

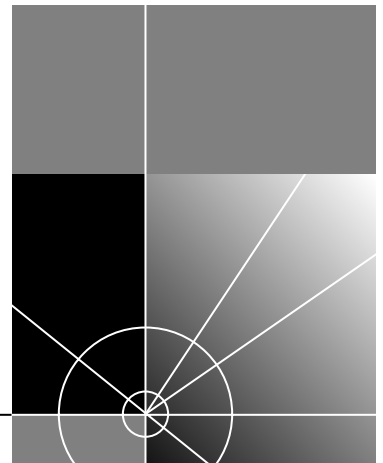


# CoreBuilder™ 3500 Software Installation and Release Notes

System Software  
Release 2.0.1  
December 7, 1998

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

Part Number 10012169  
Published December 1998



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# COREBUILDER 3500 SYSTEM SOFTWARE RELEASE 2.0.1

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## Overview

These release notes describe release 2.0.1 of the CoreBuilder™ 3500 system software from 3Com Corporation, dated December 7, 1998. This release supersedes release 2.0.0, dated November 12, 1998. To load the software, see "Loading Your System Software" on page 10 for instructions.



**CAUTION:** Before you install release 2.0.1 of the CoreBuilder™ 3500 system software, verify that Expansion Memory is installed on your system processor by viewing the **system display** menu. If the display shows the following information, Expansion Memory is installed:

AP Memory Size	32 Mb
FP Memory Size	20 Mb
Flash Memory Size	16Mb

If not, you must install Expansion Memory (3C35010) before you install release 2.0.1. Contact your reseller or 3Com sales representative.



**CAUTION:** Before you install release 2.0.1 of the CoreBuilder™ 3500 system software, be sure to modify the VLAN ID (VID) value to anything less than 4095. The VLAN ID can be modified using the **bridge vlan modify** command.



**CAUTION:** 3Com recommends that RSVP not be used in a production environment at this release.

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## Release Highlights for 2.0.1

The CoreBuilder 3500 system software release 2.0.1 supports the following new feature:

- Enhanced System Diagnostics

The CoreBuilder 3500 system diagnostics at startup have been enhanced at this release.

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## Release Highlights for 2.0.0

The CoreBuilder 3500 system software release 2.0.0 supports the following new features, which are described in the *Implementation Guide* on the Software and Documentation CD:

- FDDI Module
- IP Fragmentation
- IPX Snap Translation
- Port Trunking over FDDI and Gigabit Ethernet
- New Custom Filters
- IP Route Policies
- ARP Proxy
- IEEE 802.1Q Tagging Enhanced
- RIP Version 2
- FTP
- Increased Number of VLANs
- 1000BASE-SX GBIC Transceiver
- Single Reset Trunk Configuration
- Disabling of ICMP redirect
- Broadcast Address
- Web Management Enhanced Capabilities
- New Documentation

### FDDI Module

This release provides support for the FDDI module. The module contains six SC connectors, each providing a 100Mbps FDDI connection over multimode or single-mode fiber-optic cable. The ports support both SAS (single-attached station) and DAS (dual-attached station) modes to provide a maximum of six SAS connections or three DAS connections. To configure the FDDI module into your network see the *CoreBuilder 3500 Getting Started Guide*. For information on FDDI in your network, see the *Implementation Guide*.

- IP Fragmentation** When you enable IP fragmentation, FDDI packets which are larger than the maximum ethernet frame size, are fragmented into smaller packets. IP fragmentation allows FDDI and Ethernet stations that are connected to the system to communicate using IP even if the FDDI stations are transmitting packets that are too large to forward onto Ethernet. See the *Implementation Guide* for details.
- IPX Snap Translation** When IPX snap translation is *enabled*, any 802.3\_RAW IPX packets being forwarded from Ethernet to FDDI are translated to FDDI\_SNAP. Likewise, SNAP IPX packets that are being forwarded from FDDI to Ethernet are translated to 802.3\_RAW packets. When IPX snap translation is *disabled*, standard (IEEE 802.1H) bridging from 802.3\_RAW packets to FDDI\_RAW packets is implemented. See the *Implementation Guide* for details.
- Port Trunking over FDDI and Gigabit Ethernet** Port trunking is now supported over FDDI and Gigabit Ethernet, as well as Fast Ethernet. Trunking allows you to group multiple independent ports under a single logical unit, called a trunk. Trunking of multiple ports allows you to build higher-speed interconnections. See the *Implementation Guide* for details.
- New Custom Filters** You can now implement custom filters, as well as predefined filters, over Fast Ethernet, Gigabit Ethernet, and FDDI. See the *Implementation Guide* for details.
-  *Address group filtering is not supported at this release.*
- IP Route Policies** IP route policies now enable you to control the flow of routing information among the network, the protocols, and the unified routing table on your system. Routing policies are classified as either *Import* policies or *Export* policies. See the *Implementation Guide* for details.
- ARP Proxy** You can now enable or disable ARP proxy, which helps end stations on a subnetwork to reach remote subnetworks that have no routing capability or a default gateway configured. See the *Implementation Guide*.
- IEEE 802.1Q Tagging Enhanced** This release supports IEEE 802.1Q tagging. IEEE 802.1Q defines the bridging (ingress and egress) rules for VLANs. The IEEE 802.1Q proposed standard uses a tag format that embeds explicit VLAN membership information in a 12-bit VLAN ID (VID) providing 4094 possible VLANs. See the *Implementation Guide*.

