

Release Notes for Cisco 3800 Series Integrated Services Routers with Cisco IOS Release 12.4(11)XV

March 26, 2008 Cisco IOS Release 12.4(11)XV1 OL-13106-03 Second Release

These release notes describe new features and significant software components for the Cisco 3800 series routers that support the Cisco IOS Release 12.4(11)XV 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)XV, 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 7
- Limitations and Restrictions, page 8
- Caveats, page 9
- Additional References, page 19
- Open Source License Acknowledgements, page 20
- Obtaining Documentation, Obtaining Support, and Security Guidelines, page 23



System Requirements

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

- Memory Requirements, page 3
- Hardware Supported, page 6
- Determining the Software Version, page 6
- Upgrading to a New Software Release, page 6
- Feature Set Tables, page 6

Memory Requirements

Table 1 describes the memory requirements for the Cisco IOS feature sets supported by Cisco IOS Release 12.4(11)XV on the Cisco 3800 series routers.

Table 1 Required Memory for Cisco 3800 Series Routers with Cisco IOS Release 12.4(11)XV

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3825	Cisco 3825 Advanced Enterprise Services	Advanced Enterprise Services	c3825-adventerprisek9-mz	64	256
	Cisco 3825 AISK9-AESK9 Feature Set Factory UPG For Bundles	AISK9-AESK9 Feature Set Factory UPG For Bundles		64	256
	Cisco 3825 ASK9-AESK9 Feature Set Factory UPG For Bundles	ASK9-AESK9 Feature Set Factory UPG For Bundles		64	256
	Cisco 3825 SPSK9-AESK9 Feature Set Factory UPG For Bundles	SPSK9-AESK9 Feature Set Factory UPG For Bundles		64	256
	Cisco 3825 INT Voice/Video, IPIPGW, TDMIP GW AES	INT Voice/Video, IPIPGW, TDMIP GW AES	c3825-adventerprisek9_ivs-mz	64	256
	Cisco 3825 Advanced Enterprise Services With SNA Switching	Advanced Enterprise Services With SNA Switching	c3825-adventerprisek9_sna-mz	64	256
	Cisco 3825 Advanced IP Services	Advanced IP Services	c3825-advipservicesk9-mz	64	256
	Cisco 3825 ASK9-AISK9 Feature Set Factory UPG For Bundles	ASK9-AISK9 Feature Set Factory UPG For Bundles		64	256
	Cisco 3825 SPSK9-AISK9 Feature Set Factory UPG For Bundles	SPSK9-AISK9 Feature Set Factory UPG For Bundles			
	Cisco 3825 AISK9-AISK9 Feature Set Factory UPG For Bundles	AISK9-AISK9 Feature Set Factory UPG For Bundles			
	Cisco 3825 Advanced Security	Advanced Security	c3825-advsecurityk9-mz	64	256

Table 1 Required Memory for Cisco 3800 Series Routers with Cisco IOS Release 12.4(11)XV (continued)

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3825	Cisco 3825 ASK9-ASK9 Feature Set Factory UPG For Bundles	Advance Security	c3825-advsecurityk9-mz	64	256
	Cisco 3825 Enterprise Base W/O Crypto		cc3825-entbase-mz	64	256
	Cisco 3825 Enterprise Base	Enterprise Base	c3825-entbasek9-mz	64	256
	Cisco 3825 Enterprise Services W/O Crypto	Enterprise Services W/O Crypto	c3825-entservices-mz	64	256
	Cisco 3825 Enterprise Services	Enterprise Services	c3825-entservicesk9-mz	64	256
	Cisco 3825 SPSK9-ESK9 Feature Set Factory UPG For Bundles	SPSK9-ESK9 Feature Set Factory UPG For Bundle			
	Cisco 3825 IP Base W/O Crypto	IP Base W/O Crypto	c3825-ipbase-mz	64	256
	Cisco 3825 IP Base	IP Base	c3c3825-ipbasek9-mz	64	256
	Cisco 3825 IP Voice W/O Crypto	IP Voice W/O Crypto	c3825-ipvoice-mz	64	256
	Cisco 3825 INT Voice/Video, IPIP GW, TDMIP GW	INT Voice/Video, IPIP GW, TDMIP GW	c3825-ipvoice_ivs-mz	64	256
	Cisco 3825 IP Voice	IP Voice	c3825-ipvoicek9-mz	64	256
	Cisco 3825 SP Services	SP Services	c3825-spservicesk9-mz	64	256
	Cisco 3825 SPSK9-SPSK9 Feature Set Factory UPG For Bundles	SPSK9-SPSK9 Feature Set Factory UPG For Bundles			
Cisco 3845	Cisco 3845 Advanced Enterprise Services	Advanced Enterprise Services	c3845-adventerprisek9-mz	64	256
	Cisco 3845 AISK9-AESK9 Feature Set Factory UPG For Bundles	AISK9-AESK9 Feature Set Factory UPG For Bundles			
	Cisco 3845 ASK9-AESK9 Feature Set Factory UPG For Bundles	ASK9-AESK9 Feature Set Factory UPG For Bundles			
	Cisco 3845 SPSK9-AESK9 Feature Set Factory UPG For Bundles	SPSK9-AESK9 Feature Set FactoryUPG For Bundles			
	Cisco 3845 INT Voice/Video, IPIPGW, TDMIP GW AES	INT Voice/Video, IPIPGW, TDMIP GW AES	c3845-adventerprisek9_ivs-mz	64	256

