

# SuperStack<sup>®</sup> Switch 610/630/1100/3300 Family Software Version 2.72 Release Notes

## Table of Contents

[Related Documentation](#)

[Software License Agreement](#)

[About This Software Version](#)

[Information about other 3Com products affected](#)

[Upgrading to Software Version 2.72](#)

[Fixes for Known Faults](#)

[Points to Note when using the Switch 610/630/1100/3300](#)

[Adding Units to the Stack](#)

[Replacing Expansion Modules](#)

[Data throughput and Switch reliability](#)

[RMON Can Overestimate the Number of Oversized Packets](#)

[Roving Analysis Duplicates Flooded Packets](#)

[IEEE 802.1Q VLAN Learning \(GVRP\)](#)

[Power Cycle Required After BOOTP is Enabled](#)

[Auto-negotiation of IEEE 802.3x Flow Control on 10BASE-](#)

[T/100BASE-TX Ports \(Switch 610 and 1100 only\)](#)

[Web health graphs and RMON History Utilisation](#)

[Auto-negotiation and the Port Setup Page](#)

[TFTP Updates](#)

[Configuring Trunks \(Link Aggregations\)](#)

[CD-ROM](#)

[Serial Cable](#)

[Telnet and HyperTerminal](#)

[Software Update Utility](#)

[Known Problems](#)

[Known Interoperability Issues](#)

[Inter-operability With CoreBuilder 3500](#)

[Software Updates](#)

[How do I update the Software on my SuperStack Switch?](#)

[3Com Network Supervisor](#)

[Documentation Errors and Omissions](#)

**Related Documentation**

Please use these notes in conjunction with the following documents:

- "SuperStack 3 Switch 3300 User Guide" Part number: DUA1698-0AAA06
- "SuperStack 3 Switch 3300 XM, SM, TM, MM User Guide" Part number: DUA1698-5AAA04
- "SuperStack II Switch 610 User Guide " Part number: DUA1695-4AAA02
- "SuperStack II Switch 630 User Guide " Part number: DUA1698-4AAA02
- "SuperStack II Switch 1100 User Guide " Part number: DUA1695-0AAA04
- "SuperStack II Switch 3300 FX User Guide " Part number: DUA1698-2AAA03
- "SuperStack Switch Management Guide" Part number: DUA1695-0BAA05. This can be found on the CD-ROM supplied with your Switch.

You can obtain the latest technical information for the Switch 610/630/1100/3300 family including a list of known problems and solutions, from the 3Com Knowledgebase:

<http://knowledgebase.3com.com>

## **Software License Agreement**

Before you use the SuperStack II/3 Switch 610/630/1100/3300 Family 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 self-extracting exe file available to download from the 3Com website.

## **About This Software Version**


The version 2.72 agent feature set is a compatible superset of that provided by all previous versions of this agent. This agent provides support for the following SuperStack II/3 Switch 610/630/1100/3300 Family Switches:

- Switch 610            3C16954

- Switch 630            3C16984
- Switch 1100-12        3C16951
- Switch 1100-24        3C16950
- Switch 3300-12        3C16981 and 3C16981A
- Switch 3300-24        3C16980 and 3C16980A
- Switch 3300 FX        3C16982
- Switch 3300 MM        3C16988 and 3C16988A
- Switch 3300 SM        3C16987 and 3C16987A
- Switch 3300 TM        3C16986 and 3C16986A
- Switch 3300 XM        3C16985, 3C16985A and 3C16985B

## **Information about other 3Com products affected**

This agent can also be downloaded on to IBM Nways Switches 8271-E12/24 and 8271-F12/24 and will operate as before with an IBM Network Management application. An Nways Switch can be made to operate as a 3Com Switch when accessed by the Network Management application by using a simple conversion command. Conversely, a 3Com Switch can be set to operate as an Nways Switch should the customer require this for it to operate with an IBM Network Management facility. Thus Switches can be customised to suit the customers' preferred Network Management tool.

