CISCO SYSTEMS

Cisco CallManager 4.0-PBX Interoperability: Avaya Definity G3r to a Cisco 3745 Gateway with MFT T1/E1 Digital Voice Network Module with VIC2 Analog Interfaces

Introduction

This application note contains the test results of PBX interoperability testing from a PBX via analog interfaces under test to a Cisco voice router via IP communications high-density digital voice/fax network module (NM-HDV2) with 2-port voice interface card (VIC2) Analog interfaces installed in Cisco Voice Gateways.
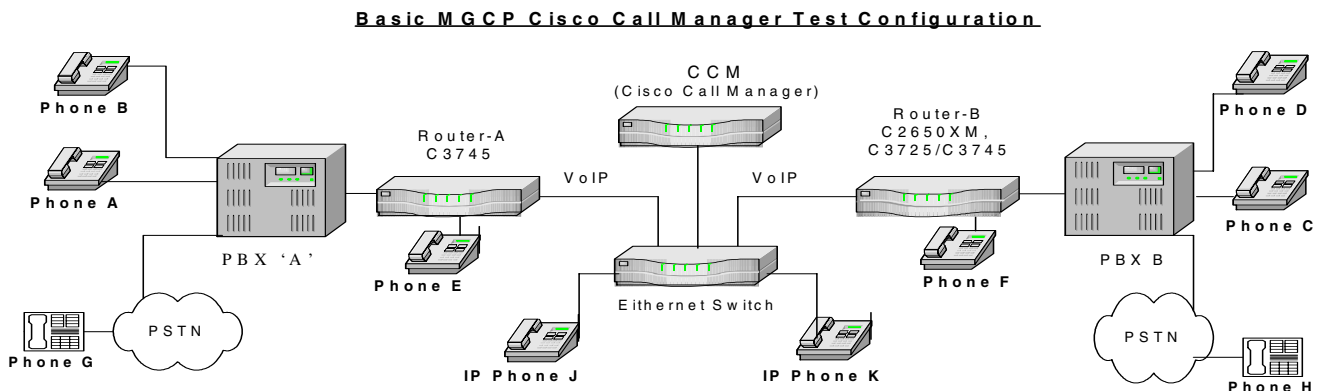
This application note is directed toward testing interoperability of the Soprano T1/E1 Voice Interface Module with an Avaya Definity G3r PBX.

The application note is for Connectivity/Interoperability testing of the selected PBX connected via Soprano T1/E1 and analog interfaces to a Cisco Multiservice IP-to-IP Gateway (C3745). The PBX/ Router under test are connected via Ethernet to an Ethernet switch which also has a Cisco CallManager and IP Phones in the Network Topology.

Figure 1 shows the test set-up for a Cisco Voice Gateway connected through an Ethernet switch and being controlled via MGCP by a the Cisco CallManager.

Network Topology

Figure 1.   Network Topology or Test Setup

Basic MGCP Cisco Call Manager Test Configuration

The above diagram is representative of the various configurations used for testing. As shown in the diagram above, a PBX is connected via an interface to a Cisco router, which in turn, is connected to an Ethernet switch which also has the CCM (cisco call manager) IP Phones and a second Cisco router. The second Cisco router is connected to a second PBX. The interoperability testing involved signaling and audio path confirmation on the voice interfaces under test between each Cisco router and it's associated PBX.

Limitations

When the Meridian phone is disconnected from a call, it returns to dial-tone.

Due to the CO Trunk connection to the PBX, the incoming calls are directed to a digital phone and Blind Transferred to the

PSTN Phone.

When and incoming call is answered and the Blind Transferred to the PSTN phone, the Meridian does not drop the PSTN call, though the

CO Trunk call has disconnected.

