



Release Notes for Cisco MGX 8880 Media Gateway Release 5.6.00

Revised: September 22, 2011, OL-23363-02

Contents

The content of this document is arranged into the following major sections:

[About This Release, page 2](#)

[Type of Release, page 2](#)

[Locating Software Updates, page 2](#)

[Features in Release 5.6.00, page 3](#)

[VXSM Enhancements, page 3](#)

[System Requirements, page 3](#)

[MGX and RPM Software Version Compatibility Matrix, page 3](#)

[SNMP MIB Release, page 4](#)

[Supported Hardware, page 4](#)

[MGX 8880 Product IDs and Card Types, page 5](#)

[Service Class Template Files, page 6](#)

[AXSM and AXSM/B SCT Files, page 6](#)

[AXSM-E SCT Files, page 7](#)

[AXSM-XG SCT Files, page 7](#)

[MPSM-T3E3-155 SCT Files, page 8](#)

[MPSM-16-T1E1 SCT Files, page 8](#)

[Limitations, Restrictions, and Notes for 5.6.00, page 9](#)

[Upgrading the VISM-PR Image, page 9](#)

[Higher Level Logical Link Limits, page 9](#)



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

© 2011 Cisco Systems, Inc. All rights reserved.

[Command Line Interface Access Levels](#), page 10

[Disk Space Maintenance](#), page 10

[Using the clrmscnf Command](#), page 11

[AXSM Card Automatic Protection Switching Limitations](#), page 11

[Path and Connection Trace Features](#), page 12

[Priority Routing Feature](#), page 12

[Soft Permanent Virtual Connection Interoperability](#), page 12

[Manual Clocking](#), page 13

[Enabling Priority Bumping](#), page 13

[Other Limitations and Restrictions](#), page 13

[Known MGX 8880 Media Gateway Anomalies](#), page 14

[Known Route Processor Module Anomalies](#), page 14

[Related Documentation](#), page 14

[Obtaining Documentation, Obtaining Support, and Security Guidelines](#), page 15

About This Release

These release notes describe the system requirements, new features, and limitations that apply to Release 5.6.00 of the Cisco Multiservice Switch (MGX) 8880 Media Gateway, and provide Cisco support information.

**Note**

To verify that you have the latest version of Cisco IOS required to support the new features included in this release, please check Cisco IOS availability status at Cisco.com.

For information about new Cisco Voice Switch Service Module (VXSM) features, refer to the *Release Notes for the Cisco Voice Switch Service Module (VXSM), Release 5.6.00*.

For information about new Cisco Voice Internetworking Service Module (VISM)-Premium (PR) features, refer to the *Release Notes for the Cisco Voice Interworking Service Module (VISM), Release 3.3.35.201*.

Type of Release

Release 5.6.00 is a software release for the Cisco MGX 8880 media gateway.

Locating Software Updates

Release 5.6.00 software is located at:

<http://www.cisco.com/cisco/web/download/index.html>

Features in Release 5.6.00

VXSM Enhancements

For information about VXSM enhancements, refer to *Release Notes for the Cisco Voice Switch Service Module (VXSM), Release 5.6.00*.

System Requirements

[Table 1](#) lists Cisco WAN or Cisco IOS products that are compatible with Release 5.6.00.

Table 1 Release 5.6.00 Compatibility Matrix

Switch or Component	Compatible Software Release
MGX 8880 (PXM45/C)	MGX 5.6.00
VXSM	VXSM 5.6.00
VISM-PR	VISM 3.3.35.201
Cisco IOS RPM-XF	12.4(15)T13
Cisco IOS RPM-PR (supported only with VISM-PR cards)	12.4(15)T13
AXSM	AXSM 5.6.00
MPSM	MPSM 5.6.00

MGX and RPM Software Version Compatibility Matrix

[Table 2](#) lists the software that is compatible for use in a switch running Release 5.6.00 software.

