Release Notes for Cisco IAD2430 Series Integrated Access Devices with Cisco IOS Release 12.4(20)YA

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Cisco IOS Release 12.4(20)YA3
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These release notes for the Cisco IAD2430 Series Integrated Access Devices (IAD) describe the product-related enhancements provided in Cisco IOS Release 12.4(20)YA.

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(20)YA, see the "Caveats" section on page 6 and the online *Caveats for Cisco IOS Release 12.4(20)T*. The caveats document is updated for every 12.4T maintenance release.

Contents

These release notes describe the following topics:

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

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Introduction

The Cisco IAD2430 is the next generation integrated voice and data services platform for Service Providers, building on the industry leading Cisco IAD2420 series IAD. The Cisco IAD2430 series offers a major leap forward in price performance and enhanced software functionality such as MGCP SRST used to accelerate the migration from time division multiplexing (TDM) to VoIP cost efficiently. The Cisco IAD2430 series harnesses the maturity of the Cisco IAD2420 series software and enhances functionality by providing more capabilities such as denser interfaces (up to 24 FXS and up to 2 voice or 2 data T1s), encryption, and DC power back up while maintaining it's 1RU form factor for space saving Service Provider Managed Services deployment.

For information on new features and Cisco IOS commands supported by Cisco IOS Release 12.4(20)YA, see the "New and Changed Information" section on page 5.

Cisco IAD 2430 Series Integrated Access Device

The Cisco IAD2430 Series Integrated Access Device consists of the following five models:

- Cisco 2430-24FXS IAD
- Cisco 2431-8FXS IAD
- Cisco 2431-16FXS IAD
- Cisco 2431-1T1E1 IAD
- Cisco 2432-24FXS IAD

The following WAN interface cards (WICs) and Voice Interface Cards (VICs) are supported:

- VIC2-2FXO
- VIC2-2FXS
- VIC-4FXS/DID
- VIC2-2BRI-NT/TE
- VWIC-2MFT-T1
- VWIC-2MFT-E1
- WIC-1T
- WIC-1ADSL
- WIC-1SHDSL
- WIC-1ADSL-DG
- WIC-1SHDSL-V2

Port Numbering

Port numbering conventions for the Cisco IAD2430 Series Integrated Access Device differs from the Cisco IAD2420 Series Integrated Access Device:

- An external compact flash card is numbered slot 0.
- 10/100Base-T Fast Ethernet ports are numbered Fast Ethernet 0/0 and Fast Ethernet 0/1 from right to left.
- T1/E1 ports are numbered T1 or E1 1/0 and T1 or E1 1/1 from right to left.
- The slot for WICs and VICs is numbered slot 0. WIC and VIC interfaces are numbered by interface face with this slot number and an interface number, beginning with 0 and running from right to left.
- FXS voice port numbering begins at 2/0 and extends to 2/7, 2/15, or 2/23, depending on the number of voice ports.

MGCP Endpoint Naming Convention

The Media Gateway Control Protocol (MGCP) endpoint naming convention for Cisco IAD2430 Series IAD differs from the Cisco IAD2420 Series IAD. The MGCP naming convention for the Cisco IAD2430 Series IAD is the following:

Cisco IAD2431-1T1E1

S1/DS1-0/1@iad2430-digital
S1/DS1-0/2@iad2430-digital
. . .
S1/DS1-0/24@iad2430-digital

S1/DS1-1/1@iad2430-digital
S1/DS1-1/2@iad2430-digital
. . .
S1/DS1-1/24@iad2430-digital

Cisco IAD2430-24FXS, IAD2431-8FXS, IAD2431-16FXS, IAD2432-24FXS

AALN/S2/0@iad2430-analog
AALN/S2/1@iad2430-analog
. . .
AALN/S2/23@iad2430-analog

Voice Analog Ports

AALN/S0/0@iad2430-analog
AALN/S0/1@iad2430-analog
AALN/S0/2@iad2430-analog
AALN/S0/3@iad2430-analog

System Requirements

This section describes the system requirements for the Cisco IOS Release 12.4(20)YA releases and includes the following sections:

Memory Requirements

Table 1 lists the memory recommendations of the Cisco IOS feature sets for the Cisco IAD2430 series IAD for Cisco IOS Release 12.4(20)YA. Cisco IAD2430 series IAD are available with a 32-MB Flash memory card.