 *The user must rename the download file from s2s02\_72.bin to nws02\_72.bin when downloading the agent to an Nways Switch for the first time.*

For details on how to perform this customisation please contact 3Com support.

## **Upgrading to Software Version 2.72**

3Com strongly recommends that you update all Switch units that are running a previous software agent to version 2.72 software agent.

## **Fixes for Known Faults**

The following known faults have been fixed in version 2.72:

- The Switch would reset or become non-responsive to its management IP address when the tcp port 80 (used for WEB management) was attacked. The Switch now closes and aborts rogue requests.

## **Points to Note when using the Switch 610/630/1100/3300**

Supported Expansion Modules:

- 3C12060 - AUI Transceiver Interface Module (F)
- 3C12061 - SMA Transceiver Interface Module
- 3C12063 - TP Transceiver Interface Module
- 3C12064 - AUI Transceiver Interface Module (M)
- 3C12065 - 10BASE-FL Transceiver Interface Module
- 3C12066 - Coaxial Transceiver Module
- 3C12067 - 10BASE-FB Transceiver Interface Module
- 3C16960 - Matrix Module
- 3C16965 - Matrix Cable
- 3C16968 - Layer 3 Module
- 3C16971 - 100BASE-FX Fibre Module

- 3C16971 - 100BASE-FX Dual Fibre Module
- 3C16973 - 1000BASE-LX Module
- 3C16975 - 1000BASE-SX Module
- 3C16977 - ATM Downlink Module
- 3C16978 - 1000BASE-T Module

## **Adding Units to the Stack**

3Com recommends that you initialize a Switch that has previously been used elsewhere in your network before you add it to an existing stack. If you do not initialize the unit, problems may be caused by conflicting Switch configurations.

It is also strongly recommended that all units in a stack should be running the same version of agent software. If you add any Switch running version 2.72 agent, you will need to install version 2.72 agent to the existing Switches for the stack to run properly.

3Com recommends that a reset is performed following a TFTP update on a stack of units, to ensure that VLAN information is consistent across the stack.

If an existing stack has its Spanning Tree Algorithm and Protocol (STAP) enabled and is powered-up with a new unit that has its STAP disabled (default), the setting of the new unit may override the whole stack. A similar issue may also be encountered with the Broadcast Storm Control setting. When powering up an existing stack with new units in this way, the recommended procedure is to either (i) configure the new unit appropriately before adding it to the stack, or (ii) re-configure the new stack appropriately immediately after power-up.

## **Replacing Expansion Modules**

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

- Static addresses

- Resilient links
- IGMP router ports
- Spanning Tree port data
- Half-duplex flow control

3Com recommends that all module configuration parameters should be reviewed after an Expansion Module has been replaced.

### **Data throughput and Switch reliability**

If you believe your SuperStack Switch/stack from the 1100 or 3300 families, is suffering from poor data throughput and Switch reliability, 3Com particularly recommends upgrading the software to version 2.72. Changes to the memory allocation within the Switch made in version 2.69 may significantly improve data throughput and Switch reliability.

It is often possible to update a unit using the Software Update Utility when a TFTP update has proved impossible.

### **Out of Specification 1000BASE-SX/LX Signal Levels Affect Switch Operation**

If you use:

- A 1000BASE-SX Module or 1000BASE-LX Module in any of the Switches or
- A Switch 3300 SM

Ensure that the optical connection to the port conforms to IEEE 802.3z. If the levels are outside the IEEE 802.3z standard, the Switch may not operate correctly.

### **Link Up Traps may not be generated on a 1000BASE-SX/LX Connection**

If you use:

- A 1000BASE-SX Module or 1000BASE-LX Module in any of the Switches or

- A Switch 3300 SM

and you configure Link Up traps for the Module port, some of the traps may not be generated. To ensure that Link Up traps always reach your management workstation, configure the traps on both ends of the link.

### **RMON Can Overestimate the Number of Oversized Packets**

Packets that have an IEEE 802.1Q tag can have a legal length of up to 1522 bytes. RMON categorizes packets over 1518 bytes as oversize packets, so some 802.1Q-tagged packets may be recorded as oversize.

