



# Release Notes for Cisco 3700 Series Integrated Services Routers with Cisco IOS Release 12.4(11)XJ

---

**March 26, 2008**

**Cisco IOS Release 12.4(11)XJ6**

**OL-12259-02 Second Release**

**Last Updated: September 24, 2008**

These release notes describe new features and significant software components for the Cisco 3700 series routers that support the Cisco IOS Release 12.4(11)XJ releases. These release notes are updated as needed to describe new memory requirements, new features, new hardware support, software platform deferrals, microcode or modem code changes, related document changes, and any other important changes. Use these release notes with the [Cross-Platform Release Notes for Cisco IOS Release 12.4T](#) located on [Cisco.com](#).

For a list of the software caveats that apply to Cisco IOS Release 12.4(11)XJ, see the “[Caveats](#)” section on [page 9](#) and [Caveats for Cisco IOS Release 12.4\(11\)T](#). The online caveats document is updated for every maintenance release and is located on [Cisco.com](#).

## Contents

- [System Requirements, page 2](#)
- [New and Changed Information, page 6](#)
- [Limitations and Restrictions, page 9](#)
- [Caveats, page 9](#)
- [Additional References, page 41](#)
- [Open Source License Acknowledgements, page 42](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 44](#)



---

**Americas Headquarters:**

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

© 2006-2007 Cisco Systems, Inc. All rights reserved.

# System Requirements

This section describes the system requirements for Cisco IOS Release 12.4(11)XJ and includes the following sections:

- [Memory Requirements, page 2](#)
- [Hardware Supported, page 4](#)
- [Determining the Software Version, page 5](#)
- [Upgrading to a New Software Release, page 5](#)
- [Feature Set Tables, page 5](#)

## Memory Requirements

[Table 1](#) describes the memory requirements for the Cisco IOS feature sets supported by Cisco IOS Release 12.4(11)XJ on the Cisco 3700 series routers.

**Table 1** *Recommended Memory for the Cisco 3700 Series Routers with Cisco IOS Cisco IOS Release 12.4(11)XJ*

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3725	Cisco 3725 Advanced Enterprise Services	Advanced Enterprise Services	c3725-adventerprisek9-mz	64	256
	Cisco 3725 AISK9-AESK9 Feature Set Factory UPG For Bundles	AISK9-AESK9 Feature Set Factory UPG For Bundles		64	256
	Cisco 3725 SPSK9-AESK9 Feature Set Factory UPG For Bundles	SPSK9-AESK9 Feature Set Factory UPG For Bundles		64	256
	Cisco 3725 INT Voice/Video, IPIPGW, TDMIP GW AES	INT Voice/Video, IPIPGW, TDMIP GW AES	c3725-adventerprisek9_ivs-mz	64	256
	Cisco 3725 Advanced Enterprise Services With SNA Switching	Advanced Enterprise Services With SNA Switching	c3725-adventerprisek9_sna-mz	64	256
	Cisco 3725 Advanced IP Services	Advanced IP Services	c3725-advipservicesk9-mz	64	256
	Cisco 3725 SPSK9-AISK9 Feature Set Factory UPG For Bundles	SPSK9-AISK9 Feature Set Factory UPG For Bundles			
	Cisco 3725 Advanced Security	Advanced Security	c3725-advsecurityk9-mz	64	256
	Cisco 3725 Enterprise Base w/o crypto	Enterprise Base w/o Crypto	c3725-entbase-mz	64	256

**Table 1**      **Recommended Memory for the Cisco 3700 Series Routers with Cisco IOS Release 12.4(11)XJ**

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3725	Cisco 3725 Enterprise Base	Enterprise Base	c3725-entbasek9-mz	64	256
	Cisco 3725 Enterprise Services w/o crypto	Enterprise Services w/o crypto	c3725-entservices-mz	64	256
	Cisco 3725 Enterprise Services Cisco 3725 SPSK9-ESK9 Feature Set Factory UPG For Bundles	Enterprise Services SPSK9-ESK9 Feature Set Factory UPG For Bundles	c3725-entservicesk9-mz	64	256
	Cisco 3725 IP Base w/o Crypto	IP Base w/o Crypto	c3725-ipbase-mz	32	128
	Cisco 3725 IP Base	IP Base	c3725-ipbasek9-mz	32	128
	Cisco 3725 IP Voice w/o Crypto	IP Voice w/o Crypto	c3725-ipvoice-mz	64	256
	Cisco 3725 INT Voice/Video, IPIP GW, TDMIP GW	INT Voice/Video, IPIP GW, TDMIP GW	c3725-ipvoice_ivs-mz	64	256
	Cisco 3725 IP Voice	IP Voice	c3725-ipvoicek9-mz	64	256
	Cisco 3725 SP Services	SP Services	c3725-spservicesk9-mz	64	256
	Cisco 3745 Advanced Enterprise Services Cisco 3745 AISK9-AESK9 Feature Set Factory UPG For Bundles Cisco 3745 SPSK9-AESK9 Feature Set Factory UPG For Bundles	Advanced Enterprise Services AISK9-AESK9 Feature Set Factory UPG For Bundles SPSK9-AESK9 Feature Set Factory UPG For Bundles	c3745-adventerprisek9-mz	64	256
Cisco 3745	Cisco 3745 INT Voice/Video, IPIPGW, TDMIP GW AES	INT Voice/Video, IPIPGW, TDMIP GW AES	c3745-adventerprisek9_ivs-mz	64	256
	Cisco 3725 Advanced Enterprise Services With SNA Switching	Advanced Enterprise Services With SNA Switching	c3745-adventerprisek9_sna-mz		

**Table 1** *Recommended Memory for the Cisco 3700 Series Routers with Cisco IOS Release 12.4(11)XJ*

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3745	Cisco 3745 Advanced IP Services	Advanced IP Services	c3745-advipservicesk9-mz	64	256
	Cisco 3745 SPSK9-AISK9 Feature Set Factory UPG For Bundles	SPSK9-AISK9 Feature Set Factory UPG For Bundles			
	Cisco 3745 Advanced Security	Advanced Security	c3745-advsecurityk9-mz	32	256
	Cisco 3745 Enterprise Base w/o Crypto	Enterprise Base w/o Crypto	c3745-entbase-mz	32	256
	Cisco 3745 Enterprise Base	Enterprise Base	c3745-entbasek9-mz	32	256
	Cisco 3745 Enterprise Services w/o Crypto	Enterprise Services w/o Crypto	c3745-entservices-mz	64	256
	Cisco 3745 Enterprise Services	Enterprise Services	c3745-entservicesk9-mz	64	256
	Cisco 3745 SPSK9-ESK9 Feature Set Factory UPG For Bundles	SPSK9-ESK9 Feature Set Factory UPG For Bundles			
	Cisco 3745 IP Base w/o Crypto	IP Base w/o Crypto	c3745-ipbase-mz	32	128
	Cisco 3745 IP Base SSH	IP Base SSH	c3745-ipbasek9-mz	32	128
	Cisco 3745 IP Voice w/o Crypto	IP Voice w/o Crypto	c3745-ipvoice-mz	64	256
	Cisco 3745 IP Voice	IP Voice	c3745-ipvoicek9-mz	64	256
	Cisco 3745 SP Services	SP Services	c3745-spservicesk9-mz	64	256
	Cisco 3745 INT Voice/Video, IPIP GW, TDMIP GW	INT Voice/Video, IPIP GW, TDMIP GW	c3745-ipvoice_ivs-mz	64	256

## Hardware Supported

Cisco IOS Release 12.4(11)XJ supports the following Cisco 3700 series routers:

- Cisco 3725
- Cisco 3745

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 3700 series routers, which are available on [Cisco.com](http://www.cisco.com) at the following location:

[http://www.cisco.com/univercd/cc/td/doc/product/access/acs\\_mod/3700/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/access/acs_mod/3700/index.htm)

## Determining the Software Version

To determine which version of Cisco IOS software is currently running on your Cisco 3700 series router, log in to the router and enter the **show version** EXEC command. The following sample output from the **show version** command indicates the version number.

```
Router> show version
Cisco Internetwork Operating System Software
IOS (tm) C3700 Software (c3745-entbasek9-mz), Version 12.4(11)XJ, EARLY DEPLOYMENT RELEASE
SOFTWARE (fc1)
Synched to technology version 12.4(11)T
```

## Upgrading to a New Software Release

For general information about upgrading to a new software release, refer to the *Software Installation and Upgrade Procedures* located at [http://www.cisco.com/warp/public/130/upgrade\\_index.shtml](http://www.cisco.com/warp/public/130/upgrade_index.shtml).

## Feature Set Tables

The Cisco IOS software is packaged in feature sets consisting of software images, depending on the platform. Each feature set contains a specific set of Cisco IOS features. Release 12.4(11)XJ supports the same feature sets as Releases 12.4 and 12.4(11)T, but Release 12.4(11)XJ includes new features supported by the Cisco 3700 series routers.



### Caution

The Cisco IOS images with strong encryption (including, but not limited to, 168-bit [3DES] data encryption feature sets) are subject to United States government export controls and have limited distribution. Strong encryption images to be installed outside the United States will likely require an export license. Customer orders can be denied or subject to delay as a result of United States government regulations. When applicable, the purchaser/user must obtain local import and use authorizations for all encryption strengths. Please contact your sales representative or distributor for more information, or send an e-mail to [export@cisco.com](mailto:export@cisco.com).

Table 2 lists the feature and feature sets supported in Cisco IOS Release 12.4(11)XJ.

The tables use the following conventions:

- In—The number in the ‘In’ column indicates the Cisco IOS release in which the feature was introduced. For example, “12.4(11)XJ” indicates that the feature was introduced in 12.4(11)XJ. If a cell in this column is empty, the feature was included in a previous release or in the initial base release.
- Yes—The feature is supported in the software image.
- No—The feature is not supported in the software image.



### Note

These feature set tables contain only a selected list of features, which are cumulative for Release 12.4(11)*nn* early deployment releases only (*nn* identifies each early deployment release). The tables do not list all features in each image—additional features are listed in [Cross-Platform Release Notes for Cisco IOS Release 12.4\(11\)T](#) and Release 12.4(11)T Cisco IOS documentation.

