Release Notes for Catalyst 6500 Series and Cisco 7600 Series Communication Media Module Software Release 12.2(2)YK1

Current Release: 12.2(2)YK1—November 14, 2002

This publication describes the features, modifications, and caveats for the Catalyst 6500 series and Cisco 7600 Series Internet Router Communication Media Module (CMM) software release 12.2(2)YK1 running Cisco IOS Release 12.1(13)E or later or Catalyst software release 7.3(1) or later.

Note For detailed installation and configuration procedures for the CMM, refer to the *Catalyst 6500 Series and Cisco 7600 Series Internet Router Communication Media Module Installation and Configuration Note* at the following URL:

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

Note Except where specifically differentiated, the term "Catalyst 6500 series switches" includes both Catalyst 6500 series and Catalyst 6000 series switches.

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System Requirements

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

Hardware Supported

The supervisor engine can have an MSFC, MSFC2, or MSFC3, but the CMM does not require one for configuration or operation.

Product Number	Product Description	Minimum Software Version	Recommended Software Version	IOS Release	Catalyst Release
WS-SVC-CMM	Communication Media Module	12.2(2)YK	12.2(2)YK1	12.1(13)E	7.3(1)

Software Compatibility

Software release 12.2(2)YK1 requires Cisco IOS Release 12.1(13)E or Catalyst software release 7.3(1) or later.

Orderable Software Images

Table 1 lists the software versions and applicable ordering information for the CMM software.

Table 1 Orderable Software Images

Software Version	Filename	Orderable Product Number[1]
12.2(2)YK1 image	wscmm-i6s-mz	S6CMVG3-12202YK

1. Installed on system; append with "=" for spare on floppy media.

Feature Set

Table 2 lists the supported features for the CMM interface modules in software release 12.2(2)YK1.

Table 2 CMM Interface Module Supported Features

WS-SVC-CMM-6T1 Module	WS-SVC-CMM-6E1 Module
Line code—B8ZS[1], AMI[2]	Line code—HDB3[3], AMI
Frame format—SF[4], ESF[5] with CRC[6]/no CRC	Frame format—with CRC4/no CRC4
MGCP: T1-PRI T1-CAS E&M[7] Wink Start T1-CAS E&M Delay Dial Fax Pass-through Cisco Fax Relay Modem Pass-through Music on Hold DTMF[8, 9] Relay G711 codec (sampling size: 10, 20, and 30 ms) G729 codec (sampling size: 10, 20, 30, 40, 50, and 60 ms)	MGCP: E1-PRI Fax Pass-through Cisco Fax Relay DTMF Relay Modem Pass-through Music on Hold G711 codec (sampling size: 10, 20, and 30 ms) G729 codec (sampling size: 10, 20, 30, 40, 50, and 60 ms)

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. E&M = ear and mouth
8. DTMF = Dual Tone Multi-Frequency
9. DTMF is supported; DTMF/MF is not supported

Usage Guidelines and Restrictions

This section provides usage guidelines and restrictions for the CMM.

- The recommended VAD setting for the CMM is off.

Caveats

These sections describe the following release caveats:

Open Caveats in Release 12.2(2)YK1

This section describes the known limitations that exist in CMM software release 12.2(2)YK1.

- After a reload with the MGCP (XML) configuration download enabled, there might be a Warning on the Console saying "Warning: Primary line clock source is not operational." Actually, the clock source line primary is configured by MGCP (XML) configuration download before and after a reload. (CSCdy33340)
- There might be a problem when fax pass-through is configured but only when a fax or modem is in close proximity to an IP or PSTN phone. Once a call is established through the gateway, one-way audio can be triggered if either the IP phone or the PSTN phone is in close proximity to an audible fax or modem. Fax or modem tones induced into the line through the handset or speakers can trigger a PCM_SWITCHOVER resulting in one-way audio from the PSTN side.

  Workaround: Increase the distance between the phone and the fax/modem, or reduce the fax/modem volume. (CSCdz14789)
- There is a problem with voice activity detection (VAD) or silence suppression when these are enabled on G.729 calls only. A delay will occur on the 7935 Polycom phone with some of the T1 (CAS/PRI) or E1 (PRI) voice calls. The delay is heard in only one direction from the PSTN to the 7935 Polycom phone. The delay problem occurs with varying amounts of delay. If you experience this problem, the workaround is to turn off VAD. (CSCdz19171)

Resolved Caveats in Release 12.2(2)YK1

This section describes the resolved caveats in CMM software release 12.2(2)YK1.

