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Release Notes for the Ethernet Routing Switch 8300 Software Release 2.3



NORTEL

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Contents

| | |
|---|----|
| Introduction | 7 |
| File names for this release | 8 |
| Upgrading the switch to Release 2.3 software | 10 |
| Before upgrading the switch from a previous release | 10 |
| Note about DLD files | 10 |
| Upgrade procedures | 11 |
| New Ethernet Routing Switch 8300 hardware | 12 |
| 8348GTX module | 12 |
| 8348GTX-PWR module | 12 |
| New software features in this release | 13 |
| Serviceability/Manageability | 13 |
| Supported software and hardware capabilities | 15 |
| Ethernet Routing Switch 8010/8006 chassis support | 16 |
| 8302AC power supply | 17 |
| Supported SFPs | 17 |
| Hot-removal/hot-insertion of Ethernet Routing Switch 8300 modules | 18 |
| Hot-removal of master CPU | 18 |
| Problems resolved in this release | 20 |
| Known limitations and considerations in this release | 22 |
| Reading path | 37 |
| Important information | 37 |
| Chassis and module installation | 37 |
| Related publications | 38 |
| Hard-copy technical manuals | 39 |
| How to get help | 40 |

Introduction

These release notes for the Nortel Ethernet Routing Switch 8300 (formerly known as Passport 8300) Software Release 2.3 describe the hardware and software and any known issues that exist in this release. They are based on Ethernet Routing Switch 8300 Software Release 2.3 and Java Device Manager (Device Manager) 5.9.5.0.

A list of related publications can be found on [page 38](#). The Ethernet Routing Switch 8300 Software Release 2.3 documentation suite can be found on the documentation CD included with your software or on the Nortel technical documentation Web site, www.nortel.com/support. For more information, see the “Reading path” on [page 37](#).

The following topics are discussed in this document:

| Topic | Page |
|--|------|
| File names for this release | 8 |
| Upgrading the switch to Release 2.3 software | 10 |
| New Ethernet Routing Switch 8300 hardware | 12 |
| New software features in this release | 13 |
| Supported software and hardware capabilities | 15 |
| Problems resolved in this release | 20 |
| Known limitations and considerations in this release | 22 |
| Reading path | 37 |
| Reading path | 37 |
| Hard-copy technical manuals | 39 |
| How to get help | 40 |

The information in these release notes supersedes applicable information in other documentation.

File names for this release

Table 1 describes the Ethernet Routing Switch 8300 Software Release 2.3 software files and the hardware they support.

Table 1 Ethernet Routing Switch 8300 Software Release 2.3 files and associated hardware

| Module or file type | Description | File name | File size (bytes) |
|--|--|------------------|-------------------|
| Boot monitor image | CPU and switch fabric firmware for the Ethernet Routing Switch 8300. Supported on Ethernet Routing Switch 8393SF modules | p83b2300.img | 1071617 |
| Runtime image | The Ethernet Routing Switch 8300 image. Supported on Ethernet Routing Switch 8393SF modules | p83a2300.img | 6292432 |
| Pre-boot monitor image | Pre-boot monitor image | p83f2300.img | 230786 |
| MIB (private) | Ethernet Routing Switch 8300 private MIB | p83a2300.mib | 2036347 |
| MIB zip file | Ethernet Routing Switch 8300 MIB | p83a2300.mib.zip | 322507 |
| MD5 checksum file ¹ | md5 checksums of all Release 2.3 software files | p83a2300.md5 | 477 |
| Input/output modules download file | Supported on Ethernet Routing Switch 8348TX, 8348TX-PWR, 8324FX, 8324GTX, 8348GTX, and 8348GTX-PWR | p83r2300.dld | 2205800 |
| Encryption module for SNMPv3 (includes DES encryption capabilities) Note: Available only on the Nortel web site (www.nortel.com/support) | Supported on the Ethernet Routing Switch 8393SF modules | p83c2300.des | 8638 |
| Encryption module for SSH (includes 3DES encryption capabilities) Note: Available only on the Nortel web site (www.nortel.com/support) | Supported on the Ethernet Routing Switch 8393SF modules | p83c2300.img | 52424 |

Table 1 Ethernet Routing Switch 8300 Software Release 2.3 files and associated hardware

| Module or file type | Description | File name | File size (bytes) |
|--|--|---------------------------|-------------------|
| Java Device Manager software image for Windows (Version 5.9.5.0) | Device Manager software image for Windows NT, Windows XP, Windows 2003, Windows 2000 | jdm_5950.exe | 120975553 |
| Java Device Manager software image for UNIX (Version 5.9.5.0) | Device Manager software image for Solaris | jdm_5950_solaris_sparc.sh | 139137432 |
| | Device Manager software image for HP-UX | jdm_5950_hpux_pa-risc.sh | 168038808 |
| Java Device Manager software image for Linux (Version 5.9.5.0) | Device Manager software image for Linux | jdm_5950_linux.sh | 141562264 |
| Readme file ² | Device Manager readme file | readme_v5.9.5.0.txt | 3287 |

¹ For more information about using the MD5 checksum command, see *Upgrading to Ethernet Routing Switch 8300 Software Release 2.3 (318769-D)*.

² This file is located on the Java Device Manager software CD.

Upgrading the switch to Release 2.3 software

Before upgrading the switch from a previous release

Before upgrading to Ethernet Routing Switch 8300 Software Release 2.3, take special note of the following cautionary messages.

- The configuration file generated with Ethernet Routing Switch 8300 Software Release 2.3 software may contain options that are not backward compatible with any prior release.
- After you upgrade your Ethernet Routing Switch 8300 series software, make sure you save the configuration file.
- When installing files on the on-board flash or PCMCIA, make sure that you verify flash capacity before downloading the files to ensure you have adequate space.
- As a precaution, before you upgrade or downgrade your switch software, make a copy of the switch configuration file specified in the boot.cfg file using the following CLI command:

```
copy /flash/config.cfg <device>/config.cfg
```

where

device can be the local PCMCIA or a remote PC host

Note about DLD files

When the boot configuration is saved in runtime, the current bootp DLD image names are saved in the boot.cfg file. If you load a new image without removing the bootp DLD entry references from the boot.cfg, then the new version of the file will not be downloaded to the I/O boards.

- On boot up, if a DLD file is not configured in boot.cfg, the CP code will search for a DLD file with the following file name:

```
p83r<stream name><version>.dld
```

The stream name and version must match the CP image being initialized. If this file is found, its checksum is verified and it is downloaded to the I/O boards. If the boot configuration is saved, this is the DLD file name saved in boot.cfg.

- If the CP does not find this DLD file name in its flash, it will search for the following default file name:

```
p83r<stream name>.dld
```

Only the stream name must match the CP image being initialized. If this file is found, its checksum is verified and it is downloaded to the I/O boards. If the boot configuration is saved, this is the DLD file name saved in boot.cfg.

To make the system boot from the default DLD files, first clear the DLD file references made by boot.cfg:

- 1 Enter the boot monitor.
- 2 Enter the following command:

```
bootp image default
```

This clears the DLD file entries so that the new version of p83r<stream name><version>.dld or p83r<stream name>.dld will be loaded.



Caution: Do not interrupt the DLD download once it has started or failure could occur.

Upgrade procedures

Refer to *Upgrading to Ethernet Routing Switch 8300 Software Release 2.3 (318769-D)* for the detailed procedures to upgrade the switch.



Note: Read the entire upgrade procedure before attempting to upgrade the switch. Upgrade procedures cause interruption of normal switch operation. Back up your runtime configuration and boot configuration before starting the upgrade process.

New Ethernet Routing Switch 8300 hardware

[Table 2](#) describes the new Ethernet Routing Switch 8300 hardware in this release.

Table 2 New Ethernet Routing Switch 8300 hardware

| New hardware | Module part number | Where to find information |
|---|--------------------|--|
| 8348GTX 48-port 10/100/1000 module | DS1404093 | <i>Installing Ethernet Routing Switch 8300 Series Modules (316796-D)</i> |
| 8348GTX-PWR 48-port 10/100/1000 with PoE module | DS1404094 | <i>Installing Ethernet Routing Switch 8300 Series Modules (316796-D)</i> |

8348GTX module

The 8348GTX module provides 48 autonegotiating (10BASE-T, 100BASE-TX, or 1000BASE-T) ports. The 8348GTX module supports standards-based 10 Mb/s half and full-duplex, 100 Mb/s half and full-duplex and 1000 Mb/s half and full-duplex operation only, as well as Custom Auto Negotiation Advertisements (CANA).