**Table 2** *Cisco IOS Release 12.4(11)XJ Feature List for Cisco 3700 Routers*

Feature	In	Image
Cisco Unified CallManager Express 4.1 Multi-party Conferencing Enhancements, page 7	12.4(11)XJ	See <a href="#">Table 1</a> for image names.
Security and QoS Feature Enhancements for the IP VSAT Satellite WAN Network Module, page 7		
CME SIP Features		
HWIC and VLAN Feature Enhancements		
SIP REFER		
VRF-Aware H.323 and SIP for Voice Gateways		

## New and Changed Information

This section contains the following information:

- [New Hardware Features in Cisco IOS Release 12.4\(11\)XJ4, page 6](#)
- [New Software Features in Cisco IOS Release 12.4\(11\)XJ4, page 6](#)
- [New Hardware Features in Cisco IOS Release 12.4\(11\)XJ3, page 6](#)
- [New Software Features in Cisco IOS Release 12.4\(11\)XJ3, page 7](#)
- [New Hardware Features in Cisco IOS Release 12.4\(11\)XJ2, page 7](#)
- [New Software Features in Cisco IOS Release 12.4\(11\)XJ2, page 7](#)
- [New Hardware Features in Cisco IOS Release 12.4\(11\)XJ, page 7](#)
- [New Software Features in Cisco IOS Release 12.4\(11\)XJ, page 8](#)
- [New Features in Release 12.4T, page 9](#)

### New Hardware Features in Cisco IOS Release 12.4(11)XJ4

There are no new hardware features in this release.

### New Software Features in Cisco IOS Release 12.4(11)XJ4

There are no new software features in this release.

### New Hardware Features in Cisco IOS Release 12.4(11)XJ3

There are no new hardware features in this release.

## New Software Features in Cisco IOS Release 12.4(11)XJ3

There are no new software features in this release.

## New Hardware Features in Cisco IOS Release 12.4(11)XJ2

There are no new hardware features in this release.

## New Software Features in Cisco IOS Release 12.4(11)XJ2

- [Cisco Unified CallManager Express 4.1 Multi-party Conferencing Enhancements, page 7](#)
- [Security and QoS Feature Enhancements for the IP VSAT Satellite WAN Network Module, page 7](#)

### Cisco Unified CallManager Express 4.1 Multi-party Conferencing Enhancements

The Cisco Unified CallManager Express 4.1 Multi-party Conferencing Enhancements feature adds digital signal processor (DSP)-based ad hoc and meet-me conferencing to Cisco Unified CallManager Express systems. DSP-based conferencing allows more parties and more functionality than software-based conferencing which only allows three parties in a conference and no meet-me functionality. For more information go to:

[http://www.cisco.com/en/US/products/sw/voicesw/ps4625/products\\_feature\\_guide09186a0080762226.htm](http://www.cisco.com/en/US/products/sw/voicesw/ps4625/products_feature_guide09186a0080762226.htm)

### Security and QoS Feature Enhancements for the IP VSAT Satellite WAN Network Module

Following are the feature enhancements for the IP VSAT Satellite WAN NM (NM-1VSAT-GILAT):

- Security enhancements: Integrated TCP Acceleration & Encryption (ITAE) over the satellite link
- QoS Enhancements: Supports GA mode in addition to DA/RA modes
- Centralized IP Address Management: Enables configuration of VSAT module IP address from the hub network management system
- Local Firmware Upgrade: Allows firmware upgrade of the VSAT module from a TFTP server
- Configurable VSAT Configuration Password: Allows the customer to set the VSAT configuration mode password

For more information about this feature, see the following documentation on Cisco.com:

[Cisco IP VSAT Satellite WAN Network Module \(NM-1VSAT-GILAT\)](#)

## New Hardware Features in Cisco IOS Release 12.4(11)XJ

The following new feature is supported on the Cisco 3700 series router in Cisco IOS Release 12.4(11)XJ:

- [HWIC and VLAN Feature Enhancements, page 8](#)

## HWIC and VLAN Feature Enhancements

The Cisco Fast Ethernet HWICs are single-wide interface cards, available as a 1-port HWIC (HWIC-1FE) and as a 2-port HWIC (HWIC-2FE), that provide Cisco modular and integrated services routers with additional line-rate Layer 3 routed ports. The following enhancements have been made in Cisco IOS Release 12.4(11)XJ:

- Extended VLAN ID
- HWIC one FE and two FE ports

For more information about these features, see the following documentation on Cisco.com:

- *Cisco Interface Cards Hardware Installation Guide*  
[http://www.cisco.com/en/US/products/hw/modules/ps2641/products\\_module\\_installation\\_guide\\_book09186a0080692b21.html](http://www.cisco.com/en/US/products/hw/modules/ps2641/products_module_installation_guide_book09186a0080692b21.html)
- *Cisco Network Modules and Interface Cards Regulatory Compliance and Safety Information*  
[http://www.cisco.com/en/US/products/hw/modules/ps2797/products\\_regulatory\\_approvals\\_and\\_compliance09186a0080183b96.html](http://www.cisco.com/en/US/products/hw/modules/ps2797/products_regulatory_approvals_and_compliance09186a0080183b96.html)

## New Software Features in Cisco IOS Release 12.4(11)XJ

The following new software features are supported in this release:

- [CME SIP Features, page 8](#)
- [SIP REFER, page 8](#)
- [VRF-Aware H.323 and SIP for Voice Gateways, page 9](#)

### CME SIP Features

#### MoH, Dialing, Line Updates, Presence with BLF, Provisioning New Phones

A presence service, as defined in RFC 2778 and RFC 2779, is a system for finding, retrieving, and distributing presence information from a source, called a presence entity (presentity), to an interested party called a watcher. When you configure presence in a Cisco Unified CME or Cisco Unified SRST system with a SIP WAN connection, a phone user, or watcher, can monitor the real-time status of another user at a directory number, the presentity.

<http://www.cisco.com/univercd/cc/td/doc/product/voice/its/cme41/cme410ft.htm>

### SIP REFER

#### Outside the Scope of a Dialog Created with an INVITE

Out-of-dialog REFER (OOD-R) allows remote applications to establish calls by sending a REFER message to a SIP gateway without an initial INVITE.

<http://www.cisco.com/univercd/cc/td/doc/product/voice/its/cme41/cme410ft.htm>



## VRF-Aware H.323 and SIP for Voice Gateways

VPN routing and forwarding (VRF) divides a physical router into multiple logical routers, each having its own set of interfaces and routing and forwarding tables. Adding VRF-awareness to voice gateways allows a voice gateway to exist in the same router as a customer edge (CE) or provider edge (PE) WAN router.

The VRF-Aware H.323 and SIP for Voice Gateways feature adds single voice VRF support to session-initiated protocol (SIP), H.323, and IP-to-IP gateways and to Cisco Survivable Remote Site Telephony routers. For more information, see the following link on Cisco.com:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124newft/124limit/124x/124xj11/vrfawvgw.htm>

## New Features in Release 12.4T

For information regarding the features supported in Cisco IOS Release 12.4T, see the Cross-Platform Release Notes and New Feature Documentation links at the following location on Cisco.com:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124relnt/xprn124/index.htm>

## Limitations and Restrictions

There are no known limitations or restrictions.

## Caveats

Caveats describe unexpected behavior or defects in the Cisco IOS software releases. Severity 1 caveats are the most serious caveats, severity 2 caveats are less serious, and severity 3 caveats are the least serious of these three severity levels.

Caveats in Cisco IOS Release 12.4(11)T are also in Cisco IOS Release 12.4(11)XJ. For information on caveats in Cisco IOS Release 12.4(11)T, refer to the *Caveats for Cisco IOS Release 12.4(11)T* document. This document lists severity 1 and 2 caveats; the documents are located on Cisco.com.



### Note

If you have an account with Cisco.com, you can also use the Bug Toolkit to find select caveats of any severity. To reach the Bug Toolkit, log in to Cisco.com and click **Service & Support: Technical Assistance Center: Tool Index: Bug Toolkit**. Another option is to go to [http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl).

This section contains the following caveat information:

- [Open Caveats - Cisco IOS Release 12.4\(11\)XJ6, page 10](#)
- [Resolved Caveats - Cisco IOS Release 12.4\(11\)XJ6, page 10](#)
- [Open Caveats - Cisco IOS Release 12.4\(11\)XJ4, page 10](#)
- [Resolved Caveats - Cisco IOS Release 12.4\(11\)XJ4, page 11](#)
- [Open Caveats - Cisco IOS Release 12.4\(11\)XJ3, page 13](#)
- [Resolved Caveats - Cisco IOS Release 12.4\(11\)XJ3, page 13](#)

- [Open Caveats - Cisco IOS Release 12.4\(11\)XJ2, page 14](#)
- [Resolved Caveats - Cisco IOS Release 12.4\(11\)XJ2, page 14](#)
- [Open Caveats - Cisco IOS Release 12.4\(11\)XJ, page 29](#)
- [Resolved Caveats - Cisco IOS Release 12.4\(11\)XJ, page 29](#)

## Open Caveats - Cisco IOS Release 12.4(11)XJ6

There are no open caveats in this release.

## Resolved Caveats - Cisco IOS Release 12.4(11)XJ6

### CSCsh12480

Cisco IOS software configured for Cisco IOS firewall Application Inspection Control (AIC) with a HTTP configured application-specific policy are vulnerable to a Denial of Service when processing a specific malformed HTTP transit packet. Successful exploitation of the vulnerability may result in a reload of the affected device.

Cisco has released free software updates that address this vulnerability.

A mitigation for this vulnerability is available. See the “Workarounds” section of the advisory for details.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080924-iosfw.shtml>.

### CSCsg91306

Multiple vulnerabilities exist in the Session Initiation Protocol (SIP) implementation in Cisco IOS that can be exploited remotely to trigger a memory leak or to cause a reload of the Cisco IOS device.

Cisco has released free software updates that address these vulnerabilities. Fixed Cisco IOS software listed in the Software Versions and Fixes section contains fixes for all vulnerabilities addressed in this advisory.

There are no workarounds available to mitigate the effects of any of the vulnerabilities apart from disabling the protocol or feature itself, if administrators do not require the Cisco IOS device to provide voice over IP services.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080924-sip.shtml>.

## Open Caveats - Cisco IOS Release 12.4(11)XJ4

There are no open caveats in this release.

