

配置基本網守呼叫准入控制

目錄

[簡介](#)

[必要條件](#)

[需求](#)

[採用元件](#)

[慣例](#)

[背景資訊](#)

[bandwidth\(gatekeeper\)指令](#)

[設定](#)

[網路圖表](#)

[組態](#)

[驗證](#)

[疑難排解](#)

[疑難排解指令](#)

[顯示和調試輸出示例](#)

[相關資訊](#)

簡介

本文檔提供了基本網守呼叫准入控制的示例配置。

必要條件

需求

在網關能夠從網守獲得正確的地址解析之前，需要滿足幾個條件。當涉及低速鏈路時，每個VoIP解決方案都有幾個重要點需要驗證。

嘗試此設定之前，請確保符合以下要求：

- 所有網關都應註冊到相應的網守
- 所有網守都應具有正確的撥號計畫，以便他們能夠決定呼叫的路由。
- 准入控制可以配置為限制某些區域之間的呼叫號碼。

由於[配置](#)部分考慮了前兩點，因此我們將重點介紹「背景資訊」部分中的[准入控制](#)。

採用元件

本文中的資訊係根據以下軟體和硬體版本：

- 三台Cisco 2600路由器。
- Cisco IOS[®]軟體版本12.2.8.5 ENTERPRISE PLUS/H323 MCM。

本文中的資訊是根據特定實驗室環境內的裝置所建立。文中使用到的所有裝置皆從已清除（預設）的組態來啟動。如果您在即時網路中工作，請確保在使用任何命令之前瞭解其潛在影響。

慣例

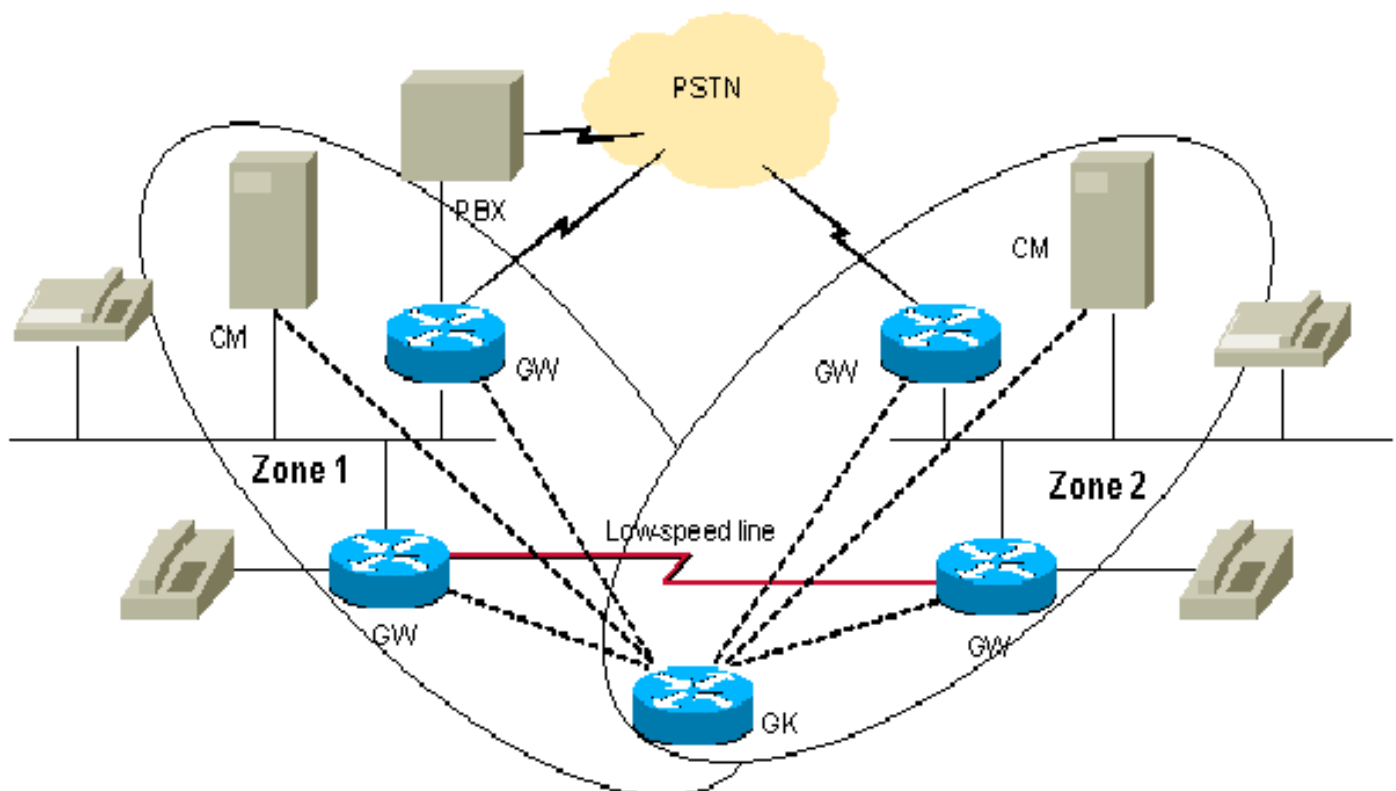
如需文件慣例的詳細資訊，請參閱[思科技術提示慣例](#)。

背景資訊

此示例配置研究具有雙區域拓撲的VoIP網路，該網路由在兩個區域中均具有三個網關的一個網守管理。本文檔的目的是提供一個准入控制配置的簡單示例，該配置將策略應用於區域之間及其內部的呼叫數。本文包含有關已設定功能、設計准則、基本驗證和疑難排解策略的技術背景資訊。

注意：在此配置中，四台路由器位於同一個LAN中。但是，在實際拓撲中，所有裝置都可能位於網路的不同部分。

在實際網路中，高優先順序流量的來源通常有多種。區分這些條件是一項複雜的工作，因為它們數量眾多，而且容易被忽視。然而，在現實生活中經常發生的幾種常見情況值得考慮。當提供流量優先順序的路由器本身不是此類流量的來源時，准入控制就成為一個問題。典型的拓撲涉及兩個站點上的多個語音網關，這些語音網關通過一對路由器提供的鏈路連線。另一種拓撲涉及兩個站點上具有IP電話的Cisco CallManager，以及PSTN或PBX的網關。在這兩種情況下，我們都有多個來自鏈路兩端的語音流量來源。



有時，如果語音流量超過了優先順序隊列配置的頻寬，則語音品質可能會出現問題。這是因為產生流量的路由器和Cisco CallManager/IP電話在上面給出的設計中沒有對呼叫准入的集中管理。在這種情況下，超出頻寬的封包將被捨棄。

有幾種方法可避免這種情況。最簡單的解決方案是在低延遲隊列(LLQ)中配置語音頻寬，以接受來自所有源的最大呼叫數。如果沒有語音流量，則未使用的頻寬將被授予資料流。當鏈路的總頻寬大於最大呼叫數所需的頻寬時，可以完成此操作。

更明智的方法是對來自鏈路兩端的每個語音流量源應用限制。執行此操作時，來自所有站點的總頻寬將不會超過建議站點間鏈路實際頻寬的75%。要應用這些限制，請使用VoIP撥號對等體配置下的**max-conn**命令。如果我們假設僅在一個中心站點存在Cisco CallManager，我們可以使用其功能限制到沒有CallManager的分支站點的呼叫數。此方法允許我們管理語音流量來源可能超額訂閱連結的情況。這種方法的缺點是不能靈活使用授予源的頻寬。此方法不允許某些網關發出額外呼叫，即使此時有可用頻寬。