Table 2 MGX and RPM Software Version Compatibility Matrix

Board Pair	Boot Software	Runtime Software
PXM45/C	pxm45_005.006.000.200_bt.fw	pxm45_005.006.000.200_mgx.fw
MGX-VXSM-155 MGX-VXSM-T3 MGX-VXSM-T1E1	vxsm_005.006.000.200_bt.fw	vxsm_005.056.000.200.fw (CALEA image) vxsm_005.006.000.200.fw (non-CALEA image)
MGX-VISM-PR-8T1 MGX-VISM-PR-8E1	vism_8t1e1_VI8_BT_3.2.00.fw	vism-8t1e1-003.053.035.201.fw (CALEA image) vism-8t1e1-003.003.035.201.fw (non-CALEA image)
MGX-SRME/B	N/A (obtains from PXM)	N/A (obtains from PXM)

Table 2 *MGX and RPM Software Version Compatibility Matrix (continued)*

Board Pair	Boot Software	Runtime Software
MGX-RPM-PR-512 (supported only with VISM-PR cards)	rpm-boot-mz.124-15.T13	rpm-js-mz.124-15.T13
MGX-RPM-XF-512	rpmxf-boot-mz.124-15.T13	rpmxf-k9p12-mz.124-15.T13 (Crypto image) rpmxf-p12-mz.124-15.T13 (non-Crypto image)
AXSM-1-2488/B AXSM-16-T3/E3/B	axsm_005.006.000.200_bt.fw	axsm_005.006.000.200.fw
AXSM-8-622-XG	axsmxg_005.006.001.200_bt.fw	axsmxg_005.006.001.200.fw
AXSM-16-155-XG	axsmxg_005.006.001.200_bt.fw	axsmxg_005.006.001.200.fw
AXSM-2-622-E AXSM-8-155-E AXSM-16-T3E3-E AXSM-32-T1E1-E	axsme_005.006.000.200_bt.fw	axsme_005.006.000.200.fw
MPSM-16-T1E1	mpsm16t1e1_005.006.000.200_bt.fw	mpsm16t1e1_005.006.000.200.fw mpsm16t1e1ppp_005.006.000.200.fw

SNMP MIB Release

The SNMP MIB release for Release 5.6.00 is *mgx8XXXrel5600mib.tar*.

Supported Hardware

This section lists the Cisco MGX 8880 product IDs, 800 part numbers, and revision levels.

Release 5.3.10 introduced the following PXM45/C hardware:

PXM-HDV—Back card with 2000-MB hard disk partition

Release 5.3.00 introduced the following RPM-PR back card:

MGX-RJ45-5-ETH—Five-port Ethernet back card

MGX 8880 Product IDs and Card Types

Table 3 lists product IDs, minimum 800 part numbers, and the minimum revision levels for the MGX 8880.