<b>RIP Version 2</b>	This release supports RIP Version 2. You now have the option to use multiple IP routing protocols on each interface. With RIP version 1, RIP version 2, and OSPF support, routes can be imported or exported among all three protocols. Controls can now be applied by means of the addition of route policies. See the <i>Implementation Guide</i> .
<b>FTP</b>	You now have the option of configuring the system to use either FTP or TFTP to conduct software updates or to save and restore NV Data.
<b>Increased Number of VLANs</b>	This release supports a maximum of 64 VLANs. For more information on VLAN implementation, see the <i>Implementation Guide</i> .
<b>1000BASE-SX GBIC Transceiver</b>	This release provides support for the 1000BASE-SX GBIC transceiver. The 1000BASE-SX GBIC transceiver provides a high-speed connection over fiber to the GBIC ports on your system. The 1000BASE-SX GBIC transceiver supports a direct connection to 62.5 or 50 micron multimode fiber-optic cable. For more information see the <i>GBIC Transceiver Installation Guide</i> .
<b>Single Reset Trunk Configuration</b>	This feature allows users to create multiple trunks before rebooting the system. In previous releases, a system reboot was required following each trunk configuration.
<b>Disabling of ICMP redirect</b>	This release supports the disabling of ICMP redirect per interface.
<b>Broadcast Address</b>	This release supports broadcast address functionality. You can now set a broadcast address to be used on a per interface basis. The configured broadcast address is the address used when forwarding received directed broadcast and when advertising RIP packets. Previous releases of the CoreBuilder 3500 system used the subnetted directed broadcast address for RIP. When an IP interface is defined, the default broadcast address is 255.255.255.255. Under the RIP menus, you will now see this broadcast address as the advertisement address for the RIP interface.



## Web Management Enhanced Capabilities

Web Management software supports these new features at this release:

- **Trunking** — Web Management now supports port trunking over FDDI and Gigabit Ethernet in addition to Fast Ethernet. See “Port Trunking over FDDI and Gigabit Ethernet” on page 7 for a description of port trunking.
- **System snapshot** — This feature, now available as part of Web Management, captures an image of all system display screens. The image shows the current values of all fields and counters at the time that you use the snapshot feature.
- **ICMP redirect** — Support for ICMP redirect functionality is available in Web Management at this release. ICMP redirect optimizes routing by redirecting routing packets to use the best route to a destination.
- **ICMP router discovery** — At this release, Web Management supports the router discovery protocol (ICMP), which allows an appropriately configured end station to locate one or more routers on the LAN to which the end station is attached.
- **Directed broadcast** — Support for directed broadcast functionality is now in Web Management. Directed broadcast specifies whether the forwarding of a directed broadcast packet (all 1s in the host portion of the address) is `enabled` or `disabled`.
- **Added OSPF functionality** — At this release, Web Management supports the configuration of OSPF areas and router ID. Additional OSPF statistics are available through an OSPF General Statistics display.
- **Trusted IP address configuration** — Web Management now supports a security authentication, which allows you to configure trusted IP addresses and prevent unauthorized users from using the WebConsole. The maximum number of trusted IP addresses that may be configured is 5.
- **Performance monitoring** — The new Performance Tab in Web Management has a graphing section that permits real-time monitoring of certain QoS and Ethernet statistics.



*For information on the Web Management suite of applications, see the Web Management User Guide. For details on new features, see Help.*

## New Documentation

The system documentation now includes three new guides on the Software and Documentation CD:

- **Implementation Guide** — Information that you need to use the features of the CoreBuilder 3500 system after you install it and attach the system to your network. Use this guide to help you choose the settings and features that best meet your needs in your networking environment. The book is available in PDF format on the CD, in HTML format with the Help system in Web Management, and separately orderable in paper from 3Com.
- **Command Reference Guide** — Information about the commands used to configure and manage the system. This multiplatform guide documents commands for the CoreBuilder 3500 as well as other 3Com systems. The book is available in PDF format on the CD and separately orderable in paper from 3Com.
- **Web Management User Guide** — Information about installing, using, and optimizing the Web Management suite of software applications. The book is available in paper in the Software and Documentation Kit, in PDF format on the CD, and separately orderable in paper from 3Com.

## Before You Start

Before you use your new software, read all of these release notes. Carefully read these sections:

- “System Software Issues at Release 2.0.0” on page 15
- “System Software Known Problems at Release 2.0.0” on page 17

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## Loading Your System Software

The CoreBuilder 3500 system software is distributed on CD in an ISO 9660 standard format, which is readable by all CD-ROM drives, including drives used with IBM PC compatible systems, Macintosh computers, and Sun and HP UNIX workstations.



**CAUTION:** Before you install release 2.0.1 of the CoreBuilder™ 3500 system software, verify that Expansion Memory is installed on your system processor by viewing the **system display** menu. If the display shows the following information, Expansion Memory is installed:

AP Memory Size	32 Mb
FP Memory Size	20 Mb
Flash Memory Size	16Mb

*If not, you must install Expansion Memory (3C35010) before you install release 2.0.1. Contact your reseller or 3Com sales representative.*

You can install new software from any host that is running a Trivial File Transfer Protocol (TFTP) server.

