



Release Notes for Cisco DPA 7630/7610 Voice Mail Gateway Version 1.3(1) Integration with Cisco CallManager 4.x and later

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These release notes are for use with the Cisco DPA 7630/7610 Voice Mail Gateways with software version 1.3(1) and Cisco CallManager Release 4.1 or later. The DPA 7630/7610 integrates Definity and Meridian 1 PBX systems and Octel voice mail systems with Cisco CallManager systems.

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Documentation Roadmap

Refer to the *Cisco DPA 7630/7610 Voice Mail Gateways Administration Guide* for details about installing and administering the DPA 7630/7610. This guide ships with the DPA 7630/7610 and is also available online at this location:

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/7630adpt/dpa_v1_3/index.htm

Because the DPA 7630/7610 depends on information from the Cisco CallManager system and the Octel voice messaging system, you must verify that these systems are set up properly before configuring the DPA 7630/7610. You must also obtain some information from these systems to set up the DPA 7630/7610.

Overview of Integration Steps

Use these release notes in conjunction with the following manual:

Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3), chapter “Preparing the Cisco CallManager and Octel Systems,” located at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_access/7630adpt/dpa_v1_3/admin_gd/7630plan.htm

Perform the following steps:

1. Read and complete the “Overview of Required Tasks” section in the *Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3)*, chapter “Preparing the Cisco CallManager and Octel Systems.”
2. Configure Cisco CallManager—Follow the steps provided in these release notes in the [“Configuring Cisco CallManager”](#) section on page 3.

3. Perform the steps in the “Configuring the Octel Systems” section in the *Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3)*, chapter “Preparing the Cisco CallManager and Octel Systems.”

Configuring Cisco CallManager

The DPA requires minor changes to Cisco CallManager because when you add the DPA 7630/7610 to the IP network, Cisco CallManager recognizes the ports as Cisco IP Phones. Therefore, you need to add these ports to the Cisco CallManager database. Additionally, because of the close interaction of the DPA 7630/7610 with the voice mail system, you must ensure that some key voice mail settings on the Cisco CallManager system are properly configured.

The DPA 7630/7610 connects to Cisco CallManager to provide the following capabilities:

- Access from the Cisco IP Phones to the Octel voice messaging systems.

The DPA 7630/7610 provides connection to the Octel voice messaging system by emulating IP phones. These emulated phones appear in the Cisco CallManager database.

- Proper signaling to the message waiting indicators (MWIs) on the Cisco IP Phones.

Some ports on the DPA 7630/7610 handle MWI commands from the Octel system. An additional “virtual” IP phone sends these messages to the Cisco CallManager system. Cisco CallManager then sets the MWI on the Cisco IP Phones.

When reviewing the following tasks, if you need additional instructions, refer to the *Cisco CallManager Administration Guide* or the online help in the Cisco CallManager application:

- [Adding the DPA 7630/7610 to Cisco CallManager, page 4](#)
- [Setting Up the Voice Mail Hunt Group Using Cisco CallManager 4.1 or Later, page 5](#)
- [Configuring the DPA Ports and Phones, page 8](#)
- [Configuring the Message Waiting Light, page 12](#)

Adding the DPA 7630/7610 to Cisco CallManager

When the DPA 7630/7610 and Cisco CallManager connect, the ports on the DPA 7630/7610 appear as IP phones in the Cisco CallManager database. An additional “virtual” port also appears as an IP phone to Cisco CallManager, but it does not have any correspondence to a physical port. It is created by the DPA 7630/7610 to handle MWI commands to Cisco CallManager.

Using Auto-Registration

You can choose to have the DPA 7630/7610 automatically added to Cisco CallManager using auto-registration. To do this, you must verify that auto-registration is enabled in Cisco CallManager. Refer to the documentation or online help included with the Cisco CallManager application for details.

When the DPA 7630/7610 connects to Cisco CallManager through auto-registration, the ports connected between the DPA 7630/7610 and the Octel system are registered as Cisco IP Phones. These ports are actually emulated IP phones used to access the voice mail system and to process MWI commands.

Cisco CallManager only recognizes these IP phones after the Octel voice mail system is up and running. Therefore, verify that the Octel system and the Cisco DPA 7630/7610 systems are up before completing these tasks in Cisco CallManager.

Auto-registration automatically assigns phones a directory number. The directory number assigned is the next one available in sequential order within the device pool assigned to this phone type in Cisco CallManager. However, if you need to, you can modify this directory number for each emulated phone (see the [“Configuring the DPA Ports and Phones”](#) section on page 8).

