



Release Notes for Cisco Emergency Responder 1.3(2)

November 28, 2006

These release notes describe the feature enhancement and caveats for Cisco Emergency Responder (Cisco ER) 1.3(2).

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Related Documentation

Cisco Emergency Responder Documentation

Refer to the publications for Cisco ER 1.3. Navigate from the following documentation URL:

<http://www.cisco.com/univercd/cc/td/doc/product/voice/respond/res13/index.htm>



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Cisco Unified CallManager Documentation

Refer to the Cisco Unified CallManager Documentation Guide and other publications specific to your Cisco Unified CallManager release. Navigate from the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm

New and Changed Information

This section contains new and changed information about features supported in Cisco ER 1.3(2). This information is not documented in the latest release of the [Cisco Emergency Responder Administration Guide 1.3\(1\)](#).

This section contains these topics:

- [Switch-port Change Reporting for Wired Cisco Unified IP Phones, page 2](#)
- [Location Assignment and Call Routing Precedence, page 4](#)
- [New Server Part Numbers, page 5](#)
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Switch-port Change Reporting for Wired Cisco Unified IP Phones

Cisco ER 1.3(2) detects changes in the switch-port association of wired Cisco Unified IP Phones. An incremental or full discovery cycle detects Cisco Unified IP Phones that have changed switch-port associations or are newly discovered. Cisco Unified IP Phones that become missing during a complete discovery are also reported. Cisco ER notifies the system administrator of these changes by email.



Note

A missing Cisco Unified IP Phone is one that is registered in Cisco Unified CallManager, but is not found behind any switch-port of any switch tracked by Cisco ER. Cisco Unified IP Phones that appear on the 'Unlocated Phones' screen in Cisco ER Administration are also included in the missing list. Switch-port Change Reporting reports the location changes for IP Communicator when it is connected to a switch that is tracked by Cisco ER.

The change notification email contains the following information:

- The time of change detection. This is the approximate completion time of the discovery cycle that detected the change.
- The previous switch IP and port number of the Cisco Unified IP Phone. If the Cisco Unified IP Phone is new, this field is blank.
- The current switch IP and port number of the Cisco Unified IP Phone. If the Cisco Unified IP Phone is missing, this field is blank.
- The details of the Cisco Unified IP Phone, including the MAC address, device name, Phone Type, IP address and IP Phone extension(s).



Note

Configure the email client settings to allow line breaks in the email to improve readability. For more information on configuring the email client, see [Configuring Cisco Emergency Responder 1.3\(1\)](#).

Supported Cisco Unified IP Phones—This feature supports only wired Cisco Unified IP Phones that meet both of these conditions:

- Wired Cisco Unified IP Phones discovered behind a LAN switch-port using Cisco Discovery Protocol (CDP) tracking or Content-Addressable Memory (CAM) tracking.
- Wired Cisco Unified IP Phones actively registered in Cisco Unified CallManager. The only exception for this rule is Cisco Unified IP Phones previously registered in Cisco Unified CallManager. These Cisco Unified IP Phones are reported as missing.

Cluster Scenario—The active server in each server group within a cluster sends separate notifications for the Cisco Unified IP Phones it discovers and tracks.

Server Group Scenario—Within a server group, Cisco ER performs change detection and notification on the active Cisco ER server only.

Feature Activation—The change detection and notification feature requires manual activation. You must manually activate the change detection and notification feature. To do so, set the DetectLocationChange property to **1**. The default value of '0' prohibits change detection. Changes will be reported only for those Cisco Unified IP Phones that are registered in Cisco Unified CallManager and there is a change in the connected switch-port.

The steps for activating the feature are as follows:

Procedure

-
- Step 1** Set the DetectLocationChange property to **1** in the C:\Program Files\CiscoSystems\CiscoER\etc\E911Discovery.properties file.
- Step 2** Save the file.
- Step 3** Restart the Cisco ER Services. This will activate the feature.
-

Change Notification conditions—Cisco ER sends change notification email when a full discovery cycle completes under any of these circumstances:

- During a normally scheduled discovery.
- After a manual start from the Administrator Graphical User Interface (GUI).
- As a result of a Cisco Unified CallManager addition from the GUI by the system administrator.

