



SUPERSTACK® 3 SWITCH 4900 SERIES SOFTWARE VERSION 2.04 RELEASE NOTES

Please use these notes in conjunction with the following documents:

- *"SuperStack 3 Switch 4900 Getting Started Guide"*
Part number: DUA1770-xAAA0x
(supplied with your SuperStack 3 Switch)
- *"SuperStack 3 Switch Implementation Guide"*
Part number: DUA1770-0BAA03
(supplied in PDF format on the 3Com Web site)
- *"SuperStack 3 Switch 4900 Series Management Quick Reference Guide"*
Part number: DQA1770-0AAA03
(supplied in PDF format on the 3Com Web site)
- *"SuperStack 3 Switch Management Interface Reference Guide"*
Part number: DHA1770-0AAA03
(supplied in PDF format on the 3Com Web site)

Software License Agreements

Before you use the software on the SuperStack 3 Switch 4900 Series, please ensure that you read the license agreement text (`license.txt`).

Points to Note when using the Switch 4900 Series Software

Switch 4900 version 2.04 software agent operates on the Switch 4900, 4924, 4950, and 4900 SX.

Supported Expansion Modules

- 3C17710 — 4 port 1000BASE-SX module
- 3C17711 — 4 port 1000BASE-T module
- 3C17712 — 4 port 1000BASE-LX module
- 3C17714 — 4 port GBIC module

Replacing Expansion Modules

When an expansion module is replaced by another module of a different type, the configuration will not be completely reset to factory defaults. Specifically, the following module parameters will not be reset:

- Static addresses
- Resilient links
- IGMP router ports
- RMON alarm variables
- Spanning Tree port data

It is recommended that all module configuration should be reviewed after the expansion module has been replaced.

Auto-MDIX

Auto-MDIX is not available if auto-negotiation is disabled on a port. That port will only operate in MDIX mode.

Serial Cable

When using a serial cable you must ensure that it is wired correctly as described in Appendix B of the Getting Started Guide.

TFTP Upgrades

Note that when initiating a TFTP upgrade using the web interface or CLI, if an incorrect TFTP server IP address is entered you will not be able to correct the IP address until the TFTP upgrade operation has timed out. The default time out period is 20 minutes.

Serial Update Utility

The Serial Update Utility operates on a PC running the DOS operating system or in a DOS box running under Windows 95/98. The utility may not operate correctly in a DOS box running under Windows 2000 or in other operating systems environments.

Known Problems with the Management Software

- With IGMP snooping enabled, for VLANs other than the default VLAN, IP multicasts will only be forwarded within a VLAN if a multicast router acting as a source for IGMP queries is present in that VLAN.
- Do not disable IGMP snooping on the unit when there are hosts in the segments subscribing to multicast IP groups. Hosts may be unable to re-subscribe to the same multicast IP group, for more than 5 minutes, or until the unit is re-booted.
- When setting up a SLIP IP address and an IP address for the unit, you must ensure that the assigned IP addresses are different.
- Pause packets are counted incorrectly. Received pause packets are included in the transmit packet counters. Transmitted pause packets are included in the receive packet and octet counters.
- If a port is being blocked by Spanning Tree Protocol (STP), and STP is disabled, then the port remains blocked until the Switch is reset.
- 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.

- Internet Explorer 5 - If 'Ignore font styles specified on Web Pages' or 'Ignore font sizes specified on Web Pages' are selected, then the appearance of the web interface will be unpredictable. 3Com recommends that neither of these tools are selected (options are found under Internet Explorer 5 menu *Tools > Internet Options > Accessibility > Formatting*).
- If you should upgrade/downgrade to a different version of the software, and leave your web interface running you will not have an accurate depiction of the current web interface after you reboot. For best results, close the web browser before you upgrade/downgrade the software and then open a new session.
- Units which have automatic configuration enabled for the management interface, may take several minutes to acquire a configuration from a DHCP server because of its longer initialization sequence. To expedite this process, use the Command Line Interface over the SLIP port and enter the commands `protocol / ip / basicConfig / None`, followed by `protocol / ip / basicConfig / auto`.
- The MIB variable, `IpReamTimeout` value is 60 seconds and not 5 seconds as reported. This variable reflects the time during which received packet fragments are held while awaiting reassembly.
- BOOTP address does not renew after 1 hour. The IP address is dropped and replaced with 0.0.0.0. The IP address is lost for only a few minutes every hour but is re-established.
- If you allocate a new IP address to the default VLAN on a hub that is currently running, you

should remove the IP interfaces and/or disable RIP until the DHCP/BOOTP/AutoIP process completes.