During auto registration, the host name assigned to the DPA 7630/7610 is used to populate the MAC address field in the record for the emulated phone in Cisco CallManager. The default host name is: SEP + the last 10 digits of the MAC address of the DPA 7630/7610. Typically, you should not change the default host name, but to do so, see the “Setting the Host Name” section in the *Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3)*.

Cisco CallManager requires unique MAC addresses for all devices, but all 24 ports on the DPA 7630/7610 share the same MAC address. Therefore, auto-registration includes a process that converts the host name into unique MAC addresses for each port:

1. The SEP portion of the host name is removed.
2. The two-digit port number is appended to the right.

The virtual port is assigned 25 as its port number.

Manually Adding the DPA 7630/7610

If you want to assign specific directory numbers to the emulated IP phones on the DPA 7630/7610 without using auto-registration, you must manually add each phone to the Cisco CallManager database. Keep in mind several important facts:

- Each port must have a unique MAC address. Use the auto-registration formula to calculate the MAC address for each port.
- Use the a descriptive name for the **Description** for each port. For ease of administration, use a similar name for ports configured on the same DPA 7630/7610 system.
- Add each port on the DPA 7630/7610 as a Cisco 30 VIP IP Phone.
- Consider adding a descriptive line to the **Display** field, such as voice mail.

Setting Up the Voice Mail Hunt Group Using Cisco CallManager 4.1 or Later

You must configure several settings in Cisco CallManager to ensure that the voice mail hunt group is set up properly for the DPA 7630/7610. You must configure these settings for each Cisco CallManager system in a cluster, and you must stop and restart Cisco CallManager after making these changes.

Refer to the instructions specific to the version of Cisco CallManager that you are using with the DPA 7630/7610.

On Cisco CallManager 4.1 or later, you must configure some service parameters, but you must also configure the voice mail port and voice mail profile. These sections provide an overview of these steps:

- [Configuring Voice Mail Service Parameters on Cisco CallManager 4.1 or Later, page 6](#)
- [Creating the Pilot Port for the Voice Mail Hunt Group, page 7](#)
- [Creating Voice Mail Profile for the Voice Mail Hunt Group, page 8](#)

Configuring Voice Mail Service Parameters on Cisco CallManager 4.1 or Later

Follow these steps to configure the voice mail service parameters on Cisco CallManager 4.1 or later:

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- Step 1** From Cisco CallManager, choose **Service > Service Parameters**.
 - Step 2** From the Server drop-down list box, choose a server.
 - Step 3** From the Services list, choose Cisco CallManager.
 - Step 4** Click **Update**.
-

Creating the Pilot Port for the Voice Mail Hunt Group

You need to create the voice mail pilot number, which is the number users enter to access their voice mail messages. This number should correspond to the directory number of the first voice mail port (see the [“Configuring Call Ports” section on page 9](#)) and the pilot directory number entered on the DPA 7630/7610 (see *Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3)*).

Follow these steps to create the voice mail pilot port:

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- Step 1** From Cisco CallManager, choose **Feature > Voice Mail > Voice Mail Pilot**
- Step 2** Enter the number of the first port on the DPA 7630/7610 in the **Voice Mail Pilot Number** field.



Note This number should correspond to the directory number of the first voice mail port (see the [“Configuring Call Ports” section on page 9](#)) and the pilot directory number entered on the DPA 7630/7610 (see the “Entering Cisco CallManager Pilot Directory Number” in the *Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3)*).

- Step 3** Enter any other optional fields.
- Step 4** Click **Insert**.
-

Creating Voice Mail Profile for the Voice Mail Hunt Group

The voice mail profile enables you to assign a user a different mail box number than their extension number. So, if users have an extension that is a different number than their voice mailbox on the Octel system, they can still access their voice mail using the pilot directory number.

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- Step 1** From Cisco CallManager, choose **Feature > Voice Mail >Voice Mail Profile**
- Step 2** Click **Add a New Voice Mail Profile**.
- Step 3** Enter the minimum information:
- Profile name
 - Voice Mail Pilot box—Choose the pilot port you just added (see [“Creating the Pilot Port for the Voice Mail Hunt Group”](#) section on page 7).
 - Make this the default Voice Mail Profile for the system—Check this box.



Note If the Cisco CallManager installation has more than one voice mail system integration or the voice mail requires different voice mailbox masks, then do not check this box.

- Step 4** Click **Insert**.
-

Configuring the DPA Ports and Phones

From the perspective of the DPA 7630/7610, several types of ports exist:

- Call ports—Handle call processing (incoming and outgoing calls).
- Octel MWI ports—Receive MWI commands from the Octel system.
- Virtual port—Send MWI commands to Cisco CallManager.
- PBX MWI ports—Send MWI on the Definity and Meridian 1 PBX systems and are only present in the hybrid integration mode.