Similarly, a partial discovery cycle sends email notifications under these circumstances:

- During a normally scheduled discovery.
- As a result of a LAN switch addition to Cisco ER; the system administrator starts the discovery process.
- As a result of the system administrator selecting the **Locate Switch Ports** button on the LAN switch details page.



Note

An incremental discovery does not locate missing Cisco Unified IP Phones from Cisco Unified CallManager if no phone registrations take place during the discovery cycle. A full discovery detects all missing Cisco Unified IP Phones that are located since the previous full discovery.

The following events do not result in a change notification:

- When the CERServer starts following the first discovery cycle.

- When a Publisher returns to an online state following the first discovery cycle.
- When no phone location changes occur following a discovery cycle.

Location Assignment and Call Routing Precedence

The following information about Location Assignment and Call Routing Precedence replaces the existing section in the Cisco Emergency Responder Administration Guide 1.3(1), [Cisco Emergency Responder's Call Routing Order](#).

Cisco ER directs emergency calls based on the location of the phone from which the call is placed. The location of the phone is determined by the following methods, in order of precedence:

- Synthetic phones—The MAC address of the phone matches that of a synthetic phone and is assigned to a test Emergency Response Location (ERL). See [Adding Synthetic Phones](#) and [Configuring Test ERLs](#).
- IP Phones tracked behind a switch-port—The MAC address of the IP phone is tracked behind a switch-port assigned to an ERL. See [Configuring Switch Ports](#).
- IP Phones tracked using IP subnet—The IP address of an IP phone belongs to an IP subnet assigned to an ERL. See [Configuring IP Subnet-based ERLs](#).
- IP Phones tracked by another (remote) Cisco ER server group in the same ER cluster—The remote server group tracks an IP phone behind a switch-port or by IP subnet. When an emergency call is received, it is forwarded to the Cisco Unified CallManager cluster served by the remote Cisco ER Server Group. See [Phones Moving Between Clusters](#).
- Manually Configured Phones—The line number of the phone is manually assigned to an ERL. See [Manually Defining a Phone](#).
- Unlocated Phones—The MAC address of an IP phone is assigned to an ERL. See [Identifying Unlocated Phones](#).
- Default ERL—None of the above criteria is used to determine the phone location. The call is routed to the default ERL. See [Setting Up the Default ERL](#).



Note

MAC and/or IP address tracking is recommended for Cisco Unified IP Phones. IP phones which are not tracked by MAC or IP address will appear as Unlocated Phones, even if they are assigned a location by manual line number configuration.

Customers should resolve problems that prevent IP phones from being tracked by MAC or IP address (see [Too Many Unlocated Phones](#)), so IP phones will be not removed from the Unlocated Phones page. An ERL may be assigned directly to an IP Phone on the Unlocated Phones page, but this assignment will not take effect if the phone is assigned a location by manual line number configuration. Use the [ERL Debug Tool](#) to determine the ERL assignment in effect for an IP Phone that appears on the Unlocated Phones page.

Identifying Unlocated Phones

Cisco ER defines unlocated phones as those Cisco Unified IP Phones which meet all of the criteria below:

- The IP phone is registered to a Cisco Unified CallManager known to the Cisco ER group.
- The MAC address of the IP Phone is not tracked behind a switch-port.
- The IP Address of the IP Phone is not tracked using IP Subnets.

- The MAC Address of the IP Phone is not defined as a synthetic phone in Cisco ER.



Note

Cisco Unified IP Phones tracked by a remote Cisco ER server group and IP Phones having line numbers manually assigned to an ERL will also appear in the Unlocated Phones screen.

Assigning ERLs to Unlocated Phones

Cisco ER provides a procedure to assign an ERL to IP Phones that are displayed on the Unlocated Phones screen. This assignment associates the MAC address of the unlocated phone with an ERL that is selected by the administrator. These rules apply to this association:

- The association of an ERL with an IP Phone on the unlocated phones screen does not change the status of the IP Phone; it remains on the unlocated phones screen. This is because the IP Phone will continue to match the criteria for unlocated phones as described above.
- The ERL association is used only when the IP Phone is unlocated, as determined by Cisco ER, using the above rule.