*Installation overview* To install or upgrade your system software, you must:

- 1 Load the software image file from the CD-ROM to the TFTP host, as described next for the three supported platforms.
- 2 Download the system software from the TFTP host to the system's flash memory. See "Installing System Software via TFTP" on page 12 for details.

#### **Loading on Microsoft Windows**

To load the system software from the Microsoft Windows platform, follow these steps:


- 1 Insert the CD into the CD-ROM drive and open *File Manager* or *Explorer*.
- 2 Select the drive that represents your CD-ROM and verify that you are able to view the contents of the CD.
- 3 Configure your TFTP server on this system to allow TFTP file transfers from the CD, if possible. If this configuration is not possible, copy the system software image to a directory from which your TFTP server allows file transfers.
- 4 You are now ready to download the system software onto the system. See "Installing System Software via TFTP" on page 12 for instructions.

#### **Loading on Macintosh OS**

To load the system software from the Macintosh OS platform, follow these steps:

- 1 Insert the CD into the CD-ROM drive.
- 2 Double-click the icon that represents your CD-ROM drive and verify that you are able to view the contents of the CD.
- 3 Configure your TFTP server on this system to allow TFTP file transfers from the CD, if possible. If this configuration is not possible, copy the system software image to a directory from which your TFTP server allows file transfers.
- 4 You are now ready to download the system software onto the system. See "Installing System Software via TFTP" for instructions.

**Loading on UNIX** To load the system software from the UNIX platform, follow these steps:

- 1 Insert the CD into the CD-ROM drive.
  - 2 Mount the CD as required by your UNIX system.
-  *For information on mounting the CD, see the UNIX system documentation.*
- 3 To verify that you are able to view the contents of the CD, enter the appropriate "ls" command.
  - 4 Configure your TFTP server on this computer to allow TFTP file transfers from the CD, if possible. If this configuration is not possible, copy the system software image to a directory from which your TFTP server allows file transfers.
  - 5 You are now ready to download the system software onto your system. See "Installing System Software via TFTP" next for instructions.

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## Installing System Software via TFTP

To download the system software image via TFTP, follow the procedures in this section.



*You can load the system software into flash memory while the system is operating on the network. You do not need to bring the system down.*



*Before you begin this procedure, verify that the TFTP server software is running on the device from which you will be installing the software.*

Loading software into flash memory takes approximately 10 to 15 minutes to complete, depending on your network load.



*Before you load the new software, verify that you have defined an IP address on the system. See the CoreBuilder 3500 Quick Installation Guide or the CoreBuilder 3500 Getting Started Guide for information.*

To install the new software:

- 1 From the top level of the Administration Console, enter:

**system softwareUpdate**

You are prompted for the host IP address and Install file name. At any prompt, press Return or Enter to accept the default or current value, which is displayed in brackets [ ].

- 2 For `Host IP address`, enter the IP address of the host machine (such as a Macintosh computer, Sun workstation, or PC) from which you are installing the software.

In the example in step 3, the IP address of the host is **192.9.200.96**.

- 3 For `Install file name`, enter the complete path and filename of the system software image.



*Some TFTP servers do not accept the full path. If that is the case for your server, enter only the filename of the image. See your server's documentation for more information.*



**CAUTION:** *If the installation stops (that is, if you see no activity for more than 2 minutes), wait for the TFTP session to time out. **Do not reboot the system.** When the session has timed out, perform the installation procedure again.*

Here is an example of a successful system software installation:

```
Select menu option: sys softwareUpdate
Host IP address [192.9.200.96]:
Install file name {?}: cb3500/cb3500E
Copying sysBoot image from network to system - total size: 84
Kbytes
84 Kbytes copied
```

```
Copying diagnostic image from network to system - total size:
509 Kbytes
509 Kbytes copied
```

```
Copying operational image from network to system - total
size: 7345 Kbytes
7345 Kbytes copied
```

After the software has been loaded successfully, this message appears:

```
Installation completed
```



*If the software image stored in flash memory is corrupted (for example, when a power failure occurs while you are installing the software), contact 3Com Technical Support. See "Technical Support" at the end of these Release Notes.*

- 4 To reboot the system to use the newly loaded software, enter:

```
system reboot
```

The system prompts you with the following message:

```
Are you sure you want to reboot the system (n,y) [y]:
```

5 At the prompt, enter **y** for (yes).

You are now ready to configure management access for your system.

For a quick reminder of setup and management tasks, see the *CoreBuilder 3500 Quick Installation Guide*. For more detailed information about setting up your system and configuring management access, see the *CoreBuilder 3500 Getting Started Guide*.

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## User Documentation

This release of software is compatible with the documentation listed here. These release notes describe any changes and additions to this documentation:

- *CoreBuilder 3500 Quick Installation Guide*
- *CoreBuilder 3500 Getting Started Guide*
- *Command Reference Guide*
- *CoreBuilder 3500 Implementation Guide*
- *Web Management User Guide*
- *FDDI Module Installation Guide*
- *10/100BASE-TX Fast Ethernet Module Installation Guide*
- *100BASE-FX SMF Fast Ethernet Module Installation Guide*
- *100BASE-FX MMF Fast Ethernet Module Installation Guide*
- *1000BASE-SX Gigabit Ethernet Module Installation Guide*
- *1000BASE GBIC Module Installation Guide*
- *GBIC Transceiver Installation Guide*
- *System Processor Removal and Replacement Guide*
- *System Processor Memory Upgrade Installation Guide*
- *Power Supply Assembly Removal and Replacement Guide*
- *Fan Tray Removal and Replacement Guide*
- *PCMCIA Flash Card User Guide*
- *Blank Faceplate Installation Guide*

