



Doc. No. 78-3829-02, Rev. B

Catalyst 5000 Series Release Notes for Software Release 2.1(5)

These release notes describe the features, caveats, and modifications for the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5).



Caution Read the *Catalyst 5000 Series Release Notes for Software Release 2.1* before reading this document (these release notes are an addendum to and not a replacement for the *Catalyst 5000 Series Release Notes for Software Release 2.1* publication, part number 78-2896-02).

Note Although the software image in a new Catalyst 5000 series switch will operate correctly, later software images containing the latest upgrades and modifications are released regularly to provide you with the most optimized software available. It is strongly recommended that you check the Cisco Connection Online World Wide Web URL <http://www.cisco.com> for the latest released software image.

Documentation

The following documents are available for the Catalyst 5000 series switch:

- *Catalyst 5000 Series Installation Guide*
- *Catalyst 5000 Series Configuration Guide and Command Reference*

Cisco documentation and additional literature are available on a CD called Cisco Connection Documentation, Enterprise Series. The CD is updated and shipped monthly, so it might be more up to date than printed documentation. To order the Cisco Connection Documentation, Enterprise Series CD, contact your local sales representative or call Customer Service. The CD is available both as a single CD and as an annual subscription. You can also access Cisco technical documentation on the World Wide Web URL <http://www.cisco.com>.

Corporate Headquarters

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

Copyright © 1996
Cisco Systems, Inc.
All rights reserved.

Usage Guidelines and Restrictions

This section describes features, warnings, and cautions about using Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). It covers “Modules with Incorrectly Programmed MAC Addresses” and other “Miscellaneous Considerations.”

Modules with Incorrectly Programmed MAC Addresses

A module that does not have its MAC address correctly programmed will fail to come online. If this occurs, contact the Cisco Technical Assistance Center (TAC) to replace the module. The following output is displayed if a module does not have its MAC address correctly programmed:

```
Catalyst 5000 Power Up Diagnostics

Init NVRAM Log
LED Test
ROM CHKSUM
DUAL PORT RAM r/w
RAM r/w
RAM address test
Byte/Word Enable test
EARL test
EARL test Done

BOOTROM Version 1.5, Dated Mar  8 1996 16:24:38
BOOT date: 07/30/96 BOOT time: 17:44:58
SIMM RAM address test
SIMM Ram r/w 55aa
SIMM Ram r/w aa55
Uncompressing image.  This will take a minute...
Module 1 SPROM has invalid MAC address...module will remain offline

Minor hardware problem in Module # 1
```

The remainder of this section defines and describes the effects of an unprogrammed MAC address. The Catalyst 5000 currently uses the following types of MAC addresses for its modules:

```
00-40-0b-XX-XX-XX
00-60-09-XX-XX-XX
00-60-3e-XX-XX-XX
```

Module MAC addresses are programmed when the modules are brought online during the manufacturing process. Unique MAC address ranges are assigned to each module. If a module is incorrectly programmed, it will revert to one of the following default MAC addresses:

```
00-40-0b-ff-00-00
00-60-09-ff-00-00
00-60-3e-ff-00-00
```

If you are using Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(2) or above, the Catalyst 5000 performs a check during powerup to determine whether any module has a MAC address range that contains ff-00-00 in the last three bytes. If the Catalyst 5000 finds this condition, the switch displays the output shown above to indicate that an unprogrammed module is present. The message signifies that the SPROM on the module is not programmed and therefore the module will not come online.

If the default MAC address appears on any module other than the supervisor engine module, the module will not come online. Moreover, if the default MAC address appears on the supervisor engine module, the entire Catalyst 5000 will not come online.