Table 3 *MGX Chassis, Card, and Automatic Protection Switching Configurations*

Front Card Type	Min. 800 Part Number and Revision	Back Card Types	APS Con	Min. 800 Part Number and Revision
PXM45/C (processor switch module)	800-20217-04-A0	PXM-HDV	—	800-28566-01-A0
		PXM-HD	—	800-05052-03-A0
		PXM-UI-S3/B	—	800-21557-01-A0
MGX-VXSM-155	800-15121-06-A0	VXSM-BC-4-155	Yes	800-21428-06-A0
MGX-VXSM-T3	800-4074-02-A0	VXSM-BC-3T3	—	800-3095-03
MGX-VXSM-T1E1	800-24073-02-A0	VXSM-BC-24T1E1	—	800-23088-03-A0
MGX-VISM-PR-8T1	800-07990-02-A0	AX-RJ-48-8T1	—	800-02286-01-A0
		AX-R-RJ-48-8T1	—	800-02288-01-A0
MGX-VISM-PR-8E1	800-07991-02-A0	AX-SMB-8E1	—	800-02287-01-A0
		AX-R-SMB-8E1	—	800-02410-01-A0
		AX-RJ-48-8E1	—	800-02286-01-A0
		AX-R-RJ-48-8E1	—	800-02409-01-A0
MGX-SRME/B	800-21629-03-A0	MGX-BNC-3T3-M	—	800-03148-02-A0
		MGX-STM1-EL-1	—	800-23175-03-A0
		MGX-SMFIR-1-155	—	800-14460-02-A0
MGX-RPM-XF-512	800-09307-06-A0	MGX-XF-UI	—	800-09492-01-A0
		MGX-XF-UI/B	—	800-24045-01-A0
		MGX-1-GE	—	800-18420-03-A0
		MGX-2-GE	—	800-20831-04-A0
		MGX-1OC-12 POS-IR	—	800-08359-05-A0
		MGX-2OC-12 POS-IR	—	800-21300-04-A0
		GLC-LH-SM (was MGX-GE-LHLX)	—	30-1301-01-A0
		GLC-SX-MM (was MGX-GE-SX1)	—	30-1299-01-A0
MGX-RPM-PR-512 (supported only with VISM-PR cards)	800-07656-02-A0	MGX-RJ-45-4E/B	—	800-12134-01-A0
		MGX-RJ-45-FE	—	800-02735-02-A0
		MGX-RJ45-5-ETH	—	800-27602-01-A0
AXSM-1-2488/B	800-07983-02-A0	SMFSR-1-2488/B	Yes	800-07255-01-A0
		SMFLR-1-2488/B	Yes	800-08847-01-A0

Table 3 *MGX Chassis, Card, and Automatic Protection Switching Configurations (continued)*

Front Card Type	Min. 800 Part Number and Revision	Back Card Types	APS Con	Min. 800 Part Number and Revision
		SMFXLR-1-2488/B	Yes	800-08849-01-A0
AXSM-16-T3E3/B	800-07911-05-A0	SMB-8-T3	—	800-05029-02-A0
		SMB-8-E3	—	800-04093-02-A0
AXSM-8-622-XG	800-21445-06-A0	SFP-4-622	Yes	800-22143-05-A0
MPSM-T3E3-155	800-23005-06-A0	SFP-2-155	Yes	800-23170-02-A0
		BNC-3-T3E3	—	800-23142-04-A0
		SMB-2-155-EL	Yes	800-23171-03-A0

Service Class Template Files

This section contains Service Class Template (SCT) file information for Release 5.6.00.

AXSM and AXSM/B SCT Files

The AXSM and AXSM/B SCTs have the following characteristics:

- SCT 2—Policing enabled, PNNI
- SCT 3—Policing disabled, PNNI
- SCT 4—Policing enabled, MPLS and PNNI
- SCT 5—Policing disabled, MPLS and PNNI

The file names and checksums for the SCT files are as follows:

- AXSM_SCT.PORT.0.V1:Cchecksum is = 0x6aadd6c6= 1789777606
- AXSM_SCT.PORT.2.V1: Checksum is = 0x78ccfb22= 2026699554
- AXSM_SCT.PORT.3.V1: Checksum is = 0x987919a7= 2558073255
- AXSM_SCT.PORT.4.V1: Checksum is = 0x775bfaa2= 2002516642
- AXSM_SCT.PORT.5.V1: Checksum is = 0xe84c696a= 3897321834
- AXSM_SCT.CARD.0.V1: Checksum is = 0x6aadd6c6= 1789777606
- AXSM_SCT.CARD.2.V1: Checksum is = 0x78ccfb22= 2026699554
- AXSM_SCT.CARD.3.V1: Checksum is = 0x987919a7= 2558073255
- AXSM_SCT.CARD.4.V1: Checksum is = 0x775bfaa2= 2002516642
- AXSM_SCT.CARD.5.V1: Checksum is = 0xe84c696a= 3897321834

To confirm that the checksum of the SCT file and the file on the node match, enter **dspstchksum** <filename>.