## System Software Corrections at Release 2.0.0

The following system issues and known problems have been corrected at this release:

- IP*
  - The **ip arp flush** command now removes all ARP entries, including static ARP entries.
  - The issue that stopped some IP multicast traffic after an STP Topology change has been corrected.
- QoS*
  - To define AppleTalk QoS controls and an IP VLAN for the same port, you previously had to define the AppleTalk VLAN *before* you defined the IP VLAN. If the IP VLAN was defined first, the AppleTalk QoS controls did not work. This known problem has been corrected.
- VLANs*
  - Previously to use STP or TCMP on the system with closed VLAN mode, every port had to belong to at least one untagged, unspecified VLAN (for example, the default VLAN). That is, you could have many unspecified, untagged VLANs, as long as each port is part of one of them. At this release, this limitation has been removed.
  - The `noRxbuffers` counter, which incremented after you modify an AppleTalk VLAN and update AARP, has been corrected.

### Web Management

- QoS*
  - In Web Management at previous releases, port numbering was incorrect when viewing QoS statistics for trunked ports.

- DeviceView*
  - DeviceView now includes support for the 1000BASE SX module.



*For more information about the Web Management software, see the Web Management User Guide.*

## System Software Issues at Release 2.0.0

The following system issues are identified at this release:

- General*
  - When you boot the system from the PCMCIA card and then remove the card, the system reboots.
  - The first time that you attempt to access the modem, the screen alignment is incorrect. On subsequent attempts, the screen alignment is correct.
- IP*
  - The Administration Console displays `poisonReverse` and `advertisementAddress` fields for management IP RIP display, although the management IP port cannot act as a router.

- The system does not report an error if you assign the same IP address to an IP interface that is associated with the *out-of-band* Ethernet port and to an IP routing interface that is associated with an *in-band* Ethernet port. However, if you do, attempts to modify or remove IP interfaces may hang the other interface on the same subnetwork or cause the system to reboot.
- If an IP interface is assigned to the out-of-band Ethernet port and you do not have a network link, the system can experience problems with DNS, traceRoute, ping, and software updates through your in-band IP interface. You must attach the out-of-band Ethernet port to your network.
- Bridging*
  - The list of selectable bridge ports on the Administration Console includes ports that have already been designated as an analyzer port. The display is corrected when you attempt to use the port.
  - Bridged IP multicast frames are not counted in the bridge statistics.
- Remote monitoring*
  - To receive RMON-2 updates, you must manually set the VLAN protocol type that you want to monitor on the selected port.
  - An external remote roving analysis port (RAP) is not supported.
  - An analyzer port does not detect internally generated ICMP frames that are transmitted out of the monitor port using the **IP ping**, **IP advanced ping**, **IP traceroute**, or **IP advanced traceroute** commands. Reply frames received at the monitor port can be captured at the analyzer port.
- System*
  - The **SYS** LED on the system processor no longer lights if the system processor fails at power up.
  - You cannot perform **nvData reset** while you are using telnet to access the system.
  - The addressThreshold trap does not respond at this release.
  - The serial port receives error messages from user interfaces at this release (including telnet session, Web Management, and SNMP).
  - To enable the timeout of remote sessions to the system, verify that `system consoleTimeout` is set to *enabled*. The factory default for `system consoleTimeout` is *disabled*.
- Packet filters*
  - Multiple port filter assignment requests using SNMP results in a PDU returning a bad value.
- QoS*
  - To add a new QoS nonflow classifier, you must delete one or more (unrequired) nonflow classifiers in the range of 400 through 498.



- Ethernet*
  - 802.3x flow control is not supported for 10/100BASE-TX Ethernet ports.
  - If the autonegotiation feature for a 100 Mbps Ethernet link does not function properly, disable autonegotiation and manually set the port speed and duplex mode (*half-duplex* or *full-duplex*). Also, on a 1000 Mbps link, autonegotiation must match on both sides of the link.
- SNMP*
  - There is no SNMP support for creating or deleting trunks.
  - To prevent time-outs of SNMP requests, 3Com recommends that you increase the default timeout for your network management station or browser.
- Trunking*
  - Each installed Gigabit Ethernet module consumes one of the four trunk resources in the system. However, when trunking two or more Gigabit Ethernet ports only one trunk resource is used.
- Web Management*
  - The PCMCIA card is not supported through the Web Management software. Use the Administration Console for PCMCIA support.
  - After you first set the Help Configuration URL, choose another menu item and then select the item that you want to configure in order for the Help link to work.



*For more information about the Web Management software, see the Web Management User Guide.*

## System Software Known Problems at Release 2.0.0



The following system software known problems are identified at this release:

**CAUTION:** *3Com recommends that RSVP not be used in a production environment at this release.*

- Ethernet*
  - The Ethernet detail display may erroneously report a flow control value for a 10/100 port.
  - If you insert a GBIC transceiver into a 1000BASE GBIC module while the Administration Console is in the `ethernet` menu, you are not able to change the autonegotiation mode of the newly inserted port until you leave the `ethernet` menu and then enter it again.
- System*
  - If you revert from this new release 2.0.1 to the previous release 1.2.0 release and you have one or more FDDI modules installed, be sure to remove the FDDI modules.:
  - You can not restore NVData from the system menu using FTP as the protocol. To restore NVData from the system menu use TFTP.