- Voice calls fail on the CMM if the codec type configured is G711ULAW or G711ALAW with a 30-ms sampling rate. There is no problem when configured for 10-ms and 20-ms sampling rates. This problem is resolved in Release 12.2(2)YK1. (CSCdy23154)
- A periodic clicking sound might be heard when a call is put on hold. The workaround is to configure unicast Music on Hold instead of multicast Music on Hold. This problem is resolved in Release 12.2(2)YK1. (CSCdy49606)
- The temperature monitoring process has been optimized to reduce CPU utilization. This problem is resolved in Release 12.2(2)YK1. (CSCdy41750)
- This problem might affect G.729 calls. An intermittent delay might be heard in the PSTN-to-IP phone direction for calls originating from the PSTN to an IP phone. If you experience this problem, the workaround is to turn VAD off. This problem is resolved in Release 12.2(2)YK1. (CSCdy54786)
- The CMM temperature sensors on the baseboard should work as follows: The Sensor 1 field refers to the outtake temperature sensor, and the Sensor 2 field refers to the intake temperature sensor. However, the software "swaps" the temperature readings of the two sensors. This problem is resolved in Release 12.2(2)YK1. (CSCdy84013)
- With auto configuration, you might not be able to download the complete XML configuration file. As a result, the configuration is not done.

  Workaround: Manually create the configurations on the gateway. This problem is resolved in Release 12.2(2)YK1. (CSCdy51953)

- When reconfiguring the ISDN switch type from primary-ni to primary-5ess or updating any other value with that endpoint in CCM using the gateway auto configure feature, the T1 controller gets shut down when the reconfiguration is done. As a result of the reconfiguration, the Layer 1 is deactivated.

  Workaround: 1. Manually change the switch type rather than using the auto config feature. 2. Or manually do a no shut after the auto reconfiguration is done. This problem is resolved in Release 12.2(2)YK1. (CSCdz17090)

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 configuration tasks:

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

- 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 the CMM supports secondary clock sources from 1 to 17. The CMM must have **clock source line primary** and **clock source line secondary** configured to avoid any clock slips.
- The default configuration for the CMM is "Cisco Fax Relay." To run "Fax pass through calls," you need to 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 the CMM for configuration download from Cisco CallManager. If the configuration is lost, you must reconfigure it. To retain the manual configuration, disable the automatic configuration download from Cisco CallManager before doing a CMM reload.

Related Cisco CallManager Caveats—Release 3.2(2c) and/or Earlier

This section describes the related Cisco CallManager caveats in release 3.2(2c) and/or earlier releases.

Note The caveats listed below have been fixed in the Cisco CallManager 3.2(2c)spF-rc3 support patch.

- The global GW database xxxx.cnf.xml file (in the tftppath directory in Cisco CallManager) does not get updated after changes are made in the MGCP configuration GUI. To update this file, you need to restart "TFTP service" on the Cisco CallManager. (CSCdy10859)

- Adding a new gateway does not automatically create the corresponding xxxx.cnf.xml file (in the tftppath directory in Cisco CallManager). To create this file, you need to restart "TFTP service" on Cisco CallManager. (CSCdy11956)

Related Documentation

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

- *Catalyst 6000 Family and Cisco 7600 Series Internet Router Communication Media Module Installation and Configuration Note*
- *Regulatory Compliance and Safety Information for the Catalyst 6500 Series Switches*
- *Catalyst 6500 Series Installation Guide*
- *Catalyst 6500 Series Quick Software Configuration Guide*
- *Catalyst 6500 Series Module Installation Guide*
- *Catalyst 6500 Series Software Configuration Guide*
- *Catalyst 6500 Series Command Reference*
- *Catalyst 6500 Series IOS Software Configuration Guide*
- *Catalyst 6500 Series IOS Command Reference*
- *System Message Guide—Catalyst 6500 Series, 5000 Family, 4000 Family, 2926G Series, 2948G, and 2980G Switches*
- For information about MIBs, refer to

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

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- http://www.cisco.com
- http://www-china.cisco.com
- http://www-europe.cisco.com

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Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:

  http://www.cisco.com/cgi-bin/order/order_root.pl

- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

  http://www.cisco.com/go/subscription

- Nonregistered CCO users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

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http://www.cisco.com

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

http://www.cisco.com/tac

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

http://www.cisco.com/register/

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

http://www.cisco.com/tac/caseopen

Contacting TAC by Telephone

If you have a priority level 1(P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.

This document is to be used in conjunction with the documents listed in the "Related Documentation" section.