For example, Phone A is currently unlocated and appears on the unlocated phones screen. Using the ERL assignment feature for unlocated phones, Location A is assigned as the ERL for this phone. A subsequent phone tracking cycle finds Phone A behind a switch-port and it no longer appears in the Unlocated Phones screen. The Phone A-to-Location-A assignment is no longer valid. Because the association is persistent, if the IP Phone is unlocated at any future time, the assignment will be valid.

New Server Part Numbers

The following section highlights new server part numbers provided by Cisco ER 1.3(2). The new part numbers are for these Nantucket Ph 2 servers.

- MCS-7825-H2-IPC1 (+950 CPU) is now MCS-7825-H2-IPC2
- MCS-7825-I2-IPC1 (+950 CPU) is now MCS-7825-I2-IPC2

New Software and Hardware Support

The following sections highlight new support provided by Cisco ER 1.3(2).

Resolution of Caveats

- **Resolution of CSCse82561**—The Installation Guide, Release Note and Planning Guide for Cisco ER 1.3(1a) include the support information and configuration instructions for Voice Gateway (VG) 248. Cisco ER 1.3(2) supports Voice Gateway (VG) 224 configuration similar to the VG 248 support. Refer to [Configuring Cisco ER 1.3\(1\)](#) or [Release Notes for Cisco Emergency Responder 1.3\(1a\)](#) for information on configuring High Density Voice Gateways. Use the instructions for VG 248 to configure VG 224 Voice Gateways.
- **Resolution of CSCsg27148**—On a 4924 Metro switch, ports without ‘pluggable’ ports inserted are not discovered during an incremental discovery. A full discovery or a manual selective discovery locates these ports where the optics have been moved to another port without ‘pluggable’ ports.

For a complete list of resolved caveats, see the [“Resolved Caveats” section on page 8](#).

Cisco Unified CallManager Support

Cisco Emergency Responder (Cisco ER) 1.3(2) supports Cisco Unified CallManager versions 4.3 and 5.1 in addition to the previously supported Cisco Unified CallManager versions 5.0, 4.2, 4.1, 4.0, and 3.

**Note**

When upgrading to Cisco ER 1.3(2) from a previous version of Cisco ER, you will be prompted to enter the Cisco Unified CallManager version you are running. Although Cisco ER 1.3(2) does support Cisco Unified CallManager 4.3, version 4.3 is not listed as one of the available versions. If you are running Cisco Unified CallManager 4.3, select version **4.2** when prompted by the installation wizard.

Supported Operating Systems

Cisco ER 1.3(2) supports version 2000.2.4 as the minimum version; these Operating System versions are supported in Cisco ER 1.3(2):

- 2000.4.4
- 2000.4.3
- 2000.4.2
- 2000.4.1b
- 2000.4.1
- 2000.2.7
- 2000.2.6sr2
- 2000.2.4

**Note**

Cisco recommends you upgrade to the highest Operating System version supported by your hardware.

Refer to the Cisco Unified Communications Operating System Administration Guide, Release 5.0(4) and Release Notes for Cisco Unified CallManager Release 5.0(4a) for more information on supported Operating Systems.

Backup and Restore System

Use the Cisco IP Telephony Backup and Restore System (BARS) version 4.0(11) for back up and restore of Cisco ER 1.3(2).

Cisco Security Agent

Cisco ER 1.3(2) supports Version 5 for the Cisco Security Agent (CSA) policy version 3.0(3) for Cisco Unified CallManager.

New Platform Support

Cisco ER 1.3(2) supports these new Media Convergence Server (MCS) platforms:

- MCS-7815-I2-IPC1
- MCS-7825-H2-IPC1 (+950 CPU)
- MCS-7825-I2-IPC1 (+950 CPU)
- MCS-7835-H2-IPC1
- MCS-7835-I2-IPC1
- MCS-7845-H2-IPC1

- MCS-7845-I2-IPC1

Cisco IP Communicator

Cisco ER 1.3(2) supports Cisco IP Communicator 2.0.