System Components

Hardware Requirements

Cisco Hardware
Cisco C3745

PBX Hardware including Interface Card
Avaya Definity G3r

Special Cards, Blades, or Cables Required
NM-HDV2-2T1/E1 (2-port T1/E1 IP communications high-density digital voice/fax network module)

PVDM2-8 (8-channel packet fax/voice digital signal processor module)

PVDM2-16 (16-channel packet fax/voice digital signal processor module)

PVDM2-32 (32-channel packet fax/voice digital signal processor module)

PVDM2-48 (48-channel packet fax/voice digital signal processor module)

PVDM2-64 (64-channel packet fax/voice digital signal processor module)

VIC2-2 FXS (two-port voice interface card – Foreign Exchange Station)

VIC2-4 FXS (four-port voice interface card – Foreign Exchange Station)

Software Requirements

Cisco CallManager Release
Release 4.0

PBX software release
Avaya Definity G3r - V6

Cisco IOS Release or Cisco CatOS Release (for the gateway)
Cisco IOS Software, 3700 Software (C3745-ADVENTERPRISEK9-M), Version 12.3(7)T, RELEASE SOFTWARE (fc1)

Configuration

Configuration Sequence and Tasks

List the configuration sequence for software or hardware.

Configuration Menus and Commands

Show configuration menus, configuration commands or screen captures.

Configuring the Avaya Definity G3r

```
display trunk-group 7                                         Page   1 of  11
                              TRUNK GROUP

Group Number: 7                   Group Type: co              CDR Reports: y
  Group Name: CO TRUNK - SLOT 7          COR: 1      TN: 1       TAC: 607
   Direction: two-way         Outgoing Display? y
 Dial Access? y               Busy Threshold: 99          Night Service:
Queue Length: 0               Country: 1         Incoming Destination: 4004
   Comm Type: voice              Auth Code? n    Digit Absorption List:
    Prefix-1? n                 Trunk Flash? n         Toll Restricted? n

TRUNK PARAMETERS
            Trunk Type: ground-start
      Outgoing Dial Type: tone                      Cut-Through? y
      Trunk Termination: 600ohm          Disconnect Timing(msec): 500

              Auto Guard? n    Call Still Held? n    Sig Bit Inversion: none
       Terminal Balanced? n                          RA Trunk Loss: 0db
                           Trunk Gain: high

  Disconnect Supervision - In? y  Out? y
  Answer Supervision Timeout: 10        Receive Answer Supervision? n


  CANCEL   REFRESH                         HELP     GO TO    NEXT    PREV
                                                    PAGE     PAGE    PAGE
```

```
display trunk-group 7                                          Page   2 of  11
TRUNK FEATURES
                ACA Assignment? n              Measured: none
                                                          Maintenance Tests? y
                                      Data Restriction? n

    Abandoned Call Search? n
  Suppress # Outpulsing? n

        Charge Conversion: 1
          Decimal Point: none
         Currency Symbol:
            Charge Type: units




  CANCEL    REFRESH                        HELP        GO TO     NEXT     PREV
                                                       PAGE      PAGE     PAGE
```

```
display trunk-group 7                                          Page   3 of  11
                              TRUNK GROUP
  ADMINISTRABLE TIMERS
    Incoming Disconnect(msec): 500        Outgoing Disconnect(msec): 500
                                          Outgoing Dial Guard(msec): 1600
  Incoming Glare Guard(msec): 1500      Outgoing Glare Guard(msec): 1500


         Ringing Monitor(msec): 5200         Incoming Seizure(msec): 500
     Outgoing End of Dial(sec): 10    Outgoing Seizure Response(sec): 5
   Programmed Dial Pause(msec): 1500      Disconnect Signal Error(sec): 240
            Flash Length(msec): 540




  END TO END SIGNALING
     Tone(msec): 350       Pause(msec): 150

  OUTPULSING INFORMATION
     PPS: 10    Make(msec): 40   Break(msec): 60      PPM? n


  CANCEL    REFRESH                        HELP        GO TO     NEXT     PREV
                                                       PAGE      PAGE     PAGE
```

```
display trunk-group 7                                          Page   4 of  11
                              ATMS THRESHOLDS
      TTL Type: 105-w-rl                 Far End Test No:
    TTL Vendor:                              TTL Contact:
  Trunk Vendor:                            Trunk Contact:
  Trunk Length:
                              MARGINAL        UNACCEPTABLE
                            Min   Max         Min   Max
                1004 Hz Loss: -2    21         -2    21

                            -Dev  +Dev        -Dev  +Dev
               404 Hz Loss: 9      9           9     9
              2804 Hz Loss: 9      9           9     9

        Maximum C Message Noise:     55              55
        Maximum C Notched Noise:     74              74
             Minimum SRL-HI:    0               0
             Minimum SRL-LO:    0               0
               Minimum ERL:     0               0

        Allow ATMS Busyout, Error Logging and Alarming? n


 CANCEL   REFRESH                         HELP       GO TO     NEXT      PREV
                                                     PAGE      PAGE      PAGE
```

```
display trunk-group 7                                          Page   5 of  11
                              TRUNK GROUP
                             Administered Members (min/max):    1/1
  GROUP MEMBER ASSIGNMENTS        Total Administered Members:    1

       Port    Code Sfx Name      Night           Mode      Type   Ans Delay
   1: 01A0701 TN747  B
   2:
   3:
   4:
   5:
   6:
   7:
   8:
   9:
  10:
  11:
  12:
  13:
  14:
  15:


 CANCEL   REFRESH                         HELP       GO TO     NEXT      PREV
                                                     PAGE      PAGE      PAGE
```
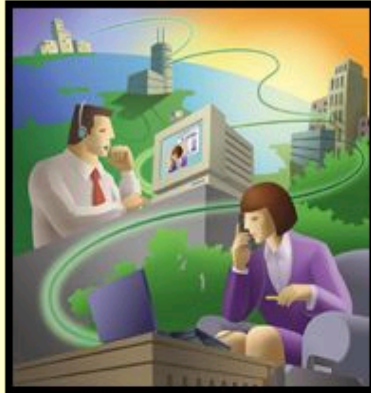
Configuring Cisco CallManager