Table 1 Cisco Release 12.4(20)YA Memory Recommendations for the Cisco IAD2430 Series IAD

Platform	Feature Set	Software Image	Flash Memory (MB)	DRAM Memory (MB)	Runs From
Cisco IAD2430	Cisco 2430 Series IOS IP Subset/IPSEC 64BIT/FW/Voice	c2430-i6k9o3s-mz	64	128	RAM
	Cisco 2430 Series IOS IP Subset/Voice	c2430-i6s-mz	64	128	RAM
Cisco IAD2431 Cisco IAD2432	Cisco 2430 Series IOS IP Plus/IPsec 64BIT/FW/Voice	c2430-ik9o3s-mz	64	128	RAM
	Cisco 2430 Series IOS IP Plus	c2430-is-mz	64	128	RAM
Cisco IAD2435	Cisco IAD 2435 Series IOS Advanced IP Services	c2435-advipservicesk9-mz	128	256	RAM
	Cisco IAD 2435 Series IOS IP Voice w/o Crypto	c2435-ipvoice-mz	128	256	RAM

Hardware Supported

Cisco IOS Release 12.4(20)YA supports the following platforms:

- Cisco IAD2430
- Cisco IAD2431
- Cisco IAD2432
- Cisco IAD2435

For detailed descriptions of the new hardware features, see the "New and Changed Information" section on page 5.

Determining the Software Version

To determine the version of Cisco IOS software currently running on your Cisco IAD2430 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

The following sections list the new hardware products and software features supported by the Cisco IAD2430 series IAD in Cisco IOS Release 12.4(20)YA:

- New Hardware Features in Cisco IOS Release 12.4(20)YA3, page 5
- New Software Features in Cisco IOS Release 12.4(20)YA3, page 5
- New Features in Release 12.4T, page 5

New Hardware Features in Cisco IOS Release 12.4(20)YA3

There are no new hardware features in this release.

New Software Features in Cisco IOS Release 12.4(20)YA3

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(20)YA3

There are no open caveats in this release.

Resolved Caveats - Cisco IOS Release 12.4(20)YA3

`CSCsu84868 c3845: Error mesg %SYS-2-BADSHARE: Bad refcount in datagram_done.`

Symptom Cisco 3845 experiences trackback error:

Aug 14 12:34:55.960: %SYS-2-BADSHARE: Bad refcount in datagram_done, ptr=7006C010, count=0, -Traceback= 0x61816650 0x60641BD0 0x60C27A80 Aug 17 16:51:45.739: %SYS-2-BADSHARE: Bad refcount in datagram_done, ptr=705985A4, count=0, -Traceback= 0x61816650 0x60641BD0 0x60C27A80

Conditions The error message occurs on a router running the c3845-adventerprisek9_ivs_li-mz.124-15.T5 image.

Workaround None.

`CSCsy22826 VG224 sending incorrect ssType in 1+ node CUCM cluster.`

Symptom VG224 endpoint does not connect to callback destination, once the callback destination is idle.

Conditions Multi node cluster and VG224 endpoint is registered with node other then the first node in the cluster.

Workaround Have VG224 endpoints registered with first node.

Further Problem Description: The activation of the callback is successful. What fails is when the callback destination becomes idle again and the VG224 endpoint gets notified (ring). After the VG224 endpoint goes offhook, the system should automatically connect to the Callback destination.This does not happen and VG224 endpoint gets silence.

Open Caveats - Cisco IOS Relase 12.4(20)YA2

There are no open caveats in this release.

