



Release Notes for the Catalyst 3750, 3560, and 2970 Switches

Cisco IOS Release 12.2(20)SE4

Revised, April 2005

The Cisco IOS Release 12.2(20)SE4 runs on Catalyst 3750, 3560, and 2970 switches.



Note

Use these release notes in conjunction with the information in the [Release Notes for the Catalyst 3750, 3560, and 2970 Switches, Cisco IOS Release 12.2\(20\)SE3](#).

The Catalyst 3750 switches support stacking through Cisco StackWise technology. The Catalyst 3560 and 2970 switches do not support switch stacking. Unless otherwise noted, the term *switch* refers to a standalone switch and to a switch stack.

These release notes include important information about this Cisco IOS release and any limitations, restrictions, and caveats that apply to it. Verify that these release notes are correct for your switch:

- If you are installing a new switch, refer to the Cisco IOS release label on the rear panel of your switch.
- If your switch is on, use the **show version** privileged EXEC command.
- If you are upgrading to a new release, refer to the software upgrade filename for the software version. See the [“Deciding Which Software Files to Use”](#) section on page 2.

For the complete list of Catalyst 3750, 3560, and 2970 switch documentation, see the [“Related Documentation”](#) section on page 3.

You can download the switch software from this site (for registered Cisco.com users with a login password):

- <http://www.cisco.com/kobayashi/sw-center/sw-lan.shtml>

This software release is part of a special release of Cisco IOS software that is not released on the same 8-week maintenance cycle that is used for other platforms. As maintenance releases and future software releases become available, they will be posted to Cisco.com (previously Cisco Connection Online [CCO]) in the Cisco IOS software area.



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Deciding Which Software Files to Use

The upgrade procedures in the *Release Notes for the Catalyst 3750, 3560, and 2970 Switches, Cisco IOS Release 12.2(20)SE3* describe how to perform the upgrade by using a combined tar file. This file contains both the Cisco IOS image file and the files needed for CMS. You must use the combined tar file to upgrade the switch through CMS. To upgrade the switch through the command-line interface (CLI), use the tar file and the **archive download-sw** privileged EXEC command.

[Table 1](#) lists the filenames for this software release.

Table 1 *Cisco IOS Software Image Files*

Filename	Description
c3750-i9-tar.122-20.SE4.tar	Catalyst 3750 SMI file and CMS files
c3750-i5-tar.122-20.SE4.tar	Catalyst 3750 EMI file and CMS files
c3750-i9k91-tar.122-20.SE4.tar	Catalyst 3750 SMI cryptographic file and CMS files
c3750-i5k91-tar.122-20.SE4.tar	Catalyst 3750 EMI cryptographic file and CMS files
c3560-i9-tar.122-20.SE4.tar	Catalyst 3560 SMI file and CMS files
c3560-i5-tar.122-20.SE4.tar	Catalyst 3560 EMI file and CMS files
c3560-i9k91-tar.122-20.SE4.tar	Catalyst 3560 SMI cryptographic file and CMS files
c3560-i5k91-tar.122-20.SE4.tar	Catalyst 3560 EMI cryptographic file and CMS files
c2970-i6l2-tar.122-20.SE4.tar	Catalyst 2970 image file and CMS files
c2970-i6k9l12-tar.122-20.SE4.tar	Catalyst 2970 cryptographic image file and CMS files

Cisco IOS Caveats Resolved in Cisco IOS Release 12.2(20)SE4

These caveats were resolved in this release for the indicated switches:

- CSCed65285

Certain release trains of Cisco Internetwork Operating System (IOS), when configured to use the Cisco IOS Secure Shell (SSH) server in combination with Terminal Access Controller Access Control System Plus (TACACS+) as a means to perform remote management tasks on Cisco IOS devices, may contain two vulnerabilities that can potentially cause Cisco IOS devices to exhaust resources and reload. Repeated exploitation of these vulnerabilities can result in a Denial of Service (DoS) condition. Use of SSH with Remote Authentication Dial In User Service (RADIUS) is not affected by these vulnerabilities.

Cisco has made free software available to address these vulnerabilities for all affected customers. There are workarounds available to mitigate the effects of the vulnerability (see the “Workarounds” section of the full advisory for details.)