## Resolved Caveats - Cisco IOS Release 12.4(11)XJ4

### Miscellaneous Caveats

- CSCse56501

A device running Cisco IOS software that has Internet Protocol version 6 (IPv6) enabled may be subject to a denial of service (DoS) attack. For the device to be affected by this vulnerability the device also has to have certain Internet Protocol version 4 (IPv4) User Datagram Protocol (UDP) services enabled. To exploit this vulnerability an offending IPv6 packet must be targeted to the device. Packets that are routed throughout the router can not trigger this vulnerability. Successful exploitation will prevent the interface from receiving any additional traffic. The only exception is Resource Reservation Protocol (RSVP) service, which if exploited, will cause the device to crash. Only the interface on which the vulnerability was exploited will be affected.

Cisco is providing fixed software to address this issue. There are workarounds available to mitigate the effects of the vulnerability.

This advisory is posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20080326-IPv4IPv6.shtml>.

- CSCsf12082

Certain Cisco Catalyst 6500 Series and Cisco 7600 Router devices that run branches of Cisco IOS based on 12.2 can be vulnerable to a denial of service vulnerability that can prevent any traffic from entering an affected interface. For a device to be vulnerable, it must be configured for Open Shortest Path First (OSPF) Sham-Link and Multi Protocol Label Switching (MPLS) Virtual Private Networking (VPN). This vulnerability only affects Cisco Catalyst 6500 Series or Catalyst 7600 Series devices with the Supervisor Engine 32 (Sup32), Supervisor Engine 720 (Sup720) or Route Switch Processor 720 (RSP720) modules. The Supervisor 32, Supervisor 720, Supervisor 720-3B, Supervisor 720-3BXL, Route Switch Processor 720, Route Switch Processor 720-3C, and Route Switch Processor 720-3CXL are all potentially vulnerable.

OSPF and MPLS VPNs are not enabled by default.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080326-queue.shtml>.

- CSCsk73104

Cisco IOS contains multiple vulnerabilities in the Data-link Switching (DLSw) feature that may result in a reload or memory leaks when processing specially crafted UDP or IP Protocol 91 packets.

Cisco has released free software updates that address these vulnerabilities. Workarounds are available to mitigate the effects of these vulnerabilities.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080326-dlsw.shtml>

- CSCsi01470

A vulnerability in the Cisco implementation of Multicast Virtual Private Network (MVPN) is subject to exploitation that can allow a malicious user to create extra multicast states on the core routers or receive multicast traffic from other Multiprotocol Label Switching (MPLS) based Virtual Private Networks (VPN) by sending specially crafted messages.

Cisco has released free software updates that address this vulnerability. Workarounds that mitigate this vulnerability are available.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080326-mvpn.shtml>.

- CSCdv59309

Two vulnerabilities exist in the virtual private dial-up network (VPDN) solution when Point-to-Point Tunneling Protocol (PPTP) is used in certain Cisco IOS releases prior to 12.3. PPTP is only one of the supported tunneling protocols used to tunnel PPP frames within the VPDN solution.

The first vulnerability is a memory leak that occurs as a result of PPTP session termination. The second vulnerability may consume all interface descriptor blocks on the affected device because those devices will not reuse virtual access interfaces. If these vulnerabilities are repeatedly exploited, the memory and/or interface resources of the attacked device may be depleted.

Cisco has made free software available to address these vulnerabilities for affected customers.

There are no workarounds available to mitigate the effects of these vulnerabilities.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080326-pptp.shtml>

- CSCsj58566

Two vulnerabilities exist in the virtual private dial-up network (VPDN) solution when Point-to-Point Tunneling Protocol (PPTP) is used in certain Cisco IOS releases prior to 12.3. PPTP is only one of the supported tunneling protocols used to tunnel PPP frames within the VPDN solution.

The first vulnerability is a memory leak that occurs as a result of PPTP session termination. The second vulnerability may consume all interface descriptor blocks on the affected device because those devices will not reuse virtual access interfaces. If these vulnerabilities are repeatedly exploited, the memory and/or interface resources of the attacked device may be depleted.

Cisco has made free software available to address these vulnerabilities for affected customers.

There are no workarounds available to mitigate the effects of these vulnerabilities.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20080326-pptp.shtml>

#### CSCsg70474

Multiple voice-related vulnerabilities are identified in Cisco IOS software, one of which is also shared with Cisco Unified Communications Manager. These vulnerabilities pertain to the following protocols or features:

- Session Initiation Protocol (SIP)
- Media Gateway Control Protocol (MGCP)
- Signaling protocols H.323, H.254
- Real-time Transport Protocol (RTP)
- Facsimile reception

Cisco has made free software available to address these vulnerabilities for affected customers. Fixed Cisco IOS software listed in the Software Versions and Fixes section contains fixes for all vulnerabilities mentioned in this advisory.

There are no workarounds available to mitigate the effects of any of the vulnerabilities apart from disabling the protocol or feature itself.

This advisory is posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20070808-IOS-voice.shtml>

CSCsi60004

Multiple voice-related vulnerabilities are identified in Cisco IOS software, one of which is also shared with Cisco Unified Communications Manager. These vulnerabilities pertain to the following protocols or features:

- Session Initiation Protocol (SIP)
- Media Gateway Control Protocol (MGCP)
- Signaling protocols H.323, H.254
- Real-time Transport Protocol (RTP)
- Facsimile reception

Cisco has made free software available to address these vulnerabilities for affected customers. Fixed Cisco IOS software listed in the Software Versions and Fixes section contains fixes for all vulnerabilities mentioned in this advisory.

There are no workarounds available to mitigate the effects of any of the vulnerabilities apart from disabling the protocol or feature itself.

This advisory is posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20070808-IOS-voice.shtml>

CSCsi80749

Multiple voice-related vulnerabilities are identified in Cisco IOS software, one of which is also shared with Cisco Unified Communications Manager. These vulnerabilities pertain to the following protocols or features:

- Session Initiation Protocol (SIP)
- Media Gateway Control Protocol (MGCP)
- Signaling protocols H.323, H.254
- Real-time Transport Protocol (RTP)
- Facsimile reception

Cisco has made free software available to address these vulnerabilities for affected customers. Fixed Cisco IOS software listed in the Software Versions and Fixes section contains fixes for all vulnerabilities mentioned in this advisory.

There are no workarounds available to mitigate the effects of any of the vulnerabilities apart from disabling the protocol or feature itself.

This advisory is posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20070808-IOS-voice.shtml>

## Open Caveats - Cisco IOS Release 12.4(11)XJ3

There are no open caveats in this release.

## Resolved Caveats - Cisco IOS Release 12.4(11)XJ3

There are no open resolved in this release.

## Open Caveats - Cisco IOS Release 12.4(11)XJ2

CSCsi09530 CME SIP phone failed to register because of authenticate register

**Symptom** If “authenticate register” is configured under “voice register global”, CME SIP failed to register.

**Conditions** “authenticate register” is configured under “voice register global”, when CME is acting as a REGISTRAR

**Workaround** Disable “authenticate register” under “voice register global”

**Further Problem Description:** In registrar Functionality, CME challenges an inbound Register request with 401 response If “authenticate register” is configured under “voice register global”. The Registering Endpoint then Sends a Register Request with Credentials. GW Stack is not processing this Request and is dropping it.

## Resolved Caveats - Cisco IOS Release 12.4(11)XJ2

CSCec12299

Devices running Cisco IOS versions 12.0S, 12.2, 12.3 or 12.4 and configured for Multiprotocol Label Switching (MPLS) Virtual Private Networks (VPNs) or VPN Routing and Forwarding Lite (VRF Lite) and using Border Gateway Protocol (BGP) between Customer Edge (CE) and Provider Edge (PE) devices may permit information to propagate between VPNs.

Workarounds are available to help mitigate this vulnerability.

This issue is triggered by a logic error when processing extended communities on the PE device.

This issue cannot be deterministically exploited by an attacker.

Cisco has released free software updates 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-20080924-vpn.shtml>.

CSCsf08998

Multiple voice-related vulnerabilities are identified in Cisco IOS software, one of which is also shared with Cisco Unified Communications Manager. These vulnerabilities pertain to the following protocols or features:

- Session Initiation Protocol (SIP)
- Media Gateway Control Protocol (MGCP)
- Signaling protocols H.323, H.254
- Real-time Transport Protocol (RTP)
- Facsimile reception

Cisco has made free software available to address these vulnerabilities for affected customers. Fixed Cisco IOS software listed in the Software Versions and Fixes section contains fixes for all vulnerabilities mentioned in this advisory.

There are no workarounds available to mitigate the effects of any of the vulnerabilities apart from disabling the protocol or feature itself.

This advisory is posted at

<http://www.cisco.com/warp/public/707/cisco-sa-20070808-IOS-voice.shtml>

CSCsd85587

A vulnerability has been discovered in a third party cryptographic library which is used by a number of Cisco products. This vulnerability may be triggered when a malformed Abstract Syntax Notation One (ASN.1) object is parsed. Due to the nature of the vulnerability it may be possible, in some cases, to trigger this vulnerability without a valid certificate or valid application-layer credentials (such as a valid username or password).

Successful repeated exploitation of any of these vulnerabilities may lead to a sustained Denial-of-Service (DoS); however, vulnerabilities are not known to compromise either the confidentiality or integrity of the data or the device. These vulnerabilities are not believed to allow an attacker will not be able to decrypt any previously encrypted information.

The vulnerable cryptographic library is used in the following Cisco products:

- Cisco IOS, documented as Cisco bug ID CSCsd85587
- Cisco IOS XR, documented as Cisco bug ID CSCsg41084
- Cisco PIX and ASA Security Appliances, documented as Cisco bug ID CSCse91999
- Cisco Unified CallManager, documented as Cisco bug ID CSCsg44348
- Cisco Firewall Service Module (FWSM)

This vulnerability is also being tracked by CERT/CC as VU#754281.

Cisco has made free software available to address this vulnerability for affected customers. There are no workarounds available to mitigate the effects of the vulnerability.

This advisory is posted at <http://www.cisco.com/warp/public/707/cisco-sa-20070522-crypto.shtml>.



