



Catalyst 3900 Series Token Ring Switch Release 3.0(2) Release Note

June 5, 1998

This document describes what is new in this release, including a list of the fixed problems. It also lists the known (open) problems for this release and contains information about the Catalyst 3900 and Catalyst 3920 Token Ring switches that was not included in the User Guides. This document is available on the Cisco Connection Documentation CD-ROM or in print.

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Problems Fixed in This Release

This section lists problems that have been resolved in this release of the Catalyst 3900 series main image and the ATM firmware image.

Problems Fixed in the Catalyst 3900 Series Main Image Release 3.0(2)

The following is a list of problems found in the Catalyst 3900 series main image software that have been resolved in this release.

Problem Identifier	Problem Description
CSCdj34650	A TFTP code download fails when the user tries to clear a message from a telnet or console screen.
CSCdj43071	Creating an entry in the unsupported RMON group alarm halts the SNMP agent in the box.

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Problems Fixed in This Release

Problem Identifier	Problem Description
CSCdj43075	The values for the access protocol, individual address count, and phantom drive support are not correct when read from an SNMP agent.
CSCdj73894	The Catalyst 3900 series RMON feature does not reply to Threshold Manager RMON requests properly.
CSCdj79684	When transitioning from VTP transparent mode to client mode, no ring number should be required for the default TrCRF (1003).
CSCdj84503	If you enable or disable a TrCRF on the ISL module using the console panels, the state may not be reflected properly in SNMP.
CSCdj85377	The user should not be allowed to set the active SPAN monitoring port to be a port that is in the same TrBRF and TrCRF as any other port.
CSCdj86879	When ports are operating in cut-through mode, it is possible under certain circumstances for ports to stop forwarding traffic.
CSCdj91702	If you change the STP mode of a port that is running spanning tree from auto to forwarding (on the Port Spanning Tree Parameters panel), intermittent packet loss is observed.
CSCdj91876	Configuration of passive monitoring leads to NVRAM problems.
CSCdj92002	In a stack of switches, if you reassign a TrCRF that contains ports on more than one switch to another parent, the ports on the remote switch are not updated correctly.
CSCdj92538	If you configure more than six preferred TrBRFs on a Catalyst 3900 that contains an ISL uplink (in either the switch or the stack) and the Spanning-Tree Protocol is to be run on the TrBRFs, the spanning tree may not resolve for subsequently configured preferred TrBRFs.
CSCdj92839	In a switch (or stack of switches) that contains two ATM modules configured for redundancy, if you disconnect the ATM port that is in forwarding mode and then reconnect the port, spanning tree will not reconverge properly to once again send traffic over the port.
CSCdj94852	The Catalyst 3900 ATM module does not appear on the ATM Director topology map. The fix for this problem also requires the ATM image 1.2(2).
CSCdj95037	Under certain circumstances the Catalyst 3900 ATM module may reset when you delete an ELAN.
CSCdk01053	The console should not allow the user to assign more than one port in a stack to a backup TrCRF.
CSCdk01077	The console is not allowing changes, such as a change in the ring number, to TrCRFs that are configured as a backup TrCRF.
CSCdk03521	If you change the local mode (on the VTP Administrative Configuration panel) from Client to Transparent or Server, problems occur if the number of defined VLANs is greater than the number that can be stored in NVRAM (currently 129).

Problem Identifier	Problem Description
CSCdk05035	You cannot change parameters for default TrCRF (1003) via an SNMP manager, such as CiscoView.
CSCdk06190	In an ISL network containing Catalyst 3900s and Catalyst 5000s, single route and all route broadcasts are looping in the ISL cloud.
CSCdk06612	When a TrBRF's state is changed to preferred, the update slows down the processor and the console response time.

Problems Fixed in the ATM Firmware Release 1.2(3)

The following is a list of problems found in the Catalyst 3900 ATM firmware that have been resolved in the 1.2.(3) release.