Resolved Caveats - Cisco IOS Release 12.4(20)YA2

- CSCsv04836

  Multiple Cisco products are affected by denial of service (DoS) vulnerabilities that manipulate the state of Transmission Control Protocol (TCP) connections. By manipulating the state of a TCP connection, an attacker could force the TCP connection to remain in a long-lived state, possibly indefinitely. If enough TCP connections are forced into a long-lived or indefinite state, resources on a system under attack may be consumed, preventing new TCP connections from being accepted. In some cases, a system reboot may be necessary to recover normal system operation. To exploit these vulnerabilities, an attacker must be able to complete a TCP three-way handshake with a vulnerable system.

  In addition to these vulnerabilities, Cisco Nexus 5000 devices contain a TCP DoS vulnerability that may result in a system crash. This additional vulnerability was found as a result of testing the TCP state manipulation vulnerabilities.

  Cisco has released free software updates for download from the Cisco website that address these vulnerabilities. Workarounds that mitigate these vulnerabilities are available.

  This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090908-tcp24.shtml.

Resolved Caveats - Cisco IOS Release 12.4(20)YA1

CSCsu70214

A vulnerability exists in Cisco IOS software where an unauthenticated attacker could bypass access control policies when the Object Groups for Access Control Lists (ACLs) feature is used. Cisco has released free software updates that address this vulnerability. There are no workarounds for this vulnerability other than disabling the Object Groups for ACLs feature. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-acl.shtml.

CSCsw47076

A vulnerability exists in Cisco IOS software where an unauthenticated attacker could bypass access control policies when the Object Groups for Access Control Lists (ACLs) feature is used. Cisco has released free software updates that address this vulnerability. There are no workarounds for this vulnerability other than disabling the Object Groups for ACLs feature. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-acl.shtml.

CSCsv48603

A vulnerability exists in Cisco IOS software where an unauthenticated attacker could bypass access control policies when the Object Groups for Access Control Lists (ACLs) feature is used. Cisco has released free software updates that address this vulnerability. There are no workarounds for this vulnerability other than disabling the Object Groups for ACLs feature. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-acl.shtml.

CSCsx07114

A vulnerability exists in Cisco IOS software where an unauthenticated attacker could bypass access control policies when the Object Groups for Access Control Lists (ACLs) feature is used. Cisco has released free software updates that address this vulnerability. There are no workarounds for this vulnerability other than disabling the Object Groups for ACLs feature. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-acl.shtml.

CSCsu50252

A vulnerability exists in Cisco IOS software where an unauthenticated attacker could bypass access control policies when the Object Groups for Access Control Lists (ACLs) feature is used. Cisco has released free software updates that address this vulnerability. There are no workarounds for this vulnerability other than disabling the Object Groups for ACLs feature. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-acl.shtml.

CSCsy54122

A vulnerability exists in Cisco IOS software where an unauthenticated attacker could bypass access control policies when the Object Groups for Access Control Lists (ACLs) feature is used. Cisco has released free software updates that address this vulnerability. There are no workarounds for this vulnerability other than disabling the Object Groups for ACLs feature. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-acl.shtml.

CSCsy15227

Cisco IOS Software configured with Authentication Proxy for HTTP(S), Web Authentication or the consent feature, contains a vulnerability that may allow an unauthenticated session to bypass the authentication proxy server or bypass the consent webpage.

There are no workarounds that mitigate this vulnerability.

This advisory is posted at the following link:

http://www.cisco.com/warp/public/707/cisco-sa-20090923-auth-proxy.shtml

CSCsz38104

The H.323 implementation in Cisco IOS Software contains a vulnerability that can be exploited remotely to cause a device that is running Cisco IOS Software to reload. Cisco has released free software updates that address this vulnerability. There are no workarounds to mitigate the vulnerability apart from disabling H.323 if the device that is running Cisco IOS Software does not need to run H.323 for VoIP services. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-h323.shtml.

CSCsq58779

Cisco IOS devices that are configured for Cisco Unified Communications Manager Express (CME) and the Extension Mobility feature are vulnerable to a buffer overflow vulnerability. Successful exploitation of this vulnerability may result in the execution of arbitrary code or a Denial of Service (DoS) condition on an affected device.

Cisco has released free software updates that address this vulnerability.

This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-cme.shtml.