Installation Notes

This section describes upgrade information for Cisco ER 1.3(2) and includes these topics:

- [Supported Upgrades, page 7](#)
- [Important Upgrade Notes, page 7](#)

Supported Upgrades

For upgrade paths to Cisco ER 1.3(2) software, download **CER-fmr.1-3-2.exe** from the following URL:
<http://www.cisco.com/cgi-bin/tablebuild.pl/cer>

Important Upgrade Notes

The following Cisco ER 1.3(2) upgrade requirements apply:

- Data migration to Cisco ER 1.3(2) from releases of Cisco ER earlier than Cisco ER 1.3(1a) is not supported. To upgrade to Cisco ER 1.3(2) from these earlier releases, upgrade to Cisco ER 1.3(1a), then upgrade to Cisco ER 1.3(2).
- All Cisco ER servers must be upgraded to Cisco ER 1.3(2). In a Cisco ER cluster, a Cisco ER 1.3(2) server will not operate with previous versions of Cisco ER servers.
- You must uninstall all Service Patches or Service Releases before performing the upgrade. To uninstall all Service Patches or Service Releases, use the Add/Remove Programs in the Windows control panel.

Caveats

This section includes these topics:

- [Using Bug Toolkit, page 7](#)
- [Open Caveats, page 8](#)
- [Resolved Caveats, page 8](#)

Using Bug Toolkit

Known problems (bugs) are graded according to severity level. These release notes contain descriptions of:

- All severity level 1 or 2 bugs.
- Significant severity level 3 bugs.

You can search for problems by using the Cisco Software Bug Toolkit.

To access Bug Toolkit, you need the following items:

- Internet connection
- Web browser
- Cisco.com user ID and password

To use the Software Bug Toolkit, follow these steps:

Procedure

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- Step 1** To access the Bug Toolkit, go to http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.
- Step 2** Log on with your Cisco.com user ID and password.
- Step 3** Click the **Launch Bug Toolkit** hyperlink.
- Step 4** To look for information about a specific problem, enter the bug ID number in the “Enter known bug ID” field and click **Search**.
-

Open Caveats

[Table 1](#) describes the problems that are known to exist in Cisco ER 1.3(2).

Table 1 Open Caveats for Cisco ER 1.3(2)

Identifier	Headline and Bug Toolkit Link
CSCsa80104	Cisco ER server runs out of memory when user logs into ‘cersystemadmin’ http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCsa80104
CSCse54070	Email alert for Cisco ER server is not sent when notification is set http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCse54070
CSCsg26527	Cisco ER webpage searches result in the error ‘Failed to contact Cisco Emergency Responder’ http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCsg26527
CSCsg64964	When Cisco Unified CallManager’s auto-registration is disabled, no email notification is sent for new, unlocated phones http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCsg64964

Resolved Caveats

[Table 2](#) describes the problems that are resolved in Cisco ER 1.3(2).

Table 2 *Resolved Caveats for Cisco ER 1.3(2)*

Identifier	Headline and Bug Toolkit Link
CSCef35391	Backup of Cisco ER folder results in a an erroneous message - failure to backup callhistory.csv file http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCef35391
CSCsa87766	Cisco ER database write fails due to Emergency Location Identification Number (ELIN) update error http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCsa87766
CSCse12340	Cisco ER does not support the addition of Emergency Response Location (ERL) http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCse12340
CSCse29137	Phones registered to a 7825I server running Cisco Unified CallManager 5.0 in a Cisco ER 1.3(1a) environment are not discoverable http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCse29137
CSCse32416	Cisco ER user-level account has access to full administrative privileges http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCse32416
CSCse82561	Support and configuration of Voice Gateway (VG) 224 is not referenced in the Install Document, Release Note and Planning Guide for Cisco 1.3(1a) http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCse82561
CSCse90031	Cisco ER logon field accepts incorrect login although credentials are valid http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCse90031
CSCsg27148	Cisco ER incremental discovery does not report ports without pluggable connectors (SFP or RJ45) or ports without ME-4924-10G connectors http://www.cisco.com/cgi-bin/Support/Bugtool/onebug.pl?bugid=CSCsg27148

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. This section explains the product documentation resources that Cisco offers.