AXSM-E SCT Files

The AXSM-E SCTs have the following characteristics:

- CARD and PORT SCT 5—Policing enabled for PNNI, disabled for MPLS
- PORT SCT 6—Policing disabled, used for PNNI ports.
- CARD and PORT SCT 52—Policing enabled on PNNI, disabled on MPLS
- PORT SCT 53—Policing disabled on PNNI and MPLS
- PORT SCT 54—Policing enabled on PNNI, disabled on MPLS
- PORT SCT 55—Policing disabled on PNNI and MPLS

The following are checksums for the new AXSM-E SCT file:

- AXSME_SCT.PORT.5.V1: Checksum is = 0x793c56d0= 2033997520
- AXSME_SCT.PORT.6.V1: Checksum is = 0xe92db9a5= 3912087973
- AXSME_SCT.PORT.52.V1: Checksum is = 0x51241b7a= 1361320826
- AXSME_SCT.PORT.53.V1: Checksum is = 0x34bdf8b9= 884865209
- AXSME_SCT.PORT.54.V1: Checksum is = 0xb5df2c5c= 3051301980
- AXSME_SCT.PORT.55.V1: Checksum is = 0xc5d355c8= 3318961608
- AXSME_SCT.CARD.5.V1: Checksum is = 0x793c56d0= 2033997520
- AXSME_SCT.CARD.52.V1: Checksum is = 0x972810ac= 2535985324

AXSM-XG SCT Files

The AXSM-XG SCTs have the following characteristics:

- CARD SCT 2—Policing disabled on PNNI and MPLS. Applied in ingress direction based on backplane bandwidth.
- PORT SCT 100 (OC-192), 200 (OC-48), 300 (OC-12), 400 (OC-3), 500 (DS3)—Policing disabled on PNNI and MPLS
- PORT SCT 101, 201, 301, 401, 501—Policing disabled on PNNI and enabled on MPLS
- PORT SCT 110, 210, 310, 410, 510—Policing enabled on PNNI and disabled on MPLS
- PORT SCT 111, 211, 311, 411, 511—Policing enabled on PNNI and enabled on MPLS

The SCT file names and checksums are:

- AXSMXG_SCT.PORT.100.V1: Checksum is = 0x2342cfd= 591581151
- AXSMXG_SCT.PORT.200.V1: Checksum is = 0x2814a68d= 672441997
- AXSMXG_SCT.PORT.300.V1: Checksum is = 0x7e2bf17= 132300567
- AXSMXG_SCT.PORT.400.V1: Checksum is = 0xa602de0a= 2785205770
- AXSMXG_SCT.PORT.500.V1: Checksum is = 0xd6d07790= 3603986320
- AXSMXG_SCT.PORT.101.V1: Checksum is = 0x7f3935c0= 2134455744
- AXSMXG_SCT.PORT.201.V1: Checksum is = 0x6e41c693= 1849804435
- AXSMXG_SCT.PORT.301.V1: Checksum is = 0x98ba0700= 2562328320
- AXSMXG_SCT.PORT.401.V1: Checksum is = 0xae33e067= 2922635367