8348GTX-PWR module

The 8348GTX-PWR module provides 48 autonegotiating (10BASE-T/100BASE-TX/1000BASE-T) ports with Power over Ethernet (PoE). The 8348GTX-PWR module ports support the IEEE 802.3af. The 8348GTX-PWR module supports standards-based 10 Mb/s half and full-duplex, 100 Mb/s half and full-duplex and 1000 Mb/s half and full-duplex operation only, as well as CANA.



Note: The 8348GTX & 8348GTX-PWR modules require Release 2.3.0 or later versions of the software to operate in a Ethernet Routing Switch 8300 switch.

New software features in this release

The following are new features for the Ethernet Routing Switch 8300 Software Release 2.3:

Serviceability/Manageability

Ethernet Routing Switch 8300 Software Release 2.3 added a new CLI and NNCLI command and system message to enhance serviceability and management.

For complete listings of all commands and system messages, see:

- *CLI Command Line Reference for the Ethernet Routing Switch 8300* (317360-D)
- *NNCLI Command Line Reference for the Ethernet Routing Switch 8300* (316810-D)
- *System Messaging Platform Reference Guide* (316806-C)

New command

Trust DSCP

Enables or disables DSCP being trusted in an IPv4/6 packet. When enabled the dscp-to-cos-map will be used to decide on packet's traffic class and 802.1p value. This allows applications to activate Layer-3 based CoS on trusted interface. Default is disabled.



Note: Trust DSCP can only be enabled on either 8348GTX or 8348GTX-PWR modules when in the GigabitEthernet level of NNCLI.



Note: Trust DSCP should be enabled on filter associated with same port for consistent trusting of DSCP.

For more information about Trust DSCP, see *Configuring QoS and Filters using the CLI* (317339-C), *Configuring QoS and Filters using the NNCLI* (316801-C), *Configuring QoS and Filters using Device Manager* (317340-C), *CLI Command Line Reference for the Ethernet Routing Switch 8300* (317360-D) and *NNCLI Command Line Reference for the Ethernet Routing Switch 8300* (316810-D).

New Syslog messages

“Warning: Remarking DSCP and/or 802.1p is enabled. So disabling packet/octet counters for Acl-id %d Ace-id %d”

"Remark 802.1p action in filter is not supported when policy is enabled. Remark 802.1p is disabled for Acl-id # Ace-id #."

"Match counter is not supported when remarking 802.1p action is enabled. Counter mode is disabled for Acl-id # Ace-id #."

For complete listings of all commands and system messages, see:

- *CLI Command Line Reference for the Ethernet Routing Switch 8300* (317360-D)
- *NNCLI Command Line Reference for the Ethernet Routing Switch 8300* (316810-D)
- *System Messaging Platform Reference Guide* (316806-C)

Supported software and hardware capabilities

Table 3 lists the known limits for the Ethernet Routing Switch 8300 Software Release 2.3 and JDM 5.9.5.0 of the Ethernet Routing Switch 8300 Series software. These capabilities will be enhanced in subsequent software releases.

Table 3 Supported capabilities in the 8300 Series (Release 2.3)

| Feature | Maximum number supported |
|--|---|
| VLANs | Up to 2047 VLANs; 200 have been tested and are officially supported in Release 2.3 Note: The range of valid ID numbers is greater than the maximum number of supported VLANs. The range for VLAN IDs is 1- 4000. |
| Protocol-based VLANs | 12 records, 50 VLANs maximum |
| ARP records | 2500 |
| IP interfaces | Up to 512 IP interfaces; 200 have been tested and are officially supported in Release 2.3 |
| Local next hops | 500 |
| Static routes | 1000 |
| Spanning Tree groups | Up to 64; groups 1 through 25 have been tested and are officially supported in Release 2.3 |
| Aggregation groups <ul style="list-style-type: none"> 802.3ad static aggregation groups | 31 <ul style="list-style-type: none"> For 8348TX, 8348TX-PWR and 8324FX ports, you can use only Link Aggregation Groups 1-7 For 8324GTX, 8348GTX and 8348GTX-PWR ports and 8393SF, you can use Link Aggregation Groups 1-31 |
| Ports per aggregation group <p>Note: All the ports MUST be of the same type (no mix of technology is supported)</p> | 4 |
| IGMP maximum number of unique groups | 1500 |
| RIP scaling | <ul style="list-style-type: none"> 8 routed VLANs 750 RIP routes 500 ARP entries 1500 MAC entries 8 STGs |

Table 3 Supported capabilities in the 8300 Series (Release 2.3) (continued)

| Feature | Maximum number supported |
|-----------------------------------|--|
| EAPoL 802.1x supplicants | Up to 3072 supplicants; 128 have been tested and are officially supported in Release 2.3 |
| RADIUS MAC centralization clients | Up to 3072 clients; 64 have been tested and are officially supported in Release 2.3 |



Note: Jumbo Frames are not supported in Release 2.3. You should therefore, not use the `mtu` command in the NNCLI Global configuration mode.

Ethernet Routing Switch 8010/8006 chassis support

You can use Ethernet Routing Switch 8300 modules with the Ethernet Routing Switch 8010 and 8006 chassis. The following requirements must be adhered to:

- 1 The Ethernet Routing switch 8010 and 8006 chassis must support up to 4096 media access control (MAC) addresses to be used with Ethernet Routing Switch 8300 modules. Upgrade kit (DS1411015) upgrades the number of supported MAC addresses on the chassis from 1024 to 4096. For more information about this kit, see *Adding MAC Addresses to the Passport 8000 Series Chassis* (212486-B).
- 2 The Ethernet Routing Switch 8300 switch fabric modules (8393SF) are limited to one switch fabric per Ethernet Routing Switch 8010 or Ethernet Routing Switch 8006 chassis. This single switch fabric in the 8010 or 8006 chassis can be in either slot 5 or 6. Dual switch fabric modules in these chassis are not supported. Only Ethernet Routing Switch 8310 and 8306 (10-slot and 6-slot PoE chassis) support dual switch fabric configurations.

- 3 The Ethernet Routing Switch 8010 and 8006 chassis do not support Power over Ethernet (PoE) capabilities on the PoE module. Therefore, the PoE feature is not available in these chassis.



Note:

1. You can use the Ethernet Routing Switch 8348TX-PWR or the 8348GTX-PWR module in the 8010 or 8006 chassis. Be aware, however, that when the 8348TX-PWR or the 8348GTX-PWR module is operating in the 8010 or 8006 chassis, it operates without the PoE function being available.
2. In an 8010 or 8006 chassis, you cannot mix Ethernet Routing Switch 8300 modules with Ethernet Routing Switch 8600 or 8100 modules.
3. The 8003 chassis is not supported.

8302AC power supply

The 8302AC power supply requires V2.1 software in order for the system to recognize it properly. If the system has a version of software prior to V2.1 and is booted with the 8302AC power supply in place, PoE will not be available.

Supported SFPs

[Table 4](#) lists the transceivers supported by the Ethernet Routing Switch 8300.

Table 4 Supported SFP transceivers

| Model | Product number |
|--------------------------|----------------|
| SFP transceivers: | |
| 1000BASE-SX (LC Type) | AA1419013 |
| 1000BASE-SX (MT-RJ Type) | AA1419014 |
| 1000BASE-LX (LC Type) | AA1419015 |
| 1000 BaseT SFP (RJ-45) | AA1419043 |

Table 4 Supported SFP transceivers (continued)

| Model | Product number |
|-----------------|------------------------|
| CWDM SFP GBICs: | |
| 1470nm/Gray | AA1419025 AA1419033 |
| 1490nm/Violet | AA1419026 AA1419034 |
| 1510nm/Blue | AA1419027 AA1419035 |
| 1530nm/Green | AA1419028 AA1419036 |
| 1550nm/Yellow | AA1419029 AA1419037 |
| 1570nm/Orange | AA1419030 AA1419038 |
| 1590nm/Red | AA1419031 AA1419039 |
| 1610nm/Brown | AA1419032 AA1419040 |

Hot-removal/hot-insertion of Ethernet Routing Switch 8300 modules

In general, after you hot-insert or hot-remove an Ethernet Routing Switch 8300 module, you must wait 30 seconds before performing another hot-insertion or hot-removal of a module.