Miscellaneous Considerations

This section describes considerations regarding the Catalyst 5000 series switch configuration:

- If you are running Catalyst 5000 Series ATM Module Software Release 3.1 it is recommended that you run Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5).
- The Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5) supports the following hardware modules:
 - 100BaseFX Fast Ethernet Switching module with 6 multi-mode fiber-optic and 6 single-mode fiber-optic ports (WS-X5114)
 - Catalyst 5000 ATM LAN Emulation Module Dual PHY with two UTP ports (WS-X5156)
 - Catalyst 5000 ATM LAN Emulation Module Dual PHY with two single-mode fiber-optic SC ports (WS-X5157)
 - Catalyst 5000 ATM LAN Emulation Module Dual PHY with two multi-mode fiber-optic SC ports (WS-X5158)

Previous releases of the software do not correctly recognize these modules.

- If a Catalyst 5000 contains 2.1 Software Memory Upgrade Kit SIMMs and is running a software release prior to 2.1 (such as release 1.5), the command **show version** displays only 4 MB of memory. You must install software release 2.1 or above to allow the command **show version** to recognize 2.1 Software Memory Upgrade Kit SIMMs, and to display the total memory as 8 MB.
- If you upgrade to Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5) from release 1.5 or below, the default VTP mode is set to **transparent**. In **transparent** mode, new VLANs are not automatically advertised in the VTP domain. To allow a VLAN to be advertised, specify a unique name for the VTP domain and set the VTP mode to **server** before creating new VLANs.
- If you are upgrading from Catalyst 5000 Series Supervisor Engine Software Release 1.5 or below, your allowed VLAN configuration for each trunk remains the same after the upgrade. Therefore, if you create VLANs outside the allowed VLAN range, those VLANs become active but are not automatically added to the trunk. For example, if you create VLAN 12 when VLANs 1 through 10 are configured as allowed on the trunk, VLAN 12 becomes active but is not added to the trunk.
- You can configure 256 VLANs on a Catalyst 5000. However, the VLAN ID configuration number has a range from 1 to 1000.
- If a module fails to come online, try resetting it.
- The **show mac** command displays the InDiscard counter value as zero, instead of the actual counter value for Ethernet ports. (The InDiscard counter tracks the number of frames that the Catalyst 5000 series switch discards because the frames were destined for the local segment.)
- The LrnDiscard counter (displayed using the **show mac** command) indicates the number of times a CAM entry is replaced with a newly learned address when the CAM table is full. In Catalyst 5000 Series Supervisor Engine Module Software Releases 1.3 and 1.4, the counter value is not maintained for each port; instead, the value is maintained for the entire switch.
- Serial download is supported for downloading Flash code to the supervisor engine module, but not to the switching modules.

- Although the **show spantree** command displays the fast-start feature as enabled on a trunk port, the spanning-tree portfast mode has no effect on trunk ports, such as ISL, ATM, or FDDI. Do not use the **set portfast** command on a trunk port. In addition, designating a port as a trunk port ignores the portfast feature for the port. When you hot-swap an FDDI or ATM module, use the **set portfast disable** command to disable the fast-start feature for any ports that are using it.
- Sometimes the command **show module** indicates that the status LED of an Ethernet module is green even if some module ports fail the PMD loopback test during powerup; the status LED of an Ethernet module is orange or red only when all of the module ports fail the PMD loopback test. To correct this error, use the **show test** command to view PMD loopback test results for a module and then reset the module using the **reset mod_num** command; if the failure persists, replace the module.
- When you disable a trunk on a fast Ethernet port using the command **set trunk mod_num/port_num off**, wait for a confirmation statement from the Catalyst 5000 before reenabling the trunk, to prevent the trunk from going into a non-trunking state. If this error occurs, use the **set port** command to disable and then reenabling the port.
- You cannot disable an ATM module using the **set module disable** command. However, you can disable other module types. To recover from this problem, open an ATM session and shut down the ATM interface using the shut down command.
- If you downgrade your Catalyst 5000 from 2.1(5) to a previous release, save your configuration. Your previous configuration will be erased as a result of the downgrade.
- When you insert or replace a module (other than the supervisor engine module), use the command **clear config all** or **clear config mod_num** to clear the module configuration information in the supervisor engine module and obtain the correct spanning tree parameters. Perform this command from the supervisor engine module command prompt.
- If you have an LECS, LES, or BUS configured on an ATM module, and you replace the supervisor engine module or move the ATM module from one slot to another, the ATM addresses (NSAPs) become modified. Be sure to update the LECS database configuration with new NSAP values.