Table 1 Required Memory for Cisco 3800 Series Routers with Cisco IOS Release 12.4(11)XV (continued)

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3845	Cisco 3845 Advanced Enterprise Services With SNA Switching	Advanced Enterprise Services With SNA Switching	c3845-adventerprisek9_sna-mz	64	256
	Cisco 3845 Advanced IP Services	Advanced IP Services	c3845-advipservicesk9-mz	64	256
	Cisco 3845 ASK9-AESK9 Feature Set Factory UPG For Bundles				
	Cisco 3845 SPSK9-AISK9 Feature Set Factory UPG For Bundles				
	Cisco 3845 AISK9-AISK9 Feature Set Factory UPG For Bundles				
	Cisco 3845 Advanced Security	Advanced Security	c3845-advsecurityk9-mz	64	256
	Cisco 3845 ASK9-ASK9 Feature Set Factory UPG For Bundles				
	Cisco 3845 Enterprise Base W/O Crypto	Enterprise base W/Q Crypto	c3845-entbase-mz	64	256
	Cisco 3845 Enterprise Base	Enterprise Base	c3845-entbasek9-mz	64	256
	Cisco 3845 Enterprise Services W/O Crypto	Enterprise Services W/O Crypto	c3845-entservices-mz	64	256
	Cisco 3845 Enterprise Services	Enterprise Services	c3845-entservicesk9-mz	64	256
	Cisco 3845 SPSK9-ESK9 Feature Set Factory UPG For Bundles	SPSK9-ESK9 Feature Set Factory UPG For Bundles			
	Cisco 3845 IP Base W/O Crypto	IP Base W/O Crypto	c3845-ipbase-mz	64	256
	Cisco 3845 IP Base	IP Base	c3845-ipbasek9-mz	64	256
	Cisco 3845 IP Voice W/O Crypto	IP Voice W/O CRYPTO	c3845-ipvoice-mz	64	256
	Cisco 3845 INT Voice/Video, IPIP GW, TDMIP GW	INT Voice/Video, IPIP GW, TDMIP GW	c3845-ipvoice_ivs-mz	64	256

Table 1 Required Memory for Cisco 3800 Series Routers with Cisco IOS Release 12.4(11)XV (continued)

Platform	Image Name	Feature Set	Image	Flash Memory (MB)	DRAM (MB)
Cisco 3845	Cisco 3845 IP Voice	IP Voice	c3845-ipvoicek9-mz	64	256
	Cisco 3845 SP SERVICE	SP Services	c3845-spservicesk9-mz	64	256
	Cisco 3845 SPSK9-SPSK9 Feature Set Factory UPG For Bundles	SPSK9-ESK9 Feature Set Factory UPG For Bundles			

Hardware Supported

Cisco IOS Release 12.4(11)XV supports the following Cisco 3800 series routers:

- Cisco 3825
- Cisco 3845

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 3800 series routers, which are available on Cisco.com at the following location:

http://www.cisco.com/univercd/cc/td/doc/product/access/acs_mod/3800/index.htm

Determining the Software Version

To determine which version of Cisco IOS software is currently running on your Cisco 3800 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) C3800 Software (C3800-Y7-MZ), Version 12.4(11)XV, 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.

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)XV supports the same feature sets as Releases 12.4 and 12.4(11)T, but Release 12.4(11)XV includes new features supported by the Cisco 3800 series routers.



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 probably 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.

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

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)XV" indicates that the feature was introduced in Release 12.4(11)XV. 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.