最靈活的方法是使用單獨的實體進行集中呼叫准入控制：守門員。網守幫助將兩個站點與兩個Cisco CallManager (或CallManager集群) 繫結。

附註： 使用網守並不一定意味著購買新的獨立路由器。根據呼叫數量和路由器的負載，您可以使用適當的Cisco IOS功能集為Enterprise/PLUS/H323，在現有路由器之一上配置網守。這有助於管理小型分支機構，並僅允許在中心站點配置專用網守。

應謹慎考慮網守方法，以免路由器承受額外的負載。此外，您應檢查拓撲是否允許以這種方式設定網守以避免關鍵鏈路上的額外流量。

一般建議使用單獨的思科路由器作為網路中的專用網守，其數量適合您的拓撲。

請考慮以上拓撲。在這裡，您可以將所有裝置放入由單個網守管理的兩個本地區域中。這允許您在每個區域中有大量呼叫，但會限制它們之間的呼叫數。在我們的測試示例中，我們將兩個區域之間的頻寬限制為一個呼叫，並允許其中一個區域最多兩個(較多數)呼叫。

有關此問題的詳細資訊，請參閱[VoIP呼叫准入控制](#)。

要完成任務，請使用[思科高效能閘道管理員](#)中介紹的**bandwidth(gatekeeper)**命令

[bandwidth\(gatekeeper\)指令](#)

要指定H.323流量的最大聚合頻寬，請使用**bandwidth gatekeeper**配置命令。要禁用該功能，請使用此命令的**no**形式。

注意： 此命令允許您限制通過來自區域的單個鏈路的頻寬。如果拓撲允許您通過多條路徑從一個區域到另一個區域發出呼叫，則鏈路很容易會超額使用。請考慮使用此拓撲：兩個區域通過兩條路徑連線，每個路徑只允許一個呼叫。如果頻寬受一次呼叫的限制，則不會使用第二條路徑。但如果頻寬受兩個呼叫的限制，則其中一條鏈路可能會超額使用。因此，此命令可以應用於只有一個路徑到達所有其他區域的區域。「集中星型」拓撲是一個例外。雖然集線器有多個路徑，但它不會超額訂閱鏈路，因為每個鏈路的分支上的呼叫數量會受到限制。

bandwidth {interzone |總計 | session} {default | zone zone-name} bandwidth-size

無頻寬{interzone |總計 | session} {default | zone zone-name} bandwidth-size

[語法說明](#)

下表介紹了語法：

語法	說明
----	----

interzone	指定從區域到任何其他區域的H.323流量的總頻寬量。
總計	指定區域中允許的H.323流量的總頻寬量。
會話	指定區域中會話允許的最大頻寬。
預設	指定所有區域的預設值。
區域 zone-name	指定特定區域。為特定區域命名。
頻寬大小	最大頻寬。對於interzone和total，範圍是從1到10,000,000 kbps。session的範圍是從1到5,000 kbps。

預設值

無

命令模式

網守配置

命令歷史記錄

下表描述了命令歷史記錄：

版本	修改
12.1(3)XI	引入了此命令。
12.1(5)XM	未使用zone gatekeeper命令即可識別bandwidth命令。
12.2(2)噸	此命令已整合到Cisco IOS軟體版本12.2(2)T中。
12.2(2)XB1	此命令在Cisco AS5850通用網關上實施。

使用指南

在先前的Cisco IOS軟體版本中，bandwidth指令的功能是使用zone gatekeeper指令取得的。

範例

以下示例將區域的最大頻寬配置為5,000 kbps:

```
Router(config)# gatekeeper
Router(config-gk)# bandwidth total default 5000
```

相關命令

[bandwidth remote](#) — 指定此網守與任何其他網守之間的H.323流量的總頻寬。

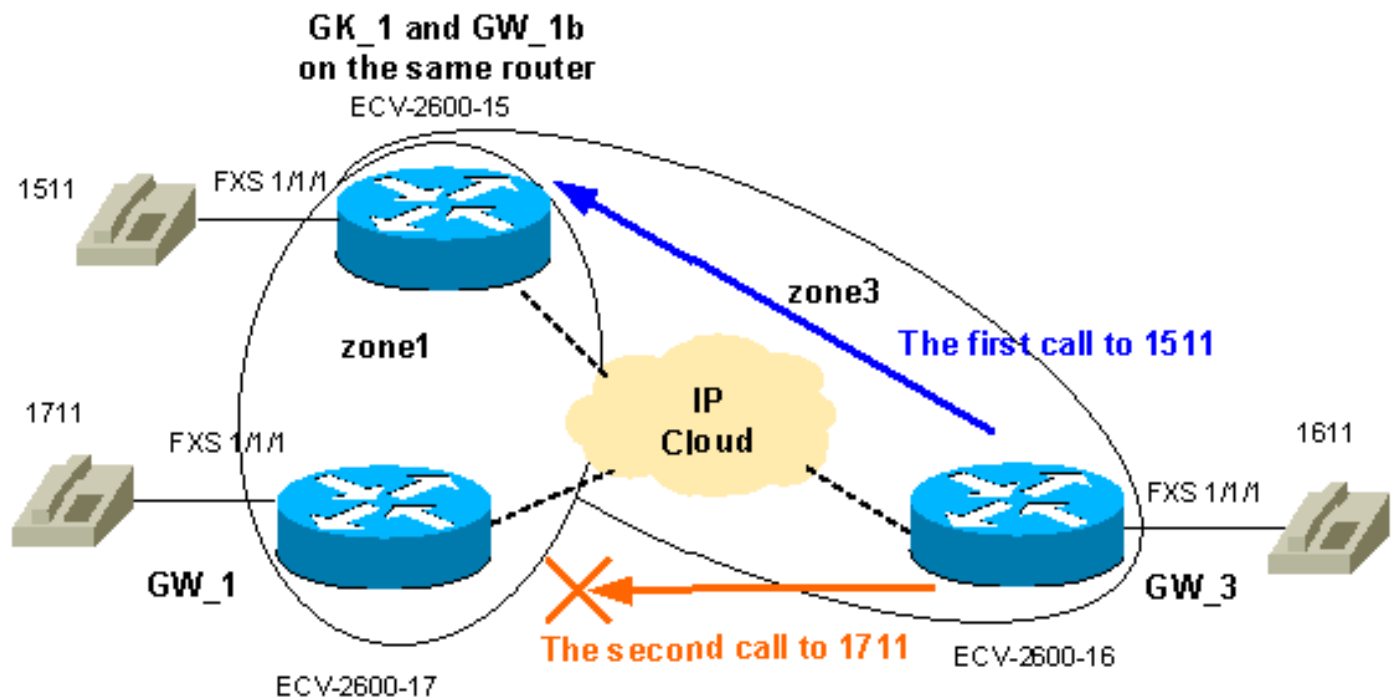
設定

本節提供用於設定本文中所述功能的資訊。

注意：要查詢有關本文檔中使用的命令的其他資訊，請使用[命令查詢工具](#)([僅限註冊客戶](#))。

網路圖表

本檔案會使用以下網路設定：



組態

目標是將zone1和zone3之間的可用頻寬限制為一個呼叫，並允許zone1中有更多呼叫（在本示例中最多兩個呼叫）。因此，我們將滿足典型呼叫准入任務的常規要求。註冊、准入和狀態協定(RAS)消息先於H225呼叫建立消息。接著H4245協商，它實際上定義了雙方的能力。因此在呼叫准入階段和RAS消息交換之後定義呼叫的實際頻寬。因此，網守將每個呼叫視為64kb呼叫。因此，應該以64kb的增量增加語音呼叫區域之間的頻寬限制。