System   Route Plan   Service   Feature   Device   User   Application   Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Cisco CallManager 4.0 Administration

[Details]

Copyright © 1999 – 2003 Cisco Systems, Inc.
All rights reserved.

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html.
If you require further assistance please contact us by sending email to export@cisco.com.

Microsoft Internet Explorer   ✕

⚠ When reporting or troubleshooting a problem, please give the following information to Technical Assistance:

Cisco CallManager System version: 4.0(1)
Cisco CallManager Administration version: 4.0(0.333)
Cisco CallManager Installation ID: CCM4.0(1)

Database Information
        DSN: CiscoCallManager
        SERVER: B9
        DATABASE: CCM0300

[OK]

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Cisco CallManager Component Versions

Latest Installed Version
Out Of Sync

Servers

🖥️ 172.20.43.253

Component Versions for all servers: Page 1 ▾

Component	Version	Installation ID
ace.dll	5.2.5.0	CCM4.0(1)
aced.dll	5.2.5.0	CCM4.0(1)
Apache Tomcat	4.1	CCM4.0(1)
ASTIsapi.dll	3.3.2.0	CCM4.0(1)
AudioTranslator.exe	4.0.0.1	CCM4.0(1)
Aupair.exe	4.0.0.37	CCM4.0(1)
AupairChangeNotify.dll	4.0.0.37	CCM4.0(1)
Aupairps.dll	3.4.0.33	CCM4.0(1)
AuthFilt.dll	4.0.0.0	CCM4.0(1)
AVVIDCustomerDirectoryConfigurationPlugin.exe	4.0.0.31(0)	CCM4.0(1)
bootp.exe	2.0.2.2	CCM4.0(1)
ccm.exe	4.0.0.0	CCM4.0(1)
CcmPerfMon.dll	4.0.0.0	CCM4.0(1)
CCNTEST.EXE	4.0.0.0	CCM4.0(1)
cdpintf.dll	4.0.0.0	CCM4.0(1)
Cisco CallManager	4.0(1)	CCM4.0(1)
Cisco CallManager Administration	4.0(0.333)	CCM4.0(1)
Cisco CallManager Serviceability	4.0(0.1)	CCM4.0(1)