Differences Between Software Releases 2.1(4) and 2.1(5)

This section describes the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3) caveats that were resolved in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5).

Note Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5) caveats are listed in the section “Caveats in Software Release 2.1(5).”

- When you remove or hot-swap an ATM module while the system is operating, the slot and virtual circuit number in the CAM table become invalid. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5) this problem has been corrected. (CSCdi42681)
- You cannot use the **session** command for an ATM card if the supervisor engine module IP address is not set (that is, if the supervisor engine module IP address is set to 0.0.0.0). This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi44641)
- The command **clear cam dyn mac_addr** deletes a MAC address from the supervisor engine module CAM but not from the FDDI module CAM. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5), this problem has been corrected. (CSCdi60839)

- The command **set trunk** does not support ATM modules. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5), this problem has been corrected. (CSCdi62362)
- The Catalyst 5000 does not recognize the ATM Dual PHY module. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi63180)
- When there are continuous spanning tree topology changes under heavy traffic conditions, a Catalyst 5000 may remain accessible through **ping** and **telnet** but stop responding to SNMP requests. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi64759)
- The Catalyst 5000 allows you to add ports to a VLAN with the type FDDI. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi65189)
- ATM ports cannot be set as a destination port for a static multicast entry. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi66054)
- If you connect a 2511 communication server to a Catalyst 5000 console, the Catalyst 5000 may reset. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5), this problem has been corrected. (CSCdi66347)
- The Catalyst 5000 reports single and multiple collisions as part of **ifOutErrors**. This problem has been corrected in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi66677)
- If a Catalyst 5000 has a permanent multicast entry in its CAM table, some modules may not come online when the switch is powered up. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5), this problem has been corrected. (CSCdi66772)
- When FDDI trunking is enabled, an FDDI port cannot be moved to an Ethernet VLAN that has a defined translation. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5), this problem has been corrected. (CSCdi67228)
- The **rpTrMonitorPortReadableFrames** MIB object is not supported. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). (CSCdi67765)
- If you delete a static multicast entry that is pointing to both Ethernet ports and an ATM port, the entry is deleted only from the Ethernet ports. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5), this problem has been corrected. (CSCdi68243)

Differences Between Software Releases 2.1(2) and 2.1(3)

This section describes the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1 and 2.1(2) caveats that were resolved in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3).

Note Caveats existing in software release 2.1(2) and not resolved in release 2.1(3) still apply to software release 2.1(3).

- The Catalyst 5000 may report alignment errors on the receiving side of supervisor MII ports that are configured as trunks. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3), this problem has been corrected. (CSCdi54628)
- When an LEC on an ATM module continuously goes up and down, a memory leak may occur that can cause the Catalyst 5000 to run out of memory buffers and stop responding to **ping**, **telnet**, or SNMP requests. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3). (CSCdi61865)

