SuperStack® 3 Switch 4200 Series Software Version 2.03 Release Notes

Please use these notes in conjunction with the following documents:

- "*SuperStack 3 Switch 4200 Getting Started Guide*" Part number: DUA1730-0AAA02
- "*SuperStack 3 Switch 4200 Management Quick Reference Guide"* Part number: DQA1730-0AAA02
- "*SuperStack 3 Switch 4200 Implementation Guide*" Part number: DUA1730-0BAA02
- "*SuperStack 3 Switch 4200 Management Interface Reference Guide*" Part number: DHA1730-0AAA02

The CD-ROM supplied with your Switch contains the Management Interface Reference Guide in HTML format, and the Implementation Guide in PDF format.

The latest release notes can be downloaded from:

http://www.3com.com/

You can obtain the latest technical information for the Switch 4200, including a list of known problems and solutions, from the 3Com Knowledgebase:

http://knowledgebase.3com.com

Software License Agreements

Before you use the SuperStack 3 Switch 4200 Series software, please ensure that you read the license agreement text. You can find the license.txt file on the CD-ROM that accompanies your product, or in the selfextracting exe that you have downloaded from the 3Com website.

About this Software Version

Management software version 2.03 is a compatible superset of that provided by all previous versions of this agent. The following SuperStack 3 4200 Switches are supported by this release:

- Switch 4226T (3C17300)
  24 10BASE-T/100BASE-TX ports,
  2 10/100/1000BASE-T ports
- Switch 4250T (3C17302)
  48 10BASE-T/100BASE-TX ports,
  2 10/100/1000BASE-T ports
- Switch 4228G (3C17304)
  24 10BASE-T/100BASE-TX ports,
  2 10/100/1000BASE-T ports and 2 GBIC ports

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Version 2.03 agent does not provide any new features. It is a maintenance release to provide fixes for known faults.

Upgrading to Software Version 2.03

3Com strongly recommends that you upgrade all 4200 units which are running a previous software agent to version 2.03 software agent.

Faults Fixed in this Release

- Priority tagged multicast packets could cause discards or flow control to occur on the port on which they were received. This has been fixed.
- 802.1d BPDU packets within the range 01-80-c2-00-00-10 to 01-80-c2-00-00-FF were transmitted out of a port blocked by spanning tree. This has been fixed so that these packets are not transmitted out of a port blocked by spanning tree.
- There is a short delay between a port activating its link status and passing network traffic. Users of Apple networks, which may transmit initialization packets during this time, may not have been able to see some network devices. The delay between a port activating its link status and passing network traffic has been reduced and the fault fixed.
- When a root bridge transmitted a BPDU frame containing a value for the 'age time' field which was greater than the previous BPDU frame that the root bridge had transmitted, it was seen that the Switch would transmit a topology change BPDU. This has been fixed so that the Switch will not sent a topology change BPDU in response to a BPDU with an updated 'age time' value from the root bridge.
- Active multicast streams configured by IGMP would be deleted from the Switch address database periodically if the stream packets were received by the Switch before the IGMP packets.
- When a multicast group has ports on more than one VLAN, if all ports on one VLAN are removed, when a port is re-added to the multicast group on that VLAN, there will be a delay before the port receives traffic for that group. This has been fixed so that there is no longer a delay.
- The 4200 would reboot when it received BPDU frames on a the port that had no port based VLAN associated with it.
- The CLI command, **`physicalInterface ethernet detail`**, 'utilization' screen heading for the utilization was `Total Rx + Tx`. This was incorrect as the total utilzation for a full duplex link is not calculated by adding received utilization to transmit utilization. This has been changed to display `Total`.
- The CLI command, **`physicalInterface ethernet detail`**, would exit when the 'utilization' screen was selected for an empty GBIC port. This has now been fixed.
- Configuring the IP subnet mask for the unit from the web interface system getting started , or protocol IP setup wizard would not accept a subnet mask of 0.0.0.0.

