



Release Notes for the Cisco Catalyst 6500 Series and the Cisco 7600 Series Communication Media Module for Cisco IOS Release 12.3(8)XY

July 26, 2006

Cisco IOS Release 12.3(8)XY7

OL-6314-01 Rev A2

These release notes for the Cisco Catalyst 6500 Series and the Cisco 7600 Series Communication Media Module (CMM) describe the enhancements provided in the Cisco IOS Release 12.3(8)XY releases. These release notes are updated as needed.

For a list of the software caveats that apply to Cisco IOS Release 12.3(8)XY, see the “[Caveats for Cisco IOS Release 12.3\(8\)XY](#)” section on page 23 and *Caveats for Cisco IOS Release 12.3 T*. The caveats document is updated for every maintenance release and is located on [Cisco.com](#).

Use these release notes with *Cross-Platform Release Notes for Cisco IOS Release 12.3* located on [Cisco.com](#).

Cisco recommends that you view the field notices for this release to see if your software or hardware platforms are affected. If you have an account on Cisco.com, you can find field notices at http://www.cisco.com/warp/customer/tech_tips/index/fn.html. If you do not have a Cisco.com login account, you can find field notices at http://www.cisco.com/warp/public/tech_tips/index/fn.html.



Note

Throughout this publication, except where specifically differentiated, the following terms apply:

- The Cisco Catalyst 6500 Series and the Cisco 7600 Series Communication Media Module (CMM) is hereafter referred to as CMM.
 - The term *Cisco Catalyst 6500 series switches* includes both Cisco Catalyst 6000 series and Cisco Catalyst 6500 series switches.
 - The term *supervisor engine* refers to Supervisor Engine 1, Supervisor Engine 2, Supervisor Engine 720, and Supervisor Engine 32.
 - The term *Multilayer Switch Feature Card (MSFC)* refers to MSFC, MSFC2, and MSFC3.
-



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

© 2007 Cisco Systems, Inc. All rights reserved.

Contents

- [System Requirements, page 2](#)
- [Memory Recommendations, page 4](#)
- [Feature Sets, page 4](#)
- [Usage Guidelines and Restrictions, page 9](#)
- [Installation Notes, page 9](#)
- [Important Notes, page 11](#)
- [Caveats for Cisco IOS Release 12.3\(8\)XY, page 23](#)
- [Related Documentation, page 29](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 29](#)

System Requirements

This section describes the system requirements for the CMM software release.

Hardware Supported

CMM requires either a Supervisor Engine 1, Supervisor Engine 2, Supervisor Engine 720, or Supervisor Engine 32. The supervisor engine can have an MSFC, MSFC2, or MSFC3, but CMM does not require one for configuration or operation. See the software recommendations in [Table 1](#).

Table 1 *Software Recommendations for the Communication Media Module*

Product Number	Product Description	Minimum Software Version	Recommended Software Version	Cisco IOS Release ¹	Cisco Catalyst Release ¹
WS-SVC-CMM	Communication Media Module	12.3(8)XY7	12.3(8)XY7	12.3(8)XY7	7.6(8)

1. See the “[Software Requirements](#)” section on [page 2](#) for detailed information on which software releases support the various supervisor engines.

Software Requirements



Note

- CMM has its own software image; the image is not bundled with the supervisor engine or MSFC images. See the “Software Upgrade Procedure” section of the [Catalyst 6500 Series and Cisco 7600 Series CMM Installation and Configuration Note](#) for instructions on downloading the image to the CMM flash memory.
- Supervisor Engine 720 and Supervisor Engine 32 require Cisco IOS Release 12.3(8)XY7 or later releases.
- Supervisor Engine 720-3B/3BXL requires Cisco IOS Release 12.3(8)XY7 or later releases

The software requirements for CMM to support Voice Features for Cisco IOS Release 12.3(8)XY7 are as follows:

- Cisco Catalyst software release 7.6(8) is the minimum release.

- Cisco IOS Release 12.1(19)E is the minimum release, Cisco IOS Release 12.1(20)E is recommended.
- Online diagnostic features require Cisco Catalyst software release 8.2(1) or a later release.

The software requirements for CMM to support all other features are as follows:

- Cisco Catalyst software release:
 - Supervisor Engine 1 and Supervisor Engine 2—Refer to the *Memory Recommendations and Requirements* section in the *Catalyst 6500 Series Supervisor Engine 1A DRAM Upgrade Installation Note* for Supervisor Engine 1 and to the *Memory Recommendations and Requirements* section in the for Supervisor Engine 2 for the minimum and recommended memory requirements.
 - Supervisor Engine 720—Refer to the Supervisor Engine documentation for the minimum and recommended memory requirements.
 - Supervisor Engine 32—Refer to the Supervisor Engine documentation for the minimum and recommended memory requirements.
- Cisco IOS Release
 - Supervisor Engine 1 and Supervisor Engine 2— Minimum release is Cisco IOS Release 12.1(13)E, and the recommended release is Cisco IOS Release 12.1(20)E.
 - Supervisor Engine 720—Minimum software is the Cisco IOS Release 12.2(14)SX, and the recommended release is Cisco IOS Release 12.2(17)SX.
 - Supervisor Engine 32—Minimum software is the Cisco IOS Release 12.2(18)SXF4, and the recommended release is Cisco IOS Release 12.2(18)SXF4.



Note

- If your system is running Cisco IOS software on both the supervisor engine and the MSFC, refer to the Supervisor Engine documentation for the image name.
- CMM software release 12.3(8)XY7 and later releases support Cisco CallManager release 3.2(2) and later releases.

Cisco Unified CallManager Support

Cisco IOS Release 12.3(8)XY7 supports Cisco Unified CallManager Release 3.2(2) and later releases.

Memory Recommendations

The memory requirements for Cisco IOS Release 12.3(8)XY are shown in [Table 2](#).

Table 2 *Memory Recommendations for the Cisco Catalyst 6500 Series and the Cisco 7600 Series Communication Media Module*

Platforms	Software Version	Software Image Name	Flash Memory Recommended	DRAM Memory Recommended	Runs From
Cisco Catalyst 6000-CMM	12.3(8)XY or later releases	wscmm-i6s-mz.123-8.XY	32 MB Flash	256 MB DRAM	RAM
Cisco 7600-CMM	12.3(8)XY or later releases	wscmm-i6s-mz.123-8.XY	32 MB Flash	256 MB DRAM	RAM

Feature Sets

[Table 3](#) lists the supported features for the CMM T1 and E1 port adapters.

[Table 4](#) lists the supported features for the CMM ad-hoc conferencing and transcoding port adapter.

[Table 5](#) Lists the supported features for the FXS Analog Interface Module.

[Table 6](#) lists the parameters for the FXS Analog Interface Module Fax and Modem Transport.