- AXSMXG_SCT.PORT.501.V1: Checksum is = 0x11988936= 295209270
- AXSMXG_SCT.PORT.110.V1: Checksum is = 0xd431808= 222500872
- AXSMXG_SCT.PORT.210.V1: Checksum is = 0x2835432c= 674579244
- AXSMXG_SCT.PORT.310.V1: Checksum is = 0x4f4c4a34= 1330399796
- AXSMXG_SCT.PORT.410.V1: Checksum is = 0xe4a7ed75= 3836210549
- AXSMXG_SCT.PORT.510.V1: Checksum is = 0xecc0047c= 3972007036
- AXSMXG_SCT.PORT.111.V1: Checksum is = 0x68397de6= 1748598246
- AXSMXG_SCT.PORT.211.V1: Checksum is = 0x6e61632e= 1851876142
- AXSMXG_SCT.PORT.311.V1: Checksum is = 0xdf23911a= 3743650074
- AXSMXG_SCT.PORT.411.V1: Checksum is = 0xecd7efce= 3973574606
- AXSMXG_SCT.PORT.511.V1: Checksum is = 0xe920f6c3= 3911251651
- AXSMXG_SCT.CARD.2.V1: Checksum is = 0xb58b69a8= 3045812648
- AXSMXG_SCT.CARD.3.V1: Checksum is = 0xb4e1239a= 3034653594

MPSM-T3E3-155 SCT Files

The SCT files for the MPSM-T3E3-155 card have the following characteristics:

- Port SCT 1—Optimized for UNI connections that use 5 or more T1/E1 lines.
- Port SCT 2—Optimized for NNI connections that use 5 or more T1/E1 lines.
- Port SCT 3—Optimized for IMA or MFR UNI connections that use 4 T1/E1 lines or less.
- Port SCT 4—Optimized for IMA or MFR NNI connections that use 4 T1/E1 lines or less.

The SCT file names and checksums are:

- MPSM155_SCT.PORT.1.V1: Checksum is = 0x88569bf5= 2287377397
- MPSM155_SCT.PORT.2.V1: Checksum is = 0x21e18676= 568428150
- MPSM155_SCT.PORT.3.V1: Checksum is = 0x3cb04789= 1018185609
- MPSM155_SCT.PORT.4.V1: Checksum is = 0xd63b320a= 3594203658
- MPSM155_SCT.CARD.1.V1: Checksum is = 0x808b3c54= 2156608596

MPSM-16-T1E1 SCT Files

The SCT files for the MPSM-16-T1E1 card have the following characteristics:

- Port SCT 3—Use for UNI ports less than or equal to 4 T1 in bandwidth.
- Port SCT 4—Use for NNI ports less than or equal to 4 T1 in bandwidth.

The MPSM-16-T1E1 SCT file names and checksums are:

- MPSM16T1E1_SCT.PORT.3.V1: Checksum is = 0x3cb04789= 1018185609
- MPSM16T1E1_SCT.PORT.4.V1: Checksum is = 0xd63b320a= 3594203658
- MPSM16T1E1_SCT.CARD.1.V1: Checksum is = 0x808b3c54= 2156608596

Limitations, Restrictions, and Notes for 5.6.00

This section includes information about limitations, restrictions, and notes pertaining to Cisco MGX Release 5.6.00.

- Due to granularity limitations in the AXSM-E hardware, cell traffic does not reach the configured peak cell rate (PCR) rate when weighted fair queuing (WFQ) is enabled. You must configure connections that have WFQ enabled with a PCR of 101 percent of the actual required rate. Available bit rate (ABR) has the same Qbin priority as the unspecified bit rate (UBR) in the SCT tables. In this case, ABR and UBR share excess bandwidth if WFQ is enabled.
- The VXSM cards, when installed for the first time or after clearing the slot configuration, create a default configuration. The creation of a default configuration involves writing large amount of data to the hard disk in the node.

When multiple VXSM cards are installed simultaneously or the configuration of multiple VXSM slots are cleared simultaneously, one or more VXSM cards could fail to be installed. This potential failure results in following recommendations (refer to CSCed12646):

- Install VXSM cards, using the **setrev** command, one at a time. Install another VXSM after the earlier one is completely installed and is Active.
- Clear the VXSM slot configuration using the **clrsmcnf** command (with no option where the slot primary software version is preserved) one at a time. Wait until the VXSM rebuilds after clearing its slot configuration (without clearing the slot primary software version) before clearing the slot configuration of another VXSM slot.