- Under certain conditions the **session** command to an ATM card becomes inoperable. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3), this problem has been corrected. (CSCdi62970)
- If you configure MII ports for trunking when MII transceivers are present, under heavy traffic conditions the trunking status of the ports may toggle between trunking and nontrunking. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3). (CSCdi64353)
- FDDI modules may not come online after you upgrade to Catalyst 5000 Series FDDI Software Release 2.1(2). If this error occurs, to bring the FDDI module online reset the FDDI module using the **reset mod_num** command. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3). (CSCdi64572)
- The Catalyst 5000 will first attempt to auto-negotiate port speed, even if the speed of a 10/100 Mbps Fast Ethernet Switching module port is set to 10 Mbps or 100 Mbps. This may prevent a link from being made to some end stations. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3). (CSCdi65030)
- Using the fiber supervisor under extremely heavy traffic conditions, the system may experience a switching bus timeout and subsequently crash. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3), this problem has been corrected. (CSCdi65055)
- If a FDDI module is present in a Catalyst 5000 chassis and all the ports of two adjacent modules are configured to be in a VLAN other than 1, some modules in the chassis may not come online after a switch powerup. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3), this problem has been corrected. (CSCdi65472)
- If you use the command **set span** to dynamically change the source port of a SPAN configuration from one port to another, the Catalyst 5000 still “spans” the traffic from the previous source port. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3). (CSCdi65620)

Differences Between Software Releases 2.1 and 2.1(2)

This section describes the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1 caveats that were resolved in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(2).

Note Caveats existing in software release 2.1 and not resolved in release 2.1(2) still apply to software release 2.1(2).

- When you are enabling or disabling FDDI ports on an FDDI module, the **set port enable** and **set port disable** commands for both ports 1 and 2; port A (port 1) and port B (port 2) on the FDDI module are treated as two different ports. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(2). (CSCdi57956)
- A Catalyst 5000 might timeout if several SNMP applications are running concurrently. Limit the number of SNMP applications to one at a time. Alternatively, increase the timeout value for manager applications. In Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(2), this has been corrected. (CSCdi58669)
- When you are viewing the **etherStats** for an Ethernet port, using an RMON application such as TrafficDirector, the Catalyst 5000 reports oversize frames even though oversize packets have not been received on the port. Ignore messages of this type and continue normal operation. This problem is fixed in Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(2). (CSCdi59442)

Caveats in Software Release 2.1(5)

This section describes possible unexpected behavior and other caveats for the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). The caveats listed here describe only serious problems.

- SNMP applications may temporarily slow down or time out if you are using an SNMPWALK, mibwalk, or Cisco View session on a Catalyst 5000 during an FDDI or ATM download. (CSCdi54102)
- Use the **reset** command at the boot prompt to load the Flash image. Do not use the command **execflash** to load the Flash image from the Boot PROM. (CSCdi57385)
- If you attempt to enter an incorrect Flash image for the supervisor engine module, the error message might not be immediately obvious. For example, if you accidentally tried to download ATM software to the supervisor engine module, the following message would appear:

```
Console> (enable) download 199.133.219.189 atm_21.cbi
Download image atm_21.cbi from 199.133.219.189 to Module 1 FLASH (y/n) [n]? y
-
Finished network download. (1950240 bytes)
ERROR: ocs hdr: csum=0x41e4ecb7 ocsp->csum=0x4c

Download failed
```

(CSCdi58607)

- If you upgrade the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5) while the FDDI software is a release prior to 2.1 (such as Catalyst 5000 Series FDDI Software Release 1.5), the FDDI module might fail to come online. To recover from this error, reset the module using the command **reset mod_num**. (CSCdi60282)
- If a Catalyst 5000 is configured as a nonroot bridge with multiple blocked spanning tree instances on trunk ports, SNMP speed performance may be impaired. To recover from this problem, adjust the spanning tree parameters to reduce the number of blocked spanning tree instances on trunk ports. (CSCdi65020)
- If the supervisor engine module receives a continuous stream of IP broadcasts, supervisor module spanning tree operation may be affected. To recover from this problem, move the IP address of the Catalyst 5000 to a management domain that has fewer broadcasts. (CSCdi66330)
- The command **show span tree** shows a trunk port in some VLANs as not connected even though it is physically connected. (CSCdi66789)
- If you reset a Catalyst 5000 module while it is actively switching traffic between ports, the switch may display an error message similar to the following:

```
Cat5000_1> (enable) reset 4
Resetting module 4...
Cat5000_1> (enable) SYNFIG: CBL0, CBL1, or CBL2 Error

ATE0
ATS0=1

Power Up Diagnostics

Init NVRAM Log
....
....
```