Table 3 *T1 and E1 Port Adapters Supported Features*

WS-SVC-CMM-6T1 Port Adapter	WS-SVC-CMM-6E1 Port Adapter
Line code—B8ZS ¹ , AMI ²	Line code—HDB3 ³ , AMI
Frame format—SF ⁴ , ESF ⁵	Frame format—with CRC4/no CRC4 ⁶
SRST ⁷	SRST
MGCP gateway fallback	MGCP gateway fallback
FDL with T1 CAS/PRI for extended super frame (only) signaling.	-

Table 3 T1 and E1 Port Adapters Supported Features (continued)

WS-SVC-CMM-6T1 Port Adapter	WS-SVC-CMM-6E1 Port Adapter
MGCP and H.323: T1-PRI—Supports up to 18 ports T1-CAS—Supports up to 18 ports T1-CAS E&M ⁸ Wink Start T1-CAS E&M Delay Dial T1-CAS E&M Immediate Start ⁹ T1-CAS FXS Loop Start T1-CAS FXO Loop Start T1-CAS FXS Ground Start T1-CAS FXO Ground Start Fax Pass-through Cisco Fax Relay T.38 fax relay Modem Pass-through Music on Hold (unicast, multicast) DTMF Relay ^{10, 11} G711 codec (sampling size: 10, 20, and 30 ms) G729 codec (sampling size: 10, 20, 30, 40, 50, 60 ms) QSIG backhaul	MGCP and H.323: E1-PRI—Supports up to 18 ports Fax Pass-through Cisco Fax Relay DTMF Relay ¹³ Modem Pass-through Music on Hold (unicast, multicast) G711 codec (sampling size: 10, 20, and 30 ms) G729 codec (sampling size: 10, 20, 30, 40, 50, 60 ms) QSIG backhaul E1 R2 CAS signaling ⁹ Fax Pass-through Cisco Fax Relay T.38 fax relay Modem Pass-through Music on Hold (unicast, multicast) DTMF Relay ^{10, 11} G711 codec (sampling size: 10, 20, and 30 ms) G729 codec (sampling size: 10, 20, 30, 40, 50, 60 ms) QSIG backhaul

1. B8ZS = binary 8-zero substitution.
2. AMI = alternate mark inversion.
3. HDB3 = high-density bipolar with three zeros.
4. SF = super framing.
5. ESF = extended super framing.
6. CRC = cyclic redundancy check.
7. SRST = Survival Remote Site Telephony.
8. E&M = ear and mouth.
9. Supported only with H.323.
10. DTMF = Dual Tone Multi-Frequency.
11. DTMF is supported; DTMF/MF is not supported.

Table 4 **Ad-Hoc Conferencing and Transcoding Port Adapter Supported Features****WS-SVC-CMM-ACT Port Adapter**

Media support for transcoding and conferencing:

- Codec support for G.711 MuLaw, G.711 Alaw, G.729 annex A and annex B, and G.723.1
- Packetization support:
 - 10 ms to 30 ms for G.711 MuLaw and G.711 Alaw
 - 10 ms to 60 ms for G.729AB
 - 30 ms and 60 ms for G.723

Speaker selection (three loudest speakers).

Performance: Each ACT port adapter can support up to 128 ports with a max of 128 participants in a single conference.

IP precedence bits, DSCP¹, and 802.1Q marking.

One registration entity per port adapter.

Standalone transcoding without associated conference. Codecs and packetization intervals supported are the same as for conferencing.

MTP² support.

Modem and fax support through MTP.

Fallback support for transcoding and ad-hoc conferences.

Support for spanning conferences between digital signal processors (DSP) on the same port adapter.

1. DSCP = differentiated services code point.
2. MTP = media termination point.

Table 5 *FXS Analog Interface Module Features*

Digital Signal Processing per Port
G.711, G.729, G.729A voice encoding
Silence suppression
Comfort noise generation
Ring cadence is selectable in 12 different patterns and is programmable in a user-defined cadence
Dual tone multifrequency (DTMF) detection
Signaling, loop start
Modem Pass-through
Line echo cancellation
Impedance (600 ohms), complex 1
Programmable analog gain, signaling timers
FXS Interface Features
Address signaling formats: In-band DTMF
MGCP and H.323 support
Fax Pass-through
FXS CallID
T.38 fax relay
Cisco Fax Relay
Signaling formats: Loop start and ground start
Ringing tone: Programmable
Ringing frequency: 25 Hz and 50 Hz
Distance: 300-ohms maximum loop

Table 6 *FXS Analog Interface Module Fax and Modem Transport Parameters*

Parameter Name	Description	Default
Fax relay enable	Enables/disables fax relay support in the gateway. Enabling this parameter will result in the gateway attempting fax relay negotiation as part of the call setup. If it is enabled but the far end does not support fax relay, the fax call will switch to pass-through mode.	Checkbox checked
Fax error correction mode (ECM) override	ECM occurs in some higher-end fax models that enable fax pages to be transmitted error free. If ECM is enabled, the transmission has a low tolerance to jitter and packet loss. This results in a higher number of failed fax calls. For better reliability (even with higher packet loss), ECM needs to be disabled. ECM is disabled by enabling the checkbox.	Checkbox checked

Table 6 *FXS Analog Interface Module Fax and Modem Transport Parameters (continued)*

Maximum fax rate	Defines the maximum fax transmission rate to be used during the fax call. This can be used to restrict the bandwidth utilized for fax transmission.	14400
Fax payload size	Configures the size of the fax payload (fax data) carried over the real-time transport protocol (RTP). The value can range between 20 and 48.	20
Non standard facilities country code	Overrides the country code passed by the fax machine with the value defined. Setting the value to default (65535) results in the gateway passing the country code values received from the fax machine to the far end. If the value is not the default, then the gateway will pass the configured value as the country code to the far end. It will suppress the actual country code passed by the fax machine. The country code can be received by the gateway from the far end through ISDN. For details about the nonstandard facilities country code, refer to the T.35 specification.	65535
Non standard facilities vendor code	Overrides the vendor/provider code passed by the fax machine with the value defined. Setting the value to default (65535) results in the gateway passing the vendor code values received from the fax machine to the far end. If the value is not the default, the gateway passes the configured value as the vendor code to the far end. It will suppress the actual vendor code passed by the fax machine. The vendor code can be received by the gateway from the far end through ISDN. For details about the nonstandard facilities vendor code, refer to the T.35 specification.	65535

Table 6 *FXS Analog Interface Module Fax and Modem Transport Parameters (continued)*

Fax/Modem Packet Redundancy	Enables packet redundancy support for fax and modem calls. Packet redundancy support results in retransmission of packets in case of problems. Enabling redundancy can have a negative impact on performance.	Checkbox unchecked
Named service event (NSE) type	NSE type attempts to standardize the transfer of tones over the real-time transport protocol (RTP). Two NSE standards exist in Cisco products: one for Cisco IOS gateways and one for non-Cisco IOS gateways. The Catalyst 6500 series switch 8-port T1/E1 PSTN interface module supports both standards. You need to configure the right NSE type based on the network setup. If the module needs to talk to a Cisco IOS gateway (a VG200 or AS5300 for example), set this option to IOS Gateway. If the gateways need to talk to other non-Cisco IOS gateways (such as a WS-X6608-E1/T1, VG248, WS-X6624-FXS, or another WS-SVC-CMM-24FXS), set this option to non-IOS Gateway.	Non-IOS Gateway

Usage Guidelines and Restrictions

This section provides usage guidelines and restrictions for CMM:

- The recommended voice activity detection (VAD) setting for CMM is off.
- Cisco Express Forwarding (CEF) is not supported on the CMM.

Installation Notes

Detailed Installation and Configuration Procedures

For detailed installation and configuration procedures, refer to the *Catalyst 6500 Series and Cisco 7600 Series CMM Installation and Configuration Note* at the following URL:
http://www.cisco.com/univercd/cc/td/doc/product/lan/cat6000/cfgnotes/78_14107.htm

Supported Version

Cisco IOS Release 12.3(8)XY only works with field-programmable gate array (FPGA) erasable programmable logic device EPLD B version 10 (hex 0XA). EPLD B firmware upgrade occurs automatically when Cisco IOS Release 12.3(8)XY is loaded on CMM the first time.