These feature set tables contain only a selected list of features, which are cumulative for Release 12.4(4)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(4)XC Feature List for Cisco 3800 Routers

Feature	In	Image
3G Wireless High-Speed WAN Interface Card	12.4(11)XV	See Table 1 for image names.

New and Changed Information

This section contains the following information:

- New Hardware Features in Release 12.4(11)XV, page 7
- New Software Features in Release 12.4(11)XV, page 8
- New Features in Release 12.4T, page 8

New Hardware Features in Release 12.4(11)XV

The following new hardware feature is supported in this release:

• 3G Wireless High-Speed WAN Interface Card, page 8

3G Wireless High-Speed WAN Interface Card

The Third Generation (3G) Wireless High-Speed WAN interface card (HWIC) is a multiband, multiservice WAN card. The primary application of 3GHWIC is WAN connectivity as a backup datalink for critical data applications. The 3G wireless WAN HWIC can also function as the primary WAN connection. The 3G HWIC supports the following Cisco integrated services routers (Cisco ISRs):

- Cisco 3824
- Cisco 3845

The 3G wireless WAN HWIC provides broadband WAN connectivity using high speed cellular data technology and it supports the following GSM and CDMA technologies:

- High-speed Downlink Packet Access (HSDPA)
- Universal Mobile Telecommunications System (UMTS)
- Enhanced Data-Rates for GSM Evolution (EDGE)
- General Packet Radio Service (GPRS)
- Evolution-Data Optimized (EVDO)
- 1 times Radio Transmission Technology (1xRTT)
- Automatic best network selection
- Multiple external antenna options
- Static and dynamic IP addressing
- Modem-based support for mobile IP
- Cellular interface based on the async interface in Cisco IOS
- NAT support
- Security features like Firewall, IDS/IPS and IPsec VPN on the router
- WAN switchover using IOS backup interface feature

New Software Features in Release 12.4(11)XV

There are no new software features in this release.

New Features in Release 12.4T

For information regarding the features supported in Cisco IOS Release 12.4T, see the *Cross-Platform Release Notes* 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 Release 12.4(11)XV. 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.



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, to go to: http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

This sections contains the following information:

- Open Caveats Cisco IOS Release 12.4(11)XV1, page 9
- Resolved Caveats Cisco IOS Release 12.4(11)XV1, page 9
- Open Caveats Cisco IOS Release 12.4(11)XV, page 18
- Resolved Caveats Cisco IOS Release 12.4(11)XV, page 18

Open Caveats - Cisco IOS Release 12.4(11)XV1

There are no open caveats in this release.

Resolved Caveats - Cisco IOS Release 12.4(11)XV1

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.

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.

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

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

CSCsg03449 Etherswitch module VLAN Trunking Protocol Vulnerabilities

Symptom

- VTP Version field DoS
- Integer Wrap in VTP revision
- Buffer Overflow in VTP VLAN name

Conditions The packets must be received on a trunk enabled port.

Further Information: On the 13th September 2006, Phenoelit Group posted an advisory containing three vulnerabilities:

- VTP Version field DoS
- Integer Wrap in VTP revision
- Buffer Overflow in VTP VLAN name

These vulnerabilities are addressed by Cisco IDs:

- CSCsd52629/CSCsd34759 -- VTP version field DoS
- CSCse40078/CSCse47765 -- Integer Wrap in VTP revision
- CSCsd34855/CSCei54611 -- Buffer Overflow in VTP VLAN name

CSCsg03449 -- Etherswitch module VLAN Trunking Protocol Vulnerabilities. Cisco's statement and further information are available on the Cisco public website at: http://www.cisco.com/warp/public/707/cisco-sr-20060913-vtp.shtml

CSCsg40567 Memory leak found with malformed tls/ssl packets in http core process

Symptom Malformed SSL packets may cause a router to leak multiple memory blocks.

Conditions This symptom is observed on a Cisco router that has the ip http secure server command enabled.

Workaround Disable the ip http secure server command.

CSCsi56163 SIM read failure on bootup for certain SIMs causes Unknown SIM status

Symptom Certain SIMs on certain GSM HWICs exhibit read failure causing SIM Unknown status.

Conditions Router bootup with the affected SIMs

Workaround Use a valid working service provider approved SIM.

CSCsi72340 C1841 crashed while upgrading GSM firmware

Symptom Router crash with memory corruption while attempting firmware upgrade on HWIC-3G-CDMA or HWIC-3G-GSM

Conditions The trigger is firmware upgrade process for HWIC-3G-GSM or HWIC-3G-CDMA.