If this error occurs, the switch may experience a watchdog reset. To prevent this problem from occurring, do not reset a module while it is actively switching traffic between workstations connected to a Group Ethernet Switching module. (CSCdi67387)

- Currently the Catalyst 5000 allows you to create static entries in the CAM table and specify invalid destination ports. (CSCdi68222)
- Under heavy broadcast conditions or under heavy management traffic, memory resources on the supervisor engine module may be reduced, affecting your ability to create a session on an ATM module; you may also not be able to telnet to or ping the Catalyst 5000. This situation is temporary and the switch will recover as soon as the broadcast or heavy management traffic ends. (CSCdi68745)
- If you connect the console port of a Catalyst 5000 to a 2511 terminal server, ensure that the “no exec” line appears in the configuration of each of the ports of the terminal server. If this line is not present, a module may fail to come online. (CSCdi69293)
- An ATM module running Catalyst 5000 Series ATM Module Software Release 1.1 fails to come online on a Catalyst 5000 running Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(5). To recover from this error, reset the ATM module using the command **reset mod_num**. It is recommended that you install the ATM software release 2.2 or above.

Caveats in Software Release 2.1(3)

This section describes possible, unexpected behavior and other miscellaneous caveats for the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(3). The caveats listed here describe only serious problems.

- Under certain conditions, a Catalyst 5000 10 Mbps Ethernet module port may stop learning MAC addresses even though the command **show mac** indicates the port is still receiving frames. To correct this problem, disable the port using the command **set port disable mod_num/port_num** and reenale the port using the command **set port enable mod_num/port_num**. (CSCdi60452)
- When there are continuous spanning tree topology changes under heavy traffic conditions, a Catalyst 5000 may remain accessible through **ping** and **telnet** but stop responding to SNMP requests. The catalyst needs to be reset to correct this problem. (CSCdi64759)
- Occasionally some LECs that are configured on an ATM module may not come up after you reset a Catalyst 5000 Series switch. To recover from this problem, reconfigure the LECs that failed to come up on the ATM module. (CSCdi65004)
- Bidirectional file transfers between workstations occur more slowly using a Group Switching Ethernet module than using a Catalyst 5000 Series Ethernet (10BaseT 24 port) module. Performance can be improved by adjusting the TCP timeout values on the work stations. (CSCdi65606)
- If a Catalyst 5000 has a permanent multicast entry in its CAM table, some modules may not come online when the switch is powered up. To recover from this problem, remove and reinsert the modules that fail to come online. (CSCdi66772)
- If the supervisor engine module receives a continuous stream of IP broadcasts, supervisor module spanning tree operation may be affected. (CSCdi66330)

Caveats in Software Release 2.1(2)

This section describes possible unexpected behavior and other miscellaneous caveats for the Catalyst 5000 Series Supervisor Engine Module Software Release 2.1(2). The caveats listed here describe only serious problems.