This advisory will be posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20050406-ssh.shtml>

- CSCed65778

Certain release trains of Cisco Internetwork Operating System (IOS), when configured to use the Cisco IOS Secure Shell (SSH) server in combination with Terminal Access Controller Access Control System Plus (TACACS+) as a means to perform remote management tasks on Cisco IOS devices, may contain two vulnerabilities that can potentially cause Cisco IOS devices to exhaust resources and reload. Repeated exploitation of these vulnerabilities can result in a Denial of Service (DoS) condition. Use of SSH with Remote Authentication Dial In User Service (RADIUS) is not affected by these vulnerabilities.

Cisco has made free software available to address these vulnerabilities for all affected customers. There are workarounds available to mitigate the effects of the vulnerability (see the “Workarounds” section of the full advisory for details.)

This advisory will be posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20050406-ssh.shtml>

- CSCeg55298 (Catalyst 3750)

When two or more Cisco Catalyst 3750 switch stacks are connected to each other through nonrouted (Layer 2) ports, and a client sends an IGMP leave message, this no longer causes a storm of IGMP leave messages to be sent between the two switch stacks.

- CSCeg63064 (Catalyst 2970)

Catalyst 2970 switches now correctly forward IPv6 packets that have hop-by-hop options set.

Related Documentation

These documents provide complete information about the Catalyst 3750, 3560, and 2970 switches and are available at Cisco.com:

- <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat3750/index.htm>
- <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat3560/index.htm>
- <http://www.cisco.com/univercd/cc/td/doc/product/lan/cat2970/index.htm>

You can order printed copies of documents with a DOC-xxxxxx= number from the Cisco.com sites and from the telephone numbers listed in the “Obtaining Documentation” section on page 4.

These documents provide complete information about the Catalyst 3750 switches:

- *Catalyst 3750 Switch Software Configuration Guide* (order number DOC-7816180=)
- *Catalyst 3750 Switch Command Reference* (order number DOC-7816181=)
- *Catalyst 3750 Switch System Message Guide* (order number DOC-7816184=)
- Cluster Management Suite (CMS) online help (available only from the switch CMS software)
- *Catalyst 3750 Switch Hardware Installation Guide* (order number DOC-7815136=)

These documents provide complete information about the Catalyst 3560 switches:

- *Catalyst 3560 Switch Software Configuration Guide* (order number DOC-7816404=)
- *Catalyst 3560 Switch Command Reference* (order number DOC-7816405=)
- *Catalyst 3560 Switch System Message Guide* (order number DOC-7816406=)
- Cluster Management Suite (CMS) online help (available only from the switch CMS software)
- *Catalyst 3560 Switch Hardware Installation Guide* (order number DOC-7816057=)

These documents provide complete information about the Catalyst 2970 switches:

- *Catalyst 2970 Switch Software Configuration Guide* (order number DOC-7816182=)
- *Catalyst 2970 Switch Command Reference* (order number DOC-7816183=)
- *Catalyst 2970 Switch System Message Guide* (order number DOC-7816185=)
- Cluster Management Suite (CMS) online help (available only from the switch CMS software)
- *Catalyst 2970 Switch Hardware Installation Guide* (order number DOC-7815469=)

For other information about related products, refer to these documents:

- *Cisco Small Form-Factor Pluggable Modules Installation Notes* (not orderable but available on Cisco.com)
- *Cisco RPS 300 Redundant Power System Hardware Installation Guide* (order number DOC-7810372=)
- *Cisco RPS 675 Redundant Power System Hardware Installation Guide* (order number DOC-7815201=)

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/univercd/home/home.htm>

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

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:

<http://www.cisco.com/en/US/partner/ordering/index.shtml>

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can send comments about technical documentation to bug-doc@cisco.com.

You can submit comments 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.

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

The Cisco Technical 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, 365 days a year at this URL:

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

Access to all tools on the Cisco Technical 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>

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 automatically provides recommended solutions. If your issue is not resolved using the recommended resources, your service request will be assigned to a Cisco TAC 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 TAC 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)—Your 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 operation 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 your network is impaired, but 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.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:
<http://www.cisco.com/go/marketplace/>
- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:
<http://cisco.com/univercd/cc/td/doc/pcat/>
- *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>
- *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>
- *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>
- 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>

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section.

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