Hot-removal of master CPU

In a dual CPU configuration, both CPUs require the same set of images at all times. When you insert a new CPU in the Ethernet Routing Switch 8300, ensure that it has the same set of boot and runtime images as the existing CPU.

Removing the master CPU can result in a configuration loss for the removed CPU if it is replaced in the Ethernet Routing Switch 8300. To avoid this situation, follow these instructions if you need to remove a master CPU from an 8300 chassis:

- 1** Use the save to standby option to automatically save both the boot and the configuration files to both CPUs (master and standby).
- 2** If you are using the out-of-band Ethernet port of the 8393 SF module for management, add a virtual IP address. The virtual IP address will allow access to the master CPU whether the master CPU is slot 5 or slot 6.
- 3** Perform a soft reset on the master CPU to cause failover to occur.
- 4** Wait until the new master comes up and the old master becomes the standby.
- 5** Remove the standby CPU. If you need to re-insert this CPU, you must wait at least 60 seconds.

Note that if you remove the master CPU without following this procedure and then save the configuration after removal, the new configuration will not contain the removed CPU configuration. You will then need to reconfigure the CPU ports.

To avoid this issue, back up the existing configuration file before saving any configuration. After you insert the removed CPU, you can then reboot the switch with the backup configuration file to restore the configuration. For more information, see the guidelines for warm standby in *Network Design Guidelines* (316809-C).

Problems resolved in this release

Table 5 describes issues that have been fixed since the 8300 Series Release 2.2 in the following categories:

| Topic | Page |
|--------------------------|------|
| HARDWARE | 20 |
| SOFTWARE | 20 |
| Platform | 20 |
| NNCLI | 21 |
| Layer 2 | 21 |
| Layer 3 | 21 |

Table 5 Problems resolved, by type of issue

| CR reference | Description |
|-----------------|--|
| HARDWARE | |
| Q00988540 | A copper SFP installed in an 8393 SFP port will only support 1000 Mbps speed and full duplex. Therefore, it cannot be connected to any device that only supports speeds of 100 Mbps or 10 Mbps. As well, the Ethernet Routing Switch 8300 does not support CANA on copper SFP ports because the speed and duplex on copper SFP ports are fixed at 1000 Mbps and full duplex. |
| SOFTWARE | |
| Platform | |
| Q00837041 | Web Server RO name and password are now hidden and no longer show up in the configuration file. |
| Q00837034 | Web Server resolution password information no longer shows up in the information display. |
| Q00876457 | When a host password is configured, all copy file transfers that use "ftp" as opposed to "tftp" are blocked if no password is used. |
| Q01151636 | On reset, the switch does not set port status down for ports 6/1, 6/2, and 6/8. The following error message displays: <code>sysi2cwriterepread</code> |
| Q01157580 | In Enterprise Switch Manager (ESM), the File/Inventory Manager (FIM) displays the Card Front Type for the 8324FX module as unknown. This occurs when PMON is upgraded automatically and the switch is reset or powered off or during the IO card reset, |

Table 5 Problems resolved, by type of issue (continued)

| CR reference | Description |
|-------------------------|---|
| NNCLI | |
| Q00869924, Q00876361 | You cannot disable an access-policy in the NNCLI. You can, however, still delete it. You can also disable access policies from the Device Manager. |
| Q01156840 | The show eapol multihost non-eap-mac status <ports> command will not display consistent information about radius-mac-centralization clients unless you first execute a command that issues an authentication request. |
| Q00901990 | In the NNCLI, the <i>src-port-pair</i> field is not set when you use the range and mask operators. Instead, you can configure this field using the CLI and Device Manager. Note: You can configure the <i>dst-port</i> field in the NNCLI with the range and mask operators. |
| Layer 2 | |
| Q00867884 | In the Interface Configuration mode, ip igmp last-member-query-int <value> will have no effect on the Ethernet Routing Switch 8300. This parameter is not supported. |
| Q00892593 | You cannot configure an IP protocol-based VLAN and an ARP-based VLAN on the same port using the user-defined VLAN protocol type 0x0806. |
| Layer 3 | |
| Q01109089 | Verified in build 36, the update timer can now be set to a value up to 2147483647. The timeout interval value, however, can only be set up to 259200 to ensure that the update timer is appropriately set with respect to the timeout timer value. |
| Q01148215 | You cannot set route-discovery parameters for a non-routable VLAN (i.e., a VLAN without an IP address). If you attempt to do so, the switch may display the following error message: Consistency check error Invalid port number The error message should read: Error: vlan <vid> is not set for routing |

Known limitations and considerations in this release

Table 6 describes issues known to exist in the 8300 Series Software Release 2.2 in the following categories:

| Topic | Page |
|--------------------------------------|------|
| HARDWARE | 22 |
| SOFTWARE | 23 |
| Platform | 23 |
| CLI | 26 |
| NNCLI | 27 |
| Device Manager | 27 |
| Layer 2 | 29 |
| Layer 3 | 32 |
| QoS | 32 |
| Multicast | 32 |
| Bandwidth management | 33 |
| Security | 35 |
| Miscellaneous | 36 |