#### Note

Another related advisory is posted together with this Advisory. It also describes vulnerabilities related to cryptography that affect Cisco IOS. A combined software table for Cisco IOS only is available at <http://www.cisco.com/warp/public/707/cisco-sa-20070522-cry-bundle.shtml> and can be used to choose a software release which fixes all security vulnerabilities published as of May 22, 2007. The related advisory is published at <http://www.cisco.com/warp/public/707/cisco-sa-20070522-SSL.shtml>.

Csg51259 CME: DTMF stops working after consult transfer to called party's mailbox

CSCsg51244 CME: CME does not send 3xx messages for transfer --> forward scenarios

CSCsg46411 CME: CME does not send a REFER over SIP trunk for calls involving AA

CSCsg30101 CME: dtmf-relay force rtp-nte CLI does not work

CSCsf32028 CME: Host portion of Refer-To: header must be an Address of Record

CSCsh23992 IAD2801 BRI voice port ISDN status does not come up

CSCsg59037 85x/87x cannot upgrade rommon from IOS

**Symptom** Cisco 851 and 871 routers have no way to remotely upgrade the ROMMON firmware image.

**Conditions** Cisco IOS versions for the Cisco 851 and 871 routers did not provide a mechanism to remotely upgrade the ROMMON firmware image.

**Workaround** Cisco IOS Release 12.4(11)T1 for the Cisco 851 and 871 router introduces the command upgrade rom-monitor file which allows the ROMMON firmware image to be remotely upgraded. Please consult this link for more information:

[http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tcr/tcf\\_r/cf\\_13ht.htm#wp1032550](http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124tcr/tcf_r/cf_13ht.htm#wp1032550)

CSCsf26561 CME: User portion of Diversion header is incorrect when calling through AA

**Conditions** Tests on Cbeyond's Live setup have revealed that PSTN to AA --> tx to SCCP phone--> CFWD to CUE/PSTN has an issue. The 302 Moved Temporarily from CME to BroadSoft has a Diversion header whose user portion is the private extension #, not the expanded DID # due to which the subsequent call fails.

**Workaround** Unless removing the dialplan-pattern, no work around present.

CSCsg46362 contact header incorrect in 302 message using sip-srst redirect mode

**Symptom** The contact header ip address is incorrect in the 302 message sent by sip srst in redirect mode. As the result basic call fails in this mode. B2b mode is working okay.

**Workaround** Use b2b mode

CSCsg17289 DNS-SRV issues for SIP registrations

CSCsg39750 Spurious mem access/traceback while resetting sip phone with presence

CSCsg18902 Blind transfer is not working on SIP trunk



**Symptom** Blind transfer failed on SCCP endpoint over SIP trunk

**Conditions** When session-target is configured but outbound-proxy is not configured.

**Workaround** None

CSCse89321 Dtmf path not getting confirmed in sip media forking call

CSCsg94873 One way audio for PSTN to AA and calls xferred to SIP phone with G.729

CSCsh25511 A router may crash with CPU Vector 300

**Symptom** A router may crash with CPU vector 300

**Conditions** IOS running qos and cce

**Workaround** none

Further Problem Description:

CSCsh45544 Placed call list in 7970 phone always shows unknown number

CSCsh37177 %SDP-3-SDP\_PTR\_ERROR traceback error when redirecting call to AA

CSCsg31719 Digits are not relayed correctly when call is not connected.

**Symptom** When onhook dialing or speed dial is performed from CME to an analog port where dialtone is slightly delayed some digits are dropped.

**Conditions** This is not seen when the digits are delayed, or when the user waits to hear dialtone then dials.

**Workaround** Dial digit by digit

CSCsh14247 Call transfer fails when initiated from SIP Phone

CSCsg49416 Refer is not sent by CME when Cfwf all is set from TNP phone

CSCsh19990 Traceback= 0x438662AC 0x40BF2BEC with Call Park/Pick Up operation

CSCsh37345 DSL Operating-mode 'auto tone low' enables ETSI mode only

**Symptom** The DSL line fails to train with “dsl operating-mode auto tone low” command if the DSLAM does not support ETSI mode.

**Conditions** In the command **dsl operating-mode auto tone low**, the “**dsl operating-mode auto**” is used to enable all the supported modes on a DSL line and the “**tone low**” is used to disable DT-UR2 so that the DSL line can use the carrier tones 29 through 48. Instead, this command does not disable DT-UR2 and enables only ETSI mode. With this,

- a. If the DSL configuration on the DSLAM does not support ETSI mode, then the DSL line fails to train up.
- b. If the DSLAM supports ADSL2+, ADSL2, ETSI modes, then it trains in ETSI mode, where it's supposed to train in ADSL2+, since the ADSL2+ has higher priority than ETSI mode.

**Workaround** Avoid using “**dsl operating-mode auto**” command. To select a desirable mode along with disabling DT-UR2, the commands like “**dsl operating-mode adsl2+ tone low**” or “**dsl operating-mode adsl2 tone low**” can be used.

CSCsh11146 Memory leak at AFW\_SS\_SIP\_PrepareTransferSetup

**Symptom** Memory leak occurred in transfer scenarios.

**Workaround** There is no workaround.

CSCek67638 include presence feature in c2801 security package

**Symptom** The 2801 security image does not have presence feature.

CSCsh59469 DTMF is distorted when played from SCCP controlled ATA on CME

**Symptom** DTMF generated by a SCCP controlled ATA registered to CallManager Express may be choppy, broken, or overlapping when multiple digits are pressed, one after another.

Example topology:

IVR---fxs---ATA---sccp---CME---pri---PSTN

A user in the PSTN calls the IVR. The digits are not reliably detected by the IVR when pressed by the PSTN user because of the overlapping / choppy output.

**Conditions** This is seen on a SCCP controlled ATA registered to CallManager Express.

**Workaround** Use H323 software on the ATA.

CSCsh55262 Update CME GUI version and new Cisco logo

CSCsg95736 MAC address is missing for radio interface

**Symptom** IOS image is not reading the mac address for radio interface.

**Workaround** The problem is not seen if the dot11 interface is in up state.

CSCsh53808 Transcoder fails after several H.323 transcoded calls to CUE

CSCsg31559 Spurious memory access at strncmp, skinny\_hwconf\_check\_adhoc\_register

CSCsh14101 503 Service Unavailable should be sent to CAC rejected calls

CSCsh60218 VG224 continues to ring when first of two ringing shared calls hangs up

CSCsh48646 FAC fails for the first time after enabling in certain conditions

CSCsh78605 Need CLI to enable/disable SIP Line incoming dial-peer matching

**Symptom** For an inbound call across a SIP Trunk, IOS might match an dynamically configured dial-peer instead of the user-defined dial-peer configured with “incoming called-number”.

**Conditions** This problem was observed when IOS SIP Gateway was also configured as a SIP SRST.

**Workaround** Use IOS 12.4(6)T6.

CSCsh39749 Few objects of hds12Shds1SpanStatusTable giving wrong values with ARCHER

**Symptom** MIB value for LineRate (hds12Shds1StatusMaxAttainableLineRate) queried through SNMP GET/GETNEXT returns incorrect values. Also hds12Shds1InvVendorID displays data in wrong format.

**Conditions** No Specific conditions.

**Workaround** For hds12Shds1StatusMaxAttainableLineRate, multiply the value with 1000 and for hds12Shds1InvVendorID, convert the displayed values into ASCII characters.

CSCsh63545 ARCHER IMA MIB modifications

**Symptom** SNMP walk on imaLinkIntervalTable returns no entries. SNMP get does not work for imaGroupTable.

**Conditions** No specific condition.

**Workaround** No workaround for **imaLinkIntervalTable**. Do a SNMP Walk on **imaGroupTable** to view the individual table entry values.

CSCsh46622 HDSL2-SHDSL-LINE-MIB: Few tables not populated for ARCHER with CRUSHER on

**Symptom** When HWIC-4SHDSL and WIC-1SHDSL-V2 are present in a router, HDSL2-SHDSL-LINE-MIB entries for HWIC-4SHDSL are not getting displayed.

**Conditions** This problem happens if WIC-1SHDSL-V2 comes up before HWIC-4SHDSL.

1. Shutdown both HWIC-4SHDSL and WIC-1SHDSL-V2.
2. Reload the router. Do a “no shutdown” on HWIC-4SHDSL controller first and then do a “no shut” for WIC-1SHDSL-V2 controller.
3. Then save the config.

CSCsh41397 SNMP getone gives NO\_SUCH\_INSTANCE\_EXCEPTION error for HWIC-4SHDSL

**Symptom** SNMP GET operation on HDSL2-SHDSL-LINE-MIB objects returns no such instance for HWIC-4SHDSL.

**Conditions** No specific conditions. The failure always happens when a SNMP get is done.

**Workaround** Workaround is to do SNMP Walk for the entire table.

CSCsh68584 CME MWI notify message not compliant to RFC 3842

**Symptom** MWI lights on 7970 does not glow

**Conditions** 7970 when configured as SIP phone for CME.

**Workaround** There are no workarounds

CSCsh68560 CME: sip to sccp to sccp attend transfer fails

**Symptom** One way audio.

**Conditions** The problem is observed when you have XEE SIP line or trunk, XOR and XTO sccp on same CME, consultation transfer.

**Workaround** No apparent workaround, except that the problem is intermittent.

CSCsh22682 VLAN information disappears after router reload

**Symptom** Devices in data VLAN on MVAP configured port with portfast loose connectivity

**Conditions** Device is connected to MVAP configured port with portfast enabled. Router has been reloaded.

**Workaround** Remove and add data VLAN from VLAN database. Sometimes this does not seem to work

12.4(9)T and earlier releases do not see this problem

Do not use portfast on MVAP port

**Further Problem Description:** After the router has been reloaded we see an incomplete **arp** entry. Removing and adding VLAN data fixes this issue for a while. This issue is also resolved If the MVAP port does not have portfast enabled.

CSCsg76281 CME 4.1:PSTN-to-AA, tx to sccp1, then tx to sccp2, cfwd all to CUE fails

CSCsg18481 Consult Transfer failed with Call forward busy

**Symptom** Consult transfer failed when XTO has call-forward busy

**Conditions** XEE is SCCP endpoint and XOR is SIP phone

**Workaround** There are no workarounds

CSCsh58082 SIP: A router may reload due to SIP traffic

**Symptom** Cisco devices running an affected version of Internetwork Operating System (IOS) which supports Session Initiation Protocol (SIP) are affected by a vulnerability that may lead to a reload of the device when receiving a specific series of packets destined to port 5060. This issue is compounded by a related bug which allows traffic to TCP 5060 and UDP port 5060 on devices not configured for SIP. There are no known instances of intentional exploitation of this issue. However, Cisco has observed data streams that appear to be unintentionally triggering the vulnerability.