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

Product: Cisco 3745

Gateway : A-3745

Status: Ready

| Update | Delete | Reset Gateway |

Domain Name*	A-3745
Description	A-3745
Cisco CallManager Group*	Default ▾

Installed Voice Interface Cards   Endpoint Identifiers

Mainboard Slot	< None > ▾
Module in Slot 1	< None > ▾
Module in Slot 2	< None > ▾
Module in Slot 3	< None > ▾
Module in Slot 4	NM-HD-2VE ▾

| Subunit 0 | VIC2-2FXS ▾ | Begin Port 0 | (4/0/0)POTS | (4/0/1)POTS |
| Subunit 1 | VWIC-2MFT-E1 ▾ | Begin Port 0 | (4/ 0) | (4/ 1) |

Product Specific Configuration

Global ISDN Switch Type	4ESS ▾
Switchback Timing*	Graceful ▾
Switchback uptime-delay (min)	10
Switchback schedule (hh:mm)	12:00

* indicates required item

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

Slot 4/ Sub-Unit 0

🖥 POTS	**4/0/0**	5400
🖥 POTS	4/0/1	5401

Slot 4

🖥	4/0
🖥	4/1

Product : Cisco 3745

Gateway : AALN/S4/SU0/0@A-3745
Registration: Registered with Cisco CallManager 172.20.43.253
IP Address: 172.20.43.151

Status: Ready

[Update] [Delete] [Reset Gateway]

Gateway Information

Description	AALN/S4/SU0/0@172.20.43.151
Device Pool*	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
Network Hold Audio Source	< None >
Location	< None >
AAR Group	< None >
Network Locale	United States

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain	(e.g., "0000FF")
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

Port Information

Prefix DN	
Num Digits*	4
Expected Digits*	0
SMDI Port Number(0-4096)*	0

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Directory Number Configuration
<u>Configure Device (AALN/S4/SU0/0@A-3745)</u>
<u>Dependency Records</u>

Associated With

[FXS]
[MGCP] **AALN/S4/SU0/0@A-3745 (Port 1)**

Directory Number: 5400

Status: Ready
Note: Any update to this Directory Number automatically resets the associated devices

[Update] [Remove from Device] [Reset Devices]

Directory Number

Directory Number*	`5400`
Partition	< None > ▾

Directory Number Settings

Voice Mail Profile	< None > ▾ (Choose <None> to use default)
Calling Search Space	< None > ▾
AAR Group	< None > ▾
Network Hold Audio Source	< None > ▾
Auto Answer	Not available on this device.

Call Forward and Pickup Settings

	Voice Mail	Destination	Calling Search Space
Forward All	☐	_____	< None > ▾
Forward Busy	☐	_____	< None > ▾
Forward No Answer	☐	_____	< None > ▾
No Answer Ring Duration		_____ (seconds)	
Call Pickup Group	< None > ▾		

MLPP Alternate Party Settings

Target (Destination)	_____
Calling Search Space	< None > ▾
No Answer Ring Duration	_____ (seconds)

Line Settings for this Device

Display (Internal Caller ID)	`A-3745-fxs-4/0/0`
Line Text Label	Not available on this device.
External Phone Number Mask	`408527`
Message Waiting Lamp Policy	Not available on this device.
Ring Setting (Phone Idle)	Not available on this device.
Ring Setting (Phone Active)**	Not available on this device.

Multiple Call / Call Waiting Settings

Maximum Number of Calls*   [2]   (1 – 2)

Busy Trigger*   [2]   (<= Max. Calls)

Forwarded Call Information Display

☑ Caller Name   ☐ Caller Number

☐ Redirected Number   ☑ Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.

Note:
If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong characterset is selected. (English characters are included in all character sets.)