Table 6 Known limitations, by type of issue

| CR reference | Description |
|-----------------|--|
| HARDWARE | |
| Q00961155 | Current Ethernet Routing Switch 8300 software does not support a modular automatic power pruning function. When the total Available Power for allocation is 0 and an additional PoE module is inserted, the additional module will not receive any PoE power even if it is configured with Critical Priority. You must manually admin disable a selected PoE module in order to release the power to the higher priority module. |
| Q01265501 | The CPU utilization may be reported as 12 percent after upgrading to release 2.3.0.0. The actual CPU utilization is much less. This value has been calculated incorrectly and will be addressed in a future release. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-------------------------------------|---|
| SOFTWARE | |
| Platform | |
| Q01219890 | LogtoPcmcia configurations are not saved across reboots when set to FALSE. |
| Q00802594 Q00803154 Q00803806 | The Ethernet Routing Switch 8300 provides limited support for Web management. It provides information for viewing purposes only. Nortel recommends that you do <i>not</i> use Web management for operational network management purposes. |
| Q01264094 | If CLI Log (clilog.txt) file exceeds the PCMCIA capacity, an endless scrolling of INFO message occurs until enough space is cleared on the PCMCIA. |
| Q01152303 | <p>The following error messages may display on the console:</p> <pre>snmpIoWrite sendto failed : bufSize = 108, pRemote = 0x86b1fc19, pLocal = 0x0 S_errno_EHOSTDOWN snmpIoWrite sendto failed : bufSize = 108, pRemote = 0x86b1fc19, pLocal = 0x0 S_errno_EHOSTDOWN snmpIoWrite sendto failed : bufSize = 108, pRemote = 0x86b1fc19, pLocal = 0x0 S_errno_EHOSTDOWN</pre> <p>These messages are benign and are the result of normal behavior when the management station is offline or not responding to ARP requests.</p> |
| Q01147366 | Be aware that the Ethernet Routing Switch 8300 does not provide a warning message when you delete the default SNMP-v3 user. Consider carefully before you delete the default user, so that you do not inadvertently lose SNMP access to the box. |
| Q01113202 | Ping datasize option has no effect. No matter what datasize you specify, ping will always use 56 bytes. Note: The total size of the ICMP packet is 64 bytes. |
| Q01086424 | <p>When failing over CPUs, you may see the following message:</p> <ul style="list-style-type: none"> • cpldIsBoardOk: invalid slot number 0 <p>The message occurs because of timing differences in processes transitioning between slave and master. The message is benign, and functionality is not affected. No action is required. The new master will initialize and continue to function normally.</p> |
| Q01062155 | Port utilization reported by monitor statistics is not accurate. The extent of discrepancy between the actual and observed rates depends on the traffic's frame size: larger frame sizes are more accurate. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-------------------------|--|
| Q01040803, Q00883620 | On devices with IP interfaces (IP-enabled VLANs), you cannot change the management IP address back to default (0.0.0.0/0) using config bootconfig net mgmt . You can make this change only from the monitor prompt during boot or if the device does not have IP-enabled VLANs. |
| Q01035465 | File transfer from switch to host workstation can be slow with the copy command or TFTP client. You will not experience this problem with FTP. In this case, Nortel recommends that you use FTP, or execute a TFTP client on remote host workstation and use the GET operation. |
| Q01033494 | <p>When an image file is copied to the switch using the copy command, two messages display on the console if the command completes successfully.</p> <p>The first message confirms completion of the image data transfer through TFTP: File [source file-path] - xxxx bytes successfully transferred</p> <p>The second message confirms that the image has been saved to flash: File [source file-path] - successfully written</p> <p>If the second message does not display, then the file has not been successfully written to flash.</p> |
| Q01029311 | <p>You cannot perform more than one configuration file save at a time. If a second configuration file save is initiated from a separate Telnet session while a file save is in progress, the second operation fails. The following messages display:</p> <pre>Another show or save in progress. Please try the command later. malloc: 0x3d0002 S_objLib_OBJ_UNAVAILABLE Save boot to file <filename> failed.</pre> |
| Q01026909 | <p>If you boot the Ethernet Routing Switch 8300 with no configuration file and then try to source a configuration file that contains RMON alarms, you can experience a number of instances of the following error message:</p> <pre>SNMP WARNING RMON not init before RmonAlarmCreate</pre> <p>The RMON configuration messages appear if RMON is not enabled. Alternatively, if RMON is enabled, then the RMON task initialization is delayed. Use show rmon info to check if RMON is enabled, and reconfigure the RMON alarms and events.</p> |
| Q00972634 | You may experience a delay of up to 10 seconds before the login prompt displays in a Telnet session. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-------------------------|---|
| Q00904970, Q00861897 | <p>The <code>nocheck-sw-version</code> flag, dedicated for use by Nortel customer support engineers, is available on the Ethernet Routing Switch 8300. If this flag is changed, it will disable all image consistency checks. The default value of this flag is set to false. Ensure that this flag remains at its default value and is not changed.</p> <p>To display the current value of <code>nocheck-sw-version</code>, enter the config bootconfig flags info command. This is also true in the boot monitor mode minus the config bootconfig portion of the command syntax.</p> <p>The flag not only determines whether local images match, but also determines if a master CPU will respond to software version queries from a standby CPU. If the flag is set to true on the master and a standby CPU is present at boot or is later inserted with its flag set to false, the standby boot process hangs with no error as it tries to query the master for software versions.</p> <p>Since it is impossible to check the condition of the flag on the hung standby CPU, the only way to determine whether this is happening is to see if a software version query message displays on the master. If the following message is observed on the master console or log (if the log level is set to INFO), the hang problem is caused by something other than the <code>nocheck-sw-version</code> flag state.</p> <pre>CPU6 [05/12/04 10:44:53] SW INFO Software version query from 127.0.1.5 version 2.0.0.1/011, running 2.0.0.1/011</pre> <p>The message shows either 127.0.1.5 or 127.0.1.6 depending on the slot the master is in. If this message is not displayed on the master while booting or inserting a second CPU, the hang problem results from the standby's inability to check the master's software version. To recover in the cleanest possible way, Nortel recommends that you reboot the Ethernet Routing Switch 8300, exit to monitor mode, and set the flag to its default value (false) on both CPUs. If that is too intrusive, setting the flag to false on the master and then resetting the secondary should cause the secondary to finish booting up.</p> |
| Q00896569 | <p>In a redundant CPU configuration, if both the <code>savetostandby</code> and <code>factorydefault</code> boot flags are set to true and the box is rebooted, the <code>factorydefault</code> flag on the secondary CPU comes up as true, even though the factory default value should be false. You should manually adjust this flag. The flags on the primary CPU are set correctly after the boot.</p> |
| Q00885154 | <p>Check both the IP ARP and FDB tables if the following message displays:</p> <pre>HAL WARNING NPAL_CreateNhId: could not create next hop x.x.x.x, Status x</pre> <p>The message indicates that either the FDB or ARP limits have been exceeded.</p> |
| Q00862905 | <p>If egress counter statistics are attached to an MLT port and a VLAN ID has been assigned to those statistics, remove the statistics before performing any negative operations on that MLT. Negative operations include such items as removing and reinserting the module, and link down and link up. Otherwise, the port will be removed from the MLT and the only way to add it back is to first remove the statistics.</p> |
| Q00853775 | <p>Do not use a virtual interface index, such as an MLT group or VLAN, when gathering statistics or error information. If you wish to monitor such an interface, use the appropriate physical port(s) index.</p> |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-------------------------|--|
| Q00851722 | Be aware that changing CP limit settings on a single port belonging to an MLT does not change the settings for the other ports in the MLT. You need to make the change for all the ports belonging to that MLT. |
| Q00848027 | If you remove a module and intend to replace it with a different module type, the new module comes up with a default configuration. Caution: If you do not save the configuration after inserting this module, the next time you reboot the switch, the entire switch comes up with a default configuration. |
| Q00841620 | Operations over FTP may be slow. It may take several minutes for flash writes for larger files. Do not attempt to abort FTP operations since it may cause flash corruption. |
| Q00830458 | Use dos-format to format the PCMCIA card only. Use format-flash to format the flash. If you use these commands on the wrong target, it may damage your flash. |
| Q00799673 | When sourcing a configuration file, even with verify config enabled, no error message will be generated if a configuration file fails to load due to errors. |
| Q00788580 | The ICMP response time is not reported correctly when a ping to a subnet broadcast command is issued from the Ethernet Routing Switch 8300. |
| Q00757309 | The Ethernet Routing Switch 8300 displays an invalid test result when the port is connected to a 100BASE-T hub or a test port. |
| Q00755304 | When you enable the VCT test, the PHY waits a fixed amount of time before sending out the TDR test pulse. This is to ensure that the link is broken and that the link partner is not sending 10/100/1000Mbps traffic. As soon as the VCT test is finished, the PHY automatically resumes normal operation. This means that auto-negotiation starts again and the link is established. |