Problem Identifier	Problem Description
CSCdj94987	The ATM module attempts to send an invalid out-of-band message to the Catalyst 3900 main processor. An ATM uplink "Unable to Process InBox" message is generated and after the ATM module reboots, connectivity to the switch via the ATM network is lost.
CSCdk10938	Undetected data corruption can occur on some Catalyst 3900 ATM modules when sending frames. This data corruption can occur at any point in the frame. Frames may become larger or smaller. Addresses, data, or CRC fields may also become corrupted. This data corruption can eventually lead to a "Watchdog Timer" error on the ATM module. This situation can occur with all versions of the Catalyst 3900 Series Token Ring Switch and ATM module software.

Known Problems

This section lists the currently known problems.

Selecting End does not Scroll to the End of the Message Log

Problem Identifier: CSCdj49835

Problem Description: In some situations, selecting **End** on the Message Log Information panel does not scroll the message log display entirely to the end of the messages.

Recommended Action: If selecting End does not scroll to the bottom of the message log, select **More**.

Switch Forwards STE Frames onto Rings Already in RIF

Problem Identifier: CSCdj53766

Problem Description: The current version of the switching ASIC in the Catalyst 3900 does not reduce STE frames. The ASIC could forward a frame back onto a ring that it has already traversed.

Recommended Action: To avoid this problem:

- Step 1** Enable the IBM Spanning Tree.
- Step 2** Do not allow source-route loops in the network.
- Step 3** Do not allow a source-route loop between TrCRFs in a Catalyst 3900.

Using IEEE Spanning Tree on Default TrBRF Can Cause a Loop

Problem Identifier: CSCdj87014

Problem Description: If you have multiple boxes in a redundant ISL configuration with the Cisco Spanning Tree running on the default TrCRF (1003), enabling the IEEE Spanning Tree on the default TrBRF (1005) will cause all ISL ports to go to forwarding state.

Recommended Action: Do not enable the Spanning-Tree Protocol for the default TrBRF (1005).

Conflict Between RMON and TFTP

Problem Identifier: CSCdj89368

Problem Description: Software updates cannot be downloaded via TFTP if RMON is enabled.

Recommended Action: Perform the following steps:

- Step 1** Disable RMON.
- Step 2** Reboot the system.
- Step 3** Download the software updates.
- Step 4** After the download is complete, re-enable RMON before rebooting with the new image so that RMON will be active immediately with the new image.
- Step 5** Reboot the system.

Problems Running in a Redundant Configuration

Problem Identifier: CSCdj89370

Problem Description: Only the default TrCRF (1003) can span an ISL cloud. No other TrCRFs can be distributed across an ISL connection. Therefore, if the switch is running in a redundant configuration and you delete the TrCRFs in a preferred TrBRF, a loop may be created if only one TrCRF remains configured for that TrBRF.

Recommended Action: If running in a redundant configuration, make a preferred TrBRF non-preferred before attempting to delete all TrCRFs for that TrBRF.

Possible Loops with VTP

Problem Identifier: CSCdj89372

Problem Description: The default Ethernet VLAN (1) is used to carry VTP traffic across an ISL cloud. Because the Spanning Tree Protocol is not run on the default Ethernet VLAN, if an ISL cloud is configured redundantly and all switches are in VTP Client or Transparent modes a loop will form.

Recommended Action: Configure at least one of the switches in a redundant ISL configuration as the VTP Server.

Amendments to the Documentation

This section contains information that was not included in the User Guides. The headings in this section correspond with the applicable section titles in the documentation.

RMON Support

The description of the Token Ring Ring Station Group is incorrect. This section should read as follows:

The Catalyst 3900 series Token Ring switches support the ringStationControlTable portion of the Token Ring Ring Station Group. This support allows a Catalyst 3900 series switch to gather segment information from each ring segment to which it is attached. This segment information includes Ring State, Beacon Sender, Beacon NAUN, and Active Monitor MAC Address, as well as Station Order Changes.