To Cisco CallManager, these ports on the DPA appear as IP phones, but the PBX MWI ports do not appear in Cisco CallManager. The Cisco CallManager database also contains records of all the end-user phones. You must configure each of these phones in Cisco CallManager to ensure that calls are processed properly. You access the phones using the **Devices > Phone** menu in Cisco CallManager.

These sections provide details about the required settings in Cisco CallManager for the different ports:

- [Configuring Call Ports, page 9](#)
- [Configuring Octel MWI Ports, page 11](#)
- [Configuring the Virtual Port, page 11](#)
- [Configuring End-User Phones, page 11](#)

Configuring Call Ports

Use call ports to connect lines from the Octel system that handle incoming messages, such as voice mail access, and outgoing calls such as fax calls, outgoing calls to pagers, and so on. However, a particular line from the Octel system must support either incoming or outgoing calls; it cannot support both.

Outgoing Calls

Do not include the call ports supporting outgoing calls in the voice mail hunt groups. Otherwise, configure these lines in Cisco CallManager as you normally would, assigning directory numbers to them.

Incoming Calls

The call ports supporting incoming calls require additional configuration in Cisco CallManager. In these cases, these lines and their corresponding call ports compose the voice mail hunt groups.

See [Table 1](#) for an overview of the required settings for Cisco CallManager 4.1 and later.

Table 1 *Outgoing Call Ports Configuration Settings*

Field	Description
Directory Number	Assign a directory number to each of these phones. Ensure that these directory numbers are not included in the voice mail hunt group. Assign one of these ports to be the primary or “pilot” directory number in the voice mail hunt group. Record this value because you need it to configure the DPA 7630/7610.
Call Waiting	Disable call waiting.
Call Forwarding	Assign call forwarding numbers (Forward Busy and Forward No Answer settings), so calls roll to next available directory number in the hunt group.
Display	If the DPA 7630/7610 is connected to an Octel 200 or 300 voice mail system, you must enter D-xxxx, where xxxx is the directory number. However, you do not need to enter anything in the Display field if the DPA 7630/7610 is connected to an Octel 250 or 350 voice mail system
Maximum Calls	Set this value to 2 on the Directory number page.
Busy Trigger	Set this value to 1 on the Directory number page.

Using Hunt Lists and Line Groups

Calls should be distributed to DPA ports from CallManager using the Hunt Pilot/Hunt List/ Line Group feature in Cisco CallManager 4.x.

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- Step 1** Create a new Line Group for the DPA Ports and insert all the DPA incoming lines into the group.
 - Step 2** Choose a distribution algorithm.
 - Step 3** Create a new Hunt List.
 - Step 4** Add the Line Group that contains the DPA ports.
 - Step 5** Create a new Hunt Pilot.
 - Step 6** Enter the Hunt Pilot DN that was used in the Voice Mail Pilot configuration.
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Configuring Octel MWI Ports

The DPA 7630/7610 uses the Octel MWI ports to handle MWI messages from the Octel system. You can also enable these lines to support outgoing call processing. However, you must not configure these ports to handle any incoming call processing. See [Table 2](#) for an overview of the required settings for Cisco CallManager 4.1 and later.

Table 2 *Octel MWI Ports Configuration Settings*

Field	Description
Directory Number	Assign a directory number to each of these phones. Ensure that these directory numbers are not included in the voice mail hunt group.
Call Waiting	Disable call waiting.
Call Forwarding	Do not set.

Configuring the Virtual Port

The DPA 7630/7610 automatically creates and uses the virtual port to send MWI messages to Cisco CallManager. One virtual port is created regardless of the number of Octel MWI ports you have. The virtual phone settings are similar to the Octel MWI port. See [Table 3](#) for an overview of the required settings for both Cisco CallManager 4.1 and later.

Table 3 *Virtual Port Configuration Settings*

Field	Description
Directory Number	Assign a directory number to this phone.
Call Waiting	Disable call waiting.
Call Forwarding	Do not set

Configuring End-User Phones

Although the DPA 7630/7610 does not directly interact with the end-user phones, the phone configuration must be verified to properly forward to voice mail. By default, all directory numbers assigned to a phone will use the default voice mail

profile. If the voice mail profile created earlier was selected as the default Voice Mail Profile for the system, then all phones should use this profile and no further device configuration is required. If the voice mail profile created earlier was not selected as the default, then each directory number must be updated to use the newly created Voice Mail Profile, as shown below:

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- Step 1 Find a directory number to use the Octel VM.
 - Step 2 In the Directory Number Settings, select the Voice Mail Profile created earlier.
 - Step 3 Click **Update**.
-

Configuring the Message Waiting Light

In Cisco CallManager, you must set the option to enable the message waiting light on Cisco IP Phones. After you configure these settings, you must record the values and enter them on the DPA 7630/7610 (see the *Cisco 7630/7610 Voice Mail Gateways Administration Guide (1.3)*).