**Workaround** Workarounds exist to mitigate the effects of this problem on devices which do not require SIP. This advisory is posted at: <http://www.cisco.com/warp/public/707/cisco-sa-20070131-sip.shtml>.

CSCec12299 Corruption of ext communities when receiving over ipv4 EBGp session

**Symptom** EIGRP-specific Extended Community 0x8800 is corrupted and shown as 0x0:0:0.

**Conditions** This symptom is observed when EIGRP-specific Extended Community 0x8800 is received via an IPv4 EBGp session on a CE router. This occurs typically in the following inter-autonomous system scenario:

**ASBR/PE-1 <----> VRF-to-VRF <----> ASBR/PE-2**

**Workaround** Use a configuration such as the following to remove extended communities from the CE router:

```
router bgp 1
address-family ipv4 vrf one
neighbor 1.0.0.1 remote-as 100
neighbor 1.0.0.1 activate
neighbor 1.0.0.1 route-map FILTER in
exit-address-family
!
ip extcommunity-list 100 permit _RT.*_
!
!
route-map FILTER permit 10
set extcomm-list 100 delete
!
```

CSCsh95740 CME tftp bindings corrupt/erroneous with perphone cnf

**Symptom** On 12.4(11)XJ, performing a 'show tele tftp-bindings' may show corrupted or incorrect output.

**Conditions** The CME system was reloaded with 'cnf-file perphone' configured under telephony-service.

**Workaround** There is no workaround.

CSCek68607 CallerID not updated with AA CFB call to sip phone over SIP trunk

CSCsh90148 SIP UPDATE message sending should be controllable via CME on SIP trunk

**Symptom** UPDATE messages being sent on the SIP trunk cause calls to fail under certain conditions

**Conditions** Calls are over a SIP trunk from CME 4.1 to service provider SIP proxy

**Workaround** There are no workarounds

CSCsh45568 Alignment errors in classify\_packet

**Symptom** Alignment errors may be seen on a Cisco router due to NBAR. High CPU may be seen as well.

**Workaround** No known workaround at this time.

CSCsf25671 Client with L2TPv2 on Virtual-PPP fails to get ip add from LNSs ip pool

**Symptom** L2TPv2 VPDN sessions are terminated by the client shortly after IPCP negotiation completion

```
00:00:23.859: Vp1 IPCP: State is Open
00:00:23.859: Vp1 IPCP: Install negotiated IP interface address #.#.#.#
00:00:23.859: IP-ADDR: ip_new_address(), old 0.0.0.0/0, new #.#.#.#/# on
Virtual-PPP1
00:00:23.859: ACLIB [Vp1, 22]: ac_ppp_voluntary_restore_link_vectors() -
Restoring previously saved link
00:00:23.859: ACLIB [Vp1, 22]: SW AC interface UNPROVISIONED for PPP interface
Vp1
00:00:23.859: ACLIB: Unbinding SWSB subblock
00:00:23.859: ACLIB [Vp1, 22]: Deleting AC subblock structure.
00:00:23.859: ACLIB: ac_ppp_restart_session() - restarting LCP.
00:00:23.859: Xconnect[ac:Vp1(PPP)]: provisioning fwder with fwd_type=1,
sss_role=2
00:00:23.859: ACLIB: Setting new AC state to Ac-Provisioning, old state was

Ac-Idle
00:00:23.859: ACLquest
00:00:23.859: IP-ADDR: invoke_ip_address_change() to 0.0.0.0/0, secondary

off, sense off, on Virtual-PPP1
00:00:23.859: IP-ADDR: invoke_ip_address_change() to #.#.#.#/#, secondary

off, sense on, on Virtual-PPP1
00:00:23.859: IP-ADDR: ipaddr_table_insert() #.#.#.#, in global table on

Virtual-PPP1IB [Vp1, 22]: AC attached subblock to Virtual-PPP1
00:00:23.859: ACLIB ive <Circuit Provisioned> msg
00:00:23.863: ACMGR [Vp1, 22]: provision event, FSP down state no chg, action

is ignore[Vp1, 22]: AC provisioned. Bringing down existin
00:00:23.863: XC L2TP: Received L2TUN API message <Unprovision>
00:00:23.863: XC L2TP: uid:116[#.#.#.#/#] Event <L2TUN Session Unprovision>,

state Established -> Established
00:00:23.863: XC L2TP: Sending L2TUN message <Disconnect>
00:00:23.863: XC L2TP: uid:116[#.#.#.#/#] L2TUN socket teardown:
00:00:23.863: XC L2TP: uid:116[#.#.#.#/#] "xconnect destroyed"
00:00:23.863: XC L2TP: uid:116[#.#.#.#/#] PW-MGMT: PW peer #.#.#.#, vcid #
00:00:23.863: XC L2TP: uid:116[#.#.#.#/#] PW-MGMT: Reason [Unprovisioned]g

PPP session on interface Vp1
00:00:23.859: ACLIB [Vp1, 22]: ac_ppp_voluntary_set_link_vectors() changing

vectors for Vp1
00:00:23.859: ACLIB [Vp1, 22]: SW AC intf PROVISIONED for PPP interface Vp1
00:00:23.859: Xconnect[unkn:#.#.#.#/#]: provisioning fwder with fwd_type=2,

sss_role=1
00:00:23.859: XC L2TP: XConnect provision re
00:00:23.859: Vp1 IPCP: Install route to #.#.#.#
00:00:23.863: L2TP: (Tnl#:Sn#)L2X s/w switching session unboun #.#.#.# vcid #,

Unprovisioned, VC state UP
00:00:23.863: XC L2TP: uid:116[#.#.#.#/#] Tell MIB that PW peer #.#.#.#, vcid

1 is UP
00:00:23.863: L2TUN APP: uid:116handle/176170Destroying app session
00:00:23.863: XC L2TP: Received L2TUN API message <Provision>
```

```

00:00:23.863: XC L2TP: uid:121[#.##.##/#] PW-MGMT: PW peer #.##.##, vcid 1
00:00:23.863: XC L2TP: uid:121[#.##.##/#] PW-MGMT: Reason [Provisioned]d
00:00:23.863: L2TP   #:#:#   : Received a SSM L2TP segment down event
00:00:23.863: ACMGR [Vp1, 22]: Receive <Circuit Unprovisioned> msg
00:00:23.863: ACMGR [Vp1, 22]: unprovision event, SIP state chg both up to

end, action is peer service disconnect
00:00:23.863: ACMGR [Vp1, 22]: Sent a sip service disconnect

```

**Conditions** Client-initiated xconnect L2TPv2 sessions

**Workaround** The problem was not observed in 12.4(9)T2

CSCse78963 Adopt new default summer-time rules from EPA BADCODE BUG

**Symptom** Starting in calendar year 2007, daylight savings summer-time rules may cause Cisco IOS to generate timestamps (such as in syslog messages) that are off by one hour.

**Conditions** The Cisco IOS configuration command: clock summer-time zone recurring uses United States standards for daylight savings time rules by default. The Energy Policy Act of 2005 (H.R.6.ENR), Section 110 changes the start date from the first Sunday of April to the second Sunday of March, and it changes the end date from the last Sunday of October to the first Sunday of November.

**Workaround** A workaround is possible by using the clock summer-time configuration command to manually configure the proper start date and end date for daylight savings time. After the summer-time period for calendar year 2006 is over, one can for example configure: clock summer-time PDT recurring 2 Sun Mar 2:00 1 Sun Nov 2:00 (this example is for the US/Pacific time zone)

CSCsi06347 CLI for MOH should be displayed under voice-port

**Symptom** CLI for MOH is hidden

**Conditions** Happens when signal loopstart live-feed is configured under voice-port.

**Workaround** There are no workarounds.

CSCsh98465 INFO request not generated on hookflash

**Symptom** INFO request messages is generated properly on hookflash

**Conditions** This feature is broken in 12.4(11)XJ based image

**Workaround** Currently there is no workaround.



CSCse24889 Malformed SSH version 2 packets may cause processor memory depletion

**Symptom** Malformed SSH version 2 packets may cause a memory leak, causing the platform to operate under a degraded condition. Under rare circumstances, the platform may reload to recover itself.

**Conditions** This symptom is observed on a Cisco platform that is configured for SSH version 2 after it has received malformed SSHv2 packets.

**Workaround** As an interim solution until the affected platform can be upgraded to a Cisco IOS software image that contains the fix for caveat

CSCse24889, configure SSH version 1 from the global configuration mode, as in the following example:

```
config t
ip ssh version 1
end
```

**Alternate Workaround:** Permit only known trusted hosts and/or networks to connect to the router by creating a vty access list, as in the following example:

```
10.1.1.0/24 is a trusted network that
is permitted access to the router, all
other access is denied

access-list 99 permit 10.1.1.0 0.0.0.255
access-list 99 deny any

line vty 0 4
access-class 99 in
end
```

Further Problem Description: For information about configuring vty access lists, see the Controlling Access to a Virtual Terminal Line document:

[http://www.cisco.com/en/US/products/ps6441/products\\_configuration\\_guide\\_chapter09186a0080716ec2.html](http://www.cisco.com/en/US/products/ps6441/products_configuration_guide_chapter09186a0080716ec2.html)

For information about SSH, see the *Configuring Secure Shell on Routers and Switches Running Cisco IOS* document:

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

CSCse98165 Mid-call invite not sent to OGW with nat symmetric check-media-src

**Symptom** IPIP gateway does not send an to the Originating gateway when a mid-call invite is received from the terminating gateway The following is configured on the IPIP gateway

**sip-ua**

**nat symmetric check-media-src**

**Workaround** There are no workarounds.

CSCsh74276 Counter for Lost packet not cumulative during a call

**Symptom** Packet loss counter varies randomly.

**Conditions** Sequence number goes wild.

**Workaround** There are no workarounds.

CSCek70160 UDP packet corrupted in SIP->H323 IPIPGW during T38 mode

**Symptom** In fax1 -- OGW --sip--- IPIPGW -- h323 -- TGW --fax2 scenario, T38 fax fails.

**Conditions** When “dtmf-relay rtp-nte digit-drop” is configured on IPIPGW and T38 is sent from fax1 to fax2.

**Workaround** There are no workarounds

CSCsh67943 7301 fails on a T38 when configured as IPIPGW doing SIP - H323

**Symptom** In fax1 -- OGW --sip--- IPIPGW -- h323 -- TGW --fax2 scenario, T38 fax fails.

**Conditions** When TGW is using v123-21 image, IPIPGW using 12.4(9)T image, T38 fails.

**Workaround** There are no workarounds.

CSCsi09696 CME SIP missed quotation for aop parameter

CSCsi18104 SIP: 400 Bad Request for AA's REFER, and AA's transfer failed

**Symptom** Seeing “400 Bad Request” response for AA’s “REFER” request, and AA’s semi-attended transfer failed against XJ1 image.