MIBs

To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL:

<http://tools.cisco.com/ITDIT/MIBS/servlet/index>

If Cisco MIB Locator does not support the MIB information that you need, you can also obtain a list of supported MIBs and download MIBs from the Cisco MIBs page at the following URL:

<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

To access Cisco MIB Locator, you must have an account on Cisco.com. If you have forgotten or lost your account information, send a blank e-mail to cco-locksmith@cisco.com. An automatic check will verify that your e-mail address is registered with Cisco.com. If the check is successful, account details with a new random password will be e-mailed to you. Qualified users can establish an account on Cisco.com by following the directions found at this URL:

<http://tools.cisco.com/RPF/register/register.do>

The Cisco Catalyst 6500 Series and the Cisco 7600 Series CMM support Simple Network Management Protocol (SNMP) Version 3 support for the following MIBs:

- CISCO dial control MIB extension to RFC 2128
- CISCO-VOICE-DIAL-CONTROL-MIB Voice Dial Control MIB
- CISCO-VOICE-IF-MIB Voice Interface MIB
- CISCO-VOICE-ANALOG-IF-MIB Voice Analog Interface MIB
- CISCO-DSP-MGMT-MIB Digital Signal Processing Management MIB
- CISCO-FLASH-MIB
- Ethernet MIBs: RFC 1157 SNMP RFC1643 Ethernet
- RFC1213 MIB II
- RFC1573 MIB II Interface extensions
- CISCO-CAS-IF-MIB
- ISDN-MIB
- CISCO-ENVMON-MIB
- CAS-INTERFACES-MIB
- RFC1406-MIB ds1
- OLD-CISCO-CHASSIS-MIB (CANA)
- IF-MIB
- ENTITY-MIB (RFC 2737)
- SNMPv2-SMI
- SNMPv2-MIB

Important Notes

The following sections contain important notes about Cisco IOS Release 12.3(8)XY that can apply to the Cisco Catalyst 6500 series and the Cisco 7600 series communication media module.

Deferrals

Cisco IOS software images are subject to deferral. Cisco recommends that you view the deferral notices at the following location to determine if your software release is affected:

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

Field Notices and Bulletins

For general information about the types of documents listed in this section, refer to the following document:

http://www.cisco.com/warp/customer/cc/general/bulletin/software/general/1654_pp.htm

- **Field Notices**—Cisco recommends that you view the field notices for this release to see if your software or hardware platforms are affected. If you have an account on Cisco.com, you can find field notices at http://www.cisco.com/warp/customer/tech_tips/index/fn.html. If you do not have a Cisco.com login account, you can find field notices at http://www.cisco.com/warp/public/tech_tips/index/fn.html.
- **Product Bulletins**—If you have an account on Cisco.com, you can find product bulletins at <http://www.cisco.com/warp/customer/cc/general/bulletin/index.shtml>. If you do not have a Cisco.com login account, you can find product bulletins at <http://www.cisco.com/warp/public/cc/general/bulletin/iosw/index.shtml>.
- *What's Hot in Software Center: Cisco IOS 12.3(4)T—What's Hot in Software Center: Cisco IOS 12.3(4)T* provides information about caveats that are related to deferred software images for Cisco IOS Release 12.3(4)T. If you have an account on Cisco.com, you can access *What's Hot in Software Center: Cisco IOS 12.3(4)T* at <http://www.cisco.com/kobayashi/sw-center> or by logging in and selecting **Technical Support: Software Center: Cisco IOS Software: What's Hot in Software Center: Cisco IOS 12.3(4)T**.
- *What's New for IOS — What's New for IOS* lists recently posted Cisco IOS software releases and software releases that have been removed from Cisco.com. If you have an account on Cisco.com, you can access *What's New for IOS* at <http://www.cisco.com/kobayashi/sw-center/sw-ios.shtml> or by logging into [Cisco.com](http://www.cisco.com) and selecting **Technical Support: Software Center: Products and Downloads: Cisco IOS Software**.
- SNMP is now supported with Cisco IOS Release 12.3(8)XY.

Important Notes in Cisco IOS Release 12.3(8)XY

The following section describes important notes for Cisco IOS Release 12.3(8)XY.

Release Upgrade Notice

The CMM wscmm-i6s-mz.123-8.XY image contains a new bundle 4.4.X DSPware infrastructure. Once downloaded, this software will perform an automatic FPGA upgrade to version 10 (hex 0xA) in order to take advantage of the new bundle 4.4.X DSPware infrastructure.

After the upgrade, power cycling CMM is required. If you have an ACT module on CMM, you must reconfigure the ACT module with the new FastEthernet interface instead of Ethernet. Any other CMM release before wscmm-i6s-mz.123-8.XY image will require an automatic bundle FPGA upgrade to version 10 (hex 0xA).

**Note**

The [Automatically Upgrading Feature Cards FPGA, page 12](#) and [Downgrading Feature Cards FPGA, page 16](#) are both applicable to all versions of Cisco IOS Release 12.3(8)XY and should be referred to when upgrading or downgrading.

Important Notes in Cisco IOS Release 12.3(8)XY

The following section describes important notes for Cisco IOS Release 12.3(8)XY. Please read the entire release note before downloading and installing the CMM 12.3(8)XY image. See the following sections:

- [Downgrading Feature Cards FPGA, page 16](#)
- [Software Upgrade Procedure, page 20](#)
- [Booting a Specific CMM Image, page 21](#)
- [Ethernet to FastEthernet Interface Change Notice, page 21](#)
- [Media Termination Point Port Density, page 22](#)

Automatically Upgrading Feature Cards FPGA

The first time you are loading the Cisco IOS Release 12.3(8)XY image, any FPGA EPLD B on T1/E1/FXS module and any FPGA EPLD A on the FXS module with a version not set to 10(hex 0xA) will be upgraded automatically to version 10(hex 0xA). This upgrade is necessary to work with the Cisco IOS software 12.3(8)XY image.

1. It is important that you avoid doing the following:
 - a. Do not change or save the configuration during FPGA download because feature cards are not enabled, and configurations for these modules will be lost.
 - b. Do not reload CMM during the FPGA download. The feature cards may be corrupted if the download is not completed. Downloading each FPGA may take up to six minutes, and you must wait for each individual download to complete.

**Note**

When upgrading the FPGA via Telnet into CMM directly, you need to turn on the terminal monitor to see the messages.

Example:

```
CMM#term monitor ?
<cr>
```

2. You will be prompted to power-cycle CMM when the download is completed. This must be done for feature cards to function. To power cycle CMM, you must perform the following steps from the Catalyst Supervisor administrator:
 - a. From Cisco Catalyst OS: enter **set module power down x**; then enter **set module power up x**.

**Note**

Entering **reset <mod x>** from the switch or **reload** from CMM is not adequate.

- b. From Cisco IOS: enter **hw-module module x reset**.

An alternative method to the above steps is to remove CMM from the Catalyst 6000chassis and then insert CMM into the chassis again. Before hot swapping CMM, refer to the safety precautions and port adapter removal procedures in the *Catalyst 6500 Series and Cisco 7600 Series CMM Installation and Configuration Note* at the following URL:

http://www.cisco.com/univercd/cc/td/doc/product/lan/cat6000/cfgnotes/78_14107.htm

3. Do not load earlier Cisco IOS images (any image before Cisco IOS Release 12.3(8)XY) because this may crash CMM or corrupted feature cards.
4. Enter **show wscmm sprom slot#** to see the output of FPGA. Look for 'EPLD B' to verify that the version number is set to 10 (hex 0XA) after the upgrade.
5. For the FXS module, enter the **show wscmm sprom slot#** command to see the output of FPGA. Look for 'EPLD A' to verify that the version number is set to 0xA after the upgrade.