- The IPX, VLAN, TCMP, and QoS statistics, as well as the Ethernet detail statistics for peak bytes and frame rates, are not reset when you set a baseline with the command **system baseline set**.
  - A delay of approximately 30 seconds may occur when you exchange GBIC transceivers.
  - If an analyzer is configured on a module that is then replaced with a new module of a different media type (for instance, if a Fast Ethernet module is replaced with an FDDI module), the new module is incorrectly configured with an analyzer port.
- QoS*
- You can no longer define an IP multicast rate limit from the IP menu. You could previously use **ip multicast interface enable** and specify a rate limit. Now, use **bridge port multicastLimit** or QoS to set this type of rate limit.
  - If you are using the system as a one-armed router with IEEE 802.1Q tagging, QoS rate limits and flow filters do not work.
  - Repeatedly modifying a QoS control to change one or more classifiers subject to the control results in undesirable behavior. This problem is specific to nonflow classifiers (classifiers 400 through 498).
- SNMP*
- For SNMP management, the **ipDefaultTTL** object cannot be set, that is, no write is allowed.
  - You cannot configure more than one routing interface on a multiprotocol VLAN using SNMP. Instead, configure the routing interface through the Web Management software or the Administration Console.
- Trunking*
- When you hot swap modules of different media types, you must first remove trunks that have been configured on the affected module.
  - When you modify a trunk to add to a port, the **vlan modify** command does not move the port to the VLANs that contain the anchor. The result is that a single trunked port can exist in two different VLANs.
- GVRP*
- If GVRP is enabled on a port being used as a RAP Analyzer Port, GVRP will send frames out on this port. Normally, only frames transmitted out the port that is being mirrored should be sent out of the Analyzer Port. In this case, additional GVRP frames will appear on this port in addition to those frames from the mirrored port.
- Bridging*
- Bridging statistics may not be increased when routed frames are filtered using custom or port group filters.

- When you connect a CoreBuilder 3500 10/100 Ethernet port to a 10BASE-T Ethernet port, the system does not revise the default path cost to reflect the 10BASE-T Ethernet LAN segment. The 10BASE-T Ethernet port defaults to 100.
- Roving analysis* ■ When monitoring an FDDI port, frames larger than 1520 will not be sent out the analyzer port.
- When monitoring a GE port, some of the traffic processed by the system software will not be sent out the analyzer port.
- Web Management* ■ If you enter incorrect information in the Web Management interface, the system reports an error and you must reenter previous information.
- WebConsole incorrectly accepts a value outside of the valid range for the QoS statistical interval. The valid range is 0 to 4294967295.
- When you are running installable Web Management applications, the JAVA Console in Internet Explorer and Netscape Navigator incorrectly displays exceptions.
- Setting the system baseline does not reset the IP interface statistics in the WebConsole.
- WebConsole does not support the new Administration Console password menu item in IP RIP.
- IP routes cannot be displayed per subnet using the Web Console IP Route Display option.
- The WebConsole incorrectly returns a success response when you configure Ethernet autonegotiation on trunked Gigabit Ethernet ports. You cannot configure this parameter on trunked ports in Web Management.
- When you attempt to modify or remove Gigabit Ethernet trunks through the WebConsole, you may receive an erroneous message that additional trunk resources are required to complete the configuration. Use the Administration Console to complete the configuration.
- When you add or remove an analyzer port through the WebConsole, you may receive an erroneous message that the configuration was unsuccessful even though the configuration has completed successfully. You can confirm your configuration by checking the Roving Analysis Display in Web Management.

- You cannot remove a control rate limit using the WebConsole Remove Control form when only one rate limit has been configured for the control.



*For more information about the Web Management software, see the Web Management User Guide.*

*Documentation*

- The CoreBuilder 3500 Implementation Guide incorrectly displays information in Table 9 (page 83) and Table 13 (page 138). The correct tables are displayed here:

Type	Speed	Media	Connector	Recommended Distance (max)
10/100BASE-TX	10/100 Mbps	Category 5 UTP	RJ-45	100 m
100BASE-FX	100 Mbps	single-mode fiber	SC	20 km
		multimode fiber	SC	<ul style="list-style-type: none"> <li>■ 412 m (half-duplex)</li> <li>■ 2 km (full-duplex)</li> </ul>
1000BASE-SX	1000 Mbps	multimode fiber	SC	62.5 micron:
				<ul style="list-style-type: none"> <li>■ 200 m @ 160 MHz modal bandwidth</li> <li>■ 260 m @ 200 MHz modal bandwidth</li> </ul>
				50 micron:
1000BASE-LX GBIC	1000 Mbps	single-mode fiber	GBIC	<ul style="list-style-type: none"> <li>■ 525 m</li> </ul>
		multimode fiber	Duplex SC conditioned launch cable	9 micron:
				<ul style="list-style-type: none"> <li>■ 10 km</li> </ul>
1000BASE-SX GBIC	1000 Mbps	multimode fiber	GBIC	62.5 and 50 micron:
				<ul style="list-style-type: none"> <li>■ 550 m</li> </ul>
				62.5 micron:
				<ul style="list-style-type: none"> <li>■ 200 m @ 160 MHz modal bandwidth</li> <li>■ 260 m @ 200 MHz modal bandwidth</li> </ul>
				50 micron:
				<ul style="list-style-type: none"> <li>■ 525 m</li> </ul>