### **Roving Analysis Duplicates Flooded Packets**

Roving analysis generates up to two copies of each flooded packet. To avoid this duplication, remove the analysis port from all the VLANs to which the monitor port belongs. If you do this, the analysis port generates all VLAN-tagged packets as untagged packets.

### **IEEE 802.1Q VLAN Learning (GVRP)**

IEEE 802.1Q VLAN Learning (GVRP) only functions correctly in networks that have 16 or less 802.1Q VLANs.

### **Power Cycle Required After BOOTP is Enabled**

After BOOTP is enabled the Switch needs to be power cycled before BOOTP will start operating.

### **Auto-negotiation of IEEE 802.3x Flow Control on 10BASE-T/100BASE-TX Ports (Switch 610 and 1100 only)**

The 10BASE-T/100BASE-TX ports on your Switch 610 or Switch 630 cannot auto-negotiate IEEE 802.3x flow control.

If you want to enable IEEE 802.3x flow control on a 10BASE-T/100BASE-TX port:

1. From the Port Setup page of the web interface, set the Auto-negotiation list box to Disabled.



2. Click Apply.
3. Set the FD Flow Control list box to Enabled.
4. Configure the port to the desired speed and full duplex operation.
5. Click Apply.

## **Web health graphs and RMON History Utilisation**

The RMON History Utilisation Mib variable, is based on half duplex links. Thus full duplex links can scale up to 200% (100% TX and 100% RX)

This also affects the Web health graphs that show utilization. Thus full duplex links can go over 100% and will scale up to 200% (100% TX and 100% RX).

## **Spurious messages**

If a SuperStack Switch is equipped with a Layer 3 Expansion Module and the Switch has a default IP address of 0.0.0.0, spurious messages may be sent out on any SLIP connection that may be established with the Switch. If this occurs, use the Command Line Interface through the serial port to reconfigure the IP address for the units.

## **Auto-negotiation and the Port Setup Page**

The Port Setup page of the web interface contains an Auto-negotiation list box that allows you to enable and disable auto-negotiation for twisted pair ports.

If you set the Auto-negotiation list box to Enabled and click Apply, the true speed and duplex settings may not be shown immediately on the Port Setup page. 3Com recommends that you click the relevant port icon on the Switch Graphic to refresh the page and show the true settings.

## **TFTP Updates**

Note that when initiating a TFTP update using the Web interface or CLI, if an incorrect TFTP server IP address or software update filename is entered you will not be able to correct the IP address or filename until the TFTP update operation has timed out. The default time out period is 5 minutes.

You can avoid the 5 minute time out period by aborting the update, either using the Abort button in the Web interface or the Esc character in the Command Line Interface.

## **Configuring Trunks (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.

## **CD-ROM**

When using the setup.exe that displays the splash screen on the CD-ROM you may experience a problem if you have an early version of virus checker installed on your PC. If you experience this problem the following error is displayed when the setup.exe is activated:

```
Application Error
Exception EResNotFound in
Module 0DSCD.EXE at 0016:0B37
Resource TMainForm not found.
```

You can either:

- Turn off your virus checking software whilst using the CD-ROM

or

- Update your virus checking software to the latest version.

## **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.

## **Telnet and HyperTerminal**

Accessing the Command Line Interface via Telnet or Windows HyperTerminal using

TCP/IP may not work correctly on some platforms unless it has been configured to send line feeds with carriage returns. To set this for Telnet enter `set crlf` when in command mode. To set this for HyperTerminal click on the *Settings* tab in the *Properties* screen, click *ASCII Setup*. And ensure that *Send line ends with line feeds* is checked within the *ASCII Sending* section.

You should not configure HyperTerminal in the above way if you are using a console cable to make a direct connection to the Switch.