Sample screen logs for upgrade FPGA output are shown in the following section.

Sample Upgrade Screen Logs

In the following examples, the first log shows an upgrade EPLD B on E1, and the second log shows an upgrade EPLD A on FXS.

```
----- Downloading E1 module EPLD B screen log -----
```

```
System Bootstrap, Version 12.2(1r)T1, RELEASE SOFTWARE (fc1)
TAC Support: http://www.cisco.com/tac
Copyright (c) 2002 by cisco Systems, Inc.
```

```
-SVC-CMM platform with 262144 Kbytes of main memory
```

```
Boot config value : 0^M
rommon 1 > b bootflash:wscmm-i6s-mz.xy
Self decompressing the image : #####
##### [OK]
```

```
Cisco IOS Software, Cat6K-1c Software (wscmm-I6S-M), Experimental Version 12.3(20040717:0
22843) [atrang-xy 116]^M
Copyright (c) 1986-2004 by Cisco Systems, Inc.
Compiled Fri 27-Aug-04 16:45 by atrang
Image text-base: 0x60010F60, data-base: 0x61100000
```

```

controller E1 1/0

controller E1 1/1

controller E1 1/2

controller E1 1/3

    framing NO-CRC4

    linecode ami

ds0-group 1 timeslots 1-15,17-31 type e&m-melcas-wink

controller E1 1/4

controller E1 1/5

    framing NO-CRC4

    linecode ami

ds0-group 1 timeslots 1-15,17-31 type e&m-melcas-wink

voice-port 1/3:1

    echo-cancel coverage 64

voice-port 1/5:1

    echo-cancel coverage 64

mediacard 2

port 1/3:1

port 1/5:1

Updating Daughterboard ID/index: 0/73 EPLD B = 3840
Takes a few seconds ...

Press RETURN to get started!

*Mar  1 00:00:09.639: %JAGGER-6-INFO: ms_dsprm_init is NOT ACTIVE, FPGA epld will be upgr
aded
*Mar  1 00:00:09.755: %SYS-6-LOGGERSTART: Logger process started
*Mar  1 00:00:11.639: %SYS-5-CONFIG_I: Configured from memory by console
*Mar  1 00:00:11.895: %SYS-5-RESTART: System restarted --
Cisco IOS Software, Cat6K-lc Software (wscmm-I6S-M), Experimental Version 12.3(20040717:0
22843) [atrang-xy 116]
Copyright (c) 1986-2004 by Cisco Systems, Inc.
Compiled Fri 27-Aug-04 16:45 by atrang
*Mar  1 00:00:11.895: %SNMP-5-COLDSTART: SNMP agent on host at-jagger is undergoing a col
d start
*Mar  1 00:00:11.899: %EPLD-4-START_WARNING:
##### START FPGA DOWNLOAD PROCESS #####
# All feature cards will not be enabled during FPGA          #
# download. Please ignore configuration 'invalid' messages #
# at boot up time. Do not change/save configuration          #
# until after FPGA download is completed and power-cycle    #
# or configurations for feature cards will be lost...       #
#####
*Mar  1 00:00:12.015: %EPLD-3-UPGRADE: Module 1 upgrade FPGA B to version 10
*Mar  1 00:00:12.287: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0,

```

```

changed state to down
*Mar 1 00:00:13.063: %LINK-5-CHANGED: Interface FastEthernet1/0, changed state to administratively down
*Mar 1 00:00:13.295:
*Mar 1 00:00:13.763: %LINK-3-UPDOWN: Interface GigabitEthernet1/0, changed state to up

*Mar 1 00:00:14.239: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to down
*Mar 1 00:00:21.291: %SCP-5-ONLINE: Module online
*Mar 1 00:00:21.291: %PIM-5-DRCHG: DR change from neighbor 0.0.0.0 to 10.1.1.107 on interface GigabitEthernet1/0 (vrf default)
*Mar 1 00:00:21.407: %EPLD-6-INFO: Start programming FPGA B, this can take up to 6 minutes per download...

*Mar 1 00:00:22.199: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0, changed state to up
*Mar 1 00:00:22.199: %PIM-5-NBRCHG: neighbor 10.1.1.1 UP on interface GigabitEthernet1/0 (vrf default) MODULE 1 FPGA download completion 5 percent...MODULE 1 FPGA download completion 10 percent...
*Mar 1 00:00:47.879: %HSRP-6-STATECHANGE: GigabitEthernet1/0 Grp 0 state Standby -> ActiveMODULE 1 FPGA download completion 15 percent...MODULE 1 FPGA download completion 20 percent...MODULE 1 FPGA download completion 25 percent...MODULE 1 FPGA download completion 30 percent...MODULE 1 FPGA download completion 35 percent...MODULE 1 FPGA download completion 40 percent...MODULE 1 FPGA download completion 45 percent...MODULE 1 FPGA download completion 50 percent...MODULE 1 FPGA download completion 55 percent...MODULE 1 FPGA download completion 60 percent...MODULE 1 FPGA download completion 65 percent...MODULE 1 FPGA download completion 70 percent...MODULE 1 FPGA download completion 75 percent...MODULE 1 FPGA download completion 80 percent...MODULE 1 FPGA download completion 85 percent...MODULE 1 FPGA download completion 90 percent...MODULE 1 FPGA download completion 95 percent...

Updating Daughterboard ID/index: 0/73 EPLD B = 10
Takes a few seconds ...

*Mar 1 00:04:39.039: %EPLD-6-INFO: FPGA B download slot 1 successfully completed!
*Mar 1 00:04:45.255: %EPLD-4-COMPLETE:

##### FEATURE CARDS FPGA DOWNLOAD COMPLETED ##### ^M
# In order for feature cards to function, power-cycle CMM # ^M
# immediately! Do not change/save configuration # ^M
# until after power-cycle or configurations for feature # ^M
# cards will be lost... # ^M
##### ^M

----- Downloading FXS EPLD A screen log -----
Updating Daughterboard ID/index: 1/71 EPLD A = 3840
Takes a few seconds ...

Press RETURN to get started!

*Mar 1 00:00:09.835: %JAGGER-6-INFO: ms_dsprm_init is NOT ACTIVE, FPGA epld will be upgraded
*Mar 1 00:00:09.951: %SYS-6-LOGGERSTART: Logger process started
*Mar 1 00:00:10.275: %SYS-5-CONFIG_I: Configured from memory by console
*Mar 1 00:00:10.527: %SYS-5-RESTART: System restarted --
Cisco IOS Software, Cat6K-lc Software (wscmm-I6S-M), Experimental Version 12.3(20040717:022843) [atrang-xy 116]
Copyright (c) 1986-2004 by Cisco Systems, Inc.
Compiled Fri 27-Aug-04 16:45 by atrang
*Mar 1 00:00:10.527: %SNMP-5-COLDSTART: SNMP agent on host at-jagger is undergoing a cold start
*Mar 1 00:00:10.531: %EPLD-4-START_WARNING:
##### START FPGA DOWNLOAD PROCESS #####
# All feature cards will not be enabled during FPGA #
# download. Please ignore configuration 'invalid' messages #

