



Release Notes for Cisco AS5000 Series Universal Gateways with Cisco IOS Release 12.4(15)XZ

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Cisco IOS Release 12.4(15)XZ2
OL-19156-01 First Release

These release notes describe new features and significant software components for the Cisco AS5000 series routers that support Cisco IOS Release 12.4(15)XZ. These release notes are updated as needed. Use these release notes with the [Cross-Platform Release Notes for Cisco IOS Release 12.4T and About Cisco IOS Release Notes](#).

For a list of the software caveats that apply to Cisco IOS Release 12.4(15)XZ, see the “[Caveats](#)” section on [page 5](#) and the online [Caveats for Cisco IOS Release 12.4\(20\)T](#). The caveats document is updated for every 12.4T maintenance release.

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Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

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Introduction

The Cisco AS5350XM and Cisco AS5400XM universal gateways are the only 1-rack unit, 2-, 4-, or 8-PRI gateway that provides universal services—data, voice, and fax services on any service, any port. The Cisco AS5350XM and Cisco AS5400XM universal gateways offer high performance and high reliability in a compact, modular design. This cost-effective platform is appropriate for Internet service providers (ISPs) and enterprises that require innovative universal services.

System Requirements

This section describes the system requirements for Cisco IOS Release 12.4(15)XZ and includes the following sections:

- [Memory Requirements, page 2](#)
- [Supported Hardware, page 4](#)
- [Determining the Software Version, page 4](#)
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- [Feature Set Tables, page 4](#)

Memory Requirements

[Table 1](#) and [Table 2](#) describe the memory requirements for the Cisco IOS feature sets that are supported by Cisco IOS Release 12.4(15)XZ on the Cisco AS5000 universal gateways.

Table 1 *Memory Requirements for the Cisco AS5350XM Universal Gateway*

Platform	Feature Set	Software Image	Flash Memory (MB)	DRAM (MB)
Cisco AS5350XM	Cisco AS5350 IOS IP PLUS IPSEC 3DES	c5350-ik9s-mz	64	256
	Cisco AS5350 IOS IP PLUS IPSEC 3DES LAWFUL INTERCEPT	c5350-ik9su2-mz	64	256
	Cisco AS5350 IOS IP PLUS	c5350-is-mz	64	256
	Cisco AS5350 IOS ENTERPRISE PLUS IPSEC 3DES	c5350-jk9s-mz	64	256
	Cisco AS5350 Ser. IOS INT VOICE/VIDEO IPIPGW, TDMIP GW LI	c5350-jk9su2_ivs-mz	64	512
	Cisco AS5350 IOS ENTERPRISE PLUS	c5350-js-mz	64	256
	Cisco AS5350 Ser. IOS INT VOICE/VIDEO IPIPGW, TDMIP GW EPLUS	c5350-js_ivs-mz	128	512
	Cisco AS5350 Ser. IOS INT Voice/Video IPIPGW, TDMIP GW EPLUS	c5350-js_ivs-mz	128	512

Table 1 *Memory Requirements for the Cisco AS5350XM Universal Gateway (continued)*

Platform	Feature Set	Software Image	Flash Memory (MB)	DRAM (MB)
Cisco AS5350	Cisco AS5350 IOS IP PLUS IPSEC 3DES	c5350-ik9s-mz	64	128
	Cisco AS5350 IOS IP PLUS IPSEC 3DES LAWFUL INTERCEPT	c5350-ik9su2-mz	64	128
	Cisco AS5350 IOS IP PLUS	c5350-is-mz	64	128
	Cisco AS5350 IOS ENTERPRISE PLUS IPSEC 3DES	c5350-jk9s-mz	64	128
	Cisco AS5350 IOS ENTERPRISE PLUS	c5350-js-mz	64	128