Upgrading the VISM-PR Image

If you are upgrading the VISM-PR image to Release 3.2.1x or later and the PXM1E or PXM45 image from Release 4.x or earlier to Release 5.x, first upgrade the VISM-PR cards. Then, upgrade the PXM1E or PXM45 cards in the same node.

Do not configure the new VISM features until you have fully upgraded the network. After you upgrade your network to PXM1E or PXM45 Release 5.x or later and VISM-PR to Release 3.2.1x or later, apply the standard upgrade process.

Higher Level Logical Link Limits

The numbers of logical links in the higher levels of the PNNI hierarchy is limited to 30 per level when the complex node configuration is turned on. The limit is essential to reduce the processing time involved in finding the bypasses between the logical links. Each time a significant change occurs in bandwidth in one of the links within the peer group, the bypass calculation is triggered and the bypasses are usually found from one logical link to another.

If there are n logical links, the calculation involves finding $n*n$ bypasses.

If the number of logical links n is large, a lot of processing time is used to calculate the bypasses. Limit the number of logical links per level to 30. To control the number, configure the appropriate number of aggregation tokens for the outside links for that peer group.

Command Line Interface Access Levels

The following notes pertain to configuring command access levels:

- Not all command line interface (CLI) commands are changeable, and a command cannot be changed to CISCO_GP group access level.
- Only the switch software is allowed to generate the binary file. This binary file has an authentication signature which has to be validated before the binary file can be used. Any manual changes to the file make the file void.
- If the binary file becomes corrupted, then the command access levels revert back to the default values during the card bring-up. To recover, repeat the installation process or retain a copy of the binary file and execute a **cnfcli accesslevel install** command on that service module.
- Currently, command names are verified, but an invalid command name might be parsed and added to the binary file. However, this invalid name is ignored later.
- If replication to standby failed, the installation process failed.
- The **cnfcli accesslevel default** command restores all command access levels to default for the service module that this command is executed on. This command does not remove the binary file, and this change is not persistent. If the command is executed on the active card of a redundancy pair, the standby card is not affected. When the card is reset and the binary file exists, it configures from the binary file when it is brought up.

Disk Space Maintenance

Because the firmware does not audit the disk space usage nor remove unused files, the disk space in C: and E: drives must be manually monitored.

Manually delete any unused saved configuration files, core files and firmware files, and the configuration files of the MGX-RPM-PR-512 and MGX-RPM-XF-512 cards to avoid a shortage of disk space required to store event logs: configuration upload files in the C: drive and the configuration of MGX-RPM-PR-512 and MGX-RPM-XF-512 cards in the E: drive.

The following steps are recommended to remove files on the system from the active controller card:

-
- Step 1** Change to the directory that needs grooming.
CLI: **cd** <directory_name>
- Step 2** List the directory to identify old files that can be removed and available disk space.
CLI: **ll**
- Step 3** Remove any old files (you might also use wild cards in the filename).
CLI: **rm** <complete_filename>
- Step 4** List the directory to see if the file was removed and disk space is available.
CLI: **ll**
-

Saving Configurations

The system keeps only the two most recent copies of the saved system configuration under the C:/CNF directory. You can use FTP to transfer all of the saved configurations under C:/CNF to their local server for future reference. All files under C:/CNF are not replicated over to the standby controller card under any circumstances.

Using the `clrsmcnf` Command

These notes pertain to the `clrsmcnf` command:

- We do not recommend executing `clrsmcnf` on more than one card at a time
- For the clear service module configuration feature, if there is a controller card switchover before the clear service module configuration operation is complete, the `clrsmcnf` command must be re-issued to ensure that the configuration is completely cleared to avoid an incomplete cleanup.
- For the clear service module configuration feature, using the `clrsmcnf` command might result in discrepancy in the PNNI configuration. For example, some connections might be in the mismatch state.
- If the `clrsmcnf` command is given with the `<all>` option to clear the software version for the slot as well, then the card enters the fail/empty state after the operation is complete.
- If the `clrsmcnf` command is given with the `<all>` option, for cell bus service module, the card enters boot/empty state. For a broadband service module (for example, AXSM or MPSM-155-T3E3), the card enters fail/active state.
- While using the `clrsmcnf` command, the card in the specified slot is not usable until the operation is successfully completed.