```

```

# at boot up time. Do not change/save configuration #
# until after FPGA download is completed and power-cycle #
# or configurations for feature cards will be lost... #
#####
*Mar 1 00:00:10.647: %EPLD-3-UPGRADE: Module 2 upgrade FPGA A to version 10
*Mar 1 00:00:11.463: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0,
changed state to down
*Mar 1 00:00:12.163:

*Mar 1 00:00:12.163:
*Mar 1 00:00:12.163: %LINK-5-CHANGED: Interface FastEthernet1/0, changed state to
administratively down
*Mar 1 00:00:12.395: %LINK-3-UPDOWN: Interface GigabitEthernet1/0, changed state to up
*Mar 1 00:00:13.339: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0,
changed state to down
*Mar 1 00:00:13.571: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0,
changed state to up
*Mar 1 00:00:13.819: %PIM-5-DRCHG: DR change from neighbor 0.0.0.0 to 10.1.1.107 on
interface GigabitEthernet1/0 (vrf default)

*Mar 1 00:00:15.275: %PIM-5-NBRCHG: neighbor 10.1.1.1 UP on interface GigabitEthernet1/0
(vrf default)
*Mar 1 00:00:20.747: %SCP-5-ONLINE: Module online
*Mar 1 00:00:21.927: %EPLD-6-INFO: Start programming FPGA A, this can take up to 5
minutes per download...
ODULE 2 FPGA download completion 5 percent...MODULE 2 FPGA download completion 10
percent...
*Mar 1 00:00:46.499: %HSRP-6-STATECHANGE: GigabitEthernet1/0 Grp 0 state Standby ->
ActiveMODULE 2 FPGA download completion 15 percent...MODULE 2 FPGA download completion 20
percent...MODULE 2 FPGA download completion 25 percent...MODULE 2 FPGA download completion
30 percent...MODULE 2 FPGA download completion 35 percent...
ODULE 2 FPGA download completion 40 percent...MODULE 2 FPGA download completion 45
percent...MODULE 2 FPGA download completion 50 percent...MODULE 2 FPGA download completion
55 percent...MODULE 2 FPGA download completion 60 percent...MODULE 2 FPGA download
completion 65 percent...MODULE 2 FPGA download completion 70 percent...MODULE 2 FPGA
download completion 80 percent...MODULE 2 FPGA download completion 85 percent...MODULE 2
FPGA download completion 90 percent...MODULE 2 FPGA download completion 95 percent...
Updating Daughterboard ID/index: 1/71 EPLD A = 10
Takes a few seconds ...

*Mar 1 00:04:42.495: %EPLD-6-INFO: FPGA A download slot 2 successfully completed!
*Mar 1 00:04:48.827: %EPLD-4-COMPLETE:

##### FEATURE CARDS FPGA DOWNLOAD COMPLETED ##### ^M
# In order for feature cards to function, power-cycle CMM # ^M
# immediately! Do not change/save configuration # ^M
# until after power-cycle or configurations for feature # ^M
# cards will be lost... # ^M
##### ^M

```

Downgrading Feature Cards FPGA

If you need to run an image earlier than Cisco IOS Release 12.3(8)XY after upgrading FPGA to version 10 (hex 0XA), FPGA must be downgraded to version 2 for CMM to function correctly. For more information, see the following jam message link:

<http://www.cisco.com/cgi-bin/tablebuild.pl/cmm>

Use the following downgrade procedure.

1. Make sure that anokha_t1_e1.jam and or anokha_fxs.jam files are in bootflash.

2. If CMM is booted from bootflash, make sure that Cisco IOS Release 12.3(8)XY and ZP3 images are in bootflash.
3. Enter **copy running-config bootflash:filename.save** to save the current running configuration to bootflash.
4. While CMM is running the Cisco IOS Release 12.3(8)XY image, enter the **test fpga downgrade slot#** command.
5. Repeat step 4. for all feature cards in CMM.

**Note**

When downgrading the FPGA via Telnet into CMM directly, you need to turn on the terminal monitor to see the messages.

Example:

```
CMM#term monitor ?
<cr>
```

6. Reload CMM with the Cisco IOS Release 12.3(8)XY image to download the FPGA code. The download occurs during bootup.
7. After the download is complete for all feature cards, add boot system flash **bootflash:wscmm-i6s-mz.xxxZP3** in the running configuration. This will make CMM boot up with ZP3 image at the next reboot. You can save the configuration to bootflash, because the configuration for CMM was saved in Step 3 to be used after downgrading FPGA.
8. Reload CMM with the Cisco IOS Release 12.3(8)XY image. If you run the non-ZP image, CMM may crash and corrupt the feature cards.
9. After CMM boots up with the Cisco IOS Release 12.3(8)XY image, enter the **copy bootflash:filename.save running-config** command to recover the configuration for the feature cards.
10. Enter the **write memory** command to save the configuration.
11. Enter the **show wscmm sprom slot#** command to see the output of FPGA. Look for 'EPLD B' to verify that the version number is set to version 2 after the downgrade.

Sample screen logs for downgrade FPGA output are shown in the following section.

Sample Screen Logs For Downgrade FPGA

```
Router# test fpga downgrade 1
#####
### Slot 1 FPGA will be downgraded to version 2.
### Make sure you have <anokha_t1_e1.jam> file for T1/E1 card
### and <anokha_fxs.jam> file for FXS card in bootflash
#####
### MUST RUN ZP IMAGE WITH DOWNGRADE FPGA VERSION 2 AFTER DOWNLOAD!!!
#####
Proceed with downgrade?[confirm]
Updating Daughterboard ID/index: 0/70
Takes a few seconds ...

MUST RELOAD CMM IMMEDIATELY to download FPGA code.
```

```

Router# reload
Proceed with reload? [confirm]

*Mar 1 00:35:16.947: %SYS-5-RELOAD: Reload requested by console. Reload
Reason: Reload command.
*Mar 1 00:35:16.947: %HSRP-6-STATECHANGE: GigabitEthernet1/0 Grp 0 state
Active -> Init
System Bootstrap, Version 12.2(1r)T1, RELEASE SOFTWARE (fc1)
TAC Support: http://www.cisco.com/tac
Copyright (c) 2002 by cisco Systems, Inc.
WS-SVC-CMM platform with 262144 Kbytes of main memory

Boot config value : 2
Autoboot: Executing boot bootflash:wscmm-i6s-mz
Self decompressing the image :
#####
#####
[OK]

Cisco IOS Software, Cat6K-lc Software (wscmm-I6S-M), Experimental Version
12.3(20040309:050923) [r0308 109]
Copyright (c) 1986-2004 by Cisco Systems, Inc.
Compiled Wed 10-Mar-04 15:18
Image text-base: 0x60010A78, data-base: 0x61000000

#####
#
#           FEATURE CARD FPGA UPGRADE/DOWNGRADE           #
#
# One or more feature card FPGA will be download at boot up #
# up. All feature cards will not be enabled during FPGA #
# download. Please ignore all configuration 'invalid' #
# message at boot up time. Do not change/save #
# configuration until after FPGA download is completed and #
# power-cycle, or configurations for feature cards will be #
# lost. #
# #
#####
controller T1 1/0
^
framing sf
^
linecode ami

Press RETURN to get started!

Router>

*Mar 1 00:00:10.195: %SYS-5-CONFIG_I: Configured from memory by console
*Mar 1 00:00:10.443: %SYS-5-RESTART: System restarted --

Cisco IOS Software, Cat6K-lc Software (wscmm-I6S-M), Experimental Version
12.3(20040309:050923) [r0308 109]
Copyright (c) 1986-2004 by Cisco Systems, Inc.
Compiled Wed 10-Mar-04 15:18
*Mar 1 00:00:10.443: %SNMP-5-COLDSTART: SNMP agent on host at-jagger is
undergoing a cold start
*Mar 1 00:00:10.447: %EPLD_B-4-START_WARNING:
#####
# All feature cards will not be enabled during FPGA #
# download. Please ignore configuration 'invalid' messages #