| CLI | |
| Q01153279, Q01153288 | There are grammar and spelling errors in the descriptions for various RIP commands and options. Refer to <i>Configuring IP Routing and Multicast Operations using the NNCLI and CLI (316800-B)</i> for the correct descriptions. |
| Q01145580 | On reboot or failover, CLI display defaults to 24 screen lines, even if a different value has been saved to the configuration file. |
| Q01145231 | The command save config verbose causes a 0.0.0.0 mgmt-virt-address to be saved. |
| Q01026921 | If the show logging file command is typed after the logging file has been deleted, the following message displays: <pre>can't seek to EOF & BOF <logfile path name> errno:3670026 S_dosFsLib_INVALID_PARAMETER</pre> This indicates that the file cannot be found. The same error occurs whenever a log message should have been written, but the log file was no longer present on the system. A new log file is created after the error occurs. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-------------------------|--|
| Q01012518 | If you attempt to copy a file to the /pcmcia directory after a previously installed PCMCIA card has been removed, the following message displays, to indicate that the operation failed: Can't open directory "/pcmcia". A number of error codes, starting with a hex number and the (tShell) :, follow. Ignore these messages. |
| Q00957081 | When a file is being copied to the flash, CPU utilization may show as 100% during the copy. |
| Q00876505, Q00855057 | When you enter show ports error , <code>ospf [<ports>]</code> displays in the CLI help as one of the available options. The Ethernet Routing Switch 8300 does not support this option. |
| Q00876390 | When you enter some commands under config sys access-policy policy <number> service , <code>ssh</code> appears in the CLI help as one of the available services. Although the Ethernet Routing Switch 8300 supports SSH v1/v2, the Ethernet Routing Switch 8300 does not support this option in this release. |
| NNCLI | |
| Q00876423 | Jumbo Frames are not supported in Release 2.3. You should not use the mtu command in the NNCLI Global configuration mode. |
| Q01157948 | The value set for <code>local-next-hop</code> for static routes does not get saved across reboots. Even if the value has been set to false, it defaults to true on reboot. |
| Q01153279, Q01153288 | There are grammar and spelling errors in the descriptions for various RIP commands and options. Refer to <i>Configuring IP Routing and Multicast Operations using the NNCLI and CLI (316800-B)</i> for the correct descriptions. |
| Q01151630 | A maximum of 7 users can log in to the NNCLI at the same time using rlogin . An eighth rlogin attempt will just hang. |
| Q01036158 | You cannot use the commands ls and directory while in the NNCLI. Instead, you must use the dir command. |
| Q01010343 | In the NNCLI, the command eapol re-authenticate displays some garbage characters along with the EAP authentication messages. |
| Q00816522 | You cannot display the auto-learned MAC for a specific port in the NNCLI. Instead, it only shows the number of MACs learned. When you enter show interfaces vlan autolearn , it does not provide an option to specify a port. |
| Device Manager | |
| Q01257965 | When a user defined protocol based VLAN is created without entering a PID, the VLAN gets created with a PID 0x0000. A VLAN cannot be created in CLI and NNCLI with a blank PID and in Device Manager, when the PID provided is 0x0000 or 0000, it gives an error message. |
| Q01124947 | If you add a TACACS source IP address in the Device Manager, it may not register in the CLI. By contrast, adding configuration information in the CLI will always change information in the Device Manager. To synchronize the Device Manager and CLI, set the Device Manager's <code>rcTacacsServerSourceIPInterfaceEnabled</code> field to true. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|---------------------------------------|--|
| Q01122180 | <p>The Device Manager displays an inaccurate error message if you attempt to add more than 64 protocols to the UDP protocol table for UDP forwarding. The message that displays is:</p> <pre>rcIpUdpProtocolRowStatus.1000 0: undoFailed</pre> <p>In the CLI, the equivalent error message, which is correct, is:</p> <pre>IP WARNING reached max size 64 in the UdpProtocol Table</pre> |
| Q01039044 | <p>The Device Manager reports an incorrect amount of PoE power for an installed 8302 Power Supply. The actual amount of power is half what the Device Manager indicates.</p> |
| Q01024579 | <p>The Ethernet Routing Switch 8300 displays the following error message when you attempt to configure Guest VLAN in a spanning tree group in the Device Manager:</p> <pre>rcEapPortGuestVlanEnable.298: The specified operation is not allowed</pre> <p>The error message is incorrect and misleading. It should read as follows:</p> <pre>Port does not belong to the STG of the Guest Vlan</pre> |
| Q00862945 | <p>Be aware that the Device Manager may time out after converting MAC entries and refreshing the Allowed MAC table. You can prevent this problem by increasing the runtime memory allocation size. To do so:</p> <p>In a Windows environment:</p> <ol style="list-style-type: none"> 1. Open a command prompt. 2. Go to the directory where Device Manager is installed. For example, if the install directory is C:/Program Files/JDM, in the command prompt window, type: cd \Program Files\JDM 3. Enter the following command to launch Device Manager: .\jre\bin\java -Xmx256m- DEMPATH=. -jar .\jdm.jar <p>In a UNIX environment:</p> <ol style="list-style-type: none"> 1. Go to the directory where Device Manager is installed. 2. Enter the following command to launch Device Manager: ./jre/bin/java -Xmx256m -DEMPATH=. -jar ./jdm.jar <p>Note: The preferred memory size is 256 MB. The default value is 64 MB. Assign a suitable size based on your system environment. In a Windows environment, you require 256 MB of memory.</p> |
| Q00851125, Q00831569, Q00831575 | <p>If trace is enabled, you may experience Device Manager timeouts. You cannot avoid this problem completely. You can minimize it, however, by increasing the Device Manager timeout interval.</p> |
| Q00834504 | <p>The p-to-dscp table is not available in the Device Manager. However, it is available in the CLI and NNCLI.</p> |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|------------|------------|------------------------|---|---|--|---|---|--|-----|---|----------------------|-----------|-----------|
| Q00802165 | You cannot convert a MAC auto-learned entry to manual via the CLI and NNCLI. You can only do so via the Device Manager using the VLAN > Mac Learning > VlanMacLearning dialog boxes. | | | | | | | | | | | | | | | | | | |
| Q00793639 | When using the Device Manager, the hourglass pointer may appear unexpectedly directly over the column headers. If you move the mouse to areas where the tabs for functions exist, the hourglass does not appear and the Device Manager operates normally. | | | | | | | | | | | | | | | | | | |
| Q00780367 | In the Device Manager, the DSCP to CoS Map table is missing the column specifying the DSCP value. This option is available in the CLI and NNCLI. | | | | | | | | | | | | | | | | | | |
| Layer 2 | | | | | | | | | | | | | | | | | | | |
| Q01245585 | Records are not deleted when the user defined protocol VLAN is deleted with the PID range until the system reboots or another VLAN with the same PID is created and deleted. | | | | | | | | | | | | | | | | | | |
| Q01248310 | <p>Tx-mirrored multicast frames from non-8348GTX/GTX-PWR cards do not reach the 8348GTX or 8348GTX-PWR Mirroring-Port.</p> <table border="1" data-bbox="474 765 1116 1164"> <thead> <tr> <th colspan="3">System-wide port mirroring support limitation</th> </tr> <tr> <th></th> <th>2.2</th> <th>2.3</th> </tr> </thead> <tbody> <tr> <td>Max Mirroring/Analyzer</td> <td>2</td> <td>1</td> </tr> <tr> <td>Max TX Mirrored port for 8348TX/8348TX-PWR</td> <td>8</td> <td>8</td> </tr> <tr> <td>Max TX Mirrored port for 8348GTX/8348GTX-PWR</td> <td>N/A</td> <td>4</td> </tr> <tr> <td>Max Rx Mirrored port</td> <td>Unlimited</td> <td>Unlimited</td> </tr> </tbody> </table> <p>Note:</p> <ol style="list-style-type: none"> Maximum number of Tx-Mirrored ports supported on the 8348GTX/GTX-PWR card is 4 and for other cards is 8. If the Mirroring/Analyzer port resides in the 8348GTX/GTX-PWR card, the mirrored frames may have a VLAN tag even if the original frame is untagged. (CRQ0121847) Mirrored multicast frame from 8348TX/TX-PWR (Tx-mirrored) port to 8348GTX/GTX-PWR (Tx-mirrored) port are not supported. (CRQ01248310) | System-wide port mirroring support limitation | | | | 2.2 | 2.3 | Max Mirroring/Analyzer | 2 | 1 | Max TX Mirrored port for 8348TX/8348TX-PWR | 8 | 8 | Max TX Mirrored port for 8348GTX/8348GTX-PWR | N/A | 4 | Max Rx Mirrored port | Unlimited | Unlimited |
| System-wide port mirroring support limitation | | | | | | | | | | | | | | | | | | | |
| | 2.2 | 2.3 | | | | | | | | | | | | | | | | | |
| Max Mirroring/Analyzer | 2 | 1 | | | | | | | | | | | | | | | | | |
| Max TX Mirrored port for 8348TX/8348TX-PWR | 8 | 8 | | | | | | | | | | | | | | | | | |
| Max TX Mirrored port for 8348GTX/8348GTX-PWR | N/A | 4 | | | | | | | | | | | | | | | | | |
| Max Rx Mirrored port | Unlimited | Unlimited | | | | | | | | | | | | | | | | | |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|--------------|--|
| Q01041504 | You can use decimal as well as hex input for the user-defined PID when configuring user-defined protocol-based VLANs. CLI and NNCLI help text does not indicate that you can use both. |
| Q00897494 | Operations like adding or removing ports on an MLT, or changing STP configuration on the MLT while traffic is flowing, will result in data loss. For unicast traffic, the data loss lasts for 20–30 seconds. For multicast traffic, it may last for 2–3 minutes depending upon the IGMP configuration. |
| Q00883592 | <p>If you create an IP VLAN that belongs to a subnet represented by an existing static route, the following error message may display:</p> <pre>IP ERROR rcIpModifyNextHop: Arp pointer is NULL for route: x.x.x.x mask: x.x.x.x</pre> <p>The new local route should take over as the best route in the route table. If so, you can ignore this error.</p> |