You must configure these settings for each Cisco CallManager system in a cluster.

Creating a Message Waiting Indicator (MWI) On Number

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- Step 1 From Cisco CallManager, select **Feature > Voice Mail > Message Waiting**.
 - Step 2 Select **Add a New Message Waiting Number**.
 - Step 3 Enter the number, select the Indicator type as **On** and provide a partition and calling search space as necessary.
 - Step 4 Select **Insert**.
-

Creating a Message Waiting Indicator (MWI) Off Number

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- Step 1 From Cisco CallManager, select **Feature > Voice Mail > Message Waiting**.
 - Step 2 Select **Add a New Message Waiting Number**.

- Step 3** Enter the number, select the Indicator type as **Off** and provide a partition and calling search space as necessary.
- Step 4** Select **Insert**.
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Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation at this URL:

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

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Product Documentation DVD

The Product Documentation DVD is a comprehensive library of technical product documentation on a portable medium. The DVD enables you to access multiple versions of installation, configuration, and command guides for Cisco hardware and software products. With the DVD, you have access to the same HTML documentation that is found on the Cisco website without being connected to the Internet. Certain products also have .PDF versions of the documentation available.

The Product Documentation DVD is available as a single unit or as a subscription. Registered Cisco.com users (Cisco direct customers) can order a Product Documentation DVD (product number DOC-DOCDVD= or DOC-DOCDVD=SUB) from Cisco Marketplace at this URL:

<http://www.cisco.com/go/marketplace/>

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You can submit comments about Cisco documentation by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

From this site, you will find information about how to:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories, security notices, and security responses for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

To see security advisories, security notices, and security responses as they are updated in real time, you can subscribe to the Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed. Information about how to subscribe to the PSIRT RSS feed is found at this URL:

http://www.cisco.com/en/US/products/products_psirt_rss_feed.html

Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you have identified a vulnerability in a Cisco product, contact PSIRT:

- For Emergencies only—security-alert@cisco.com

An emergency is either a condition in which a system is under active attack or a condition for which a severe and urgent security vulnerability should be reported. All other conditions are considered nonemergencies.

- For Nonemergencies—psirt@cisco.com

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

**Tip**

We encourage you to use Pretty Good Privacy (PGP) or a compatible product (for example, GnuPG) to encrypt any sensitive information that you send to Cisco. PSIRT can work with information that has been encrypted with PGP versions 2.x through 9.x.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one linked in the Contact Summary section of the Security Vulnerability Policy page at this URL:

http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html

The link on this page has the current PGP key ID in use.

If you do not have or use PGP, contact PSIRT at the aforementioned e-mail addresses or phone numbers before sending any sensitive material to find other means of encrypting the data.

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Technical Support & Documentation website on Cisco.com features extensive online support resources. In addition, if you have a valid Cisco service contract, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not have a valid Cisco service contract, contact your reseller.

Cisco Technical Support & Documentation Website

The Cisco Technical Support & Documentation website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, at this URL:

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

Access to all tools on the Cisco Technical Support & Documentation website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>

**Note**

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support & Documentation website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests, or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—An existing network is down, or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of the network is impaired, while most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The *Cisco Product Quick Reference Guide* is a handy, compact reference tool that includes brief product overviews, key features, sample part numbers, and abbreviated technical specifications for many Cisco products that are sold through channel partners. It is updated twice a year and includes the latest Cisco offerings. To order and find out more about the Cisco Product Quick Reference Guide, go to this URL:

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- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

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- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

or view the digital edition at this URL:

<http://ciscoiq.texterity.com/ciscoiq/sample/>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- Networking products offered by Cisco Systems, as well as customer support services, can be obtained at this URL:

<http://www.cisco.com/en/US/products/index.html>

- Networking Professionals Connection is an interactive website for networking professionals to share questions, suggestions, and information about networking products and technologies with Cisco experts and other networking professionals. Join a discussion at this URL:
<http://www.cisco.com/discuss/networking>
- World-class networking training is available from Cisco. You can view current offerings at this URL:
<http://www.cisco.com/en/US/learning/index.html>

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