- The Switch in a stack would, in certain circumstances, reset after a period of 49 days of continuous operation.
- Stacks of units, which have not been completely initialized as a stack, may record incorrect information in the RMON Etherstats and event tables. This can result in incorrect port statistics being reported via any of the management interfaces (CLI, Web or SNMP), which will also affect Network Management applications such as 3NS.

Points to note when using the Switch 4200 Series

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 2.0x software. Some legacy devices do not support LACP and 3Com strongly recommend 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).*

Using VLANs

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.

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.

Known Problems with the Management Software

- 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 v4.0, v5.0, v5.5 and v6.0
  - Netscape Communicator v4.5, v4.6, v4.7, v4.76 and v6.2
- The Switch 4200 Web interface can be accessed on any of the following PC operating systems:
  - Microsoft Windows 95
  - Microsoft Windows 98
  - Microsoft Windows NT v4.0
  - Microsoft Windows 2000
  - Microsoft Windows XP
  - Solaris 2.6



Netscape Communicator v6.2 is not supported on Microsoft Windows 95.



Solaris 2.6 platforms can only be used with Netscape Communicator v4.76.

- The spanning tree mode is not synchronised 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 are 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.

- The default set-up for Netscape 4.76 on Solaris 2.6 may cause problems when using *System->Telnet->Connect*. By changing the application that Netscape launches from 'xterm' to 'dtterm' the problem is overcome. This is accomplished as follows:

1 From the *Edit* menu in Communicator, select 'Preferences'. Click the arrow next to *Navigator* to expand its sub-menu and select *Applications*. In the Applications list in the right-hand pane, click on the row that has *telnet* in the Description column and click the *Edit* button. In the *Edit* window, the text in the *Application*: box should be changed from:

```
xterm -e telnet %h %p
to
dtterm -e telnet %h %p
```

2 Click *OK* to close the *Edit* window and click *OK* to close the *Preferences* window. *Sysem->Telnet->Connect* should now connect correctly with the device.

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.



On the Switch 4200, aggregated links are only supported on the 10/100/1000 Mbps and GBIC ports.

Software Upgrades

To upgrade the software on the Switch do the following:

1 Locate the upgrade software for the Switch and run the (`filename.exe`) executable file.

2 If necessary, download the TFTP server applications into the management station.

3 Install the TFTP server (file name `3ts01_04.exe`) on a Microsoft Windows 95, 98, NT or 2000 machine.

4 Launch the TFTP server application.

5 Point the Upload/Download default directory on the TFTP server to the directory where the upgrade file is located.

6 Make sure the Switch being upgraded has an IP address assigned to it.

7 Telnet to the Switch.

   a To Telnet to the Switch, click *Start* in Microsoft Windows 95, 98, NT or 2000 machine.

   b Click *Run*.

   c In the text area, type **`telnet IP address`**

   d Click *OK*.

8 Press *Enter* to receive a login prompt.

9 Log into the Switch management.

   a The default user login is *admin*.

   b There is no default password for admin (press *Enter*).

10 From the main menu, select *System*, then select *Control*.

11 Select *SoftwareUpgrade*.

12 Enter the IP address of the TFTP server connected to the Switch.

13 Enter the upgrade file name.

   a The message will appear, `'Software Upgrade in progress.....'`.

   b The entire time the upgrade is in process, the Power/Self test LED will flash ON/OFF Green, and a series of dots will indicate that the upgrade is progressing successfully.

   c When the software upgrade is complete, the Switch will reboot itself.

3Com Network Supervisor

The CD-ROM contains 3Com Network Supervisor. 3Com Network Supervisor provides powerful yet easy-to-use network management. Focused on the needs of small to medium enterprises, it enables you to manage your network more efficiently.

To support your Switch 4200, you must download the latest version of 3Com Network Supervisor and the latest Service Pack. To do this, click on the live update in 3Com Network Supervisor which will take you to the latest Service Pack. You can also download the latest Service Pack by visiting:
`http://www.3com.com/3ns/`

For HP OpenView users the Superstack 3 Switch 4200 Series (and all other 3Com managed products) are fully supported by the 3Com Integration Kit for HP OpenView (3C15300).

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