Table 2 *Memory Requirements for the Cisco AS5400XM Universal Gateway*

Platform	Feature Set	Software Image	Flash Memory (MB)	DRAM (MB)
Cisco AS5400XM	Cisco AS5400 IOS IP PLUS IPSEC 3DES	c5400-ik9s-mz	64	512
	Cisco AS5400 IOS IP PLUS IPSEC 3DES LAWFUL INTERCEPT	c5400-ik9su2-mz	64	512
	Cisco AS5400 IOS IP PLUS	c5400-is-mz	64	512
	Cisco AS5400 IOS ENTERPRISE PLUS IPSEC 3DES	c5400-jk9s-mz	64	512
	Cisco AS5400 Ser. IOS INT VOICE/VIDEO IPIPGW, TDMIP GW LI	c5400-jk9su2_ivs-mz	64	512
	Cisco AS5400 IOS ENTERPRISE PLUS	c5400-js-mz	64	512
	Cisco AS5400 Ser. IOS INT VOICE/VIDEO IPIPGW, TDMIP GW EPLUS	c5400-js_ivs-mz	128	512
Cisco AS5400, Cisco AS5400HPX,	Cisco AS5400 IOS IP PLUS IPSEC 3DES	c5400-ik9s-mz	64	128
	Cisco AS5400 IOS IP PLUS IPSEC 3DES LAWFUL INTERCEPT	c5400-ik9su2-mz	64	128
	Cisco AS5400 IOS IP PLUS	c5400-is-mz	64	128
	Cisco AS5400 IOS ENTERPRISE PLUS IPSEC 3DES	c5400-jk9s-mz	64	128
	Cisco AS5400 IOS ENTERPRISE PLUS	c5400-js-mz	64	128

Supported Hardware

Cisco IOS Release 12.4(15)XZ supports the following Cisco AS5000 platforms:

- Cisco AS5350
- Cisco AS5350XM
- Cisco AS5400
- Cisco AS5400XM
- Cisco AS5400HPX

For detailed descriptions of new hardware features and which features are supported on each router, see the “[New and Changed Information](#)” section on page 4. For descriptions of existing hardware features and supported modules, see the hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco AS5300 router at:

http://www.cisco.com/en/US/products/hw/univgate/ps501/tsd_products_support_series_home.html

For descriptions of existing hardware features and supported modules, see the hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco AS5400 router at:

http://www.cisco.com/en/US/products/hw/univgate/ps505/tsd_products_support_series_home.html

Determining the Software Version

To determine the version of Cisco IOS software currently running on your Cisco AS5000 series router, see *About Cisco IOS Release Notes* located at:

http://www.cisco.com/en/US/docs/ios/12_4/12_4x/12_4xy15/ReleaseNote.html.

Upgrading to a New Software Release

For general information about upgrading to a new software release, see *About Cisco IOS Release Notes* located at:

http://www.cisco.com/en/US/docs/ios/12_4/12_4x/12_4xy15/ReleaseNote.html.

Feature Set Tables

For information about feature set tables, see *About Cisco IOS Release Notes* located at:

http://www.cisco.com/en/US/docs/ios/12_4/12_4x/12_4xy15/ReleaseNote.html.

New and Changed Information

- [New Hardware Features in Cisco IOS Release 12.4\(15\)XZ, page 5](#)
- [New Software Features in Cisco IOS Release 12.4\(15\)XZ, page 5](#)
- [New Features in Release 12.4T, page 5](#)

New Hardware Features in Cisco IOS Release 12.4(15)XZ

There are no new hardware features in this release.

New Software Features in Cisco IOS Release 12.4(15)XZ

There are no new software features in this release.

New Features in Release 12.4T

For information regarding the features supported in Cisco IOS Release 12.4T, see the *Cross-Platform Release Notes* links at:

http://www.cisco.com/en/US/products/ps6441/prod_release_notes_list.html

Limitations and Restrictions

There are no known limitations or restrictions in this release.

Caveats

For general information on caveats and the bug toolkit, see *About Cisco IOS Release Notes* located at http://www.cisco.com/en/US/docs/ios/12_4/12_4x/12_4xy15/ReleaseNote.html.

This section contains the following caveat information:

- [Open Caveats - Cisco IOS Release 12.4\(15\)XZ2, page 5](#)
- [Resolved Caveats - Cisco IOS Release 12.4\(15\)XZ2, page 6](#)

Open Caveats - Cisco IOS Release 12.4(15)XZ2

There are no open caveats in this release.

Resolved Caveats - Cisco IOS Release 12.4(15)XZ2

CSCsr16693 A series of TCP packets may cause a denial of service (DoS) condition on Cisco IOS devices that are configured as Easy VPN servers with the Cisco Tunneling Control Protocol (cTCP) encapsulation feature.

Cisco has released free software updates that address this vulnerability. No workarounds are available; however, the IPsec NAT traversal (NAT-T) feature can be used as an alternative.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20090325-ctcp.shtml>.