```

```

# at boot up time. Do not change/save configuration #
# until after FPGA download is completed and power-cycle #
# or configurations for feature cards will be lost... #
#####
*Mar 1 00:00:10.563: %EPLD_B-6-INFO: Slot 1: File <anokha_t1_e1.jam>
opens OK !!!
*Mar 1 00:00:10.563: %EPLD_B-3-DOWNGRADE: Module 1 downgrade FPGA to
version V.2
*Mar 1 00:00:11.259: %LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet1/0, changed state to down
*Mar 1 00:00:11.727:
*Mar 1 00:00:12.427: %LINK-3-UPDOWN: Interface GigabitEthernet1/0,
changed state to up
*Mar 1 00:00:12.907: MGCP: Codec g711ulaw is not available on this
router.
*Mar 1 00:00:12.907: MGCP: Default codec changed to G.711 u-law

*Mar 1 00:00:13.631: %LINEPROTO-5-UPDOWN: Line protocol on Interface
GigabitEthernet1/0, changed state to up
*Mar 1 00:00:21.751: %EPLD_B-6-INFO: Start programming FPGA, this can
take up to 6 minutes per card...
*Mar 1 00:00:24.743: %SCP-5-ONLINE: Module online
*Mar 1 00:00:39.431: MODULE 1 FPGA download completion 5 percent...
*Mar 1 00:00:46.431: %HSRP-6-STATECHANGE: GigabitEthernet1/0 Grp 0 state
Standby -> Active
*Mar 1 00:00:57.551: MODULE 1 FPGA download completion 10 percent...
*Mar 1 00:01:15.671: MODULE 1 FPGA download completion 15 percent...
*Mar 1 00:01:33.775: MODULE 1 FPGA download completion 20 percent...
*Mar 1 00:01:51.923: MODULE 1 FPGA download completion 25 percent...
*Mar 1 00:02:10.035: MODULE 1 FPGA download completion 30 percent...
*Mar 1 00:02:28.147: MODULE 1 FPGA download completion 35 percent...
*Mar 1 00:02:46.283: MODULE 1 FPGA download completion 40 percent...
*Mar 1 00:03:04.407: MODULE 1 FPGA download completion 45 percent...
*Mar 1 00:03:22.515: MODULE 1 FPGA download completion 50 percent...
*Mar 1 00:03:42.283: MODULE 1 FPGA download completion 55 percent...
*Mar 1 00:04:02.107: MODULE 1 FPGA download completion 60 percent...
*Mar 1 00:04:21.903: MODULE 1 FPGA download completion 65 percent...
*Mar 1 00:04:41.687: MODULE 1 FPGA download completion 70 percent...
*Mar 1 00:05:01.511: MODULE 1 FPGA download completion 75 percent...
*Mar 1 00:05:21.307: MODULE 1 FPGA download completion 80 percent...
*Mar 1 00:05:41.095: MODULE 1 FPGA download completion 85 percent...
*Mar 1 00:06:20.711: MODULE 1 FPGA download completion 95 percent...
Updating Daughterboard ID/index: 0/70
Takes a few seconds ...

*Mar 1 00:06:35.715: %EPLD_B-6-INFO: FPGA download slot 1 successfully
completed!
*Mar 1 00:06:41.815: %EPLD_B-6-INFO: ONLY RUN ZP IMAGE with this module
or CMM will be CORRUPTED!
*Mar 1 00:06:41.931: %EPLD_B-4-COMPLETE_ZP:
##### FEATURE CARDS FPGA DOWNLOAD COMPLETED #####
# In order for feature cards to function, power-cycle CMM #
# immediately and reload with ZP image! #
# Do not change/save configuration until after power-cycle #
# or configurations for feature cards will be lost... #
#####
*Mar 1 00:06:51.931: %EPLD_B-4-COMPLETE_ZP:
##### FEATURE CARDS FPGA DOWNLOAD COMPLETED #####
# In order for feature cards to function, power-cycle CMM #
# immediately and reload with ZP image! #
# Do not change/save configuration until after power-cycle #
# or configurations for feature cards will be lost... #
#####

```


Booting a Specific CMM Image

To store images and configure the system to boot a specific CMM image, Cisco recommends that you store two images in the CMM bootflash: the golden (existing) image and the new image. You should store the golden image in the first boot location and the new image in the second boot location. Then configure the image that needs to be booted up to the golden image using the following commands:

```
CMM# configure terminal
CMM(conf)> boot system bootflash: cmm-golden-image
CMM(conf)> config-register 0x2
```

By setting the configuration register to 0x2, the default booting from **bootflash:** is enabled. The booting will take place from the first file. The `boot system` command overrides the default booting from **bootflash:**. Hence it is important to have the golden image (the image that needs to be booted) as the first file in the **bootflash:** and also to set the command `boot system bootflash: cmm-golden-image` to boot with the golden image. By setting the `boot system bootflash: cmm-golden-image`, there is no chance of accidentally booting up with an unwanted image.

Setting the configuration register to 0x01 would use the first image from the **bootflash:**. The recommended setting for the configuration register is 0x2 and the configuration of the `boot system bootflash: cmm-golden-image`.

If you have console access to the CMM module and wish to enter ROMMON every time the CMM reloads, you can configure the config-register to be 0x0.



Note

Setting the configuration register to 0x0 puts the CMM in ROMMON mode and you must manually reboot from ROMMON if there is a reload or crash. Therefore, the configuration register setting of 0x0 is not recommended for use in production environments where there may not be a person available to boot the CMM manually after a reload or crash: A person with CMM console access must be available at the site.

Ethernet to FastEthernet Interface Change Notice

If you are running an earlier CMM Cisco IOS image and have WS-SVC-CMM-ACT modules on board, loading Cisco IOS Release 12.3(8)XY image for the first time will change the Ethernet interfaces corresponding to the WS-SVC-CMM-ACT modules to FastEthernet interfaces with no IP address configured and in the shutdown state.

We recommend that you save and record the Ethernet interface configurations before upgrading to Cisco IOS Release 12.3(8)XY and that you reconfigure the FastEthernet interface once CMM is up and running.

Media Termination Point Port Density

Media Termination Point (MTP) Port Density provides increased transcoder port density to support additional MTP sessions. This feature provides the following media support for transcoding and conferencing:

- G.711ulaw and alaw
- Packetization support:
 - 10 ms
 - 20 ms
 - 30 ms

Table 7 lists the numbers of ports and MTP sessions this feature supports:

Table 7 Port Density and MTP Sessions

Resource	Ports	MTP Sessions
Per DSP	128	64
Per Ad-Hoc Conferencing and Transcoding Port Adapter	512	256
Per Communications Media Module (CMM)	2048	1024

Sample Screen Logs For MTP Port Density

```
mediacard 1
  resource-pool mtpl dsps 4
!
mediacard 2
  resource-pool xcoder3 dsps 4
  sccp local GigabitEthernet1/0
  sccp ccm 10.1.1.8 identifier 1
  sccp ccm 10.1.1.58 identifier 2
  sccp
!
  sccp ccm group 1
  associate ccm 1 priority 1
  associate ccm 2 priority 2
  associate profile 1 register MTP0003feacc83f
  associate profile 2 register MTP0003feacc840
!
dspfarm
!
dspfarm profile 1mtp
  codec g711ulaw packetization-period 30
  codec g711alaw packetization-period 30
  associate resource-pool mtpl
```

Caveats for Cisco IOS Release 12.3(8)XY

This section documents possible unexpected behavior by Cisco IOS Release 12.3(8)XY and describes only severity 1 and 2 caveats and select severity 3 caveats.