Bridging Modes

The Catalyst 3900/3920 Token Ring switches support source-route bridging (SRB), source-route transparent bridging (SRT), and source-route switching. You can choose to enable either SRB or SRT for the logical connections between the TrCRF and the TrBRF. Source-route switching is used for frame forwarding within the TrCRF and is always enabled.

Interconnecting Catalyst 3900 Switches

If you plan to interconnect your Catalyst 3900 with a Catalyst 5000, your Catalyst 5000 should have Supervisor Card revision 2, or later, with NMP version 3.0(201), or later.

Also, because VTP pruning is currently not supported by the Catalyst 3900, if you extend a TrBRF from a Catalyst 3900 to a Catalyst 5000 that is using VTP pruning, you must set the TrBRF to ineligible on the Catalyst 5000.

Configuring Basic Switch and Stack Parameters

CiscoView shows the burned-in MAC address and the configured locally administered address (LAA) in non-canonical format. The Switch Configuration panel allows you to choose whether the MAC addresses displayed on the console panels are in canonical or non-canonical format. The default is non-canonical.

Displaying Module Information

The Hw Rev column on the Module Information panel has been updated to reflect the revision numbers of the module and the associated ASICs. For the base switch and the Token Ring fiber and copper expansion modules, the hardware revision is now displayed in the format *x.y.z*, where:

- *x* indicates the revision level of the module.
- *y* indicates the revision level of the switching ASIC.
- *z* indicates the revision level of the MAC Processor ASIC.

Configuring Port Parameters

When configuring a port to operate in adaptive cut-through, you can specify a threshold for errored frames. If this threshold is exceeded, the port will transition from cut-through to store-and-forward mode. Errored frames include frames with CRC errors, aborted frames, and frames that are considered too short.

Configuring the ISL Port

The Port Configuration panel for an ISL port has been updated to reflect the operation mode of the port. This field, labeled Operation Mode, is display only and the only possible value currently is FDX trunking.

Monitoring Port Traffic

As the required hardware has not become available in the marketplace to support passive monitoring of network traffic, the Catalyst 3900 no longer allows the configuration of passive SPAN.

As mentioned in the User Guide, you must place your SPAN port in a separate TrCRF and TrBRF that contains no other ports. If you plan to use SPAN, we recommend that you create a TrCRF and TrBRF upon initial configuration specifically for this purpose. It is also a good idea to leave a port on the switch assigned to this TrCRF for the purposes of future SPAN use.

Updating the Catalyst 3900 Software

Currently, if you are using RMON, you must disable RMON on a Catalyst 3900 series switch before you can download new software using TFTP. See CSCdj89368 in “Known Problems” on page 3.

Availability of Catalyst 3900 Software Upgrades on CCO

When changes are made to the Catalyst 3900 software, the new image is posted to CCO. You can then obtain a copy of the image and download it to your switch.

Obtaining Service and Support

For service and support for a product purchased from a reseller, contact the reseller. Resellers offer a wide variety of Cisco service and support programs, which are described in the section “Service and Support” in the information packet that shipped with your product.

Note If you purchased your product from a reseller, you can access Cisco Connection Online (CCO) as a guest. CCO is Cisco Systems’ primary, real-time support channel. Your reseller offers programs that include direct access to CCO’s services.

For service and support for a product purchased directly from Cisco, use CCO.

Cisco Connection Online

Cisco Connection Online (CCO) is Cisco Systems' primary, real-time support channel. Maintenance customers and partners can self-register on CCO to obtain additional information 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, product documentation, 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 it 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 connection rates up to 28.8 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.

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM, a member of the Cisco Connection Family, is updated monthly. Therefore, it might be more current than printed documentation. To order additional copies of the Documentation CD-ROM, contact your local sales representative or call customer service. The CD-ROM package is available as a single package or as an annual subscription. You can also access Cisco documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

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This document is to be used in conjunction with the *Catalyst 3900 Token Ring Switch User Guide* and the *Catalyst 3920 Token Ring Switch User Guide* publications.

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