- Currently, the **show mac** command displays the InDiscard counter value as zero, instead of the actual counter value for Ethernet ports. (The InDiscard counter tracks the number of frames that the Catalyst 5000 Series switch discards because it was destined for the local segment.) (CSCdi39812)
- The LrnDiscard counter (displayed using the **show mac** command) indicates the number of times a CAM entry is replaced with a newly learned address when the CAM table is full. In Catalyst 5000 Series Supervisor Engine Module Software Releases 1.3 and 1.4, the counter value is not maintained for each port; instead, the value is maintained for the entire switch. (CSCdi39883)
- Serial download is supported for downloading Flash code to the supervisor engine module, but not to the switching modules. (CSCdi41103)
- Although the **show spantree** command displays the fast-start feature as enabled on a trunk port, the spanning-tree portfast mode has no effect on trunk ports, such as ISL, ATM, or FDDI. Do not use the **set portfast** command on a trunk port. In addition, designating a port as a trunk port ignores the portfast feature for the port. When you hot-swap an FDDI or ATM module, use the **set portfast disable** command to disable the fast-start feature for any ports that are using it. (CSCdi55205)
- Use the **reset** command at the boot prompt to load the Flash image. Do not use the command **execflash** to load the Flash image from the Boot PROM. (CSCdi57385)
- Sometimes the command **show module** indicates that the status LED of an Ethernet module is green even if some module ports fail the PMD loopback test during powerup. The status LED of an Ethernet module is orange or red only when all of the module ports fail the PMD loopback test. Use the **show test** command to view PMD loopback test results for a module. To correct this error, reset the module using the **reset mod_num** command; if the failure persists, replace the module. (CSCdi57908)
- If you attempt to enter an incorrect FLASH image for the supervisor engine module, the error message might not be immediately obvious. For example, if you accidentally tried to download ATM software to the supervisor engine module, the following message would appear:

```
Console> (enable) download 199.133.219.189 atm_21.cbi
Download image atm_21.cbi from 199.133.219.189 to Module 1 FLASH (y/n) [n]? y
-
Finished network download. (1950240 bytes)
ERROR: ocs hdr: csum=0x41e4ecb7 ocsp->csum=0x4c

Download failed
```

(CSCdi58607)

- If the MAC address of a module has not been correctly configured, the module will fail to come online. The following output is displayed if this type of error occurs:

```
Catalyst 5000 Power Up Diagnostics

Init NVRAM Log
LED Test
ROM CHKSUM
DUAL PORT RAM r/w
RAM r/w
RAM address test
```

```
Byte/Word Enable test
EARL test
EARL test Done

BOOTROM Version 1.5, Dated Mar  8 1996 16:24:38
BOOT date: 07/30/96 BOOT time: 17:44:58
SIMM RAM address test
SIMM Ram r/w 55aa
SIMM Ram r/w aa55
Uncompressing image.  This will take a minute...
Module 1 SPROM has invalid MAC address...module will remain offline

Minor hardware problem in Module # 1

Cisco Systems Console

Enter password:
c5-qa-5>
Mon Jul 30 1996, 17:46:07  Module 1 is online.
Syndiags failed on Module Number 4
c5-qa-5>
Mon Jul 30 1996, 17:46:18  Module 4 failed to come online.
Syndiags failed on Module Number 3
c5-qa-5>
Mon Jul 30 1996, 17:46:30  Module 3 failed to come online.
:wq
```

(CSCdi59106)

- If a Catalyst 5000 is configured as a nonroot bridge with multiple blocked spanning tree instances on trunk ports, SNMP speed performance may be impaired. To recover from this problem, adjust the spanning tree parameters to reduce the number of blocked spanning tree instances on trunk ports. (CSCdi65020)
- An ATM module running Catalyst 5000 Series ATM Module Software Release 1.1 fails to come online on a Catalyst 5000 running Catalyst 5000 Series Supervisor Engine Module Software Releases 2.1 or 2.1(2). To recover from this error, reset the ATM module using the command **reset mod_num**. It is recommended that you install the ATM software release 2.2.
- When you disable a trunk on a fast Ethernet port using the command **set trunk mod_num/port_num off**, wait for a confirmation statement from the Catalyst 5000 before reenabling the trunk. This prevents the trunk from going into an undesired state. If this error occurs, use the **set port** command to disable and then reenabling the port.
- You cannot disable an ATM module using the **set module disable** command. However, you can disable other module types.

Cisco Connection Online

Cisco Connection Online (CCO), formerly Cisco Information Online (CIO), is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional content and services.

Available 24 hours a day, 7 days a week, CCO provides a wealth of standard and value-added services to Cisco's customers and business partners. CCO services include product information, software updates, release notes, technical tips, the Bug Navigator, configuration notes, brochures, descriptions of service offerings, and download access to public and authorized files.