These sections describe the following caveats:

- [Open Caveats in Release 12.3\(8\)XY7, page 23](#)
- [Closed Caveats in Release 12.3\(8\)XY7, page 23](#)
- [Open Caveats in Release 12.3\(8\)XY3, page 23](#)
- [Resolved Caveats in Release 12.3\(8\)XY3, page 24](#)
- [Open Caveats in Release 12.3\(8\)XY2, page 24](#)
- [Resolved Caveats in Release 12.3\(8\)XY2, page 24](#)
- [Open Caveats in Release 12.3\(8\)XY1, page 25](#)
- [Resolved Caveats in Release 12.3\(8\)XY1, page 25](#)
- [Open Caveats in Release 12.3\(8\)XY, page 26](#)
- [Resolved Caveats in Release 12.3\(8\)XY, page 27](#)
- [Manual Configuration in the Absence of CMM-Specific XML Files, page 28](#)

Open Caveats in Release 12.3(8)XY7

There are no open caveats in this release.

Closed Caveats in Release 12.3(8)XY7

There are no closed caveats in this release.

Open Caveats in Release 12.3(8)XY3

- CSCef85266: Cisco 3745 fails to send RM: Restart to the CCM; PRI fails to register

Symptoms: When a voice gateway is reset by a Cisco CallManager, the voice gateway may not reregister with the Cisco CallManager, even when the output of the **show isdn statistics** command indicates the following state:

```
MULTIPLE_FRAME_ESTABLISHED and L3 Protocol(s) = CCM-Manager.
```

This problem occurs when the voice gateway fails to send a restart message (RM) to the Cisco CallManager.

Conditions: This symptom is observed on a Cisco 3745 that functions as a voice gateway and that runs Cisco IOS Release 12.3(4)T6, 12.3(8)T3, or 12.3(8)T4.

Workaround: Enter the **shutdown controller** configuration command followed by the **no shutdown controller** configuration command on the T1 controller of the interface that connects to the Cisco CallManager.

- CSCeg78279: WS-SVC-CMM crashes with SNMP polling for DSP MIB file
Symptoms: Cisco Catalyst 6509 Sup720 running 12.2(18)SXD2, populated with WS-CMM-SVC module with Cisco IOS Release 12.3(8)XY2, WS-CMM-SVC module experienced frequent crash.
Workaround: There is no workaround.
- CSCsa42286: FCS counters increasing for CMM ports
Symptoms: A Cat6k with CMM module may see FCS errors increasing on the CMM ports when repeating the **show counters x** command on the supervisor, where x is the slot the CMM resides in. There isn't any impact seen at this time; the problem appears to be cosmetic only.
Conditions: Sup2 running 7.6(8) and CMM running 12.3(8)XY1. It's not known at this time whether the problem is seen with other supervisors or different code versions on either the supervisor or CMM.
Workaround: There is no known workaround.



Note Entering the **clear counters** command on the supervisor does not clear the CMM port counters.

Resolved Caveats in Release 12.3(8)XY3

- CSCef28503: MGCP GW not sending DLCX with E: during RTPLOSS
Symptoms: An MGCP gateway (GW) does not send a DLCX message with the proper reason code (E:) when an RTP loss occurs because the Ethernet interface through which the RTP transfer occurs on the GW is shut down.
Because the GW does not notify the CA about the RTP loss via a DLCX message with the proper reason code, the CA continues to send MGCP messages to the GW and vice versa in a normal way. However, these MGCP messages do not reach the GW or CA because the Ethernet interface on the GW is shut down, preventing the deletion of existing connections on the GW.
Conditions: This symptom is observed on a Cisco platform that functions as an MGCP GW and that has a single interface to the CA and terminating GW.
Workaround: Delete the connections on the MGCP GW manually through MGCP CLIs.

Open Caveats in Release 12.3(8)XY2

There are no new open caveats in this release. See [Open Caveats in Release 12.3\(8\)XY1, page 25](#).

Resolved Caveats in Release 12.3(8)XY2

- CSCee71901: CMM mod failed to come online after pwer cycled with diagL complete
Symptom: CMM module fails to come online when Supervisor running CatOS set test diaglevel complete or minimum
Condition: Sup1, Sup2 and Sup3 CatOS 8-2-1
Workaround: Set test diaglevel bypass

- CSCeg28067: CMM does not interop and comes online with Sup720-3B/3BXL
Symptom: CMM displayed FABRIC ERRORS and will not come online when plugged into a CAT6K chassis that has Sup720-3B/3BXL running either CATOS or IOS.
Condition: CMM currently does not interoperate with Sup720-3B/3BXL VSSO changes. The bootup sequence is different with Sup720-3B/3BXL VSSO support. CMM line card will need to change to this new boot up sequence.
Workaround: None. CMM currently does not support Sup720-3B/3BXL.

Open Caveats in Release 12.3(8)XY1

- CSCed67451: DSP failures seen occasionally under stress
Symptom: Digital signal processors (DSP), mostly in the range of slot#/24 to slot#/31, fail occasionally and a message is printed on the screen indicating it is recovered.
Conditions: This has been observed under regular stress conditions, so far.
Workaround: The DSPs are recovered automatically and reinstated into service. There is no impact to the functionality of CMM. However, any existing calls at the time of the failure, on the failing DSPs, are terminated.
- CSCef65757: CMM in 'no faulty' state after FPGA upgrade and power cycled
Symptoms: CMM failed to come online after the FXS module got upgraded with the new FPGA; it is displayed as <no faulty> when the **show module** command is entered in the Cisco Catalyst 6000 supervisor.
Conditions: CatOS running 8.8-2-2 CMM configured with mixed T1 and FXS modules, running image version: wscmm-i6s-mz.xy.Sep1 and after reload.
Workaround:
 1. Proceed with the FPGA upgrade.
 2. Enter **clear cam dynamic** from supervisor.
 3. Power cycle CMM module and reload.

For example:

```
Console> enable
Router# clear cam dynamic
(cr)
```

- CSCef39853: No call disconnect for fax relay T1 CAS
Symptom: Hung fax-relay calls - some calls do not disconnect.
Conditions: After long hours of excessive fax-relay stress in a CAS environment and G.729 is the configured codec, some calls are not disconnected after the fax transmission is completed. This is seen only in a fax-relay test environment using a bulk call generator.
Workaround: No workaround is available.