Workaround There is no workaround

CSCek66393FPM: router crashes with large size buffer

CSCsi95130 Router crashes while activating the modem if wrong params are used

Symptom Router crash while trying to enter "cellular x/y/z activate manual command.

Conditions While activating a modem on a HWIC-3G-CDMA using "manual activation" method, if activation code is entered that has either "*" or"#", then the router can crash. The last parameter for activating the modem is Mobile Subscriber Lock (MSL). This is a six digit code. The CLI allows the user to enter a digit [0-9] or *or #. However if * or # is entered as MSL code, then the router can crash while processing this command.

Workaround There is no workaround. Although this will happen only if wrong parameters are entered. The command works w/o any problem for normal operation.

Further Problem Description: "cdma activate manual" command needs to be used only once while trying to activate the CDMA service.

Following params are required for that MDN - 10 digit phone number. MSID - 10 digit mobile Mobile ID

MSL - 6 digit activation code SID - System ID

NID - Network ID

MDN/MSID/MSL are given out by the service provider.

SID/NID is obtained by issueing show cellular network command.

CSCek76902 Router with ISDN interface may crash - Bus Error at CCPRI_AcceptChanId

Symptom Router with ISDN interfaces may crash with a bus error.

Conditions Router is running an IOS image that has CSCef58974 integrated. A specific Q.931 SETUP message is received for a preferred channel which is not available.

Workaround There is no workaround.

CSCsj06951 Traceback @ createCNF_file while configuring user-locale

Symptom Traceback seen on terminal.

Conditions When config user-locale and generate CNF file under telephony-service.

Workaround There is no workaround

CSCsi13312 Authentication fails and unable to login to a factory fresh router

Symptom Authentication with Security Device Manager (SDM) 2.3.3 fails, preventing you from logging into the router through HTTPS, HTTP, SSH, Telnet, console, or any management application.

Conditions This symptom is observed on a Cisco router that is "fresh out of the box" and affects the following routers:

Cisco 800 series

Cisco 1700 series

Cisco 1800 series

Cisco 2700 series

Cisco 2800 series

Cisco 3700 series

Cisco 3800 series

Workaround For extensive information and a workaround, see the following

Field Notice:

http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html

CSCsj16172 WIC-1SHDSL-V3 blocks data. Error in check_tx_ready: VCD not in use

Symptom In a back to back setup WIC-1SHDSL-V3 fails to pass traffic. Each time PPP sends a frame the debugs report:

00:00:47.707: ATM0/1/0: Error in check_tx_ready: VCD not in use, vcd: 1

00:00:49.723: ATM0/1/0: Error in check_tx_ready: VCD not in use, vcd: 1

00:00:51.739: ATM0/1/0: Error in check_tx_ready: VCD not in use, vcd: 1

00:00:53.755: ATM0/1/0: Error in check_tx_ready: VCD not in use, vcd: 1

Conditions The problem is seen with 12.4(11)XV release

Workaround Use either a mainline or a T-train release

CSCsg15598 DYIDS: Fragmentation prevents signature recognition

The Intrusion Prevention System (IPS) feature set of Cisco IOS® contains several vulnerabilities. These include:

- Fragmented IP packets may be used to evade signature inspection.
- IPS signatures utilizing the regular expression feature of the ATOMIC.TCP signature engine may cause a router to crash resulting in a denial of service.

There are mitigations and workarounds for these vulnerabilities. Cisco has made free software available to address these vulnerabilities for affected customers.

This advisory is posted at:

http://www.cisco.com/warp/public/707/cisco-sa-20070213-iosips.shtml

```
CSCsh58082 SIP: A router may reload due to SIP traffic
```

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.