Note: The March 25, 2009, Cisco IOS Security Advisory bundled publication includes eight Security Advisories. All of the advisories address vulnerabilities in Cisco IOS Software. Each advisory lists the releases that correct the vulnerability or vulnerabilities in the advisory. The following table lists releases that correct all Cisco IOS Software vulnerabilities that have been published in Cisco Security Advisories on March 25, 2009, or earlier.

<http://www.cisco.com/warp/public/707/cisco-sa-20090325-bundle.shtml>

CSCsu21828 A series of TCP packets may cause a denial of service (DoS) condition on Cisco IOS devices that are configured as Easy VPN servers with the Cisco Tunneling Control Protocol (cTCP) encapsulation feature.

Cisco has released free software updates that address this vulnerability. No workarounds are available; however, the IPsec NAT traversal (NAT-T) feature can be used as an alternative.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20090325-ctcp.shtml>.

Note: The March 25, 2009, Cisco IOS Security Advisory bundled publication includes eight Security Advisories. All of the advisories address vulnerabilities in Cisco IOS Software. Each advisory lists the releases that correct the vulnerability or vulnerabilities in the advisory. The following table lists releases that correct all Cisco IOS Software vulnerabilities that have been published in Cisco Security Advisories on March 25, 2009, or earlier.

<http://www.cisco.com/warp/public/707/cisco-sa-20090325-bundle.shtml>

CSCsv38166 The server side of the Secure Copy (SCP) implementation in Cisco IOS software contains a vulnerability that could allow authenticated users with an attached command-line interface (CLI) view to transfer files to and from a Cisco IOS device that is configured to be an SCP server, regardless of what users are authorized to do, per the CLI view configuration.

This vulnerability could allow valid users to retrieve or write to any file on the device's file system, including the device's saved configuration and Cisco IOS image files, even if the CLI view attached to the user does not allow it. This configuration file may include passwords or other sensitive information.

The Cisco IOS SCP server is an optional service that is disabled by default. CLI views are a fundamental component of the Cisco IOS Role-Based CLI Access feature, which is also disabled by default. Devices that are not specifically configured to enable the Cisco IOS SCP server, or that are configured to use it but do not use role-based CLI access, are not affected by this vulnerability.

This vulnerability does not apply to the Cisco IOS SCP client feature.

Cisco has released free software updates that address this vulnerability.

There are no workarounds available for this vulnerability apart from disabling either the SCP server or the CLI view feature if these services are not required by administrators.

This advisory is posted at the following link:

<http://www.cisco.com/warp/public/707/cisco-sa-20090325-scp.shtml>.

CSCsu11522 A vulnerability exists in the Session Initiation Protocol (SIP) implementation in Cisco IOS software that can be exploited remotely to cause a reload of the Cisco IOS device.

Cisco has released free software updates that address this vulnerability. There are no workarounds available to mitigate the vulnerability apart from disabling SIP, if the Cisco IOS device does not need to run SIP for VoIP services. However, mitigation techniques are available to help limit exposure to the vulnerability.

This advisory is posted at the following link:

<http://www.cisco.com/warp/public/707/cisco-sa-20090325-sip.shtml>.

CSCsr29468 Cisco IOS software contains a vulnerability in multiple features that could allow an attacker to cause a denial of service (DoS) condition on the affected device. A sequence of specially crafted TCP packets can cause the vulnerable device to reload.

Cisco has released free software updates that address this vulnerability.

Several mitigation strategies are outlined in the workarounds section of this advisory.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20090325-tcp.shtml>

CSCsq50366 Last digit getting truncated when prefix is set to its max value of 32.

Symptom Last digit getting truncated when prefix is configured with a length of 32 under the dial-peer.

Conditions When the prefix is configured with a length of 32 under the dial-peer only 31 digits are being sent across and the calls fails as there is no matching dial-peer at the other end. When the prefix is configured for 31 digits, then all the digits are sent correctly and the call is successful.

This is seen in the following call scenario:

1. Configure E1R2 ds0 groups between callgen and UUT:
2. Callgen calls into the UUT using ds0-group1.
3. The UUT has DID configured.
4. The UUT directs the call to ds0-group2 which is connected back to callgen.
5. Callgen has DID configured for the incoming call.
6. Callgen directs the call to ds0-group3 which is connected back to the UUT
7. The uut establishes a VoIP call leg back to callgen.