注意：GW_3與網守配置在同一路由器上，以說明低端分支機構的這種可能性。

註：驗證網守和網關配置是排除GK-GW問題的重要部分。因此，為了簡化對配置的理解，已刪除了所有不相關的配置命令。

GW_1 ECV-2600-17

```
IOS (tm) C2600 Software (C2600-JSX-M), Version 12.2(7a),  
RELEASE SOFTWARE (fc1)  
!  
hostname ECV-2610-17  
!  
!
```

```
interface Ethernet0/0
 ip address 10.52.218.49 255.255.255.0
 h323-gateway voip interface
 h323-gateway voip id gk-zone1.test.com ipaddr
10.52.218.47 1718
 h323-gateway voip h323-id gw_1
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.52.218.49
!
voice-port 1/1/0
!
voice-port 1/1/1
!
!
dial-peer voice 1 voip
 destination-pattern ....
 session target ras
!
dial-peer voice 2 pots
 destination-pattern 1711
 port 1/1/1
 no register e164
!
gateway
!
end
```

GW_2 ECV-2600-16

```
!
hostname ECV-2610-16
!
!
interface Ethernet0/0
 ip address 10.52.218.48 255.255.255.0
 h323-gateway voip interface
 h323-gateway voip id gk-zone3.test.com ipaddr
10.52.218.47 1718
 h323-gateway voip h323-id gw_3
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.52.218.48
!
!
voice-port 1/1/0
!
voice-port 1/1/1
!
!
dial-peer voice 1 voip
 destination-pattern ....
 session target ras
!
dial-peer voice 2 pots
 destination-pattern 1611
 port 1/1/1
 no register e164
!
gateway
!
!
end
```

GK_1 ECV-2600-15

```

hostname ECV-2610-15
!
boot system tftp c2600-jsx-mz.122-7a.bin 10.52.218.2
!
interface Ethernet0/0
 ip address 10.52.218.47 255.255.255.0
 half-duplex
 h323-gateway voip interface
 h323-gateway voip id gk-zone1.test.com ipaddr
10.52.218.47 1718
 h323-gateway voip h323-id gw_1b
 h323-gateway voip tech-prefix 1#
 h323-gateway voip bind srcaddr 10.52.218.47
!
!
voice-port 1/1/0
!
voice-port 1/1/1
!
!
dial-peer voice 6 pots
 destination-pattern 1511
 port 1/1/1
 no register e164
!
!
dial-peer voice 5 voip
 destination-pattern ....
 session target ras
!
gateway
!
!
gatekeeper
 zone local gk-zone1.test.com test.com 10.52.218.47
 zone local gk-zone3.test.com test.com
 zone prefix gk-zone1.test.com 15.. gw-priority 10 gw_1b
 zone prefix gk-zone3.test.com 16.. gw-priority 10 gw_3
 zone prefix gk-zone1.test.com 17.. gw-priority 10 gw_1
 gw-type-prefix 1#* default-technology
bandwidth interzone zone gk-zone1.test.com 64
!--- Applies the restriction between gk-zone1, and all
!--- other zones to 64bk. That allows one call only.
bandwidth total zone gk-zone1.test.com 128
!--- Applies the restriction to the total number of
calls in zone1, !--- and allows two call in the gk-
zone1. no shutdown
!
end

ECV-2610-15#

```

驗證

本節提供的資訊可用於確認您的組態是否正常運作。

[輸出直譯器工具](#)(僅供註冊客戶使用)支援某些show命令，此工具可讓您檢視show命令輸出的分析。

- **show gateway** — 顯示網關註冊狀態。
- **show gatekeeper endpoints** — 列出註冊到網守的所有網關。
- **show gatekeeper zone prefix** — 顯示網守上配置的所有區域字首。
- **show gatekeeper call** — 顯示網守處理的活動呼叫。

疑難排解

本節提供的資訊可用於對組態進行疑難排解。

疑難排解指令

[輸出直譯器工具](#) (僅供註冊客戶使用) 支援某些 **show** 命令，此工具可讓您檢視 **show** 命令輸出的分析。

注意：發出 **debug** 指令之前，請先參閱 [有關 Debug 指令的重要資訊](#)。

- **debug h225 asn1** — 顯示 H225 (RAS 和 Q931 呼叫設定) 消息。
- **debug cch323 h225** — 顯示 H225 呼叫建立消息。

以下是一些有用的連結：

- [VoIP 呼叫故障排除和調試 — 基本知識](#)
- [VoIP Debug 指令](#)
- [Cisco IOS 語音、視訊和傳真命令參考，版本 12.2](#)

顯示和調試輸出示例

!--- First step is to check the gateway registrations. **!---** On the first gateway:

```
ECV-2610-17#show gateway
Gateway gw_1 is registered to Gatekeeper gk-zone1.test.com
```

```
Alias list (CLI configured)
```

```
H323-ID gw_1
```

```
Alias list (last RCF)
```

```
H323-ID gw_1
```

```
H323 resource thresholding is Disabled
```

```
ECV-2610-17#
```

!--- And on the second Gateway: ECV-2610-16#**show gateway**

```
Gateway gw_3 is registered to Gatekeeper gk-zone3.test.com
```

```
Alias list (CLI configured)
```

```
H323-ID gw_3
```

```
Alias list (last RCF)
```

```
H323-ID gw_3
```

```
H323 resource thresholding is Disabled
```

```
ECV-2610-16#-----
```

!--- The same on the third Gateway: ECV-2610-15#**show gateway**

```
Gateway gw_1b is registered to Gatekeeper gk-zone1.test.com
```

```
Alias list (CLI configured)
```


H323-ID gw_1b
Alias list (last RCF)
H323-ID gw_1b

H323 resource thresholding is Disabled

ECV-2610-15#-----

!--- And on the corresponding Gatekeeper: ECV-2610-15#show gatekeeper end

GATEKEEPER ENDPOINT REGISTRATION

=====

CallSignalAddr	Port	RASignalAddr	Port	Zone Name	Type	F
----------------	------	--------------	------	-----------	------	---

10.52.218.47	1720	10.52.218.47	58841	gk-zone1.test.com	VOIP-GW	
--------------	------	--------------	-------	-------------------	---------	--

H323-ID: gw_1b

10.52.218.48	1720	10.52.218.48	59067	gk-zone3.test.com	VOIP-GW	
--------------	------	--------------	-------	-------------------	---------	--

H323-ID: gw_3

10.52.218.49	1720	10.52.218.49	52887	gk-zone1.test.com	VOIP-GW	
--------------	------	--------------	-------	-------------------	---------	--

H323-ID: gw_1

Total number of active registrations = 3

ECV-2610-15#

!--- To check the dial plan on the Gatekeeper:

ECV-2610-15#show gatekeeper zone pre

ZONE PREFIX TABLE

=====

GK-NAME E164-PREFIX

gk-zone1.test.com 15..

gk-zone3.test.com 16..

gk-zone1.test.com 17..

ECV-2610-15#

!--- All configured prefixes should be seen in the zone list. -----

----- **!--- To check the zone status on the Gatekeeper:** !--- The output shows one permitted interzone call.

ECV-2610-15#show gatekeeper zone st

GATEKEEPER ZONES

=====

GK name	Domain Name	RAS Address	PORT	FLAGS
---------	-------------	-------------	------	-------

!--- The output shows the bandwidth restrictions for this zone. gk-zone1.test.com

10.52.218.47 1719 LS

BANDWIDTH INFORMATION (kbps) :

Maximum total bandwidth : 128

Current total bandwidth : 64

Maximum interzone bandwidth : 64

Current interzone bandwidth : 64

Maximum session bandwidth :

Total number of concurrent calls : 1

SUBNET ATTRIBUTES :

All Other Subnets : (Enabled)

PROXY USAGE CONFIGURATION :

Inbound Calls from all other zones :

to terminals in local zone gk-zone1.test.com : use proxy

to gateways in local zone gk-zone1.test.com : do not use proxy

to MCUs in local zone gk-zone1.test.com : do not use proxy

Outbound Calls to all other zones :

from terminals in local zone gk-zone1.test.com : use proxy

from gateways in local zone gk-zone1.test.com : do not use proxy

from MCUs in local zone gk-zone1.test.com : do not use proxy

!--- There are no bandwidth restrictions for this zone. gk-zone3.tes test.com 10.52.218.47 1719

LS

BANDWIDTH INFORMATION (kbps) :

Maximum total bandwidth :

Current total bandwidth : 64

Maximum interzone bandwidth :

Current interzone bandwidth : 64

Maximum session bandwidth :

Total number of concurrent calls : 1

SUBNET ATTRIBUTES :

All Other Subnets : (Enabled)

PROXY USAGE CONFIGURATION :

Inbound Calls from all other zones :

to terminals in local zone gk-zone3.test.com : use proxy

to gateways in local zone gk-zone3.test.com : do not use proxy

to MCUs in local zone gk-zone3.test.com : do not use proxy

Outbound Calls to all other zones :

from terminals in local zone gk-zone3.test.com : use proxy

from gateways in local zone gk-zone3.test.com : do not use proxy

from MCUs in local zone gk-zone3.test.com : do not use proxy

ECV-2610-15#

ECV-2610-15#show gatekeeper call

Total number of active calls = 1.