CCO serves a wide variety of users through two interfaces that are updated and enhanced simultaneously—a character-based version and a multimedia version that resides on the World Wide Web (WWW). The character-based CCO supports Zmodem, Kermit, Xmodem, FTP, and Internet e-mail, and is excellent for quick access to information over lower bandwidths. The WWW version of CCO provides richly formatted documents with photographs, figures, graphics, and video, as well as hyperlinks to related information.

You can access CCO in the following ways:

- WWW: <http://www.cisco.com>.
- WWW: <http://www-europe.cisco.com>.
- WWW: <http://www-china.cisco.com>.
- Telnet: cco.cisco.com.
- Modem: From North America, 408 526-8070; from Europe, 33 1 64 46 40 82. Use the following terminal settings: VT100 emulation; databits: 8; parity: none; stop bits: 1; and baud rates up to 14.4 kbps.

For a copy of CCO's Frequently Asked Questions (FAQ), contact cco-help@cisco.com. For additional information, contact cco-team@cisco.com.

Note If you are a network administrator and need personal technical assistance with a Cisco product that is under warranty or covered by a maintenance contract, contact Cisco's Technical Assistance Center (TAC) at 800 553-2447, 408 526-7209, or tac@cisco.com. To obtain general information about Cisco Systems, Cisco products, or upgrades, contact 800 553-6387, 408 526-7208, or cs-rep@cisco.com.

This document is to be used in conjunction with the *Catalyst 5000 Series Installation Guide* and *Catalyst 5000 Series Configuration and Command Reference* publication.

AtmDirector, AutoConnect, AutoRoute, AXIS, BPX, Catalyst, CD-PAC, CiscoAdvantage, CiscoFusion, Cisco IOS, the Cisco IOS logo, *CiscoLink*, CiscoPro, the CiscoPro logo, CiscoRemote, the CiscoRemote logo, CiscoSecure, Cisco Systems, CiscoView, CiscoVision, CiscoWorks, ClickStart, ControlStream, EdgeConnect, EtherChannel, FairShare, FastCell, FastForward, FastManager, FastMate, FastPADImp, FastPADmicro, FastPADmp, FragmentFree, FrameClass, Fulcrum INS, IGX, Impact, Internet Junction, JumpStart, LAN²LAN Enterprise, LAN²LAN Remote Office, LightSwitch, NetBeyond, NetFlow, Newport Systems Solutions, *Packet*, PIX, Point and Click Internetworking, RouteStream, Secure/IP, SMARTnet, StrataSphere, StrataSphere BILLder, StrataSphere Connection Manager, StrataSphere Modeler, StrataSphere Optimizer, Stratm, StrataView Plus, StreamView, SwitchProbe, SwitchVision, SwitchWare, SynchroniCD, *The Cell*, The FastPacket Company, TokenSwitch, TrafficDirector, Virtual EtherSwitch, VirtualStream, VlanDirector, Web Clusters, WNIC, Workgroup Director, Workgroup Stack, and XCI are trademarks; Access by Cisco, Bringing the Power of Internetworking to Everyone, Enter the Net with MultiNet, and The Network Works. No Excuses. are service marks; and Cisco, the Cisco Systems logo, CollisionFree, Combinet, EtherSwitch, FastHub, FastLink, FastNIC, FastPacket, FastPAD, FastSwitch, ForeSight, Grand, Grand Junction, Grand Junction Networks, the Grand Junction Networks logo, HSSI, IGRP, IPX, Kalpana, the Kalpana logo, LightStream, MultiNet, MultiWare, OptiClass, Personal Ethernet, Phase/IP, RPS, StrataCom, TGV, the TGV logo, and UniverCD are registered trademarks of Cisco Systems, Inc. All other trademarks, service marks, registered trademarks, or registered service marks mentioned in this document are the property of their respective owners.

Copyright © 1996, Cisco Systems, Inc.
All rights reserved. Printed in USA.
969R