Workaround None.

CSCsr68545 Error %DATACORRUPTION-1-DATAINCONSISTENCY when running ipsla with rtt.

Symptom Error message occurs:

```
000302: Jul 24 13:00:13.575 CDT: %DATACORRUPTION-1-DATAINCONSISTENCY: copy error
-Traceback= 0x410FD1A4 0x41119DB0 0x41138324 0x41DE5714
```

Conditions IP SLA configured with RTT.

Workaround None.

CSCsr27960 Traceback observed after configuring credential under sip-ua.

Symptom Traceback observed when configuring credentials CLI under sip-ua.

Conditions This happens when user configures credentials CLI with username length more than 32 characters.

Workaround None.

CSCso58935 Caller ID still display Barge for point-to-point call between sccp share.

Symptom Caller ID still display To Barge for point to point call between two sccp shared line phones after the other party drops out from cBarge conference.

Workaround None.

CSCsr14658 CLI Cannot handle Double quotes.

Symptom CME 4.3. IOS 12.4.15XZ SP Services. Under telephony-service the following url services was configured:

```
http://10.1.1.1 "My service"
```

Note the quotes. On the running config you see the above command without the quotes and everything works fine. When you type **wr**, then you again see the same command without the quotes. The issue is that, when you reload the router, the command is there, but it is not accepted and you have to type it again. Also, if you type **url services http://10.1.1.1 My service**, then you get an error of invalid input.

Conditions Normal operation.

Workaround Use one word and underscore instead of space.

CSCsq48167 CME DN **description** command may allow for open-ended quote delimitation.

Symptom The CME **description** command under the ephone-dn potentially allows for the description string to be saved to the router configuration without a trailing quote. This leaves an open-ended delimitation in the configuration for the description string, and will cause the CME GUI to fail to load with an "unterminated string constant" error.

Conditions There are two ways that the configuration can get a description with no closing quote:

1. Description is entered with quotes on both sides, and total string length is between 33 and 40 characters.

<i>Entering</i>

Router(config)#ephone-dn 1

Router(config-ephone-dn)#description "01234567890123456789012345678912345"

<i>Appears as</i>

ephone-dn 1

description "01234567890123456789012345678912"

2. Description is entered with quotes only on beginning of string.

<i>Entering</i>

Router(config)#ephone-dn 1

Router(config-ephone-dn)#description "test"

<i>Appears as</i>

ephone-dn 1

description "test"

Workaround Enter the description without any quotes via the CLI.

Additional References

Use this release note with the documents and websites in this release note and the documents listed in the following sections:

- [Release-Specific Documents, page 10](#)
- [Platform-Specific Documents, page 10](#)

Release-Specific Documents

The following documents are specific to Release 12.4 and apply to Release 12.4(15)XZ.

- [Cross-Platform Release Notes for Cisco IOS Release 12.4T](#)
- [Cisco IOS Software Releases 12.4 Special and Early Deployments](#)
- [Caveats for Cisco IOS Release 12.4\(20\)T](#)

Platform-Specific Documents

Hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco AS5300 universal gateways are at:

http://www.cisco.com/en/US/products/hw/univgate/ps501/tsd_products_support_series_home.html

Hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco AS5400 universal gateways are at:

http://www.cisco.com/en/US/products/hw/univgate/ps505/tsd_products_support_series_home.html

Cisco IOS Software Documentation Set

The Cisco IOS software documentation set consists of the Cisco IOS configuration guides, Cisco IOS command references, and other supporting documents.

Documentation Modules

Each module in the Cisco IOS documentation set consists of one or more configuration guides and one or more corresponding command references. Chapters in a configuration guide describe protocols, configuration tasks, and Cisco IOS software functionality, and contain comprehensive configuration examples. Chapters in a command reference provide complete command syntax information. Use each configuration guide with its corresponding command reference. *Cisco IOS Software Documentation* is available in html or pdf form.

Select your release and click the command references, configuration guides, or any other Cisco IOS documentation you need.

Notices

See the “Notices” section in *About Cisco IOS Release Notes* located at:
http://www.cisco.com/en/US/docs/ios/12_4/12_4x/12_4xy15/ReleaseNote.html.

Use this document in conjunction with the documents listed in the “[Additional References](#)” section.

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