GATEKEEPER CALL INFO

=====

LocalCallID	Age(secs)	BW			
5-0	1	64 (Kbps)			
Endpt(s): Alias	E.164Addr	CallSignalAddr	Port	RASignalAddr	Port
src EP: gw_3	1611	10.52.218.48	1720	10.52.218.48	59067
dst EP: gw_1b	1511	10.52.218.47	1720	10.52.218.47	58841

ECV-2610-15#

!--- The output shows that we reach maximum number of calls for gk-zone1. ECV-2610-15# ECV-2610-

15#show gatekeeper zone st

GATEKEEPER ZONES

=====

GK name	Domain Name	RAS Address	PORT	FLAGS
gk-zone1.tes	test.com	10.52.218.47	1719	LS

BANDWIDTH INFORMATION (kbps) :

Maximum total bandwidth : 128

Current total bandwidth : 128

Maximum interzone bandwidth : 64

Current interzone bandwidth : 64

Maximum session bandwidth :

Total number of concurrent calls : 2

SUBNET ATTRIBUTES :

All Other Subnets : (Enabled)

PROXY USAGE CONFIGURATION :

Inbound Calls from all other zones :

to terminals in local zone gk-zone1.test.com : use proxy

to gateways in local zone gk-zone1.test.com : do not use proxy

to MCUs in local zone gk-zone1.test.com : do not use proxy

Outbound Calls to all other zones :

from terminals in local zone gk-zone1.test.com : use proxy

from gateways in local zone gk-zone1.test.com : do not use proxy

from MCUs in local zone gk-zone1.test.com : do not use proxy

gk-zone3.tes test.com 10.52.218.47 1719 LS

BANDWIDTH INFORMATION (kbps) :

Maximum total bandwidth :

Current total bandwidth : 64

Maximum interzone bandwidth :

Current interzone bandwidth : 64

Maximum session bandwidth :

Total number of concurrent calls : 1

SUBNET ATTRIBUTES :

All Other Subnets : (Enabled)

PROXY USAGE CONFIGURATION :

Inbound Calls from all other zones :

to terminals in local zone gk-zone3.test.com : use proxy

to gateways in local zone gk-zone3.test.com : do not use proxy

to MCUs in local zone gk-zone3.test.com : do not use proxy

Outbound Calls to all other zones :

from terminals in local zone gk-zone3.test.com : use proxy

from gateways in local zone gk-zone3.test.com : do not use proxy

from MCUs in local zone gk-zone3.test.com : do not use proxy

gk-zone2.test.com 10.52.218.46 1719 RS

ECV-2610-15#

ECV-2610-15#show gatekeeper call

Total number of active calls = 2.

GATEKEEPER CALL INFO

=====

LocalCallID	Age(secs)	BW			
20-33504	49	64 (kbps)			
Endpt(s): Alias	E.164Addr	CallSignalAddr	Port	RASSignalAddr	Port
src EP: gw_3	1611	10.52.218.48	1720	10.52.218.48	49762
dst EP: gw_1b	1510	10.52.218.47	1720	10.52.218.47	52344
LocalCallID	Age(secs)	BW			
21-22720 36		64 (Kbps)			
Endpt(s): Alias	E.164Addr	CallSignalAddr	Port	RASSignalAddr	Port
src EP: gw_1	1711	10.52.218.49	1720	10.52.218.49	54114
dst EP: gw_1b	1511	10.52.218.47	1720	10.52.218.47	52344

ECV-2610-15#

!--- The conversation between the gateway and gatekeeper consists of !--- an exchange of RAS messages. !--- We start call to 1511 from GW_3. ECV-2610-16#deb h225 asn1

H.225 ASN1 Messages debugging is on

ECV-2610-16#

*Mar 1 14:22:20.972: RAS OUTGOING PDU ::=

value RasMessage ::= admissionRequest :

```
{
  requestSeqNum 970
  callType pointToPoint : NULL
  callModel direct : NULL
  endpointIdentifier {"8262B76400000019"}
  destinationInfo
  {
    e164 : "1511"
  }
  srcInfo
  {
    h323-ID : {"gw_3"}
  }
  bandwidth 640
  callReferenceValue 23
}
```

```
nonStandardData
{
  nonStandardIdentifier h221NonStandard :
  {
    t35CountryCode 181
    t35Extension 0
    manufacturerCode 18
  }
  data '000000'H
  }
  conferenceID '00000000000000000000000000000000'H
  activeMC FALSE
  answerCall FALSE
  canMapAlias TRUE
  callIdentifier
{
  guid '00000000000000000000000000000000'H
  }
  willSupplyUUIEs FALSE
  }
}
```

```
*Mar 1 14:22:20.992: RAS OUTGOING ENCODE BUFFER ::= 27 8803C900 F0003800 32003600
32004200 37003600 34003000 30003000 30003000 30003100 39010180 48440140 03006700
77005F00 33400280 001740B5 00001203 00000000 00000000 00000000 00000000 00000004
E0200180 11000000 00000000 00000000 00000000 00000100
```

```
*Mar 1 14:22:21.008:
```

```
*Mar 1 14:22:21.073: RAS INCOMING ENCODE BUFFER ::= 2B 0003C940 0280000A 34DA2F06
B800EF14 00C00100 020000
```

```
*Mar 1 14:22:21.077:
```

```
*Mar 1 14:22:21.081: RAS INCOMING PDU ::=
```

```
!--- The GW_3 gets permission to proceed with that call. value RasMessage ::= admissionConfirm :
```

```
{
  requestSeqNum 970
  bandwidth 640
  callModel direct : NULL
  destCallSignalAddress ipAddress :
{
  ip '0A34DA2F'H
  port 1720
  }
  irrFrequency 240
  willRespondToIRR FALSE
  uuiesRequested
{
  setup FALSE
  callProceeding FALSE
  connect FALSE
  alerting FALSE
  information FALSE
  releaseComplete FALSE
  facility FALSE
  progress FALSE
  empty FALSE
  }
  }
}
```

```
!--- The Call setup message from GW_3 follows. *Mar 1 14:22:21.105: H225.0 OUTGOING PDU ::=
```

```
value H323_UserInformation ::=
```

```
{
  h323-uu-pdu
{
  h323-message-body setup :
```

```

{
  protocolIdentifier { 0 0 8 2250 0 2 }
  sourceAddress
{
  h323-ID : {"gw_3"}
}
  sourceInfo
{
  gateway
{
  protocol
{
  voice :
{
  supportedPrefixes
{
  {
  prefix e164 : "1#"
  }
  }
  }
  }
  }
  mc FALSE
  undefinedNode FALSE
  }
  activeMC FALSE
  conferenceID '00000000000000000000000000000000'H
  conferenceGoal create : NULL
  callType pointToPoint : NULL
  sourceCallSignalAddress ipAddress :
{
  ip '0A34DA30'H
  port 11018
  }
  callIdentifier
{
  guid '00000000000000000000000000000000'H
  }
  fastStart
{
  '0000000D4001800A040001000A34DA3041C5'H,
  '400000060401004D40018011140001000A34DA30...'H
  }
  mediaWaitForConnect FALSE
  canOverlapSend FALSE
  }
  h245Tunneling FALSE
  }
}

