

Switch 4200

SWITCH 4200 FAMILY SOFTWARE VERSION 3.05 RELEASE NOTES

http://www.3com.com/

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Chapter 1 Introduction

1.1. Scope

The version 3.05 agent is a compatible super set of functionality provided by all previous versions of this agent. This agent provides support for the following:

Product	Hardware Version (up to and including)
Switch 4226T (3C17300)	03
Switch 4250T (3C17302)	03
Switch 4228T (3C17304)	04
Switch 4200 26-Port (3C17300A)	04
Switch 4200 50-Port (3C17302A)	04
Switch 4200 28-Port (3C17304A)	04

The latest hardware versions of the Switch 4200 26-Port, Switch 4200 50-Port and Switch 4200 28-Port will only work with Software Update Utility version 3.20 or later. This can be downloaded from the 3Com Web site.

1.2. Online Resources

Use these notes in conjunction with the following documents:

"Switch 4200 Family Getting Started Guide" Part number: DUA1730-0AAA04 covering the Switch 4200 26-Port (3C17300A), Switch 4200 50-Port (3C17302A) and Switch 4200 28-Port (3C17304A)

"Switch 4200 Family Getting Started Guide" Part number: DUA1730-0AAA03 covering the Switch 4226T (3C17300), Switch 4250T (3C17302) and Switch 4228G (3C17304)

"Switch 4200 Family Implementation Guide" Part number: DUA1730-0BAA03

"Switch 4200 Family Management Quick Reference Guide" Part number: DQA1730-0AAA03

"Switch 4200 Family Management Interface Reference Guide" Part number: DHA1730-0AAA03

You can obtain the latest technical information for your switch, including a list of known problems and solutions, from the 3Com Knowledgebase: http://knowledgebase.3com.com

Chapter 2 Issues Fixed In Switch 4200 v3.05

The following issue has been fixed in Switch 4200 v3.05:

• A problem where users would lose access to the switch through telnet or the web GUI has been resolved.

Chapter 3 Points to note when using the Switch 4200

3.1. Apple networks and Rapid Spanning Tree

With default settings, there is a 4 second delay between a front panel port activating its link status and passing network traffic. When running AppleTalk, which can transmit initialization packets during this start-up time, you may not see some network devices. The delay between a port activating its link status and passing network can be reduced for edge devices by setting the stpFastStart value for a port to "Enable".

3.2. Head-of-Line Blocking

This section applies to the Switch 4226T, Switch 4250T and Switch 4228G only.

If the Head of Line blocking settings have been changed from the default QoS setting, under very heavy network loading, where servers transmit large numbers of consecutive frames to multiple clients (i.e. using large window sizes), it is possible that other data streams may be disrupted due to local frame buffer capacity becoming exhausted. This could affect other network applications and in extreme conditions could cause stacked units to reconfigure from stacked to individual units in an unpredictable way.

3.3. Configuring Link Aggregations

When creating a manual aggregation between two systems, the ports in the aggregation must not be physically connected together until the aggregation has been correctly configured at both ends of the link. Failure to configure the aggregation at both ends before physically connecting the ports can result in a number of serious network issues such as lost packets and network loops.

When configuring a manual aggregation, all member ports can only be selected from the same unit. Automatic aggregations (using LACP) can include ports from different units in a stack. However, only member ports from a single unit in the stack will be selected for activation. Upon failure, or disabling LACP on the active links, ports members from a different unit will be automatically activated (if all members on the current unit are no longer active) thus ensuring resilient connectivity.

CAUTION: The LACP protocol is disabled by default in the version 3.00 software. Some legacy devices do not support LACP and 3Com strongly recommends LACP remains disabled on ports connected to these devices (in rare cases, if LACP is enabled on ports connected to these devices, it can result in incorrect network configurations).

3.4. Using VLANs

This section applies to the Switch 4226T, Switch 4250T and Switch 4228G only.

The Switch 4200 implements Open VLANS. This means that if an IEEE 802.1Q tagged packet (that is, the packet that contains a VLAN ID) is received at a port and that port is NOT a member of that VLAN, the Switch does not perform any VLAN filtering. As a result a tagged packet will be forwarded if the address has been previously learned by the Switch. However, if the address is unknown, the packet will only be flooded to ports within the VLAN (s) on which the receive port is a member.

3.5. TFTP Upgrades

The Software Upgrade feature will not automatically re-establish a connection to the 3Com TFTP server if the connection is lost temporarily for more than 15 seconds. In these circumstances, the TFTP connection will timeout approximately 3.5 minutes before the upgrade can be restarted manually.