Comparison Point	Gigabit Ethernet	Trunked Fast Ethernet
Max burst rate	1000 Mbps	100 Mbps
Max aggregate rate	1000 Mbps (2000 Mbps full duplex)	800 Mbps (over 8 links) 1600 Mbps full duplex)
Standards compliance	IEEE 802.3z	In progress

- In the CoreBuilder 3500 Implementation Guide Chapter 9, VLANs, the following changes needs to be added or changed:

- Under the section “Network-based IP VLANs” add the following Important Consideration:

The network information is used only in situations where there are multiple network-based VLANs defined on a particular port. In situations where there is only one network-based VLAN defined on a port, the VLAN is treated as an ordinary IP protocol-based VLAN, and network-based information is ignored.

- Under the section “Ingress Rules for Network-based (Layer 3) VLANs” , ARP and RARP have different ingress rules. RARP frames are assigned to the *All IP Subnets* (Multicast) VLAN.
- Under the section “Examples of Flooding and Forwarding Decisions” , in example 3 the RARP response frame should be as follows:

RARP Response Frame (Protocol 0x8035), IP DA = 158.101.102.2, MAC DA is known on port 6

Frame will be assigned to the All IP Subnets VLAN and transmitted on port 6 untagged

- Under the section “Examples of Flooding and Forwarding Decisions” , in example 4 the information for one Network-based VLAN should be as follows:

**Frame received on Port 1**

IP Frame (Protocol 0x0800), IP destination address (DA) 158.101.103.1, MAC DA is known on port 6

**Action**

Frame will be assigned to the IP\_100 VLAN and transmitted on port 6 tagged.

RARP Response Frame (Protocol 0x8035), IP DA = 158.101.103.2, MAC DA is unknown

Frame will be assigned to the IP\_100 VLAN and transmitted on port 6 tagged.

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## SNMP MIB Files

SNMP MIB files are shipped with the system software as ASN.1 files. Copies of ASN.1 files are provided for each of the supported compilers described in “Compiler Support” next.

### Supported Versions

The SNMP MIB file names and the currently supported version of each MIB are listed here.

- **bridge.mib** — Bridge MIB, RFC 1493  
Unsupported groups and tables in this MIB:
  - **dot1dSr** group
  - **dot1dPortPair**
  - **dot1dStatic** group
- **ethernet.mib** — Ethernet MIB, RFC 1398
- **3cFddi.mib** — LANplex Optional FDDI MIB, version 1.2.1
- **fddiSmt7.mib** — FDDI SMT 7.3 MIB, RFC 1512  
Unsupported groups and tables in this MIB:
  - **dot3CollTable**
  - **dot3Test** group
  - **dot3Errors** group
  - **dot3ChipSets** group
- **if.mib** — IF MIB, RFC 1573  
Unsupported counters and tables in this MIB:
  - **ifTestTable**
  - **ifRcvAddressTable**
  - **ifHC** 64-bit counters
- **mib2.mib** — MIB-II MIB, RFC 1213  
Unsupported group in this MIB:
  - **egp** group
- **rmon.mib** — RMON MIB, and RFC 1757



*RMON statistics for Gigabit Ethernet are not supported at this release.*

Supported groups in this MIB:

- **statistics**
- **history**
- **alarm**
- **hosts**
- **hostTopN**
- **matrix**
- **event**



*A maximum of four different ports can be configured for the following RMON groups at any given time:*

- **hosts**
- **hostTopN**
- **matrix**
- nlHost
- nlmatrix
- addressMap
- **fddiRmon.mib — AXON RMON MIB**
  - axFddiStatistics
  - axFddiHistory
- **rfc2021.mib — RMONv2 MIB, RFC 2021**
  - protocolDir
  - protocolDist
  - addressMap
  - nlHost
  - nlMatrix
  - probeCapabilities object of probeConfig group
- **trunk.mib**
- **vlan.mib — 3Com VLAN MIB**
- **3cFilter.mib**
- **3cQos.mib**
- **3cProd**

- **3cSys.mib** — Replaces s2System.mib, swSystem.mib, and lp.mib

Unsupported groups in this MIB:

- **a3ComSysSlot**
- **a3ComSysControlPanel**
- **a3ComSysSnmp**
- **a3ComSysTokenRingPort**
- **3cWeb.mib**
- **3cPolicy.mib**
- **3cPoll.mib**

**Compiler Support** ASN.1 MIB files are provided for each of these MIB compilers:

- HP Openview (version 3.1)
- SunNet Manager (version 2.0)
- SMIC (version 1.0.9)
- MOSY (version 7.1)
  - For the MIB file 3cfddi.mib, the MOSY compiler reports warnings for counter names that do not end in "s." This report has no effect on the output produced by the MOSY compiler.
  - The MIB file fddiSmt7.mib produces the following warning messages when it is compiled using the SunNet Manager compiler:

```
Translating...
Warning: The following INDEX entries in
fddimibMACCountersTable are not resolved:
    fddimibMACSMTIndex
    fddimibMACIndex
Translation Complete.
Schema file in "fddiSmt7.mib.schema"
Oid file in "fddiSmt7.mib.oid"
```

These warning messages have no effect on the ability of SNM to use the schema file generated with SNM version 2.0 or later.