Resolved Caveats in Release 12.3(8)XY1

- CSCef88922: ACT DSP crash occurred on Conferencing calls
- CSCef93564: Device type for transcoder is incorrect

- CSCef76283: One way audio during call with transcoder
Symptom: One way audio or no audio observed during conferencing calls and transcoding calls through ACT
Condition: Configure loop back interface with Supervisor Native Cisco IOS
Workaround: Shut down loop back interface
- CSCef40309: Cannot ping default gateway from the CMM module with Sup720 in slot5
Symptom: The CMM module cannot ping default gateway (VLAN interface) from the slot 5 in Cisco Catalyst 6K 6513 chassis with Sup720
Conditions: CMM version: all images with Sup720
Workaround: Try moving the CMM module to any other empty slot.
- CSCee38133: T1-PRI DSPCore err cause DSP timeouts all T1-PRI spans no recover
- CSCee40179: E1 controllers remain down when connection cables after bootup in H.323
Symptom:
Without Auto config enabled: When bootup CMM in h.323 config without pri cables pre-connected to the ports, all E1 controllers are still down (lost of signal) after connected cables once module is online and all DSPs are up.
With Auto config: Some of the E1 controllers are remaining shut down when connected the PRI cables after the xml downloaded config on CMM. Conditions:Booup CMM without PRI cables pre-connected.
Workaround:
 - Shut and no shut of controller.
 - Reload with cables connected.
- CSCee41625: Change Ethernet to FastEthernet for Embassy card on **show version** command
- CSCee46642: Sup720 Cisco IOS in the Cisco 7603 chassis cannot session to CMM
- CSCee54519: DSP time-out error message seen in CMM
Symptoms: DSP time-out errors received in CMM causing the ISDN connection go to TEI_ASSIGNED.
Conditions: CMM is operating in normal conditions, running MGCP with CMM 3.3.3SR4a. Two ports connected to PBX and one connected to PSTN. Controller to PSTN configure as ISDN switch type PRI-EURO. Controllers connected to PBX running QSIG.
Workaround: Reset the controller.

Open Caveats in Release 12.3(8)XY

- CSCef40309: The CMM module cannot ping default gateway (VLAN interface) from the slot 5 in Cisco Catalyst 6K 6513 chassis with Sup720
Conditions: CMM version: all images with Sup720
Workaround: Try moving the CMM module to any other empty slot.
- CSCef52918 CMM: get bogus counters with show port show counters, etc.
CSCef76283: One way audio during call with transcoder
Symptom: One way audio or no audio observed during conferencing calls and transcoding calls through ACT

Condition: Configure loop back interface with Supervisor Native Cisco IOS

Workaround: Shut down loop back interface

- CSCed67451: DSP failures seen occasionally under stress

Symptom: Digital signal processors (DSP), mostly in the range of slot#/24 to slot#/31, fail occasionally and a message is printed on the screen indicating it is recovered.

Conditions: This has been observed under regular stress conditions, so far.

Workaround: The DSPs are recovered automatically and reinstated into service. There is no impact to the functionality of CMM. However, any existing calls at the time of the failure, on the failing DSPs, are terminated.

- CSCee01015: DSP timeout under stress with fax passthru calls with DSPware 4.4.X

Symptom: Very rarely a digital signal processors (DSP) fails with **dsp timeout** messages on the screen and the DSP is not recovered.

Workaround: There is no workaround.

- CSCef65757: CMM in 'no faulty' state after FPGA upgrade and power cycled

Symptoms: CMM failed to come online after the FXS module got upgraded with the new FPGA; it is displayed as <no faulty> when the **show module** command is entered in the Cisco Catalyst 6000 supervisor.

Conditions: CatOS running 8.8-2-2 CMM configured with mixed T1 and FXS modules, running image version: wscmm-i6s-mz.xy.Sep1 and after reload.

Workaround:

1. Proceed with the FPGA upgrade.
2. Enter **clear cam dynamic** from supervisor.
3. Power cycle CMM module and reload.

For example:

```
Console> enable
Router# clear cam dynamic
(cr)
```

- CSCef39853: No call disconnect for fax relay T1 CAS

Symptom: Hung fax-relay calls - some calls do not disconnect.

Conditions: After long hours of excessive fax-relay stress in a CAS environment and G.729 is the configured codec, some calls are not disconnected after the fax transmission is completed. This is seen only in a fax-relay test environment using a bulk call generator.

Workaround: No workaround is available.

Resolved Caveats in Release 12.3(8)XY

- CSCee05904

Symptoms: DSP timeouts after saving running configuration via CLI.

Conditions: Usually seen with high call volume but is dependent on the CPU load and other factors at the time of saving the configuration.

Workaround: Defer saving configuration to a time when the call volume and the incoming call rate are very low.

- CSCee62625
FDL ATT does not work
Symptoms: When a T1 circuit in a CMM (Communications Media Module) is configured for FDL (Facility Data Link) protocol type AT&T, it doesn't respond to AT&T requests.
Conditions: Under normal circumstances whenever 'fdl att' is configured under the T1 controller.
Workaround: No workaround is available.
- CSCef28023
Output statistics for FE always 0
Symptoms: The output statistics for the FE interface are not accounted even though the packets are transmitted.
Conditions: This can be observed when the **show interface fast** command is entered.
is entered.
- CSCef28859
CMM crash at ms_dsprm_close
Symptom: CMM reloads during regular operation.
Conditions: The CMM reload is followed by DSP Timeout messages (waiting for error stats).
Workaround: No workaround is available.
- CSCef33292
Symptoms: No audio when invoking the CMM conference resource. Unable to ping from supervisor to ethernet interface on CMM module.
Conditions:
- Supervisor image: c6sup22-jo3sv-mz.121-22.E2.bin - CMM image/version: Version 12.2(13)ZP3
- Turn on **debug ip icmp** on CMM and there was no packet coming in while pinging from supervisor.
Workaround: No workaround is available.
Further Problem Description:
- Ping from supervisor to GigEth interface on CMM is good
- Conference bride/transcoding resource are registered using Gig1/0 interface
- No audio when invoking conference resource

Manual Configuration in the Absence of CMM-Specific XML Files

If you do not have the CMM-specific XML files or do not want to install CMM-specific XML files, you need to perform the following tasks:



Note

The problem requiring manual configuration in the absence of CMM-specific XML files has been resolved in the Cisco CallManager 3.2(2c)spF-rc3 support patch. If you load this patch, you do not need to perform the following configuration commands.

- Configure the **clock source line primary** and **clock source line secondary** under T1/E1 controllers as per your requirements. The secondary clock source is a backup for the primary clock source, and CMM supports secondary clock sources from 1 to 17. CMM must have **clock source line primary** and **clock source line secondary** configured to avoid any clock slips.

- The default configuration for CMM is “Cisco Fax Relay.” To run “Fax pass through calls,” supplement the default configuration with the following two commands:
 - **mgcp modem pass through voip mode cisco**
 - **no ccm fax protocol cisco**
- The default configuration for “echo cancel coverage” is set to 64 ms. This default can be changed as needed under **voice-port** configuration.
- The default configuration for “input gain” and “output attenuation” is set to 0 dB. This default can be changed as needed under **voice-port** configuration.

The manual configuration is lost on a reload if you set CMM for a configuration download from Cisco CallManager. If you lose the configuration, you must reconfigure. To retain the manual configuration, disable the automatic configuration download from Cisco CallManager before reloading CMM.

Related Documentation

For more detailed installation and configuration information, refer to these publications:

- *Catalyst 6500 Series and Cisco 7600 Series Router CMM Installation and Configuration Note*
- *Regulatory Compliance and Safety Information for the Catalyst 6500 Series Switches*
- *Regulatory Compliance and Safety Information for the Cisco 7600 Series Routers*
- *Catalyst 6500 Series Switch Module Installation Guide*
- *Catalyst 6500 Series and Cisco 7600 Series CMM Installation and Configuration Note*
- *Cisco 7600 Series Router Module Installation Guide*
- *Catalyst 6500 Series Switch Cisco IOS Software Configuration Guide*
- *Cisco 7600 Series Router Cisco IOS Software Configuration Guide*
- *Catalyst 6500 Series Switch Cisco IOS Command Reference*
- *Cisco 7600 Series Router Cisco IOS Command Reference*

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>

This document is to be used in conjunction with the documents listed in the “[Related Documentation](#)” section on page 29.

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, GigaStack, 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, RateMUX, ScriptShare, SlideCast, 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. (0612R)

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