```

```

*Mar 1 14:22:21.141: H225.0 OUTGOING ENCODE BUFFER::= 20
A0060008 914A0002 01400300

```

```

67007700 5F003308 80013C05 04010020 40000000 00000000 00000000 00000000 00000045
1C07000A 34DA302B 0A110000 00000000 00000000 00000000 00000032 02120000 000D4001
800A0400 01000A34 DA3041C5 1D400000 06040100 4D400180 11140001 000A34DA 3041C400
0A34DA30 41C50100 01000680 0100

```

```

*Mar 1 14:22:21.161:

```

```

*Mar 1 14:22:21.417: H225.0 INCOMING ENCODE BUFFER::= 21
80060008 914A0002 00048811

```

```

00000000 00000000 00000000 00000000 00390219 0000000D 40018011 14000100 0A34DA2F
486E000A 34DA2F48 6F1D4000 00060401 004D4001 80111400 01000A34 DA3041C4 000A34DA
2F486F06 800100

```

```
*Mar 1 14:22:21.429:
*Mar 1 14:22:21.429: H225.0 INCOMING PDU ::=
!--- The GW_3 gets Call Proceeding from GW_1b. value H323_UserInformation ::= { h323-uu-pdu {
h323-message-body callProceeding :
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  destinationInfo
{
  mc FALSE
  undefinedNode FALSE
  }
  callIdentifier
{
  guid '00000000000000000000000000000000'H
  }
  fastStart
{
  '0000000D40018011140001000A34DA2F486E000A...'H,
  '400000060401004D40018011140001000A34DA30...'H
  }
  }
  h245Tunneling FALSE
  }
  }
```

```
*Mar 1 14:22:21.617: H225.0 INCOMING ENCODE BUFFER::= 28
001A0006 0008914A 00020000
00000000 00000000 00000000 00000000 06A00100 120140B5 0000120B 60011000 011E041E
028188
```

```
*Mar 1 14:22:21.626:
```

```
*Mar 1 14:22:21.626: H225.0 INCOMING PDU ::=
!--- The GW_3 geta Call Progress from GW_1b. value H323_UserInformation ::= { h323-uu-pdu {
h323-message-body progress :
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  destinationInfo
{
  mc FALSE
  undefinedNode FALSE
  }
  callIdentifier
{
  guid '00000000000000000000000000000000'H
  }
  }
  h245Tunneling FALSE
  nonStandardControl
{
  {
  nonStandardIdentifier h221NonStandard :
{
t35CountryCode 181
t35Extension 0
manufacturerCode 18
  }
  data '60011000011E041E028188'
  }
  }
  }
```

```
*Mar 1 14:22:21.642: H225 NONSTD INCOMING ENCODE BUFFER ::= 60
01100001 1E041E02 8188
*Mar 1 14:22:21.646:
*Mar 1 14:22:21.646: H225 NONSTD INCOMING PDU ::=
!--- The GW_3 get some facility messages from GW_1b. value H323_UU_NonStdInfo ::= { version 16
protoParam qsigNonStdInfo :
{
 iei 30
rawMesg '1E028188'H
}
}

*Mar 1 14:22:22.831: %SYS-3-MGDTIMER: Running timer, init, timer = 81F1AC08.
-Process= "Virtual Exec", ipl= 0, pid= 61
-Traceback= 803250A4 80325214 80325318 80EB12C0
80EB17DC 802A65F0 802B5080 8033D818
*Mar 1 14:22:22.835: H225 NONSTD OUTGOING PDU ::=

value ARQnonStandardInfo ::=
{
  sourceAlias
{
}
  sourceExtAlias
{
}
}

*Mar 1 14:22:22.839: H225 NONSTD OUTGOING ENCODE
BUFFER ::= 00 0000
*Mar 1 14:22:22.839:
*Mar 1 14:22:22.839: RAS OUTGOING PDU ::=
!--- The GW_3 starts the second Call to 1711 now we send RAS message to GK. value RasMessage ::=
admissionRequest :
{
  requestSeqNum 971
  callType pointToPoint : NULL
  callModel direct : NULL
  endpointIdentifier {"8262B76400000019"}
  destinationInfo
{
  e164 : "1711"
}
  srcInfo
{
  h323-ID : {"gw_3"}
}
  bandwidth 640
  callReferenceValue 24
  nonStandardData
{
  nonStandardIdentifier h221NonStandard :
{
  t35CountryCode 181
  t35Extension 0
  manufacturerCode 18
}
  data '000000'H
}
}
```

```
conferenceID '00000000000000000000000000000000'H
activeMC FALSE
answerCall FALSE
canMapAlias TRUE
callIdentifier
{
  guid '00000000000000000000000000000000'H
}
willSupplyUUIEs FALSE
}
```

```
*Mar 1 14:22:22.860: RAS OUTGOING ENCODE BUFFER ::= 27 8803CA00 F0003800 32003600
32004200 37003600 34003000 30003000 30003000 30003100 39010180 4A440140 03006700
77005F00 33400280 001840B5 00001203 00000000 00000000 00000000 00000000 00000004
E0200180 11000000 00000000 00000000 00000000 00000100
```

```
*Mar 1 14:22:22.876:
```

```
*Mar 1 14:22:22.940: RAS INCOMING ENCODE BUFFER ::= 2B 0003CA40 0280000A 34DA3106
B800EF14 00C00100 020000
```

```
*Mar 1 14:22:22.944:
```

```
*Mar 1 14:22:22.944: RAS INCOMING PDU ::=
```

```
!--- The GW_3 gets permission to proceed as there are no restrictions on zone3. value RasMessage
::= admissionConfirm :
```

```
{
  requestSeqNum 971
  bandwidth 640
  callModel direct : NULL
  destCallSignalAddress ipAddress :
{
  ip '0A34DA31'H
  port 1720
}
  irrFrequency 240
  willRespondToIRR FALSE
  uuiesRequested
{
  setup FALSE
  callProceeding FALSE
  connect FALSE
  alerting FALSE
  information FALSE
  releaseComplete FALSE
  facility FALSE
  progress FALSE
  empty FALSE
}
}
```

```
*Mar 1 14:22:22.972: H225.0 OUTGOING PDU ::=
```

```
!--- The GW_3 sends setup message to GW_1. value H323_UserInformation ::= { h323-uu-pdu { h323-
message-body setup :
```

```
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  sourceAddress
{
  h323-ID : {"gw_3"}
}
  sourceInfo
{
  gateway
{
```



```

protocol
{
  voice :
  {
    supportedPrefixes
  {
    {
      prefix e164 : "1#"
    }
  }
  }
  mc FALSE
  undefinedNode FALSE
  }
  activeMC FALSE
  conferenceID '00000000000000000000000000000000'H
  conferenceGoal create : NULL
  callType pointToPoint : NULL
  sourceCallSignalAddress ipAddress :
  {
    ip '0A34DA30'H
    port 11019
  }
  callIdentifier
  {
    guid '00000000000000000000000000000000'H
  }
  fastStart
  {
    '0000000D4001800A040001000A34DA30402F'H,
    '400000060401004D40018011140001000A34DA30...'H
  }
  mediaWaitForConnect FALSE
  canOverlapSend FALSE
  }
  h245Tunneling FALSE
  }
  }