## Release History

Table 1 describes the release history of the CoreBuilder 3500 system software.

**Table 1** Release History for System Software

Release Number	Description of Release
2.0.1	Sixth release of the CoreBuilder 3500 system software. <ul style="list-style-type: none"><li>■ Upgraded system diagnostics</li></ul>
2.0.0	Fifth release of the CoreBuilder 3500 system software. <b>Release features:</b> <ul style="list-style-type: none"><li>■ FDDI Module</li><li>■ IP Fragmentation</li><li>■ IPX Snap Translation</li><li>■ Port Trunking over FDDI and Gigabit Ethernet</li><li>■ New Custom Filters</li><li>■ IP Route Policies</li><li>■ ARP Proxy</li><li>■ IEEE 802.1Q Tagging Enhanced</li><li>■ RIP Version 2</li><li>■ FTP</li><li>■ Increased Number of VLANs</li><li>■ 1000BASE-SX GBIC Transceiver</li><li>■ Single Reset Trunk Configuration</li><li>■ Disabling of ICMP redirect</li><li>■ Broadcast Address</li><li>■ Web Management Enhanced Capabilities</li><li>■ New Documentation</li></ul>

**Table 1** Release History for System Software (continued)

Release Number	Description of Release
1.2.0	<p>Fourth release of the CoreBuilder 3500 system software.</p> <ul style="list-style-type: none"><li>■ Support for the 1000BASE GBIC module (LX support)</li><li>■ Support for configuring multi-protocol 802.1Q VLANs</li><li>■ Additional IPX options:<ul style="list-style-type: none"><li>- ipx NetBIOS</li><li>- ipx secondary</li><li>- ipx route secondary</li><li>- ipx server secondary</li></ul></li><li>■ Software corrections</li></ul>
1.1.1	<p>Third release of the CoreBuilder 3500 system software.</p> <p><b>Base Plus Extended System Software Release changes:</b></p> <ul style="list-style-type: none"><li>■ Read/Write access and Administer password no longer available through the SNMP MIB variable</li></ul>

**Table 1** Release History for System Software (continued)

Release Number	Description of Release
1.1.0	<p>Second release of the CoreBuilder 3500 system software.</p> <p><b>Base System Software Release features:</b></p> <ul style="list-style-type: none"> <li>■ IP routing (OSPF support)</li> <li>■ IPv4 multicast DVMRP routing</li> <li>■ IGMP version 2 snooping</li> <li>■ RMON-1</li> <li>■ Gigabit Ethernet 1000BASE-SX module</li> <li>■ Port trunking</li> <li>■ Port group packet filtering</li> <li>■ IEEE 802.1Q tagging for bridging and routing</li> <li>■ Address table per VLAN (closed VLAN)</li> <li>■ Simplified port numbering</li> <li>■ Roving analysis</li> <li>■ Web-based management</li> </ul> <p><b>Base Plus Extended System Software Release features:</b></p> <p>Everything in Base System Software, plus:</p> <ul style="list-style-type: none"> <li>■ RMON-2</li> <li>■ IPX routing</li> <li>■ AppleTalk routing</li> <li>■ RSVP for 10/100 Ethernet</li> <li>■ Quality of Service: Static bandwidth reservation (RSVP) for 10/100 Ethernet</li> </ul>
1.0.0	<p>First release of the CoreBuilder 3500 system software.</p> <p><b>Release features:</b></p> <ul style="list-style-type: none"> <li>■ 10/100BASE-TX module</li> <li>■ 100BASE-FX module</li> <li>■ IP routing (RIP support)</li> <li>■ Multicast packet firewall to limit broadcast storms</li> <li>■ SNMP MIB management</li> <li>■ Spanning Tree Protocol</li> <li>■ Protocol-based VLANs</li> <li>■ traceRoute</li> <li>■ DNS client</li> </ul>

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## Technical Support

3Com provides easy access to technical support information through a variety of services, as described in this section.

Information in this section is correct at time of publication. For the very latest data, 3Com recommends that you access the 3Com Corporation World Wide Web site.

### Online Technical Services

3Com offers worldwide product support 24 hours a day, 7 days a week, through the following online systems:

- World Wide Web site
- 3Com FTP site
- 3Com Bulletin Board Service (3Com BBS)
- 3Com Facts<sup>SM</sup> automated fax service

### World Wide Web Site

Access the latest networking information on the 3Com Corporation World Wide Web site by entering the URL into your Internet browser:

**`http://support.3com.com/index.htm`**

This service provides access to online support information such as technical documentation and software library, as well as support options ranging from technical education to maintenance and professional services.

### 3Com FTP Site

Download drivers, patches, and software across the Internet from the 3Com public FTP site. This service is available 24 hours a day, 7 days a week.

To connect to the 3Com FTP site, enter the following information into your FTP client:

- Hostname: **`ftp.3com.com`** (or **`192.156.136.12`**)
- Username: **`anonymous`**
- Password: **`<your Internet e-mail address>`**



*A user name and password are not needed with Web browser software such as Netscape Navigator and Internet Explorer.*

### 3Com Bulletin Board Service

The 3Com BBS contains patches, software, and drivers for 3Com products. This service is available through analog modem or digital modem (ISDN) 24 hours a day, 7 days a week.

