



Configuring MGCP CAS MD Package

This chapter provides information on configuring the MGCP channel-associated signaling (CAS) MD Package feature. This feature introduces support for Feature Group D (FGD) Exchange Access North American (EANA) protocol signaling. The CAS MD package adds support for the reporting of automatic number identification (ANI) and dialed number identification service (DNIS) digits to enable the MGCP call agent to better handle customer billing.

For more information about this and related Cisco IOS voice features, see the following:

- "Overview of MGCP and Related Protocols" on page 3
- Entire Cisco IOS Voice Configuration Library--including library preface and glossary, other feature documents, and troubleshooting documentation--at http://www.cisco.com/univercd/cc/td/doc/product/software/ios123/123cgcr/voice_c/vcl.htm .

Feature History for MGCP CAS MD Package

Release	Modification
12.4(4)T	This feature was introduced on the Cisco AS5850.
12.4(15)T	Support was added for the Cisco AS5350, Cisco AS5350XM, Cisco AS5400XM, and Cisco AS5400HPX platforms.

- [Finding Feature Information, on page 1](#)
- [Prerequisites for MGCP CAS MD Package, on page 2](#)
- [Restrictions for MGCP CAS MD Package, on page 2](#)
- [Information About MGCP CAS MD Package, on page 2](#)
- [How to Configure the MGCP CAS MD Package, on page 2](#)
- [Configuration Examples for MGCP CAS MD Package, on page 5](#)

Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see [Bug Search Tool](#) and the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the feature information table.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to www.cisco.com/go/cfn. An account on Cisco.com is not required.

Prerequisites for MGCP CAS MD Package

Prerequisites are described in "Prerequisites for Configuring MGCP and Related Protocols" on page 3.

Restrictions for MGCP CAS MD Package

FGD Exchange Access International (EAIN) signaling is not supported.

Information About MGCP CAS MD Package

MD Package

The MD package supports the FGD EANA protocol for T1 CAS interfaces as defined in RFC 3064. It includes support for ANI and DNIS reporting that enables the MGCP call agent to improve its handling of customer billing. The MD package is enabled automatically when a T1 interface is configured using the **ds0-group** command with the **fgd-eana** keyword. The order in which the voice gateway sends the ANI and DNIS digits can be controlled by using the **notify** command in the MGCP profile.

How to Configure the MGCP CAS MD Package

**Note**

You do not have to enable the CAS MD package with the **mgcp package-capability** command. The CAS MD package is enabled automatically when a T1 controller is configured for FGD EANA signaling using the **ds0-group** command.

Configuring the Incoming Called Number in the MGCP Dial Peer

Perform this procedure to specify the dial string to use for matching incoming calls to the MGCP dial peer.

SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **dial-peer voice** *tag* **pots**
4. **service mgcpapp**
5. **incoming called number** *string*
6. **port** *port*
7. **end**

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: <pre>Router> enable</pre>	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	configure terminal Example: <pre>Router# configure terminal</pre>	Enters global configuration mode.
Step 3	dial-peer voice tag pots Example: <pre>Router(config)# dial-peer voice 1003 pots</pre>	Defines a dial peer as a POTS device and enters dial-peer configuration mode.
Step 4	service mgcpapp Example: <pre>Router(config-dial-peer)# service mgcpapp</pre>	Enables MGCP on the dial peer. Note Do not use this command in dial peers that support PRI backhaul or BRI backhaul.
Step 5	incoming called number string Example: <pre>Router(config-dial-peer)# incoming called number .</pre>	Specifies the digit string that is used to match incoming calls to the dial peer.
Step 6	port port Example: <pre>Router(config-dial-peer)# port 0/0:3:0</pre>	Binds the MGCP application to the specified voice port.
Step 7	end Example: <pre>Router(config-dial-peer)# end</pre>	Exits to privileged EXEC mode.

Modifying ANI and DNIS Order when Using CAS MD Package

Perform this procedure to specify the order in which ANI and DNIS digits are sent in notify messages to the call agent when using the CAS MD package.