| Q00867919 | When you use the unknown MAC discard feature on a given port, the first ARP request for an address, including those to be discarded, is processed. This does not impact feature operation. All packets matching the entries to be discarded will not be forwarded by the Ethernet Routing Switch 8300 but will be discarded as expected. |
| Q00860990 | If you remove a module that has associated static FDB or FDB-filter entries, the CLI command show vlan info all shows information for ports that are no longer present. This is a display issue only and does not affect the operation of the Ethernet Routing Switch 8300. |
| Q00841632 | If you delete selected ports bound to multicast MAC filtering and then source the configuration (source config.cfg), the deleted ports do not get restored as originally configured. The reason for this is that the MAC is already learned before you source the configuration. Thus, the port does not get added to the MAC. |
| Q00827920 | The agetime that displays under show vlan info advance actually applies to dynamic VLAN membership. In the Ethernet Routing Switch 8300, dynamic VLAN membership is not supported, so this agetime always appears as 0. Note that this differs from the FDB aging timer. To verify aging time, enter info under config vlan <vid> fdb-entry . |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|--|---------------|-----------|-----|------|----|------|--------------|------|---------|------|------|------|---------------|------|-----------|------------|------|------|-------------------------|------------|---------------|-----------|-----------------------|------|-------------------|------|----------------|-----------|-------------------------|------|----------------|------|-------------------------|------|----------------|-----------|
| Q00806545 | <p data-bbox="314 260 1263 321">For byProtocol VLANs, a certain number of “protocol-type” values are restricted (invalid), because the preconfigured VLAN types (IP/IPX/AppleTalk) already use these values.</p> <p data-bbox="314 321 1263 355">Table 7 lists the currently restricted hex values for preconfigured VLAN protocol types.</p> <p data-bbox="314 390 899 425">Table 7 Restricted protocol-type values (current)</p> <table border="1" data-bbox="314 434 1106 876"> <thead> <tr> <th data-bbox="321 442 785 486">Protocol type</th> <th data-bbox="785 442 1099 486">Hex value</th> </tr> </thead> <tbody> <tr> <td data-bbox="321 494 785 529">XNS</td> <td data-bbox="785 494 1099 529">0600</td> </tr> <tr> <td data-bbox="321 538 785 572">IP</td> <td data-bbox="785 538 1099 572">0800</td> </tr> <tr> <td data-bbox="321 581 785 616">BANYAN VINES</td> <td data-bbox="785 581 1099 616">0BAD</td> </tr> <tr> <td data-bbox="321 624 785 659">DEC LAT</td> <td data-bbox="785 624 1099 659">6004</td> </tr> <tr> <td data-bbox="321 668 785 703">RARP</td> <td data-bbox="785 668 1099 703">8035</td> </tr> <tr> <td data-bbox="321 711 785 746">SNA Ethernet2</td> <td data-bbox="785 711 1099 746">80D5</td> </tr> <tr> <td data-bbox="321 755 785 789">AppleTalk</td> <td data-bbox="785 755 1099 789">809B, 80F3</td> </tr> <tr> <td data-bbox="321 798 785 833">IPv6</td> <td data-bbox="785 798 1099 833">86DD</td> </tr> <tr> <td data-bbox="321 841 785 876">IPX Ethernet2, IPX SNAP</td> <td data-bbox="785 841 1099 876">8137, 8138</td> </tr> </tbody> </table> <p data-bbox="314 911 1263 972">Table 8 lists additional protocol types, from the IANA Protocol Types listing (http://www.iana.org/assignments/ethernet-numbers), whose hex values are restricted:</p> <p data-bbox="314 1006 928 1041">Table 8 Restricted protocol-type values (additional)</p> <table border="1" data-bbox="314 1050 1106 1406"> <thead> <tr> <th data-bbox="321 1058 785 1102">Protocol type</th> <th data-bbox="785 1058 1099 1102">Hex value</th> </tr> </thead> <tbody> <tr> <td data-bbox="321 1111 785 1145">BANYAN VINES Loopback</td> <td data-bbox="785 1111 1099 1145">0BAE</td> </tr> <tr> <td data-bbox="321 1154 785 1189">BANYAN VINES Echo</td> <td data-bbox="785 1154 1099 1189">0BAF</td> </tr> <tr> <td data-bbox="321 1197 785 1232">DEC unassigned</td> <td data-bbox="785 1197 1099 1232">8039-803C</td> </tr> <tr> <td data-bbox="321 1241 785 1275">DEC Ethernet Encryption</td> <td data-bbox="785 1241 1099 1275">803D</td> </tr> <tr> <td data-bbox="321 1284 785 1319">DEC unassigned</td> <td data-bbox="785 1284 1099 1319">803E</td> </tr> <tr> <td data-bbox="321 1328 785 1362">DEC LAN Traffic Monitor</td> <td data-bbox="785 1328 1099 1362">803F</td> </tr> <tr> <td data-bbox="321 1371 785 1406">DEC unassigned</td> <td data-bbox="785 1371 1099 1406">8040-8042</td> </tr> </tbody> </table> | Protocol type | Hex value | XNS | 0600 | IP | 0800 | BANYAN VINES | 0BAD | DEC LAT | 6004 | RARP | 8035 | SNA Ethernet2 | 80D5 | AppleTalk | 809B, 80F3 | IPv6 | 86DD | IPX Ethernet2, IPX SNAP | 8137, 8138 | Protocol type | Hex value | BANYAN VINES Loopback | 0BAE | BANYAN VINES Echo | 0BAF | DEC unassigned | 8039-803C | DEC Ethernet Encryption | 803D | DEC unassigned | 803E | DEC LAN Traffic Monitor | 803F | DEC unassigned | 8040-8042 |
| Protocol type | Hex value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| XNS | 0600 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IP | 0800 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BANYAN VINES | 0BAD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC LAT | 6004 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RARP | 8035 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SNA Ethernet2 | 80D5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AppleTalk | 809B, 80F3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IPv6 | 86DD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IPX Ethernet2, IPX SNAP | 8137, 8138 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protocol type | Hex value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BANYAN VINES Loopback | 0BAE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BANYAN VINES Echo | 0BAF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC unassigned | 8039-803C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC Ethernet Encryption | 803D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC unassigned | 803E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC LAN Traffic Monitor | 803F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEC unassigned | 8040-8042 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Q00802887 | <p data-bbox="314 1475 1263 1553">The autolearned MAC entry does not get re-learned after a conversion to manual entry and deletion until the FDB entry ages out. When you convert, you delete the manually entered MAC entry in the unknown MAC discard table. However, the FDB entry itself is not deleted.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|---------------------------------------|---|
| Q00784962 | When you first activate unknown MAC discard, it causes the Auto-learn mode on that port to stop functioning. |
| QoS | |
| Q01256112 | <p>When two different Scheduling groups are used, traffic flow is not expected. For example, if we are egressing traffic from two 8348GTX-PWR Gigabit ports into one 8348GTX-PWR Gigabit port and the two transmit streams have a QoS level of 3 and 4, if level 3 and 4 have the same scheduling group (say both are dwrr1,dwrr0 or strict priority), then traffic arrives as expected. However, if we change level 3 to DWRR1 and level 4 to DWRR0, the highest priority traffic always has less drops even though it is in a lower scheduling group i.e, 4 has a higher priority even though it has lower scheduling group.</p> <p>Note: There are eight hardware priority queues. By default, all queues are configured to use DWRR1 scheduling group. Nortel does not recommend that users change a higher priority queue to use DWRR0 while the lower priority queues still use DWRR1. This change will cause improper operation of hardware scheduling.</p> |
| Q01257760 | When trust-dscp is enabled on a 8348GTX or 8348GTX-PWR port you also need to enable trust-dscp on the filter for the same port for consistent trust dscp operation. A command prompt for this action will be added to the CLI and NNCLI in a future release. |
| Layer 3 | |
| Q01156066 | The switch does not respond to an ICMP Router Discovery solicitation message from source 0.0.0.0. |
| Q01142905 | When the commands to flush the IP table or all tables are executed, a RIP request is immediately sent out to solicit the updated RIP routes, rather than waiting for the update timer on the RIP peer switch to expire. |
| Q01092567 | <p>Router advertisement is not sent within the max_initial_advert_interval in the following cases:</p> <ul style="list-style-type: none"> • The interface goes down or up. • IP forwarding is enabled or disabled. <p>The Ethernet Routing Switch 8300 continues to send regular advertisements at random intervals within the MinAdvertisementInterval and MaxAdvertisementInterval range.</p> |
| Q01028334 | When configuring DHCP Relay for the first time on the Ethernet Routing Switch 8300, a save config is required when using the NNCLI. DHCP Relay will not work until you enter save config . |
| Multicast | |
| Q00889737, Q00889777, Q00889744 | IGMP static receivers are not supported in the Ethernet Routing Switch 8300. |
| Q00843934 | Traffic filters for IGMP join and leave packets are not effective if the port belongs to one or more IGMP interfaces. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-----------------------------|--|
| Q00841340 | Rate limiting configured on an inactive MLT port will not be effective for the traffic flowing over that MLT. |
| Q00810524 | When performing broadcast/multicast rate limiting on an ingress port, if the bandwidth of the egress ports is significantly less than that of the ingress ports (e.g., 1G -> 100M or 100M -> 10M), then the egress ports may drop even more than requested. This occurs only when the ingress burst rate is greater than the egress ports. |
| Q00804941 | Rate limiting will become less accurate with frame sizes larger than 64 bytes. The minimum effective rate limiting on 10Mbps is 6%. 10Mbps rate limiting is done in blocks of 6%. |
| Q00791636 | In the NNCLI and CLI, show ip igmp interface displays the IGMP snoop interfaces. Those interfaces that are not IGMP-enabled are shown as inactive if the interface is IP-enabled, or was previously IGMP snoop enabled. |
| Q00788415 | The Ethernet Routing Switch 8300 does not drop joins from a client whose IP address matches the VLAN IP itself. |