**Access by Analog Modem** To reach the service by modem, set your modem to 8 data bits, no parity, and 1 stop bit. Call the telephone number nearest you:

Country	Data Rate	Telephone Number
Australia	Up to 14,400 bps	61 2 9955 2073
Brazil	Up to 14,400 bps	55 11 5181 9666
France	Up to 14,400 bps	33 1 6986 6954
Germany	Up to 28,800 bps	4989 62732 188
Hong Kong	Up to 14,400 bps	852 2537 5601
Italy	Up to 14,400 bps	39 2 27300680
Japan	Up to 14,400 bps	81 3 3345 7266
Mexico	Up to 28,800 bps	52 5 520 7835
P.R. of China	Up to 14,400 bps	86 10 684 92351
Taiwan, R.O.C.	Up to 14,400 bps	886 2 377 5840
U.K.	Up to 28,800 bps	44 1442 438278
U.S.A.	Up to 28,800 bps	1 408 980 8204

**Access by Digital Modem** ISDN users can dial in to the 3Com BBS using a digital modem for fast access up to 56 Kbps. To access the 3Com BBS using ISDN, use the following number:

**1 408 654 2703**

### 3ComFacts Automated Fax Service

The 3ComFacts automated fax service provides technical articles, diagrams, and troubleshooting instructions on 3Com products 24 hours a day, 7 days a week.

Call 3ComFacts using your Touch-Tone telephone:

**1 408 727 7021**

**Support from Your Network Supplier**

If additional assistance is required, contact your network supplier. Many suppliers are authorized 3Com service partners who are qualified to provide a variety of services, including network planning, installation, hardware maintenance, application training, and support services.

When you contact your network supplier for assistance, have the following information ready:

- Product model name, part number, and serial number
- A list of system hardware and software, including revision levels
- Diagnostic error messages
- Details about recent configuration changes, if applicable

If you are unable to contact your network supplier, see the following section on how to contact 3Com.

**Support from 3Com**

If you are unable to obtain assistance from the 3Com online technical resources or from your network supplier, 3Com offers technical telephone support services. To find out more about your support options, please call the 3Com technical telephone support phone number at the location nearest you.

When you contact 3Com for assistance, have the following information ready:

- Product model name, part number, and serial number
- A list of system hardware and software, including revision levels
- Diagnostic error messages
- Details about recent configuration changes, if applicable

Below is a list of worldwide technical telephone support numbers:

Country	Telephone Number	Country	Telephone Number
<b>Asia Pacific Rim</b>			
Australia	1 800 678 515	New Zealand	0800 446 398
China		Singapore	800 6161 463
From anywhere in China:	86 21 6350 1590	S. Korea	
From Shanghai:	10 800 3656	From anywhere in S. Korea:	82 2 3455 6455
Hong Kong	800 933 486	From Seoul:	00798 611 2230
India	61 2 9937 5085	Taiwan	0080 611 261
Indonesia	001 800 61 009	Thailand	001 800 611 2000
Japan	0031 61 6439	Pakistan	61 2 9937 5085
Malaysia	1800 801 777	Philippines	1235 61 266 2602
<b>Europe</b>			
From anywhere in Europe, call:	+31 (0)30 6029900 phone		
	+31 (0)30 6029999 fax		
From the following European countries, you may use the toll-free numbers:			
Austria	06 607468	Netherlands	0800 0227788
Belgium	0800 71429	Norway	800 11376
Denmark	800 17309	Poland	0800 3111206
Finland	0800 113153	Portugal	05 05313416
France	0800 917959	South Africa	0800 995014
Germany	0130 821502	Spain	900 983125
Hungary	00800 12813	Sweden	020 795482
Ireland	1 800 553117	Switzerland	0800 55 3072
Israel	177 3103794	U.K.	0800 966197
Italy	1678 79489		
<b>Latin America</b>			
Argentina	541 312 3266	Colombia	571 629 4847
Brazil	55 11 523 2725, ext. 422	Mexico	01 800 849 2273
<b>North America</b>			
	1 800 NET 3Com (1 800 638 3266)		

### Returning Products for Repair

Before you send a product directly to 3Com for repair, you must first obtain a Return Materials Authorization (RMA) number. Products sent to 3Com without RMA numbers will be returned to the sender unopened, at the sender's expense.

To obtain an RMA number, call or fax:

Country	Telephone Number	Fax Number
Asia, Pacific Rim	65 543 6342	65 543 6348
Europe, South Africa, and Middle East	011 44 1442 435860	011 44 1442 435718

Country	Telephone Number	Fax Number
From the following European countries, you may call the toll-free numbers; select option 2 and then option 2:		
Belgium	0800 71429	
Denmark	800 17309	
Finland	0800 113153	
France	0800 917959	
Germany	0130 821502	
Hungary	00800 12813	
Ireland	1800553117	
Israel	177 3103794	
Italy	1678 79489	
Netherlands	0800 0227788	
Norway	800 11376	
Spain	900 983125	
Sweden	020 795482	
U.K.	0800 966197	
Austria	06 607468	
Poland	00800 3111206	
Portugal	05 05313416	
South Africa	0800 995014	
Switzerland	0800 55 3072	
Latin America	1 408 326 2927	1 408 764 6883
U.S.A. and Canada	1 800 876 3266, option 2	1 408 764 7120

## Year 2000 Compliance

For information on Year 2000 compliance and 3Com products, visit the 3Com Year 2000 Web page:

<http://www.3com.com/products/yr2000.html>