SUMMARY STEPS

1. **enable**
2. **configure terminal**

3. **mgcp profile** *{profile-name | default}*
4. **notify** *{ani-dnis | dnis-ani}*
5. **end**
6. **show mgcp profile** *[profile-name]*

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable Example: <pre>Router> enable</pre>	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	configure terminal Example: <pre>Router# configure terminal</pre>	Enters global configuration mode.
Step 3	mgcp profile <i>{profile-name default}</i> Example: <pre>Router(config)# mgcp profile default</pre>	Defines an MGCP profile to be associated with one or more MGCP endpoints.
Step 4	notify <i>{ani-dnis dnis-ani}</i> Example: <pre>Router(config-mgcp-profile)# notify dnis-ani</pre>	Specifies the order in which ANI and DNIS digits are reported to the MGCP call agent. • ani-dnis --ANI digits are sent in the first notify message. This is the default order. • dnis-ani --DNIS digits are sent in the first notify message.
Step 5	end Example: <pre>Router(config-mgcp-profile)# end</pre>	Exits to privileged EXEC mode.
Step 6	show mgcp profile <i>[profile-name]</i> Example: <pre>Router# show mgcp profile default</pre>	Displays configuration information for MGCP profiles including the setting of the notify command.

Configuration Examples for MGCP CAS MD Package

CAS MD Package Configuration Example

The following example shows the significant portions of a configuration for the CAS MD package.

```
...
controller T1 0/0:3
  framing esf
  ds0-group 0 timeslots 1 type fgd-eana mf ani-dnis
!
controller T1 0/0:4
  framing esf
  ds0-group 0 timeslots 1 type fgd-eana mf ani-dnis
...
mgcp profile default
  notify dnis-ani
!
!
dial-peer voice 1003 pots
  service mgcpapp
  incoming called-number .
  port 0/0:3:0
!
dial-peer voice 1004 pots
  service mgcpapp
  incoming called-number .
  port 0/0:4:0
...

```

Cisco AS5850 Configuration Example

The following example shows a complete running configuration for a Cisco AS5850 universal gateway that is using the CAS MD package.

```
Current configuration : 2636 bytes
!
version 12.4
no service pad
service timestamps debug datetime msec localtime
service timestamps log datetime msec localtime
no service password-encryption
service internal
!
hostname Sample
!
boot-start-marker
boot system flash:c5850-p9-mz
boot-end-marker
!
!
redundancy
  mode classic-split
logging buffered 20000000 debugging
no logging console
enable password temp

```

Configuring MGCP CAS MD Package

```
no ip route-cache distributed
no ip route-cache
!
interface FastEthernet6/0
ip address 172.16.0.46 255.255.255.0
no ip proxy-arp
logging event link-status
speed 100
full-duplex
no keepalive
!
interface GigabitEthernet6/0
no ip address
logging event link-status
shutdown
negotiation auto
!
interface GigabitEthernet6/1
no ip address
logging event link-status
shutdown
negotiation auto
!
interface Group-Async0
no ip address
encapsulation ppp
group-range 0/00 3/323
!
!
ip classless
ip route 0.0.0.0 0.0.0.0 172.16.0.200
no ip http server
!
!
!
!
!
voice-port 0/0:1:0
!
voice-port 0/0:2:0
!
voice-port 0/0:3:0
!
voice-port 0/0:4:0
!
mgcp
mgcp call-agent 172.16.0.200 18384 service-type mgcp version 0.1
mgcp package-capability dtmf-package
mgcp package-capability mf-package
mgcp package-capability rtp-package
no mgcp piggyback message
mgcp persistent onhook
mgcp fax t38 inhibit
!
mgcp profile default
!
!
dial-peer voice 1003 pots
service mgcpapp
incoming called-number .
port 0/0:3:0
!
dial-peer voice 1004 pots
```

```
service mgcpapp
incoming called-number .
port 0/0:4:0
!
!
!
line con 0
exec-timeout 0 0
transport output all
line aux 0
exec-timeout 0 0
transport output all
line vty 0 4
exec-timeout 0 0
privilege level 15
no login
transport input all
transport output all
line 0/00 0/215
modem InOut
transport input all
line 3/00 3/323
modem InOut
transport input all
!
end
```