AXSM Card Automatic Protection Switching Limitations

These notes pertain to the Automatic Protection Switching (APS) feature:

- For AXSM APS, the back card of the active card must be present for APS to function.
- AXSM cards need the back card of the active front card for the APS to work. This implies that AXSM cards do not support the cross backcard removal—the upper backcard of one AXSM and lower backcard of another AXSM.
- If you remove the upper back card of the active front AXSM, it triggers switching active card. The APS is OK. However, if the lower back card of the current active AXSM is removed at this time, it does not trigger switching the active card because the standby card is missing one of the back cards. The lower backcard APS does not work because the back card of the active front card is missing.
- Port LED lights on AXSM-E front cards indicate the receive status of the physical line connected to it only when the card is in active state. For standby AXSM-E cards, the LEDs always remain green when the lines are in loss of signal (LOS) irrespective of which lines are active (refer to anomaly CSCdv68576).

Path and Connection Trace Features

These notes pertain to the path and connection trace features:

- Path trace is not supported on the control port.
- Path trace does not have the accurate information when there is a crankback on the connect path.
- Path and connection trace support point to point connections.
- Path and connection trace support MPG (multiple peer group) and SPG (single-peer group).

Priority Routing Feature

These notes pertain to the priority routing feature:

Prioritized reroute of soft permanent virtual connection (SPVCs) is not guaranteed if the SPVCs originate on a signaling port. SPVCs might get routed out of order. In-order routing of SPVCs is guaranteed on non-signaling ports.

- RPM does not support configuration of routing priority. All RPM mastered SPVCs are assigned a routing priority of 8 by the PXM.
- Changing the routing priority for DAX connections does not change the priority of the associated SVCs. The SPVCs are not derouted and rerouted if just the endpoint parameters are changed, and routing priority is an endpoint parameter. Also, because DAX connections are never derouted even if the user-network interface (UNI) port stops responding and the **rrtcon** command is not supported for DAX connections, the routing priority change is never reflected. The only way for the routing priority change to be reflected is to execute the **dncon** and **upcon** commands. Because DAX connections are never derouted, the effect of this limitation is voided.
- Priority routing operates in a best effort manner for the following reasons:
 - Two in-order releases can still arrive out of order at the master node if they take two different paths.
 - Under congestion scenarios releases can be expected to be transmitted out-of-order. This is because releases of other calls must not be held up if you are not able to send releases on one of the interfaces because it is congested. The calls that were not released could be higher priority calls.
 - Lower priority SPVCs can be routed ahead of higher priority SPVCs. This can happen if you have repeatedly failed to route higher priority SPVCs. To prevent starvation of lower priority SPVCs, the software starts to route lower priority SPVCs. The software eventually addresses the higher priority SPVCs later.

Soft Permanent Virtual Connection Interoperability

These notes pertain to SPVC interoperability:

- Network-to-Network Interface (NNI) SPVC Addendum Version 1.0 is not supported.
- CC (Continuity Check) is not available at the slave end of a single-end SPVC.
- Reporting AIS detection to Cisco Wide Area Network Manager (CWM) is not available at the slave end of a single-end SPVC.
- The slave end of a single-end SPVC is not visible to CWM.