**Conditions** This happens when AA/CUE is configured to use **dtmf-relay sub-notify**.

**Workaround** xfer works if AA/CUE uses **dtmf-relay sip-notify**.

CSCek56688 Change after-hours login timer to 1 min

**Symptom** The minimum after-hours login timer is 5 mins. It is too long. Customer wants to be able to deactivate the login in 1 min.

**Conditions** The problem is observed when after-hours call blocking is enabled.

**Workaround** There are no workarounds.

CSCsg31867 Router crashes on large ping pkts with IPSEC/NAT configured

**Symptom** A Cisco IOS router may experience a unexpected reload.

**Conditions** This problem occurs in IOS version 12.4(11)T and later when the router is configured with IPSec and NAT, and when it needs to fragment a large packet to be encrypted over the IPSec tunnel.

**Workaround** There is no known workaround at this time.

CSCsh33057 SPEs in stuck state after stress

**Symptom** SPEs may hang after voice calls have been processed. When you enter the clear SPE command for the affected SPEs, the platform may reload unexpectedly.

**Conditions** These symptoms are observed on a Cisco AS5400 and Cisco AS5850.

**Workaround** There is no workaround to prevent the SPEs from hanging. When the SPEs hang, reload the platform to recover the SPEs.

CSCsg46624 Router crashes on applying service policy on the atm subinterface

**Symptom** Router crash

**Conditions** When a policy map is applied on the mohican point to point subinterface.

**Workaround** There are no workarounds.

CSCsh16540 Router Crashes when encapsulation dot1Q <VC id is enabled

**Symptom** A router crashes when you enter the encapsulation dot1q vlan-id command.

**Conditions** This symptom is observed on a Cisco 7200 series that runs Cisco IOS interim Release 12.4(12.7) and that is configured for MPLS. However, the symptom is platform-independent.

**Workaround** There is no workaround.

CSCsh83836 C1700 Router crashes @ fpm\_db\_add\_acl

CSCsg80097 Calling name in Facility sent via CCM Sip trunk doesnt appear on SIP CME

CSCsh11157 Memory leak at DestCaptureCallForward

CSCsg40247 T38 Fax Relay calls are going as Cisco Fax Relay

CSCsi15229 No memory available if qos and acl on router

**Symptom** One or more of the following symptoms may occur. CPU HOGS, crashes, high cpu, and/or memory allocation failures.

**Conditions** This problem is triggered when making configuration changes to an access list that is currently in use by a service policy.

**Workaround** Disable the service policy before make changes to its components.

CSCsg14313 traceback seen while making conference/transcoder co\_exist calls

CSCsg57002 SIP timer tree corruption is causing SIP gateway crash under load

**Symptom** The SIP Gateway will crash when handling calls involving DTMF relay.

**Conditions** Following is the scenario that is causing the crash: sip-notify and sip-kpml are configured as DTMF relay mechanisms on both Cisco IOS Gateway and CCM. When a call is coming in from CCM onto the GW, because of a bug (CSCse72749), GW negotiates the DTMF mechanism as sip-notify whereas CCM negotiates the DTMF relay mechanism as sip-kpml. Subsequently, CCM sends subscribe request for KPML. GW accepts the KPML subscription and starts the respective KPML timers. Now when the call is terminated, Cisco IOS GW is cleaning up the data structures without stopping the KPML timers since the negotiated DTMF relay on Cisco IOS GW is sip-notify.

**Workaround** There are two workarounds:

1. Migrate to a Cisco IOS version which has CSCse72749 fix integrated.
2. Enable either sip-notify or sip-kpml on the Cisco IOS GW (do not enable both).

CSCsg34501 Traceback from voice\_reg\_supports\_utf8 is seen

CSCsb79829 call dropped when incoming invite with alert-info header

CSCsg92387 Calling name in Notify message doesnt appear on SIP-CME Phone

CSCsh17599 One way audio with Adhoc conference by CCM and 1 participant hangs up

CSCsg36224 DSPs not released when conference DN no. is directly dialed

CSCsh32714 Spurious memory access traceback at  
sipSPI\_ipip\_copy\_channelInfo\_to\_sdp

CSCsh57237 router crashes immediately after enabling service policy

**Symptom** Router crashes

**Conditions** Crash happens immediately or after a few seconds of applying service policy on the gigabit ethernet and atm pvc. The only commands executed after applying the service policy are write memory and show run.

**Workaround** There are no workarounds.

CSCsi24620 Enable support for StationUnicodeCapableMsk feature bit

**Symptom** UTF8 localized characters can not display on new generation phones, ex 7970, 7961 and etc.

**Conditions** When using phone load later than 8.0.x.

**Workaround** There are no workarounds.

**Further Problem Description:** If the locale on CME requires UTF8 encoding the character will not display correctly with 8.0.x and newer phone loads.

CSCsh11907 Router crashes @ fair\_queue\_classify\_wred

**Symptom** Router crashes after show policy-map command

**Workaround** There is no workaround.

CSCsg03849 Spurious accesses traceback seen @ AFW\_Leg\_CheckConsultSetup

## Open Caveats - Cisco IOS Release 12.4(11)XJ

There are no open caveats in this release.

## Resolved Caveats - Cisco IOS Release 12.4(11)XJ

CSCse89321: DTMF path not getting confirmed in sip media forking call

**Symptom** There is no end-to-end DTMF path confirmation.

**Workaround** There is no workaround.

CSCsf26561 User portion of Diversion header is incorrect when calling through AA

**Symptom** Tests on customer setup have revealed that PSTN to AA --> tx to SCCP phone--> CFWD to CUE/PSTN has an issue. The 302 Moved Temporarily from CME to BroadSoft has a Diversion header whose user portion is the private extension #, not the expanded DID # due to which the subsequent call fails.

**Workaround** Remove the dialplan-pattern.

CSCsf32028 Host portion of Refer-To: header must be an Address of Record

**Symptom** SIP trunking environments (for example, Cbeyond) need the URIs to carry Address of Record [AOR] in many SIP headers.

**Workaround** There is no workaround.

CSCsg17289 DNS-SRV issues for SIP registrations

Registrar, both the dial-peers would try to send a REGISTER request sequentially. When first Dial-peer (D1) is sending REGISTER Request, the registrar cache is empty. It first sends a DNS query (SRV). After getting the DNS Response, it updates the Registrar cache and sends the REGISTER request to Registrar R1. dns\_count variable here is set to SIP\_DNS\_MODE.

When second dial-peer is sending REGISTER request, it finds the resolved IP address in registrar cache (R1) so it sends the REGISTER request to R1. dns\_count variable here is set to SIP\_NON\_DNS\_MODE. But both the REGISTER request fails as R1 is down.

As D1 is set to SIP\_DNS\_MODE, D1 would send a DNS query again with incremented dns\_count to get any alternate Registrar and it gets R2. It sends REGISTER request to R2 and gets successfully registered. As D2 is set to SIP\_NON\_DNS\_MODE, it does not retry the DNS query and simply backs off for period REG\_EXPIRES/20.

**Workaround** There is no workaround.

CSCsg18902 Blind transfer is not working on SIP trunk

**Symptom** Blind transfer failed on SCCP endpoint over SIP trunk

**Conditions** When session-target is configured but outbound-proxy is not configured.

**Workaround** There is no workaround.

CSCsg30101 CME: dtmf-relay force rtp-nte CLI does not work

**Symptom** The voice-class sip dtmf-relay force rtp-nte command does not work.

**Conditions** Call comes from PSTN gw to CUE-AA, w/offer SDP of g711u, 100(NSE) CME invite's the CUE by offering g711u and NOTIFY for DTMF. CUE replies with g711u & NOTIFY for DTMF CME replies to the PSTN gw with only g711u codec with the software image.

As a result, rfc2833 is not negotiated and hence DTMF is sent raw inband. When PSTN caller presses DTMF digits after being prompted by AA, nothing works, since the CME cannot convert raw-inband DTMF to NOTIFY. With 12.4-4T3 the CME replied to the PSTN gw with g711u and rfc2833(PT=101).

**Workaround** There is no workaround.

CSCsg39750 Spurious mem access/traceback while resetting sip phone with presence

**Symptom** Spurious memory access and traceback is encountered while resetting the SIP phone (7961). After configuring presence with CME.BLF speed dial entries, the status is not updated for the watched phones.

**Workaround** There is no workaround.

CSCsg46362 contact header incorrect in 302 message using sip-srst redirect mode

**Symptom** The contact header ip address is incorrect in the 302 message sent by SIP SRST in redirect mode. As the result basic call fails in this mode. B2b mode is working okay.

**Workaround** Use b2b mode.

CSCsg46411 CME does not send a REFER over SIP trunk for calls involving AA

**Symptom** CME fails to send a REFER over the SIP trunk for calls coming into the CUE-AA and being transferred to a local extension.

**Conditions** The CUE does a BYE-Also transfer and the CME is supposed to look at the Also: header and put that into the URI for REFER message.

**Workaround** There is no workaround.

CSCsg51244 CME does not send 3xx messages for transfer --> forward scenarios

**Symptom** CME does not send a 3xx message during call fwd if there was a call-transfer invoked before the call-forward happens.

**Conditions** With only **no suppl service sip refer** configured on CME at global level, we do not see the CME sending a 3xx over the SIP trunk to BSFT. Instead, a wrong reINVITE (only g711u, no dynamic payload 101) is seen when the call is forwarded to B's mailbox. This could potentially cause DTMF

issues for PSTN caller. For PSTN to extension-A(DID #) CFNA to A's voicemail, the CME does send a 3xx as expected. Therefore, when a transfer is done before a forward to voicemail happens, the CME does not send a 3xx.