```

```
*Mar 1 14:22:23.008: H225.0 OUTGOING ENCODE BUFFER::= 20
```

```
A0060008 914A0002 01400300
67007700 5F003308 80013C05 04010020 40000000 00000000 00000000 00000000 00000045
1C07000A 34DA302B 0B110000 00000000 00000000 00000000 00000032 02120000 000D4001
800A0400 01000A34 DA30402F 1D400000 06040100 4D400180 11140001 000A34DA 30402E00
0A34DA30 402F0100 01000680 0100
```

```
*Mar 1 14:22:23.028:
```

```
*Mar 1 14:22:23.220: H225.0 INCOMING ENCODE BUFFER::= 25
```

```
80060008 914A0002 01110000
00000000 00000000 00000000 00000006 800100
```

```
*Mar 1 14:22:23.224:
```

```
*Mar 1 14:22:23.224: H225.0 INCOMING PDU ::=
```

```
!--- The GW_1 replies with Release Complete message after asking GK !--- for permission to accept that call. !--- When the permission is denied, we set bandwidth limit. value
```

```
H323_UserInformation ::= { h323-uu-pdu { h323-message-body releaseComplete :
```

```
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  callIdentifier
```

```
{
  guid '00000000000000000000000000000000'H
}
```

```
}
h245Tunneling FALSE
}
```

```
*Mar 1 14:22:23.236: RAS OUTGOING PDU ::=
!--- The GW_3 notifies GK that the call does not exist anymore. value RasMessage ::=
```

```
disengageRequest :
{
  requestSeqNum 972
  endpointIdentifier {"8262B76400000019"}
  conferenceID '00000000000000000000000000000000'H
  callReferenceValue 24
  disengageReason normalDrop : NULL
  callIdentifier
{
  guid '00000000000000000000000000000000'H
}
  answeredCall FALSE
}
```

```
*Mar 1 14:22:23.248: RAS OUTGOING ENCODE BUFFER ::= 3E 03CB1E00 38003200 36003200
42003700 36003400 30003000 30003000 30003000 31003900 00000000 00000000 00000000
00000000 18216111 00000000 00000000 00000000 00000000 000100
```

```
*Mar 1 14:22:23.256:
```

```
*Mar 1 14:22:23.288: RAS INCOMING ENCODE BUFFER ::= 40
03CB
```

```
*Mar 1 14:22:23.288:
```

```
*Mar 1 14:22:23.288: RAS INCOMING PDU ::=
!--- The GK confirms that message. value RasMessage ::= disengageConfirm :
```

```
{
  requestSeqNum 972
}
```

```
ECV-2610-16#u all
```

```
All possible debugging has been turned off
```

```
ECV-2610-16#
```

```
-----
!--- The incoming RAS message to the GK from GW_3. ECV-2610-15#debug h225 asn1
```

```
H.225 ASN1 Messages debugging is on
```

```
ECV-2610-15#
```

```
*Mar 11 21:54:28.313: RAS INCOMING PDU ::=
```

```
value RasMessage ::= admissionRequest :
```

```
{
  requestSeqNum 970
  callType pointToPoint : NULL
  callModel direct : NULL
  endpointIdentifier {"8262B76400000019"}
  destinationInfo
{
  e164 : "1511"
}
  srcInfo
{
  h323-ID : {"gw_3"}
}
```

```
}
bandWidth 640
callReferenceValue 23
nonStandardData
{
nonStandardIdentifier h221NonStandard :
{
t35CountryCode 181
t35Extension 0
manufacturerCode 18
}
data '000000'H
}
conferenceID '00000000000000000000000000000000'H
activeMC FALSE
answerCall FALSE
canMapAlias TRUE
callIdentifier
{
guid '00000000000000000000000000000000'H
}
willSupplyUUIEs FALSE
}
```

```
*Mar 11 21:54:28.334: H225 NONSTD INCOMING ENCODE BUFFER ::= 00 0000
*Mar 11 21:54:28.334:
*Mar 11 21:54:28.334: H225 NONSTD INCOMING PDU ::=
```

```
value ARQnonStandardInfo ::=
{
sourceAlias
{
}
sourceExtAlias
{
}
}
```

```
!--- The outgoing RAS message fro GK to GW_3 with permission to start call. *Mar 11
21:54:28.338: RAS OUTGOING PDU ::=
```

```
value RasMessage ::= admissionConfirm :
{
requestSeqNum 970
bandWidth 640
callModel direct : NULL
destCallSignalAddress ipAddress :
{
ip '0A34DA2F'H
port 1720
}
irrFrequency 240
willRespondToIRR FALSE
uuiesRequested
{
setup FALSE
callProceeding FALSE
connect FALSE
alerting FALSE
information FALSE
releaseComplete FALSE
facility FALSE
}
```

```
progress FALSE
empty FALSE
}
}
```

```
*Mar 11 21:54:28.350: RAS OUTGOING ENCODE BUFFER ::= 2B 0003C940 0280000A 34DA2F06
B800EF14 00C00100 020000
```

```
*Mar 11 21:54:28.354:
```

```
*Mar 11 21:54:28.446: H225.0 INCOMING ENCODE BUFFER ::= 20
```

```
A0060008 914A0002 01400300
```

```
67007700 5F003308 80013C05 04010020 40000000 00000000 00000000 00000000 00000045
1C07000A 34DA302B 0A110000 00000000 00000000 00000000 00000032 02120000 000D4001
800A0400 01000A34 DA3041C5 1D400000 06040100 4D400180 11140001 000A34DA 3041C400
0A34DA30 41C50100 01000680 0100
```

```
*Mar 11 21:54:28.466:
```

```
*Mar 11 21:54:28.470: H225.0 INCOMING PDU ::=
```

```
!--- The incoming H323(Q931) message from GW_3 to GW_1b on the same router as GK. value
```

```
H323_UserInformation ::= { h323-uu-pdu { h323-message-body setup :
```

```
{
```

```
  protocolIdentifier { 0 0 8 2250 0 2 }
```

```
  sourceAddress
```

```
{
```

```
  h323-ID : {"gw_3"}
```

```
}
```

```
  sourceInfo
```

```
{
```

```
  gateway
```

```
{
```

```
  protocol
```

```
{
```

```
  voice :
```

```
{
```

```
  supportedPrefixes
```

```
{
```

```
  {
```

```
    prefix e164 : "1#"
```

```
  }
```

```
}
```

```
}
```

```
}
```

```
}
```

```
mc FALSE
```

```
undefinedNode FALSE
```

```
}
```

```
activeMC FALSE
```

```
conferenceID '00000000000000000000000000000000'H
```

```
conferenceGoal create : NULL
```

```
callType pointToPoint : NULL
```

```
sourceCallSignalAddress ipAddress :
```

```
{
```

```
  ip '0A34DA30'H
```

```
  port 11018
```

```
}
```

```
  callIdentifier
```

```
{
```

```
  guid '00000000000000000000000000000000'H
```

```
}
```

```
  fastStart
```

```
{
```

```
  '0000000D4001800A040001000A34DA3041C5'H,
```

```
  '400000060401004D40018011140001000A34DA30...'H
```

```
}
```


}

*Mar 11 21:54:28.542: RAS OUTGOING ENCODE BUFFER::= 27 98054200 F0003800 32003700
31003700 46003500 43003000 30003000 30003000 30003100 42010180 48440140 03006700
77005F00 33000A34 DA302B0A 40028000 1D40B500 00120300 00000000 00000000 00000000
00000000 000044E0 20018011 00000000 00000000 00000000 00000000 000100

*Mar 11 21:54:28.558:

*Mar 11 21:54:28.562: RAS INCOMING ENCODE BUFFER::= 27
98054200 F0003800 32003700 31003700 46003500 43003000 30003000 30003000 30003100
42010180 48440140 03006700 77005F00 33000A34 DA302B0A 40028000 1D40B500 00120300
00000000 00000000 00000000 00000000 000044E0 20018011 00000000 00000000 00000000
00000000 000100