## Software Update Utility

The Software Update Utility (SUU) is a Windows application used to serially update the software to the Switch via the console port. The preferred method for updating the software on the Switch is via a TFTP update. The SUU should only be used if a TFTP update has failed. This utility is available on the CD-ROM that accompanies your Switch and is downloadable from the 3Com website <http://www.3com.com/>

## Known Problems

- To ensure maximum security after connecting units in a stack, and the units have reconfigured themselves, 3Com recommends that you reconfigure the user names and passwords defined in the local database using the `Security > User` web operation or the `system/management/password` CLI command.
- The Switch does not display an error message if inappropriate, but otherwise legal, IP addresses are used for certain configurations. For example, the IP address of the Switch can be supplied as the TFTP server address for software update. No error is displayed to warn of the mistake. The solution is to supply a more appropriate IP address.
- If the ATM or Layer 3 Expansion Module is configured with the same IP address as the Switch stack, the whole stack may become unmanageable. If this occurs then the CLI may be used through a serial connection to change the IP address of the Switch or Expansion Module.
- Immediately after creating a new VLAN, the VLAN-based counters will only count for ports local to the unit where the VLAN was created. A reset of the stack is required, in order for ports in the other units to contribute to the VLAN counters.

- IP multicasts will only be forwarded within a VLAN if an IGMP router is present in that VLAN.
- When setting up a SLIP IP address and an IP address for the unit you must ensure that the assigned IP addresses are different.

## **Known Interoperability Issues**

An incompatibility exists in the default settings for Trunks/Link Aggregation between the Switch 610/630/1100/3300 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 trunks/link aggregation to work, ports at either end of a trunk/aggregated link 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 610/630/1100/3300 Family, as TCMP is not supported on the Switch 610/630/1100/3300 Family.
2. You must disable auto-negotiation on all ports on the Switch 610/630/1100/3300 Family that you want to place in a trunk before you place them in the trunk. This will result in 10/100 Mbps ports being set to half duplex mode. Gigabit and 100BASE-FX ports will be set to full duplex mode.

3. The Switch 610/630/1100/3300 does not support the aggregation of half duplex links. You must ensure that all 10/100 ports that you want to aggregate are configured to full duplex mode on both link partners.

 Refer to the Management Guide on the CD-ROM that accompanies the Switch 610/630/1100/3300 Family for more information about configuring trunks.

## **Inter-operability With CoreBuilder 3500**

If you have a CoreBuilder 3500 Layer 3 Switch on your network, 3Com recommends that the CoreBuilder 3500 has management software version 2.0x or later installed.

Although it is possible to set up a slip connection from a PC running Windows 2000 to the console port of the Switch using the "Communications Cable between 2 computers" modem type, the resulting setup only works intermittently.

## **Software Updates**


### **How do I update the Software on my SuperStack Switch?**


The management software can be updated by using a TFTP Server, or by using the Software Update Utility (SUU) supplied with your Switch or downloaded from <http://www.3com.com/>


To update the software on the Switch using TFTP, do the following:

1. Locate the update software for the Switch and run the (`filename.exe`) executable file.
2. If necessary, download the TFTP server applications into the management station.  
To do this:
  - a) Install the TFTP server (file name `3ts01_04.exe`) on a Microsoft Windows 95, 98, NT or 2000 machine.
  - b) Launch the TFTP server application.
  - c) Make sure the TFTP server is on.

3. Point the Upload/Download default directory on the TFTP server to the directory where the update file is located.
4. Make sure the Switch being updated has an IP address assigned to it.
5. Telnet to the Switch. To do this:
  - a) Click *Start* in Microsoft Windows 95, 98, NT or 2000 machine.
  - b) Click *Run*.
  - c) In the text area, type the Telnet IP address.
  - d) Click *OK*.
6. Press *Enter* to receive a login prompt.
7. Log into the Switch management as follows.
  - a) Key in **admin**, which is the default user login..
  - b) There is no default password for admin so press *Enter*.
8. From the main menu, select *System*.
9. Select *SoftwareUpgrade*.
10. Enter the IP address of the TFTP server connected to the Switch.
11. Enter the update file name.
  - a) Two messages will appear, 'Software Upgrade has begun'...and a Telnet message 'connection to host lost'.
  - b) The entire time the update is in process, the Power/Self test LED will flash ON/OFF Green, and a series of dots will indicate that the update is progressing successfully
  - c) When the software update is complete, the Switch will reboot itself.

