mgcp profile default
!
line con 0
  exec-timeout 0 0
  logging synchronous
line aux 0
line vty 0 4
  exec-timeout 0 0
  password cisco
  logging synchronous
  login
line 1/00 1/59
  no flush-at-activation
  modem InOut
!
scheduler allocate 10000 400
!
```