| Q00763045 | IGMP MRDISC is supported on the Ethernet Routing Switch 8300, but there may be interoperability issues with other 8000 series switches. In an SMLT setup, the switch should find only one mrouter on its MLT link. |
| Q00737617 | On an IGMP snoop device, the sender is available only if the traffic is unregistered. In other words, no receiver exists locally on the device. Otherwise, sender information will not be available on a snoop device. |
| Bandwidth management | |
| Q00879816 | The VLAN ID range 1–4000 is supported under VLAN configuration for data traffic. The remainder of the VLAN ID range that displays is reserved for network control traffic. Do not configure filters to match the reserved VLAN ID range. |
| Q00840339 | If a traffic policy is applied on multiple ports, these ports should belong to the same FPI. If the policy is applied across multiple I/O cards and multiple ports, the peak information rate/committed information rate (PIR/CIR) is not guaranteed. |
| Q00831460 | A common pool of 128 records exists for both policies (policers) and filter stats. If this pool is exhausted and an additional record is requested, an error message like the following appears: <code>QOS ERROR gtcMCreateTcEntry: Failed, status = 20</code> Should this happen, you need to delete one filter stat instance or policer before adding another. |
| Q00813681 | When using config qos egress-counter-set , the NNCLI does not allow you to configure a VLAN, even though <code>VLAN</code> appears to be a valid command option. As a workaround, configure without specifying a VLAN to ensure that the egress counters are created properly. |
| Q00803181 | Be aware that you can configure different filter remarking values for ports within an MLT. |
| Q00799518 | Filter counter/stats do not work when you use <code>remark-user-priority</code> for DiffServ remarking. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|---------------------------------------|---|
| Q00797808, Q00797811, Q00806856 | Partial masking of Access-Template fields is not supported. For example, Access-Template Src Mac field defined as 00:00:00:ff:ff:ff is not a supported configuration. |
| Q00788755 | There is no provision in the Ethernet Routing Switch 8300 Layer 2 commands to look up the DSCP value based on the .p bit. |
| Q00787044 | If you enter show filter access-list statistics in the CLI when ACE MatchCountMode is disabled, an error message should appear indicating that the feature is not enabled. Currently, the console shows all 0 counters without any traffic or warning messages. |
| Q00785991 | No statistics are available for traffic shaping. |
| Q00785950 | In some configurations, egress counters for multicast traffic show the counter values for unicast traffic when a port belongs to a protocol-based VLAN. In such instances, these counters are not shown under the unicast counter values. |
| Q00785103 | You can apply fdb-filters to ports but they act only on VLANs. For example, if you assign an fdb-filter to a port in a VLAN, all ports in that VLAN will act on the filter. If the port to which the fdb-filter is assigned is disabled or goes down unexpectedly, the filter remains in effect for all other ports in the VLAN. |
| Q00783246 | When you poll statistics for the QoS egress-counter-set, counters are reset to zero. You cannot gather a cumulative number of packets over a period of time using this feature if you execute show qos egress-stats . |
| Q00783230, Q00783234 | The Policing remarking feature does not work when you use <code>remark-user-priority</code> for DiffServ remarking. |
| Q00777622 | DiffServ and policing share the same table for DiffServ remarking and policing. |
| Q00777592 | After you set the <code>dst-mac's ace-op</code> parameter to a value other than <code>any</code> and <code>eq</code> in the Device Manager and then create an ACG, ports cannot be assigned to the ACG. The following are examples of the kinds of error messages that display: 8310-41:6/config/filter/access-list/1# config ether 4/7 filter create 1 Error Handler:Gen lib error code: 5 Error Handler:the unit is: 24 and the device: 24 Error: Port = 4/7, Acl Port create operation FAIL 8310-41:6/config/filter/access-list/1# config ether 4/5 filter create 1 Error Handler:Gen lib error code: 5 Error Handler:the unit is: 24 and the device: 24 Error: Port = 4/5, Acl Port create operation FAIL If you change the <code>dst-mac's ace-op</code> to <code>eq</code> , ports can be added without error messages. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|-------------------------|---|
| Q00765155 | As it appears in the CLI, the maximum value of the committed and peak burst rate is misleading. The Ethernet Routing Switch 8300 shows only a fixed maximum value of 65535, which does not change based on the configuration. The actual maximum value is calculated from the committed and peak information rates. |
| Q00755441 | In the Ethernet Routing Switch 8300, the VLAN QoS level is only supported on protocol-based VLANs. |
| Q00730427 | Be aware that QoS shaping does not perform correctly at lower rates. There is a 10–20% variation in the actual traffic rate as compared with the configured rate. |
| Q00697474 | 802.1p bits are unchanged at egress if ingress traffic is tagged with override enable. The 802.1p bit is not overwritten for untrusted Layer 2 ports. You can use filters to perform the same functions. |
| Security | |
| Q01226753 | When multiple Radius servers are configured to do EAP/RMC authentications with the same priority, if one of the servers becomes unreachable, the authentication fails on all servers. Even if there is a server that is reachable, the password sent to this server after checking with the unreachable server becomes flawed so the authentication request fails. |
| Q01271108 | The RADIUS accounting UDP port configuration change cannot be saved. The default port for RADIUS accounting is 1813, which works for all the current RADIUS servers and is the port to use according to RFC's. After a reboot or config source, the port returns to the default of 1813. |
| Q01132066 | Prompts for login and password occur prior to the authentication process. Authentication is always attempted in the following order: TACACS+, RADIUS, the local database. If both RADIUS and TACACS+ are enabled, TACACS+ authentication always occurs before RADIUS authentication. If TACACS+ fails because there are no valid servers, then the username and password are used for RADIUS authentication. If RADIUS also fails, then the username and password are used for the local database. If TACACS+ returns an access denied packet, then the user is offered a new authentication attempt (login/password prompts are re-issued — the authentication process is not passed to RADIUS). |
| Q01101658 | When the RADIUS server has had EAP or Accounting disabled for a period of time, you may need to disable and re-enable the SBR network adapter card in order to ping the server. |
| Q01101113 | You cannot log in to the switch with a WinSCP client. WinSCP is not supported on the Ethernet Routing Switch 8300. |
| Q01082576 | CLI includes profiling in the RADIUS configuration commands. The Ethernet Routing Switch 8300 does not currently support RADIUS profiling. The CLI command config radius info cli profile enable is not supported. |
| Q01054364 | Once a user has established a SSH session to an Ethernet Routing Switch 8300, the switch will return an error message when the user attempts to Telnet from the switch to another device. |
| Q01042958, Q01042890 | Session time values displayed for terminated and unauthenticated sessions in Multi-host Session Stats are incorrect. Values displayed for <i>Session-Id</i> and <i>User-name</i> are also incorrect for some sessions. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|----------------------|--|
| Q01038051 | When EAP is enabled on a port, the port also needs to be configured as multihost if N+1 authorized users will be accessing the port. Otherwise, when the N+1 user accesses the port, EAP port status is changed to force-unauthorized and all currently authorized users are dropped. |
| Q01032071 | The Ethernet Routing Switch 8300 does not meet the following requirements for 802.1x authentication related to the RADIUS authentication: <ul style="list-style-type: none"> • The switch does not return NAS-Port-Type or Called-Station-Id (port MAC address) in authentication requests. • The switch does not return NAS-Port-Type, Called-Station-Id, or Calling-Station-Id (user MAC address) in accounting requests. Full support for these options will be provided in a subsequent release. |
| Q01026930 | In rare cases, when the command config ethernet <slot/port> eapol is entered, the console on the Ethernet Routing Switch 8300 displays the following error message: <pre>IoWrite sendto failed : bufSize = 123, pRemote = 0x2f50e7fe, pLocal = 0x0 snmpIoWrite sendto failed : bufSize = 123, pRemote = 0x2f50e7fe, pLocal = 0x0</pre> These messages are benign, and functionality is not affected. |
| Q01021626 | Enabling port mirroring on an EAP-enabled port causes authentication failures. |
| Q01017469-01 | When you create a user in SNMPv3 by entering the command config snmp-v3 usm Manager md5 pass and you remove the initial password by entering the command config snmp-v3 usm delete initial , you must enter the command auth Manager old-pass pass new-pass pass to make it work. |
| Q00862936 | To disable RADIUS accounting, you must disable RADIUS globally as well as disabling RADIUS accounting. Disabling the RADIUS feature alone does not stop accounting. |
| Q00820269 | SNMPv3 notification is not supported in v2.0.0.1 of the Ethernet Routing Switch 8300. |
| Q00819777 | Note that tagging and EAP are mutually exclusive. If you enable EAP on a port, using auto or force-authorize, you cannot enable tagging on the port, and vice versa. |
| Miscellaneous | |
| Q01211847 | The packet captured by the analyzer port is not exactly the received packet. If both mirroring and analyzer port were on the 8348GTX/8348GTX-PWR car, the VLAN tag was added to all packets captured from the analyzer port, . |
| Q01265965 | When a 32-bit CLIP interface is deleted on a DUAL CPU switch, a NPAL Delete Arp Warning message is displayed on the console. |
| Q01227117 | Creation of a non-zero length prefix for SNMPv3 cannot be allowed for group-access entry because non-zero length prefixes are not supported. Also, the switch cannot be accessed with non-zero length prefixes. |