Character Set   [Western European (Latin 1)   ▾]

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

Product: Cisco 26XX

Gateway : B-2611XM

Status: Ready

| Update | Delete | Reset Gateway |

Domain Name*   B-2611XM

Description   B-2611XM

Cisco CallManager Group*   Default

| **Installed Voice Interface Cards** | | **Endpoint Identifiers** |

Module in slot 0   < None >

Module in slot 1   NM-HD-2VE

Subunit 0   VIC-4FXS   Begin Port 0   (1/0/ 0) POTS   (1/0/ 1) POTS   (1/0/ 2) POTS

(1/0/ 3) POTS

Subunit 1   VWIC-2MFT-E1   Begin Port 0   (1/ 0)   (1/ 1)

Product Specific Configuration   i

Switchback Timing*   Graceful

Switchback uptime-delay (min)   10

Switchback schedule (hh:mm)   12:00

* indicates required item

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Gateway Configuration

Slot 1/ Sub-Unit 0

POTS	**1/0/0**	5100
POTS	1/0/1	5101
POTS	1/0/2	5102
POTS	1/0/3	5104

Slot 1

| ? | 1/0 |
| ? | 1/1 |

Product : Cisco 26XX

Gateway : AALN/S1/SU0/0@B-2611XM
Registration: Registered with Cisco CallManager 172.20.43.253
IP Address: 172.20.43.155

Status: Ready

[Update] [Delete] [Reset Gateway]

Gateway Information

Description	AALN/S1/SU0/0@B-2611XM
Device Pool*	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
Network Hold Audio Source	< None >
Location	< None >
AAR Group	< None >
Network Locale	< None >

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain		(e.g., "0000FF")
MLPP Indication	Not available on this device
MLPP Preemption	Not available on this device

Port Information

Prefix DN	
Num Digits*	0
Expected Digits*	0
SMDI Port Number(0-4096)*	0

System   Route Plan   Service   Feature   Device   User   Application   Help

Cisco CallManager Administration
For Cisco IP Telephony Solutions

CISCO SYSTEMS

Directory Number Configuration

Associated With

FXS MGCP **AALN/S1/SU0/0@B-2... (Port 1)**

Directory Number: 5100

Status: Ready
Note: Any update to this Directory Number automatically resets the associated devices

[Update]   [Remove from Device]   [Reset Devices]

Directory Number

Directory Number*   [5100]

Partition   [< None > ▼]

Directory Number Settings

Voice Mail Profile   [< None > ▼]
                             (Choose <None> to use default)

Calling Search Space   [< None > ▼]

AAR Group   [< None > ▼]

Network Hold Audio Source   [< None > ▼]

Auto Answer   Not available on this device.

Call Forward and Pickup Settings

	Voice Mail	Destination	Calling Search Space
Forward All	☐	[ ]	[< None > ▼]
Forward Busy	☐	[ ]	[< None > ▼]
Forward No Answer	☐	[ ]	[< None > ▼]

No Answer Ring Duration   [   ] (seconds)

Call Pickup Group   [< None > ▼]

MLPP Alternate Party Settings

Target (Destination)   [   ]

Calling Search Space   [< None > ▼]

No Answer Ring Duration   [   ] (seconds)

Line Settings for this Device

Display (Internal Caller ID)	2600-fxs1/0/0
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)	Not available on this device.
Ring Setting (Phone Active)**	Not available on this device.

Multiple Call / Call Waiting Settings

Maximum Number of Calls*	2	(1 - 2)
Busy Trigger*	1	(<= Max. Calls)

Forwarded Call Information Display

☑ Caller Name   ☑ Caller Number

☑ Redirected Number   ☑ Dialed Number

* indicates required item; changes to Line or Directory Number settings require restart.

Note:
If you are using a language other than English for Display (Internal Caller ID) or Line Text Label text, make sure the correct character set (shown below) is selected. Text displays incorrectly if the wrong characterset is selected. (English characters are included in all character sets.)