- If single-end SPVCs originated from MGX switches, they can only be configured through CLI and not from CWM in the current release.
- Single-end provisioning is not supported for DAX connections.
- SPVC statistics are not available for the slave endpoint of a single-end SPVC because this endpoint is nonpersistent.
- When the persistent slave endpoint of an existing SPVC connection is deleted and the master endpoint is allowed to remain, the connection might become established as a single-end SPVC connection. In this case, CWM shows the connection as Incomplete.
- Override of SVC connections on a virtual path identifier (VPI) due to an incoming SPVP request for that VPI is not supported. The following override options are supported only:
 - **spvcoverridesvc**
 - **spvcoverridesvp**
 - **spvpoverridesvp**

Manual Clocking

When **resetcd** is invoked, the primary and secondary (if configured) clock sources are recommitted. However, the clock to which the node is latched is not requalified. Only the backup clock is qualified if present. Recommitted means that the primary and secondary are requalified, and the node temporarily latches onto the internal oscillator. After the clock is requalified, the node locks onto the primary clock source once again.

Enabling Priority Bumping

When you enable priority bumping on the node, you cannot change the booking factor for AXSM signaling ports. You can change the booking factor for non-signaling ports.

Other Limitations and Restrictions

Other limitations and restrictions are as follows:

- When configuring virtual interfaces (for example, VUNI, VNNI, EVUNI, EVNNI), the physical interface must be of all one ATM header type, either UNI or NNI. The signaling that is applied to a virtual port is independent of the actual virtual port ATM header. The only limit is that the VPI value must be within the UNI ATM header limitations.
- If command **clrchanct** is executed while a **dspchanct** command is currently active, the displayed data is incorrect. To display correct data, restart the **dspchanct** after the previous one is complete.
- The **clrmscnf** command does not work:
 - For redundant service modules.
 - If an upgrade is in progress.
- If RPM-XF is configured as a Label Switch Controller (LSC), execution of **clrmscnf** command on those LSC slots is rejected.

- Configuration information is not synchronized between processor switch modules (PXM) during upgrades. If any changes are made to the configuration during upgrades, the standby PXM must be rebooted. The standby PXM must be rebooted when it is in a stable state.
- Out of multiple SVC connections created between PXM and RPM using the same VPI.VCI, the MGX2 platform identifies only the first connection. Therefore, it is recommended to use different VPI.VCI when creating multiple SVC connections.

Clearing the Configuration on Redundant PXM45 Card

These notes apply to redundant cards.

- Due to checks to prevent an inserted card from affecting the system, an additional step might be required when inserting two non native PXM45 cards in a shelf. Insert the first PXM45, use the **crallcnf** command, and allow this to become active before inserting the second PXM45.
- After a **crallcnf**, explicitly clean up stale SCT files (see anomaly CSCdw80282).

Known MGX 8880 Media Gateway Anomalies

For information about anomalies in MGX Release 5.6.00 on other platforms, refer to the *Release Notes for Cisco MGX 8850 (PXM1E/PXM45), Cisco MGX 8950, and Cisco MGX 8830 Switches, Release 5.6.00*.

For information about anomalies with the VXSM card, refer to *Release Notes for the Cisco Voice Switch Service Module (VXSM), Release 5.6.00*.

For information about anomalies with the VISM card, refer to *Release Notes for the Cisco Voice Interworking Service Module (VISM), Release 3.3.35.201*.

Known Route Processor Module Anomalies

For information about anomalies with the MGX-RPM-XF-512 card, refer to *Release Notes for Cisco MGX Route Processor Module (RPM-XF) for PXM45-based Switches, Release 5.6.00*.

For information about anomalies with the MGX-RPM-PR-512 card, refer to *Release Notes for Cisco MGX Route Processor Module (RPM-PR) for MGX Releases 1.3.16 and 5.5.00*.

Related Documentation

A *Guide to Cisco Multiservice Switch Documentation* ships with your product. That guide contains general information about how to locate Cisco MGX, broadband and packet exchange (BPX), service expansion shelf (SES), and CWM documentation online.

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>

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third party trademarks mentioned 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. (1005R)

© 2011 Cisco Systems, Inc. All rights reserved.