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 library of technical product documentation on a portable medium. The DVD enables you to access installation, configuration, and command guides for Cisco hardware and software products. With the DVD, you have access to the HTML documentation and some of the PDF files found on the Cisco website at this URL:

<http://www.cisco.com/univercd/home/home.htm>

The Product Documentation DVD is created and released regularly. DVDs are available singly or by subscription. Registered Cisco.com users can order a Product Documentation DVD (product number DOC-DOCDVD= or DOC-DOCDVD=SUB) from Cisco Marketplace at the Product Documentation Store at this URL:

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

Ordering Documentation

You must be a registered Cisco.com user to access Cisco Marketplace. Registered users may order Cisco documentation at the Product Documentation Store at this URL:

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

If you do not have a user ID or password, you can register at this URL:

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

Documentation Feedback

You can provide feedback about Cisco technical documentation on the Cisco Support site area by entering your comments in the feedback form available in every online document.

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 do the following:

- 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



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 encryption key 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 to find other means of encrypting the data before sending any sensitive material.

Product Alerts and Field Notices

Modifications to or updates about Cisco products are announced in Cisco Product Alerts and Cisco Field Notices. You can receive these announcements by using the Product Alert Tool on Cisco.com. This tool enables you to create a profile and choose those products for which you want to receive information.

To access the Product Alert Tool, you must be a registered Cisco.com user. Registered users can access the tool at this URL:

<http://tools.cisco.com/Support/PAT/do/ViewMyProfiles.do?local=en>

To register as a Cisco.com user, go to this URL:

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

Obtaining Technical Assistance

Cisco Technical Support provides 24-hour-a-day award-winning technical assistance. The Cisco Support 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 Support Website

The Cisco Support 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/en/US/support/index.html>

Access to all tools on the Cisco Support 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

Before you submit a request for service online or by phone, use the **Cisco Product Identification Tool** to locate your product serial number. You can access this tool from the Cisco Support website by clicking the **Get Tools & Resources** link, clicking the **All Tools (A-Z)** tab, and then choosing **Cisco Product Identification Tool** from the alphabetical list. This 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.



Tip

Displaying and Searching on Cisco.com

If you suspect that the browser is not refreshing a web page, force the browser to update the web page by holding down the Ctrl key while pressing **F5**.

To find technical information, narrow your search to look in technical documentation, not the entire Cisco.com website. After using the Search box on the Cisco.com home page, click the **Advanced Search** link next to the Search box on the resulting page and then click the **Technical Support & Documentation** radio button.

To provide feedback about the Cisco.com website or a particular technical document, click **Contacts & Feedback** at the top of any Cisco.com web page.

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 Online Subscription Center is the website where you can sign up for a variety of Cisco e-mail newsletters and other communications. Create a profile and then select the subscriptions that you would like to receive. To visit the Cisco Online Subscription Center, go to this URL:

<http://www.cisco.com/offer/subscribe>

- 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 channel product offerings. To order and find out more about the *Cisco Product Quick Reference Guide*, go to this URL:
<http://www.cisco.com/go/guide>
- Cisco Marketplace provides a variety of Cisco books, reference guides, documentation, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:
<http://www.cisco.com/go/marketplace/>
- 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:
<http://www.ciscopress.com>
- *Internet Protocol Journal* is a quarterly journal published by Cisco 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, 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 where networking professionals 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>
- “What’s New in Cisco Documentation” is an online publication that provides information about the latest documentation releases for Cisco products. Updated monthly, this online publication is organized by product category to direct you quickly to the documentation for your products. You can view the latest release of “What’s New in Cisco Documentation” at this URL:
<http://www.cisco.com/univercd/cc/td/doc/abtunicd/136957.htm>
- 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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