Character Set   Western European (Latin 1) ▼

Configuring the Cisco C3745

```
A-3745#sho running

Building configuration...


Current configuration : 1833 bytes

!

version 12.3

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname A-3745

!

boot-start-marker

boot-end-marker

!
```

```
no network-clock-participate slot 1

no network-clock-participate slot 2

no network-clock-participate slot 3

no network-clock-participate slot 4

no network-clock-participate wic 0

no network-clock-participate wic 1

no network-clock-participate wic 2

no network-clock-participate aim 0

no network-clock-participate aim 1

no aaa new-model

ip subnet-zero

ip cef

!

ip host B9 172.20.43.253

ip audit po max-events 100

no ftp-server write-enable

voice-card 4

 no dspfarm

!

ccm-manager mgcp

ccm-manager music-on-hold

ccm-manager config server 172.20.43.253

ccm-manager config

!

no crypto isakmp enable

!

interface FastEthernet0/0

 ip address 172.20.43.151 255.255.255.0

 duplex auto

 speed auto

!

interface FastEthernet0/1
```

```
 no ip address

 shutdown

 duplex auto

 speed auto

!

ip classless

ip route 0.0.0.0 0.0.0.0 FastEthernet0/0

!

ip http server

no ip http secure-server

!

control-plane

!

voice-port 4/0/0

!

voice-port 4/0/1

!

mgcp

mgcp call-agent 172.20.43.253 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 voice 999400 pots
 application mgcpapp
 port 4/0/0
!
dial-peer voice 999401 pots
 application mgcpapp
 port 4/0/1
!
line con 0
line aux 0
line vty 0 4
 login
!
end
```

Samples of Paragraph Styles

This is Subhead1

This is Body.

This is Subhead2

This is Body.

This is Subhead3.

This is Body.

This is Subhead4.

This is Body.

This is Subhead5.

This is Body.

- This is Bullet. This is Bullet. This is Bullet. This is Bullet. This is Bullet. This is Bullet. This is Bullet. This is Bullet. This is Bullet. This is Bullet.
  - This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2. This is Bullet2.
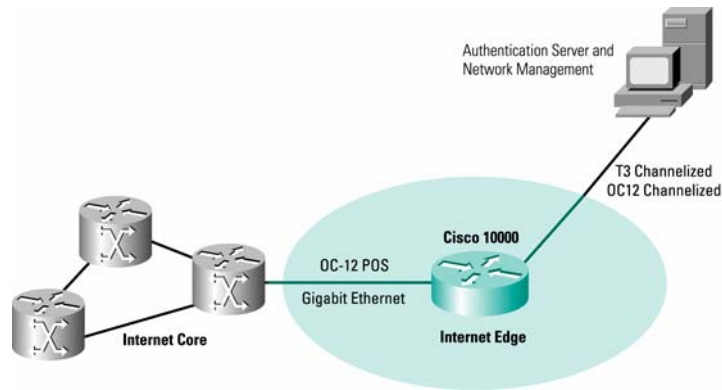
```
This is Example.

This is Example.

This is Example.
```

Use the Caption_head Style Sheet for Caption Head

Use the Caption Style Sheet for caption body text. This is a caption for photos, diagrams and charts.This is a caption for photos, diagrams and charts.

Use the Caption_head Style Sheet for Caption Head

Use the Caption Style Sheet for caption body text. This is a caption for photos, diagrams and charts.This is a caption for photos, diagrams and charts.

Chart_head Style Sheet Text	Chart_head Style Sheet Text	Chart_head Style Sheet Text
Chart_subhead Style Sheet	**Chart_subhead Style Sheet**	**Chart_subhead Style Sheet**
Chart_body Style Sheet	Chart_body Style Sheet	Chart_body Style Sheet
Chart_body Style Sheet	Chart_body Style Sheet	Chart_body Style Sheet

Acronyms

Acronym	Definitions

Important Information

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

CISCO SYSTEMS

Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
      800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters
Cisco Systems International
BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
Capital Tower
168 Robinson Road
#22-01 to #29-01
Singapore 068912
www.cisco.com
Tel: +65 317 7777
Fax: +65 317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Web site at www.cisco.com/go/offices**.

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico• The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan • Thailand • Turkey Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Printed in the USA