Table 6 Known limitations, by type of issue (continued)

| CR reference | Description |
|--------------|---|
| Q01189519 | Port utilization incorrectly read. Traffic on the monitor is at the line rate but the 48 10/100/1000 8348GTX & 8348GTX-PWR module is not reporting them at 100 percent. Instead, it is being reported as 2 percent on 100MB and 24 percent on 1Gigabit. |
| Q00784096 | If you configure a port shaper on an output port and multiple flows with different priorities are egressing through this port, one flow can monopolize the entire bandwidth up to the shaper rate configured on that port. As a workaround, Nortel recommends that you use shaper on a per-queue basis. |
| Q00773426 | If you enable port mirroring on a tagged interface, the mirrored packets will not contain the 802.1Q header. |
| Q01221206 | 48 10/100/1000 8348GTX & 8348GTX-PWR module hardware takes three minutes per board during initial DLD upload to become online. Online is defined as the start of the card insert to completion and system message stating "HW INFO Finished insertion for slot x" of config load (default config). |

Reading path

This section lists the documentation specific to the Ethernet Routing Switch 8300 platform. For information on finding and accessing up-to-date documentation, see [“Hard-copy technical manuals” on page 39](#).

Important information

- *Important Information for the 8300 Series Switch Modules (216511-D)*
- *Read Me First for the Ethernet Routing Switch 8310 Chassis (318192-C)*
- *Important Security Information for the 8300 Series Switch (216512-B)*
- *Important Notice for the 8000 Series Switch PCMCIA Card (318844-A)*

Chassis and module installation

- *Installing a Fan Tray in an Ethernet Routing Switch 8300 Series Chassis (316798-B)*
- *Installing the Ethernet Routing Switch 8300 AC Power Supply (316797-D)*
- *Installing and Maintaining the Ethernet Routing Switch 8306 and 8310 Chassis (316795-D)*
- *Installing Ethernet Routing Switch 8300 Series Modules (316796-D)*

- *Installing GBIC and Gigabit SFP Transceivers (318034-A)*

Related publications

This section describes common documentation related to the Ethernet Routing Switch 8300.

Installation and User Guides

These guides provide instructions for installing the chassis and its components, installing and getting started with the Device Manager software, and configuring various protocols on the Ethernet Routing Switch 8300.

- *Adding MAC Addresses to the Passport 8000 Series Chassis (212486-B)*
- *Configuring Power over Ethernet (317337-D)*
- *Getting Started (316799-C)*
- *Installing a Fan Tray in an Ethernet Routing Switch 8300 Series Chassis (316798-B)*
- *Installing the Ethernet Routing Switch 8300 AC Power Supply (316797-D)*
- *Installing and Maintaining the Ethernet Routing Switch 8306 and 8310 Chassis (316795-D)*
- *Installing and Using Device Manager (316808-C)*
- *Installing Ethernet Routing Switch 8300 Series Modules (316796-D)*
- *Installing GBIC and Gigabit SFP Transceivers (318034-A)*
- *Ethernet Routing Switch 8300 Power Considerations (317223-D)*
- *Upgrading to Ethernet Routing Switch 8300 Software Release 2.3 (318769-D)*
- *Using Device Manager Diagnostic Tools (317359-C)*

Reference and Configuration Guides

These guides provide reference and configuration information for the Passport 8300 switch.

- *CLI Command Line Reference for the Ethernet Routing Switch 8300 (317360-D)*
- *Configuring and Managing Security using Device Manager (317346-D)*

- *Configuring and Managing Security using the NNCLI and CLI* (316804-D)
- *Configuring IP Routing and Multicast Operations using Device Manager* (317338-B)
- *Configuring IP Routing and Multicast Operations using the NNCLI and CLI* (316800-B)
- *Configuring Network Management using the NNCLI, CLI, and Device Manager* (316803-C)
- *Configuring QoS and Filters using the CLI* (317339-C)
- *Configuring QoS and Filters using Device Manager* (317340-C)
- *Configuring QoS and Filters using the NNCLI* (316801-C)
- *Configuring VLANs, Spanning Tree, and Static Link Aggregation using the CLI* (317347-C)
- *Configuring VLANs, Spanning Tree, and Static Link Aggregation using Device Manager* (317348-C)
- *Configuring VLANs, Spanning Tree, and Static Link Aggregation using the NNCLI* (316805-C)
- *Managing Platform Operations* (317350-C)
- *Network Design Guidelines* (316809-C)
- *NNCLI Command Line Reference for the Ethernet Routing Switch 8300* (316810-D)
- *System Messaging Platform Reference Guide* (316806-C)
- *Using NNCLI and CLI Diagnostic Tools* (317222-B)

Hard-copy technical manuals

You can download current versions of technical documentation for your Ethernet Routing Switch 8300 from the Nortel customer support web site at www.nortel.com/support.

If, for any reason, you cannot find a specific document, use the **Search** function:

- 1 Click **Search** at the top right-hand side of the web page.
The **Search** page opens.
- 2 Ensure the **Support** tab is selected.

- 3 Enter the title or part number of the document in the **Search** field.
- 4 Click **Search**.

You can print the technical manuals and release notes free, directly from the Internet. Use Adobe* Acrobat Reader* to open the manuals and release notes, search for the sections you need, and print them on most standard printers. Go to Adobe Systems at the www.adobe.com URL to download a free copy of the Adobe Acrobat Reader.

How to get help

If you purchased a service contract for your Nortel product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

If you purchased a Nortel service program, contact Nortel Technical Support. To obtain contact information online, go to the www.nortel.com/contactus web page and click Technical Support.

Information about the Nortel Technical Solutions Centers is available from the www.nortel.com/callus web page.

An Express Routing Code (ERC) is available for many Nortel products and services. When you use an ERC, your call is routed to a technical support person who specializes in supporting that product or service. To locate the ERC for your product or service, go to the www.nortel.com/erc web page.