 If your TFTP server reports information about each file transfer, it will show three requests for the update file each time a Switch in the stack updates. The first two will be terminated with the message "Aborted by client request" This is the normal operation of the update process and does not indicate an error.

 Software updates initiated from the CLI or WEB of 2.67 and subsequent agents now benefit from progress feed back. Before starting the update the Switch now verifies that the file specified can be obtained from the given IP address, and is a valid agent for the device. If this verification fails, error messages will be reported, otherwise it will indicate that the update is to begin before the Switch resets and the update proceeds.

 A power interrupt during software update may cause a corrupted agent image on the Switch. If this occurs then subsequent rebooting of the Switch will be unsuccessful. The front panel LEDs 2 and 3 will be lit and the power LED will flash. In this event the software agent should be updated via the serial/console port, using the Software Update Utility.

The Software Update Utility (SUU) is a Windows application used to serially update the software to the Switch via the console port. It is variously referred to in the documentation that accompanies your Switch as: Serial Update Utility, Serial Upgrade Utility, Software Update Utility, Agent Update Utility and Management Upgrade Utility. For more information, refer to the 3Com SUU Help supplied with the SUU application and the Management Guide supplied with your Switch.

## **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. For larger networks (up to 2,500 nodes) and extra functionality you can purchase the 3Com Network Supervisor Advanced Package.

To download the latest 3Com Network Supervisor and Service Pack please visit:

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

For HP OpenView users the SuperStack Switch 610/630/1100/3300 Family (and all other 3Com managed products) are fully supported by the 3Com Integration Kit for HP OpenView (3C15300).

## **Documentation Errors and Omissions**

### **MAC Addresses**

SuperStack Switch Management Guide (DUA1695-0BAA05) Management Software Version 2.60

Chapter 1; Table 3; Software Features (page 20):

Chapter 3; Working with the Web Interface (page 72):

"No. of MAC Addresses supported - Up to 6,000" also applies to the Switches:

Switch 3300 MM 3C16988 and 3C16988A

Switch 3300 SM 3C16987 and 3C16987A

Switch 3300 TM 3C16986 and 3C16986A

Switch 3300 XM 3C16985A and 3C16985B

### **Port Trunks**

SuperStack Switch Management Guide (DUA1695-0BAA05) Management Software Version 2.60

Chapter 5; Port Trunks (page 158):

"If you install a SuperStack II Switch 100BASE-SX Module (3C16975) into a Switch, only one port trunk is supported by that unit."

Should read:

"Only one port trunk is supported per Switch, if that unit is fitted with a Gigabit Module:



1000BASE-LX (3C16973)

1000BASE-SX (3C16975)

1000BASE-T (3C16978)

or an ATM Downlink Module (3C16977)

or has a Gigabit interface:

Switch 3300 SM (3C16987/3C16987A)

Switch 3300 TM (3C16986/3C16986A)”

## **Roving Analysis**

SuperStack Switch Management Guide (DUA1695-0BAA05) Management Software  
Version 2.60

Chapter 1; Roving Analysis (page28)

Chapter 3; What is Roving Analysis? (page 87);

Please note that reconfiguration of Roving Analysis is required in the event of any power interruption or stack change. Examples of such events are a power cycle; a software agent update; a CLI, web or SNMP reset; or a communication loss to a Switch in the stack.

## **Software Update Utility/Management Upgrade Utility**

SuperStack Switch Management Guide (DUA1695-0BAA05) Management Software  
Version 2.60

Appendix B; Management Upgrade Utility (page 231);

References to the Serial Update Utility and Management Software Utility in some of the documentation supplied with the SuperStack Switch Family CD-ROM, also refer to Software update Utility.

This utility is referred to as the Management Software Upgrade Utility in the Management Guide. The two terms refer to the same utility.

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