Chapter 4 Known Problems with the Management Software

- If a port is unable to transmit packets due to an incorrect duplex mismatch setting or flow control is keeping the port continually in a pause state, management packets from the Switch can back up in the egress buffers and causes the Switch to stop passing packets on any port. Correcting the duplex mismatch and turning off flow control will fix this problem.
- When setting up a SLIP IP address and an IP address for the unit you must ensure that the assigned IP addresses are different.
- If you use Netscape to manage your Switch you may experience problems when trying to change the user password.
- 3Com recommends that if you use Netscape and you need to change the password you
 do so via the CLI command. To do this from the Web interface Device View, use the
 System > Telnet > Connect operation to start a Telnet connection and then use the
 security device user modify CLI command.

- If the error *The previous command window is still active* is displayed when using the Web interface, you must close that window before you can select another operation. You should then press Reload (Netscape) or Refresh (Internet Explorer) in your Web browser.
- The Switch 4200 Web interface can only be accessed by one of the following Web browsers:
 - Microsoft Internet Explorer v5.5 and v6.0
 - Netscape Communicator v7.1
 - Mozilla v1.0
- The Switch 4200 Web interface can be accessed on any of the following PC operating systems:
 - o Microsoft Windows 2000
 - Microsoft Windows XP
 - Microsoft Windows Server 2003
 - o Red Hat Linux 9
 - o Solaris 7
 - o Solaris 9
- The spanning tree mode is not synchronized between units following a stack merge. This should not cause any problems for the network since rapid spanning tree is fully backward compatible with legacy spanning tree. Where units within the stack are operating in different spanning tree modes, the User interface is not capable of reflecting this. They will choose one setting or the other when asked to show the current spanning tree mode. When a new spanning tree mode is configured in the stack (via the user interface of any unit), this will be set on all units within the stack regardless of whether the spanning tree mode previously differed from unit to unit.
- When adding or removing units from an existing stack it is advisable to ensure that traffic loads are at a minimum. This is particularly important when multiple LACP aggregations are present. The reason for this is that during the network reconfiguration that will accompany the addition or removal of a unit, it is possible that momentary network loops will occur. When a lot of traffic is present these loops could take several minutes to resolve and in the worst case may result in the need to reset the stack to complete the resolution.
- If the Switch receives an IS-IS packet that is tagged with a VLAN ID of 0, the packet is discarded. All other VLAN IDs are switched correctly.
- If you select the Bridge > Link Aggregation > Modify > LACP State web interface operation for a Switch that does not have any ports available or suitable for link aggregation, a blank screen displays without an accompanying error message. You can close this screen in the normal way.
- Some operating system or web browsers allow you to disable pop-ups. Please note that pop-ups must be enabled for some web operations to work.

Chapter 5 Known Incompatibility Issues

An incompatibility exists in the default settings for Link Aggregation between the Switch 4200 and the following 3Com products when using fiber interfaces:

- Switch 4007
- Switch 3900
- Switch 9300
- CoreBuilder 9000 family
- CoreBuilder 9400
- CoreBuilder 3500

The products listed above disable auto-negotiation when a port is added to an aggregated link (trunk).

In order for link aggregation (trunking) to work, ports at either end of an aggregated link (trunk) must be identically configured. To resolve the incompatibility, you must complete the following steps:

- 1. On any of the Switches listed, you must disable TCMP on a trunk (aggregated link) that connects to a Switch 4200 Series, as TCMP is not supported on the Switch 4200 Series.
- 2. You must disable auto-negotiation on the GBIC fiber ports on the Switch 4200 Series prior to placing them in an aggregated link.

Refer to the Management Interface Reference Guide on the CD-ROM that accompanies the Switch 4200 Series for more information about configuring aggregated links.

<u>Note</u>: On the Switch 4200, aggregated links are only supported on the 10/100/1000 Mbps, GBIC and SFP ports.

Chapter 6 Upgrading Software

6.1. Upgrading to Software Version 3.05

Agent version 3.05 is delivered in two images:

- The s423_05.bin image is for 3Com hardware models 3C17300, 3C17302 and 3C17304.
- The **t423_05.bin** image is for 3Com hardware models 3C17300A, 3C17302A and 3C17304A.

Version 3.00 is the minimum version for operation on the "A" models. Both versions of the software support the same features.

When you operate both older models and newer A-models in a common stack, 3Com requires that you upgrade all Switch 4200 units in the stack that are running a previous software agent to

Version 3.00. 3Com grants registered owners of A-model units the right and license to upgrade all Switch 4200 units operating in the same stack to Version 3.05.

3Com strongly recommends that you upgrade all Switch 4200 units that are running a previous software agent to Version 3.05. Contact your 3Com representative for details on Software Upgrade offers for all Switch 4200 units in your network.

Version 3.05 is available to eligible customers at www.3Com.com. The download for Version 3.05 contains both image variations. The install process ensures that the proper image is loaded for each specific Switch 4200 unit.

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