**Workaround** There is no workaround.

CSCsg51259 DTMF stops working after consult transfer to called party mailbox

**Symptom** PSTN connects to extension A, A transfers to B, B's CUE voicemail answers due to CFNA, A does a full consult transfer to B's CUE voicemail.

**Conditions** The call goes through fine, and the caller can leave a message for B, but DTMF fails even if signaling shows that 101 payload was negotiated for the SIP trunk. So if the caller wants to re-record or mark the message urgent, it does not work, although the message gets recorded.

**Workaround** There is no workaround.

CSCek61666 Ephone DNs get stuck in SEIZE state under certain conditions

**Symptom** Ephone DNs gets stuck in seize state under certain conditions, particularly under the following sequence:

1. phone-A has multiple trunk-DNs configured.
2. Call comes in on one of trunk-DN, say DN1. Call is answered and the transfer button is pressed and another extension (DN3) is dialed. The dialed extension answers the call.
3. At this time, the user on phone-A goes offhook on another trunk DN (say DN2), and dials one digit.
4. The PSTN user who is connected to DN1 hangs up and so does DN3

The above sequence gets both channels of DN1 into SEIZE state.

**Conditions** The rootcause of the issue was narrowed down to trunkdial flag that is part of the skinnyCB structure which is maintained per-phone. So, when DN2 goes offhook this trunkdial flag is set. When trunkdial flag is ON, all state transitions in the DN is ignored in SkinnyUpdateCallState. So, all state transitions are ignored for DN1 when the call is being cleared because the trunkdial flag is set for the entire phone rather than the specific DN.

**Workaround** CSCek61570 resolves this issue in the Cisco IOS 12.4(XC) throttle using a mechanism where the state transitions are not ignored it is not the active DN with trunkdial flag still in the skinnyCB structure. Make the trunkdial flag per-DN specific rather than per-phone.

CSCek37305 Cisco 7200 router crashes at get\_hwidb\_if\_same

**Symptom** Router crashes on unconfiguring T1 controller with interface configured for RTP priority.

**Conditions** This is seen on 7200 NPE-G1 router loaded with 12.2(31.4.17)SB image



**Workaround** A workaround is to ensure that the **ip rtp priority** or **ip rtp reserve** command is removed before deleting the interface.

CSCek39470 Router memory leak due to pak subblock chunk leaking with crypto+BVI

**Symptom** Cisco IOS router running 12.4 may experience per packet memory leak due to pak subblock leak in Process memPool (not in IO mem pool). The symptom is: **show proc mem 1** output seeing the first allocator's memory count is keep growing, and never decrease.

**Conditions** The leak is observed with BVI (Bridge-group Virtual Interface) interface configured with crypto ipsec tunnels. Specifically when the router is doing decryption, then send the decrypted packet to BVI interface.

**Workaround** Shutdown any BVI (Bridge-group Virtual Interface) if being used in a router with crypto ipsec configured.

CSCek45272 NAT overload failing with static mappings

**Symptom** NAT overloading from inside source address to an outside interface may fail.

**Conditions** The symptom was seen when translation ports were specified in an access-list associated to a route map and a second static NAT translation condition. Traffic which should have been NATed via the primary NAT overload statement failed because of the specified translation ports being used in second NAT translation condition. This occurred even though the traffic to be NATed did not meet the conditions of the second static NAT translation condition.

**Workaround** Remove the **ip nat inside source interface X overload** statement and then re-add it. The AT translations will then worked correctly until the next router reload.

CSCek61570 Trunk dn stuck in seize/seize state and does not recover

**Symptom** The ephone DN may get stuck in SEIZED state and one-way audio would occur afterwards.

**Conditions** If another call is dropped during trunk dialing, the DN for this terminated call would move to seized state.

**Workaround** Press ENDCALL softkey twice to move the seized DN to idle state after finishing the and trunk call. To work around the one-way audio issue, the call needs to be transferred out and then transferred back.

CSCek62099 MLP: PPPoE encaps not applied to CEF switched non-MLP packets

**Symptom** When PPP Multilink is enabled over a PPP over Ethernet (PPPoE) session, outbound packets are incorrectly sent without PPPoE headers. This causes them to be dropped.

**Conditions** Symptom is observed in IOS version 12.4 on all software-forwarding router platforms. It only affects packets which are not multilink encapsulated (due to the bundle only having a single link).

**Workaround** Either disable multilink PPP, or use the `ppp multilink fragment delay interface` command to force multilink headers to be applied to all outbound packets.

CSCir00074 Router crashes when `casnDisconnect` is set to true for pppoe session

**Symptom** A router crashes when the `casnDisconnect` object is set to “true” for a PPPoE session.

**Conditions** This symptom is observed on a Cisco 10000 series when you attempt to terminate the PPPoE session through SNMP by using the `casnDisconnect` object of the ISCO-AAA-SESSION-MIB.

**Workaround** There is no workaround.

CSCir00530 CJ-Ph2:Entry missing in `cefcModuleTable` for a CJ PA in Escort slot

**Symptom** Entry for Crackerjack PA missing from `cefcModuleTable`.

**Conditions** `SNMPGet` on the table is issued.

**Workaround** There is no workaround.

CSCsc48536 A router may reload unexpected due to bus error at `ipnat_lock_nat`

**Symptom** A Cisco router may reload unexpectedly with a bus error exception.

**Conditions** This symptom has been observed on a router with Network Address Translation (NAT) enabled.

**Workaround** There is no workaround.

CSCsd50476 When channel-group configured serial interface goes down CSCse35510 OER misidentifying overlapping prefixes

**Symptom** A serial link goes down.

**Conditions** This symptom occurs when a T1/E1 controller that is configured with channel-group causes the serial link to go down. The CEM interface will not come up.

**Workaround** There is no workaround.

CSCse46648 IP Address Getting Removed From Interface On Deleting Crypto Config

**Symptom** IP address removal from a physical interface

**Conditions** When IPSEC connection fails and the **ip unnumbered config** is applied on the virtual template

**Workaround** Use cryptomaps, wit vtis, to configure the ip address on the physical interface and re attempt connection.

CSCse88584 Router proposes the default ISKMP policy if configured one does not match

**Symptom** Router is proposing the default ISAKMP policy if the configured one does not match

**Workaround** There is no workaround.

CSCsf16536 IOSIPS - router crashes at tw\_timer\_start with sig action denyFlowInline

**Symptom** A Cisco IOS router may experience a unexpected reload.

**Conditions** This problem occurs when the router has IPS (Intrusion Prevention Systems) configured, and one or more attack signatures has the denyFlowInline action enabled.

**Workaround** Do not enable the denyFlowInline action for any IPS signatures.

CSCsf27796 1841 router reloads at retparticle with %SYS-2-BADSHARE error

**Symptom** A 1841 router may reload at retparticle with %SYS-2-BADSHARE errors.

**Conditions** The router must be running crypto traffic using a dialer interface over a GSHDSL interface.

**Workaround** There is no workaround.

CSCsg02881 MLP: Bandwidth of down MLP group should be sum of member bandwidths

**Symptom** The bandwidth of a multilink group interface that is down does not reflect the actual bandwidths of the links that are configured as members of the multilink group. In Cisco IOS Release 12.4(8) and later, the multilink interface bandwidth reflects the bandwidth of the last link in the bundle prior to going down. In earlier versions, the bandwidth is restored to 100000 Kbps.

**Conditions** This symptom is observed when the multilink interface is down. The bandwidth is correct when the multilink bundle is up.

**Workaround** There is no workaround.

CSCsg10159 Successive Default route ctrl fails on different link but on same router

**Symptom** Default route withdrawn message is send from BR immediately after successful control of default roue. And prefix goes to DEFAULT state.

**Conditions** This only happens if OER system has only one BR and static routing protocol is used. The bug is limited to default route prefix only.

**Workaround** Use non-default route prefix.

CSCsg12813 Speech loss after receiving MDCX from PGW

**Symptom** A Cisco AS5400 gateway may change it's RTP sequence numbers after receiving a MDCX command. The RTP Stream SSRC is always the same but the Sequence Number seems to be randomly initiated again.

**Conditions** MGCP receives a modification request from PGW for echo cancellation 3 seconds after the call is established.

**Workaround** There is no workaround.

CSCsg16186 SCMAbort Event crash seen on NPE-G2

**Symptom** System may crash during bootup.

**Conditions** When PA-MCX-8TE1+ is in the system and 256MB IO Memory is configured.

**Further Problem Description:** You should see SCM Abort message in the crash info file.

**Workaround** Reduce IO memory in the configuration.

CSCsg16748 ABR deletes OSPF type 3 LSA after it received max-aged type 2 LSA

**Symptom** In the situation ABR has both type 2 LSA and type 1 LSA for a prefix, ABR deletes type 3 LSA if it received max-aged type 2 LSA.

**Workaround** The workaround of this issue is configuring **timers lsa arrival** and **timers throttle lsa all** or **timers lsa-interval**.

CSCsg33172 IPS 5.0: Provide more informational error message XML and names

**Symptom** A few inconsistent error message.

**Conditions** Some SDEE messages aren't consistent with SDEE schema.

**Workaround** There is no workaround.

CSCsg38907 rip - redistribute static: redistributed prefixes have metric 16

**Symptom** Under some conditions redistributed static routes are sent out with metric 16

**Conditions** The static route for a subnet of a classfull network has a next-hop in another classfull network that is not enabled under rip. The rip update is sent out to a subnet within the same major network that the prefix of the static is about

**Workaround** Enable the next-hop network under rip. Configure distribute-list to filter the update.

CSCsg39216 ezvpn tunnel traffic with **acl** keyword is not excluded from NAT

**Symptom** When EZVPN client is configured with “**acl**” keyword, the tunneled (vpn) traffic also gets NATed.

**Conditions** This only happens if there is a NAT configuration that includes the interesting VPN traffic. The tunneled traffic should be bypassed from NAT when the VPN is up.