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
!
```

CSCsj18014 Caller ID string received with extra characters

Symptom A caller ID may be received with extra characters. Conditions: This symptom is observed when caller ID is enabled on both routers and when the station ID and station name are configured on the FXS side.

Workaround There is no workaround

CSCsb79076 MGCP RSVP enabled calls fails due to spurious error @ qosmodule_main %SYS-3-TIMERNEG errors and tracebacks are observed while making MGCP RSVP calls on a analog (RGW) setups. Observed in 12.4(3.9)T1 IOS version.

Workaround There is no workaround.

CSCsj16292 DATACORRUPTION-1-DATAINCONSISTENCY: copy error

Symptom Following an upgrade to Cisco IOS Release 12.2(18)SXF9, the following message may be displayed:

%DATACORRUPTION-1-DATAINCONSISTENCY: copy error-Traceback=

Conditions This message may appear as a result of SNMP polling of PAgP variables, but does not appear to be service impacting.

Workaround There is no workaround.

CSCsj13380 Possible problem with calling numbers when called_num_chunk not nulled

Symptom Data corruption messages may be displayed, and show isdn active may show incorrect information for calling number on outgoing calls. This problem is inconsistant, and shows up most frequently with the "isdn test call" CLI.

Conditions Outbound calls.

Workaround There is no workaround.

CSCsj44099 Router crashes if DSPFARM profile description is 128 characters long.

Symptom A cisco c3800 router can experience a memory corruption resulting in a crash if the description field under the "dspfarm profile" configuration matches the maximum of 128 characters.

Conditions During configuration of the dspfarm profile thru the CLI, a description that is 128 characters will cause a memory copy problem. If the user tries to display the results of the configuration using "show dspfarm profile", the router will crash trying to display the output.

Workaround To prevent this problem configure the dspfarm profile description with 127 characters or less.

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/docs/ios/sec_data_plane/configuration/guide/sec_cntrl_acc_vtl.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

CSCdz55178 QoS profile name of more then 32 chars will crash the router

Symptom A router that is configured for QoS may reload unexpectedly or other serious symptoms such as memory corruption may occur.

Conditions This symptom is observed on a Cisco router that has a cable QoS profile with a name that has a length that is greater than 32 characters as in the following example:

Workaround Change the name of the cable QoS profile qos profile to a length that is less than 32 characters.

CSCsd58772 rttMonLatestRttOperTime is always 0 for RTP Probe.

Symptom The MIB object rttMonLatestRttOperTime returns a value of 0.

Conditions This symptom occurs for IPSLA RTP operation only irrespective of whether the operation succeeds or fails.

Workaround There is no workaround

CSCsj52927 DATACORRUPTION-1-DATAINCONSISTENCY message in show log

Symptom DATACORRUPTION-1-DATAINCONSISTENCY messages are seen in 'show log'

Conditions The messages are seen when when the router comes up.

Workaround There is no workaround.

CSCsj32707 GW rejects SIP UPDATE with Cseq 0

Symptom A "SIP UPDATE" message from a Cisco CallManager or SIP Proxy Server with a "Cseq" value of 0 may be rejected or considered invalid by A Cisco gateway.

Conditions This symptom is observed on a Cisco gateway that runs Cisco IOS Release 12.4(9)T4 or a later release and that is connected to a SIP endpoint.

Workaround There is no workaround. Note that the symptom does not occur in Release 12.4(9)T3.

Open Caveats - Cisco IOS Release 12.4(11)XV

CSCsh40495 On HWIC-3G-GSM and in rare occasions EDGE/GPRS Rx data traffic stops until reset the modem

Further Problem Description: In rare occasions it has been observed that the modem may get into a state where the Rx (Inbound from the Wireless Network to Device) path is blocked. This problem has only been observed when the modem is attached to EDGE service and after a few hours of operation. A modem reset is required to come out of this state.

Workaround As this problem is related to the signal quality at a given location, repositioning the antenna could potentially solve this problem. Using the 20ft or 50ft Cable options, the antenna can be moved out of the spot where interference from multiple cells causes the modem Rx path failure.

When using an attached antenna, relocating the router to a location away from the problem spot can eliminate the problem.

When the failure occurs, a modem reset using the following IOS command would bring the modem out of failure state:

test cellular x/x/x modem-reset

CSCse92662:HWIC data path stops working

Symptom: HWIC data path stops working under stress condition. Both transmit and receive directions will be impacted. The problem is not specific to any particular cellular technology

Conditions: Stress over long period of time.

Workaround Reload the router

Resolved Caveats - Cisco IOS Release 12.4(11)XV

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.



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.

Additional References

Use these release notes with the appropriate documents for your Cisco configuration

- Cross-Platform Release Notes for Cisco IOS Release 12.4(11)T
- Field Notices: http://www.cisco.com/warp/public/tech_tips/index/fn.html.
- Caveats for Cisco IOS Release 12.4 and Caveats for Cisco IOS Release 12.4(11)T



If you have an account with 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, and go to: 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 3800 series routers are available on Cisco.com at the following location:

http://www.cisco.com/univercd/cc/td/doc/product/access/acs_mod/3800/index.htm

Cisco Feature Navigator

Cisco 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 Cisco 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.

Cisco 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 that are shipped with your order in electronic form.

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, 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 feedback, 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..

Obtaining Documentation, Obtaining Support, and Security Guidelines