*Mar 11 21:54:28.578:

*Mar 11 21:54:28.582: **RAS INCOMING PDU** ::= *!--- That is the same RAS message. The GK gets it, and sees the sequence number. !--- The GK is on the same router as GW_1b, so all messages can be seen twice.* value RasMessage ::=

admissionRequest :

```
{
  requestSeqNum 1347
  callType pointToPoint : NULL
  callModel direct : NULL
  endpointIdentifier {"82717F5C0000001B"}
  destinationInfo
  {
    e164 : "1511"
  }
  srcInfo
  {
    h323-ID : {"gw_3"}
  }
  srcCallSignalAddress ipAddress :
  {
    ip '0A34DA30'H
    port 11018
  }
  bandwidth 640
  callReferenceValue 29
  nonStandardData
  {
    nonStandardIdentifier h221NonStandard :
  {
    t35CountryCode 181
    t35Extension 0
    manufacturerCode 18
  }
    data '000000'
  }
  conferenceID '00000000000000000000000000000000'H
  activeMC FALSE
  answerCall TRUE
  canMapAlias TRUE
  callIdentifier
  {
    guid '00000000000000000000000000000000'H
  }
  willSupplyUUIEs FALSE
}
```

*Mar 11 21:54:28.606: H225 NONSTD INCOMING ENCODE BUFFER::= 00 0000

*Mar 11 21:54:28.606:

*Mar 11 21:54:28.606: H225 NONSTD INCOMING PDU ::=

value ARQnonStandardInfo ::=

```
{
  sourceAlias
{
  }
  sourceExtAlias
{
  }
}
```

*Mar 11 21:54:28.610: **RAS OUTGOING PDU** ::=

!--- The GK grants the permission to GW_1b. !--- This is a message in the GK debug outgoing

value RasMessage ::= **admissionConfirm** :

```
{
  requestSeqNum 1347
  bandwidth 640
  callModel direct : NULL
  destCallSignalAddress ipAddress :
{
  ip '0A34DA2F'H
  port 1720
  }
  irrFrequency 240
  willRespondToIRR FALSE
  uuiesRequested
{
  setup FALSE
  callProceeding FALSE
  connect FALSE
  alerting FALSE
  information FALSE
  releaseComplete FALSE
  facility FALSE
  progress FALSE
  empty FALSE
  }
}
```

*Mar 11 21:54:28.622: RAS OUTGOING ENCODE BUFFER::= 2B 00054240 0280000A 34DA2F06
B800EF14 00C00100 020000

*Mar 11 21:54:28.626:

*Mar 11 21:54:28.630: RAS INCOMING ENCODE BUFFER::= 2B 00054240 0280000A 34DA2F06
B800EF14 00C00100 020000

*Mar 11 21:54:28.634:

*Mar 11 21:54:28.634: **RAS INCOMING PDU** ::=

!--- The GK grants the permission to GW_1b. !--- This is a message in the GW_1b debug incoming.

value RasMessage ::= **admissionConfirm** :

```
{
  requestSeqNum 1347
  bandwidth 640
  callModel direct : NULL
  destCallSignalAddress ipAddress :
{
  ip '0A34DA2F'H
  port 1720
  }
  irrFrequency 240
  willRespondToIRR FALSE
  uuiesRequested
```

```
{
  setup FALSE
  callProceeding FALSE
  connect FALSE
  alerting FALSE
  information FALSE
  releaseComplete FALSE
  facility FALSE
  progress FALSE
  empty FALSE
}
```

```
*Mar 11 21:54:28.654: %SYS-3-MGDTIMER: Timer has parent, timer link, timer =
820AE990.
```

```
-Process= "CC-API_VCM", ipl= 6, pid= 93
```

```
-Traceback= 80325850 8032A720 80E74850 8033D818
```

```
*Mar 11 21:54:28.666: H225.0 OUTGOING PDU ::=
```

```
!--- The GW_1b replies to GW_3 setup message. value H323_UserInformation ::= { h323-uu-pdu {
h323-message-body callProceeding :
```

```
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  destinationInfo
```

```
{
  mc FALSE
  undefinedNode FALSE
}
```

```
callIdentifier
```

```
{
  guid '00000000000000000000000000000000'H
}
```

```
fastStart
```

```
{
  '0000000D40018011140001000A34DA2F486E000A...'H,
  '400000060401004D40018011140001000A34DA30...'H
}
```

```
h245Tunneling FALSE
```

```
}
```

```
*Mar 11 21:54:28.682: H225.0 OUTGOING ENCODE BUFFER::= 21 80060008 914A0002 00048811
00000000 00000000 00000000 00000000 00390219 0000000D 40018011 14000100 0A34DA2F
486E000A 34DA2F48 6F1D4000 00060401 004D4001 80111400 01000A34 DA3041C4 000A34DA
2F486F06 800100
```

```
*Mar 11 21:54:28.694:
```

```
*Mar 11 21:54:28.710: H225 NONSTD OUTGOING PDU ::=
```

```
value H323_UU_NonStdInfo ::=
```

```
{
  version 16
  protoParam qsigNonStdInfo :
{
  iei 30
  rawMesg '1E028188'H
}
```

```
*Mar 11 21:54:28.714: H225 NONSTD OUTGOING ENCODE BUFFER::= 60 01100001 1E041E02 8188
```


*Mar 11 21:54:28.714:

*Mar 11 21:54:28.714: **H225.0 OUTGOING PDU** ::=

!--- The GW_1b replies to GW_3 setup message and sends second message. value

H323_UserInformation ::= { h323-uu-pdu { h323-message-body **progress** :

```
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  destinationInfo
{
  mc FALSE
  undefinedNode FALSE
}
  callIdentifier
{
  guid '00000000000000000000000000000000'H
}
}
  h245Tunneling FALSE
  nonStandardControl
{
  {
  nonStandardIdentifier h221NonStandard :
{
  t35CountryCode 181
  t35Extension 0
  manufacturerCode 18
}
  data '60011000011E041E028188'H
}
}
}
```

*Mar 11 21:54:28.734: H225.0 OUTGOING ENCODE BUFFER::= 28 001A0006 0008914A 00020000
00000000 00000000 00000000 00000000 06A00100 120140B5 0000120B 60011000 011E041E
028188

*Mar 11 21:54:28.742:

*Mar 11 21:54:30.161: RAS INCOMING ENCODE BUFFER::= 27 8803CA00 F0003800 32003600
32004200 37003600 34003000 30003000 30003000 30003100 39010180 4A440140 03006700
77005F00 33400280 001840B5 00001203 00000000 00000000 00000000 00000000 00000004
E0200180 11000000 00000000 00000000 00000000 00000100

*Mar 11 21:54:30.177:

*Mar 11 21:54:30.181: **RAS INCOMING PDU** ::=

!--- The GK gets ARQ from GW_3 for the second call. value RasMessage ::= **admissionRequest**:

```
{
  requestSeqNum 971
  callType pointToPoint : NULL
  callModel direct : NULL
  endpointIdentifier {"8262B76400000019"}
  destinationInfo
{
  e164 : "1711"
}
  srcInfo
{
  h323-ID : {"gw_3"}
}
  bandwidth 640
  callReferenceValue 24
  nonStandardData
{
  nonStandardIdentifier h221NonStandard :
{
```

```
t35CountryCode 181
t35Extension 0
manufacturerCode 18
}
data '000000'H
}
conferenceID '00000000000000000000000000000000'H
activeMC FALSE
answerCall FALSE
canMapAlias TRUE
callIdentifier
{
guid '00000000000000000000000000000000'H
}
willSupplyUUIEs FALSE
}
```

```
*Mar 11 21:54:30.197: H225 NONSTD INCOMING ENCODE BUFFER ::= 00 0000
*Mar 11 21:54:30.201:
*Mar 11 21:54:30.201: H225 NONSTD INCOMING PDU ::=
```

```
value ARQnonStandardInfo ::=
{
sourceAlias
{
}
sourceExtAlias
{
}
}
```

```
*Mar 11 21:54:30.205: RAS OUTGOING PDU ::=
!--- The GK grants permission to GW_3, as there are no restrictions for zone3. value RasMessage
::= admissionConfirm :
{
requestSeqNum 971
bandWidth 640
callModel direct : NULL
destCallSignalAddress ipAddress :
{
ip '0A34DA31'H
!--- The hexadecimal number is 10.52.218.49, IP of GW_1. port 1720 } irrFrequency 240
willRespondToIRR FALSE uuiEsRequested { setup FALSE callProceeding FALSE connect FALSE alerting
FALSE information FALSE releaseComplete FALSE facility FALSE progress FALSE empty FALSE } } *Mar
11 21:54:30.217: RAS OUTGOING ENCODE BUFFER ::= 2B 0003CA40 0280000A 34DA3106 B800EF14 00C00100
020000 *Mar 11 21:54:30.221: *Mar 11 21:54:30.429: RAS INCOMING ENCODE BUFFER ::= 27 98045F00
F0003800 32003300 38003600 30004400 34003000 30003000 30003000 30003100 41010180 4A440140
03006700 77005F00 33000A34 DA302B0B 40028000 2840B500 00120300 00000000 00000000 00000000
00000000 000044E0 20018011 00000000 00000000 00000000 00000000 000100 *Mar 11 21:54:30.445: *Mar
11 21:54:30.445: RAS INCOMING PDU ::=
!--- The incoming request from GW_1 asks for permission to accept call from GW_3. value
RasMessage ::= admissionRequest :
{
requestSeqNum 1120
callType pointToPoint : NULL
callModel direct : NULL
endpointIdentifier {"823860D40000001A"}
destinationInfo
{
e164 : "1711"
```

```
}
srcInfo
{
h323-ID : {"gw_3"}
}
srcCallSignalAddress ipAddress :
{
ip '0A34DA30'H
port 11019
}
bandWidth 640
callReferenceValue 40
nonStandardData
{
nonStandardIdentifier h221NonStandard :
{
t35CountryCode 181
t35Extension 0
manufacturerCode 18
}
}
data '000000'H
}
conferenceID '00000000000000000000000000000000'H
activeMC FALSE
answerCall TRUE
canMapAlias TRUE
callIdentifier
{
guid '00000000000000000000000000000000'H
}
willSupplyUUIEs FALSE
}
```

```
*Mar 11 21:54:30.469: H225 NONSTD INCOMING ENCODE BUFFER ::= 00 0000
*Mar 11 21:54:30.469:
*Mar 11 21:54:30.469: H225 NONSTD INCOMING PDU ::=
```

```
value ARQnonStandardInfo ::=
{
sourceAlias
{
}
sourceExtAlias
{
}
}
```

```
!--- The GK does not allow the call to come through, and replies with ARJ. *Mar 11
21:54:30.473: RAS OUTGOING PDU ::=
```

```
value RasMessage ::= admissionReject :
{
requestSeqNum 1120
rejectReason requestDenied : NULL
}
```

```
*Mar 11 21:54:30.477: RAS OUTGOING ENCODE BUFFER ::= 2C 045F20
*Mar 11 21:54:30.477:
*Mar 11 21:54:30.541: RAS INCOMING ENCODE BUFFER ::= 3E 03CB1E00 38003200 36003200
42003700 36003400 30003000 30003000 30003000 31003900 00000000 00000000 00000000
00000000 18216111 00000000 00000000 00000000 00000000 000100
```



```
undefinedNode FALSE
}
activeMC FALSE
conferenceID '00000000000000000000000000000000'H
conferenceGoal create : NULL
callType pointToPoint : NULL
sourceCallSignalAddress ipAddress :
{
  ip '0A34DA30'H
  port 11019
}
callIdentifier
{
  guid '00000000000000000000000000000000'H
}
fastStart
{
  '0000000D4001800A040001000A34DA30402F'H,
  '400000060401004D40018011140001000A34DA30...'H
}
mediaWaitForConnect FALSE
canOverlapSend FALSE
}
h245Tunneling FALSE
}
}
```

*Mar 2 22:55:40: H225 NONSTD OUTGOING PDU ::=

value ARQnonStandardInfo ::=

```
{
  sourceAlias
{
}
  sourceExtAlias
{
}
}
```

*Mar 2 22:55:40: H225 NONSTD OUTGOING ENCODE BUFFER ::= 00 0000

*Mar 2 22:55:40:

*Mar 2 22:55:40: **RAS OUTGOING PDU** ::=

!--- The GW_1 asks GK for permission to accept the call. value RasMessage ::= **admissionRequest** :

```
{
  requestSeqNum 1120
  callType pointToPoint : NULL
  callModel direct : NULL
  endpointIdentifier {"823860D40000001A"}
  destinationInfo
{
  e164 : "1711"
}
  srcInfo
{
  h323-ID : {"gw_3"}
}
  srcCallSignalAddress ipAddress :
{
  ip '0A34DA30'H
  port 11019
}
```

```
bandWidth 640
callReferenceValue 40
nonStandardData
{
  nonStandardIdentifier h221NonStandard :
{
  t35CountryCode 181
  t35Extension 0
  manufacturerCode 18
  }
  data '000000'H
  }
  conferenceID '00000000000000000000000000000000'H
  activeMC FALSE
  answerCall TRUE
  canMapAlias TRUE
  callIdentifier
{
  guid '00000000000000000000000000000000'H
  }
  willSupplyUUIEs FALSE
  }
}
```

```
*Mar 2 22:55:40: RAS OUTGOING ENCODE BUFFER::= 27 98045F00 F0003800 32003300
38003600 30004400 34003000 30003000 30003000 30003100 41010180 4A440140 03006700
77005F00 33000A34 DA302B0B 40028000 2840B500 00120300 00000000 00000000 00000000
00000000 000044E0 20018011 00000000 00000000 00000000 00000000 000100
```

```
*Mar 2 22:55:41:
```

```
*Mar 2 22:55:41: RAS INCOMING ENCODE BUFFER::= 2C 045F20
```

```
*Mar 2 22:55:41:
```

```
*Mar 2 22:55:41: RAS INCOMING PDU ::=
```

```
!--- The GK denies permission to accept the call from GW_3 due to bandwidth limit. value
RasMessage ::= admissionReject :
```

```
{
  requestSeqNum 1120
  rejectReason requestDenied : NULL
}
```

```
*Mar 2 22:55:41: H225.0 OUTGOING PDU ::=
```

```
!--- The GW_1 rejects call setup from GW_3. value H323_UserInformation ::= { h323-uu-pdu { h323-
message-body releaseComplete :
```

```
{
  protocolIdentifier { 0 0 8 2250 0 2 }
  callIdentifier
{
  guid '00000000000000000000000000000000'H
  }
  }
  h245Tunneling FALSE
  }
}
```

```
*Mar 2 22:55:41: H225.0 OUTGOING ENCODE BUFFER::= 25 80060008 914A0002 01110000
00000000 00000000 00000000 00000006 800100
```

```
*Mar 2 22:55:41:
```

```
ECV-2610-17#
```

```
ECV-2610-17#
```

```
ECV-2610-17#u all
```

All possible debugging has been turned off

相關資訊

- [故障排除和瞭解Cisco Gatekeeper頻寬管理](#)
- [瞭解H.323網守](#)
- [思科高效能閘道管理員](#)
- [配置H.323網關](#)
- [配置H.323網守](#)
- [為虛擬介面配置H.323支援](#)
- [語音技術支援](#)
- [語音和整合通訊產品支援](#)
- [Cisco IP電話故障排除](#)
- [技術支援 - Cisco Systems](#)