Example:

```
crypto ipsec client ezvpn hwclient
connect auto
group cisco key cisco123
mode network-extension
peer 10.1.1.1
acl 103
```

```
access-list 103 permit ip 192.168.100.0 0.0.0.255 192.168.1.0 0.0.0.255
```

This occurs when the following is true:

- 1) ezvpn client is configured
- 2) interesting tunnel traffic is defined using the “**acl**” keyword under global ezvpn configuration
- 3) NAT is configured

**Workaround** Use **crypto ipsec ezvpn client <ezvpn-name> inside** on the interface instead of **acl** keyword under ezvpn global configuration.

CSCsg39961 crash sending pki request to CA CSCsg43460 Improve NPE-G2 ENVM handling

**Symptom** A router may unexpectedly reload when trying to send a PKI request to a CA.

**Conditions** The router must be configured with crypto PKI trustpoints.

**Workaround** Because this is a 1 byte redzone overrun, the following will prevent the crashes, and will display error messages instead. First, to prevent the usage of chunks, configure **no memory lite**. Second, configure **exception memory ignore overflow processor** to correct the redzone overrun.

CSCsg46546 Erroneous alerting during pickup with CSCek58324 scenario

**Symptom** Pickup will result in alerting from the pickup target instead of connected.

**Conditions** Two calls come into a trunk monitor dn. The first one to come in is answered. The second one is then answered on the same phone using the line button. Another phone uses the pickup softkey to dial the first incoming call, which is now on hold.

**Workaround** This issue only appears to occur on the second scenario of the above after a router reload.

CSCsg47834 NACK is observed for Open voice channel command

**Symptom** NACK message may be received from 5510 DSP in response to Open Voice Channel command sent by the Cisco IOS software.

```
2568288: Oct 24 13:11:33.240: //-1/xxxxxxxxxxxx/HPI/[]/hpi_tx_global_debug_info:
      DSP 3/0x3 port INVALID_CHANNEL_STATE(85), info 0x01(1)
      DSP 3/0x00000003 port mode CLOSED(1), state UNDEFINED(133), NACKed message
74/0x4A @0
      DSP message header 0008 0003 004A 0001 Payload: 0x0000 0x0000 0xFFFF 0x0000
```

**Conditions** This problem may be observed when a same 5510 DSP is used as a Transcoding and Voice Termination resource.

#### Workaround

1) Disable Transcoding

(or)

2) Make sure that the Transcoding and Voice Termination are on different DSP(s).

This can be performed by configuring the maximum number of transcoding sessions to a value such that it would require a multiple of 240 DSP credits.

Example 1:

In the following configuration each transcoding session (complexity=high) will require 40 DSP credits. In order to use a multiple of 240 credits, we need to set the maximum transcoding sessions to 6 ( $6 * 40 = 240$ ) or any multiple of 6.

```
dspfarm profile 1 transcode
  codec g711ulaw
  codec g729r8
  associate application SCCP
```

```
Router(conf-t)#dspfarm profile 1 transcode
Router(config-dspfarm-profile)#maximum sessions 6
```

Example 2:

In the following configuration each transcoding session (complexity=medium) will require 30 DSP credits. In order to use a multiple of 240 credits, we need to set the maximum transcoding sessions to 8 ( $8 * 30 = 240$ ) or any multiple of 8.

```
dspfarm profile 2 transcode
  codec g711ulaw
```

```

codec g711alaw
codec g729ar8
codec g729abr8
associate application SCCP

```

```

Router(config-t)#dspfarm profile 2 transcode
Router(config-dspfarm-profile)#maximum sessions 8

```

Use **show voice dsp group all** command to verify DSP resource allocation.



**Note** Each 5510 DSP has 240 Credits. This work-around cannot be implemented if the router has only one PVDM2-16 which has only one DSP.

CSCsg48183 Unforeseen ARP request send from all interfaces

**Symptom** A router may unexpectedly send an ARP request from all its active interfaces to the nexthop of the network of an SNMP server.

**Conditions** This symptom is observed on a Cisco router that has the **snmp-server host** command enabled after any of the following actions occur:

- Reload the router.
- A switchover of the active RP occurs.
- Enter the **redundancy force-switchover main-cpu** command.

**Workaround** There is no workaround.

CSCsg57228 IPS5.0: c871 reloads using IOS-S222 package file

**Symptom** Router crashes loading the IOS signature package file

**Conditions** Appeared to happen the most on the Cisco 871 and Cisco 2600 platforms.

**Workaround** There is no workaround.

CSCsg68199 Trunk DN offhook is not propagated to a phone already in dial out mode

**Symptom** Two IP Phones A and B are registered with Cisco CallManager Express; these phones share two trunk DN's 1 & 2. If Phone-A goes offhook on DN-1 and Phone-B immediately goes offhook on DN-2. This condition should show the DN-2 button on Phone-A as busy which is not happening.

**Conditions** This happens only when trunk DN's are used and they go offhook in quick succession on different phones and are in dialing mode.

**Workaround** There is no workaround.

CSCsg68711 Incoming call in background does not audibly ring after transfer commit

**Symptom** Phone does not ring for the second incoming call after committing transfer at alert for the first call.

**Conditions** While transferring a trunk DN call, a call comes in. After committing the transfer at alert, the incoming call still doesn't ring on the phone.

**Workaround** There is no workaround.

CSCsg70221 DTMF through the hairpin of a trunk DN does not work

**Symptom** DTMF tones are being suppressed to prevent duplicate DTMF tones from being extended to an SCCP controlled VG224 port. This problem is direct result of a fix implemented for correct CSCsf98754. The lack of DTMF prevents IVR devices from working correctly

**Conditions** PSTN -- FXO --- CME GATEWAY --- VG224/FXS --- IVR

A call comes into a FXO port that is part of a trunk group and gets transferred to an extension that is hanging off of a vg224. DTMF is not relayed to the end point

**Workaround** Set the transfer system to full blind to prevent the blocking of the DTMF.

CSCsg70355 Adopt new default summer-time rules from Energy Policy Act of 2005

**Symptom** Starting in calendar year 2007, daylight savings summer-time rules may cause Cisco IOS to generate timestamps (such as in syslog messages) that are off by one hour.

**Conditions** The Cisco IOS configuration command, **clock summer-time zone recurring**, uses United States standards for daylight savings time rules by default. The Energy Policy Act of 2005 (H.R.6.ENR), Section 110 changes the start date from the first Sunday of April to the second Sunday of March, and it changes the end date from the last Sunday of October to the first Sunday of November.

**Workaround** A workaround is possible by using the clock summer-time configuration command to manually configure the proper start date and end date for daylight savings time. After the summer-time period for calendar year 2006 is over, one can for example configure:

```
clock summer-time PDT recurring 2 Sun Mar 2:00 1 Sun Nov 2:00
```

(this example is for the US/Pacific time zone)

CSCsg73806 Runaway debugs: AFW\_Module\_ObjectCount pCallIndSs

**Symptom** A router may display the following message to the console repeatedly:

```
AFW_Module_ObjectCount pCallIndSs 1
```

This is a cosmetic error. With the fix, this message will only be seen with debugs enabled.



**Conditions** This is seen on voice routers.

**Workaround** There is no workaround.

CSCsg78801 4.x MinHits or 5.0 event-count not summarizing correctly

**Symptom** Min hit or event count not resetting correctly

**Conditions** Will fire signature on 1st occurrence of event, but never resets correctly so may or may not continue to fire signature.

**Workaround** There is no workaround.

CSCsg90212 VSA: Add code to handle CRNG failure interrupt

**Symptom** When VSA encounters a Continual RNG failure, the IOS will print the message

VSA encountered CRNG failure

**Workaround** There is no workaround.

## Additional References

The following sections describe the documentation available for the Cisco 3700 series routers. Typically, these documents consist of hardware and software installation guides, Cisco IOS configuration and command references, system error messages, feature modules, and other documents. Documentation is available as printed manuals or electronic documents, except for feature modules, which are available online on [Cisco.com](http://www.cisco.com) and the Documentation CD.

Use these release notes with 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 Cisco IOS Release 12.4(11)XJ. They are located on [Cisco.com](http://www.cisco.com):

- [Cross-Platform Release Notes for Cisco IOS Release 12.4\(11\)T](#), follow this path:
- [Caveats for Cisco IOS Release 12.4](#) and [Caveats for Cisco IOS Release 12.4\(11\)T](#) documents.



### Note

If you have an account with [Cisco.com](http://www.cisco.com), you can also use the Bug Toolkit to find selected caveats of any severity. To reach the Bug Toolkit, log in to [Cisco.com](http://www.cisco.com), and go to: [http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl).

## Platform-Specific Documents

Hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco 3700 series routers are available on [Cisco.com](http://www.cisco.com) and the Documentation CD at the following location:

[http://www.cisco.com/univercd/cc/td/doc/product/access/acs\\_mod/3700/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/access/acs_mod/3700/index.htm)

## Feature Navigator

Feature Navigator is a web-based tool that enables you to quickly determine which Cisco IOS software images support a particular set of features and which features are supported in a particular Cisco IOS image. Feature Navigator is available 24 hours a day, 7 days a week.

To use Feature Navigator, you must have a JavaScript-enabled web browser such as Netscape 3.0 or later, or Internet Explorer 4.0 or later. Internet Explorer 4.0 always has JavaScript enabled. To enable JavaScript for Netscape 3.x or Netscape 4.x, follow the instructions provided with the web browser. For JavaScript support and enabling instructions for other browsers, check with the browser vendor.

Feature Navigator is updated when major Cisco IOS software releases and technology releases occur. You can access Feature Navigator at the following URL:

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

## 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

## Open Source License Acknowledgements

The following notices pertain to this software license.

### OpenSSL/Open SSL Project

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

## License Issues

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

### OpenSSL License:

Copyright © 1998-2007 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)".
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:  
 "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)".

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

### Original SSLeay License:

Copyright © 1995-1998 Eric Young (eay@cryptsoft.com). All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscapes SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:  

“This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)”.

The word ‘cryptographic’ can be left out if the routines from the library being used are not cryptography-related.
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: “This product includes software written by Tim Hudson (tjh@cryptsoft.com)”.

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The license and distribution terms for any publicly available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution license [including the GNU Public License].

## Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feed-back, security guidelines, and also recommended aliases and general Cisco documents, see the monthly What's New in Cisco Product Documentation, which also lists all new and revised Cisco technical documentation at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

---

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

CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, *Packet*, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0705R)

© 2007, Cisco Systems, Inc. All rights reserved.