CSCsr18691

Cisco IOS devices that are configured with Cisco IOS Zone-Based Policy Firewall Session Initiation Protocol (SIP) inspection are vulnerable to denial of service (DoS) attacks when processing a specific SIP transit packet. Exploitation of the vulnerability could result in a reload of the affected device.

Cisco has released free software updates that address this vulnerability.

Workarounds that mitigate this vulnerability are available within the workarounds section of the posted advisory.

This advisory is posted at the following link:

http://www.cisco.com/warp/public/707/cisco-sa-20090923-ios-fw.shtml

CSCsy07555

Cisco IOS devices that are configured for Internet Key Exchange (IKE) protocol and certificate based authentication are vulnerable to a resource exhaustion attack. Successful exploitation of this vulnerability may result in the allocation of all available Phase 1 security associations (SA) and prevent the establishment of new IPsec sessions.

Cisco has released free software updates that address this vulnerability.

This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-ipsec.shtml

CSCee72997

Cisco IOS devices that are configured for Internet Key Exchange (IKE) protocol and certificate based authentication are vulnerable to a resource exhaustion attack. Successful exploitation of this vulnerability may result in the allocation of all available Phase 1 security associations (SA) and prevent the establishment of new IPsec sessions. Cisco has released free software updates that address this vulnerability. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-ipsec.shtml

CSCsu24505

Cisco IOS Software with support for Network Time Protocol (NTP) version (v4) contains a vulnerability processing specific NTP packets that will result in a reload of the device. This results in a remote denial of service (DoS) condition on the affected device.

Cisco has released free software updates that address this vulnerability.

Workarounds that mitigate this vulnerability are available and are documented in the workarounds section of the posted advisory.

This advisory is posted at the following link:

http://www.cisco.com/warp/public/707/cisco-sa-20090923-ntp.shtml

CSCsv75948

Cisco IOS Software with support for Network Time Protocol (NTP) version (v4) contains a vulnerability processing specific NTP packets that will result in a reload of the device. This results in a remote denial of service (DoS) condition on the affected device.

Cisco has released free software updates that address this vulnerability.

Workarounds that mitigate this vulnerability are available and are documented in the workarounds section of the posted advisory.

This advisory is posted at the following link:

http://www.cisco.com/warp/public/707/cisco-sa-20090923-ntp.shtml

CSCsx25880

A vulnerability exists in the Session Initiation Protocol (SIP) implementation in Cisco IOS Software that could allow an unauthenticated attacker to cause a denial of service (DoS) condition on an affected device when the Cisco Unified Border Element feature is enabled. Cisco has released free software updates that address this vulnerability. For devices that must run SIP there are no workarounds; however, mitigations are available to limit exposure of the vulnerability. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-sip.shtml.

CSCsq24002

Cisco IOS Software contains a vulnerability that could allow an attacker to cause a Cisco IOS device to reload by remotely sending a crafted encryption packet. Cisco has released free software updates that address this vulnerability. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-tls.shtml.

CSCsq31776

Cisco devices running affected versions of Cisco IOS Software are vulnerable to a denial of service (DoS) attack if configured for IP tunnels and Cisco Express Forwarding. Cisco has released free software updates that address this vulnerability. This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-tunnels.shtml.

CSCsx70889

Cisco devices running affected versions of Cisco IOS Software are vulnerable to a denial of service (DoS) attack if configured for IP tunnels and Cisco Express Forwarding.

Cisco has released free software updates that address this vulnerability.

This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-tunnels.shtml.

CSCsh97579

Cisco devices running affected versions of Cisco IOS Software are vulnerable to a denial of service (DoS) attack if configured for IP tunnels and Cisco Express Forwarding.

Cisco has released free software updates that address this vulnerability.

This advisory is posted at http://www.cisco.com/warp/public/707/cisco-sa-20090923-tunnels.shtml.

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
- Platform-Specific Documents

Release-Specific Documents

The following documents are specific to Release 12.4 and apply to Release 12.4(20)YA.

- *Cross-Platform Release Notes for Cisco IOS Release 12.4)T*
- *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 IAD2430 are at:

http://www.cisco.com/en/US/products/hw/gatecont/ps887/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 several 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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