- There is a defect which affects design implementation of the SuperStack 3 4900 in a layer 3 IP routing environment when Layer 2 redundancy and Spanning Tree are used. The 4900 will advertise RIP routes over a SpanningTree Blocked port but will not forward packets thru that blocked port. This causes networks to become unreachable. Please refer to 3Com's Knowledge Database, 3KB doc number 2.0.86624686.3428104 for some design guidelines. Access 3KB with the following URL: <http://knowledgebase.3com.com/> Select *Switches* and enter the 3KB doc number above in the *Open Solution by ID* field.

Known Incompatibility Issues

- An incompatibility exists in the default settings for Link Aggregation between the Switch and the following 3Com products:
 - 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, as TCMP is not supported on the Switch.
- 2 You must disable auto-negotiation on all ports on the Switch that you want to place in an aggregated link *before* you place them in the aggregated link.
 - Refer to the *Management Interface Reference Guide* on the 3Com Web site for more information about configuring aggregated links.
 - An incompatibility exists when changing link speed from 10 Mbps Half Duplex to 100 Mbps half duplex. If auto-negotiation on the Switch is disabled and the link speed on the Switch is changed from 10 Mbps half duplex to 100 Mbps half duplex, there is a possibility that the link partner will not detect the change. The link will have to be broken and reconnected before the link partner will detect the speed and change link speed to 100 Mbps half duplex.

QoS and Flow Control

The addition of Quality of Service (QoS) to the 4900 v2.04 agent, presents an issue to users who use flow control to regulate their network traffic.

The QoS feature is enabled when the 4900 agent is upgraded to v2.04. In the default configuration, the agent provides a mapping of traffic into 4 queues. In

the event of an oversubscribed port, QoS will drop low priority traffic (including pause frames) instead of injecting flow control pause frames into the link to request a backoff from another switch. To resolve this you have three options for regulating network traffic:

- Regulate traffic with QoS only (turn off flow control)
- Regulate traffic with flow control only (turn off QoS)
- Regulate traffic with a combination of QoS and flow control

To regulate traffic with QoS only, flow control can be disabled through the CLI using the **physicalInterface ethernet flowcontrol all off** command.

To regulate traffic with Flow Control only, QoS can be disabled through the CLI using the **trafficManagement qos profile assign all all 1** command. This automatically sets the number of traffic queues to one, which essentially disables QoS.

To regulate traffic with a combination of QoS and flow control, you should reconfigure the 4900 to use two or three traffic queues. This can be done through the CLI using the **trafficManagement qos trafficQueue modify** command.

Setting the number of queues to 2 allows classification queueing by normal latency (queue 1) and low latency (queue 2).

3 queues allows further classification queueing for low latency traffic and distinguishes between normal

loss (queue 2) and low loss (queue 3). In both cases, flow control frames will be injected as needed to request backoff from traffic sources.



If you have configured the number of traffic queues to a value greater than 1 in a previous 4900 agent, this setting is retained when upgrading to the v2.04 agent. If, however, the number of traffic queues is 1, the v2.04 agent will automatically reconfigure the 4900 to use 4 traffic queues when it initially boots up.

Enhancements and Fixes for Known Faults

The following have been resolved with version 2.04:

- Occasionally, version 2.02 software exhibited corrupted internal routing tables in networks configured with redundant paths to a router. The routing tables became corrupted when switchovers occurred (primary to secondary or secondary back to primary).
- In some network configurations, prolonged rapid route changes would cause a 4900 to reset.

Documentation Errors and Omissions

For Switch 4950 users:

Please note that the GBIC Device Mimic States are not documented in the Management Interface Reference Guide that accompanies the software agent version 2.04. For further information on the GBIC Device Mimic States, please refer to 'Using the Web Interface' in the Introduction section of the Switch 4950 Management Interface Reference Guide.

3Com Network Supervisor

3Com Network Supervisor Version 3.0.

To get the latest device support, use the Live Update function provided with Network Supervisor to get information about and install any new service pack or upgrade quickly and simply.

You can also download the latest service pack or upgrade from the 3Com web site at

<http://www.3com.com/tns/>.

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