NORTEL

Nortel Ethernet Routing Switch 2500 Series

Release Notes — Software Release 4.2

NN47215-400

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New in this release

The following sections describe what's new in Nortel Ethernet Routing Switch 2500 Series release 4.2:

Features

The following features are new in Nortel Ethernet Routing Switch 2500 Series software release 4.2:

- "802.1X enhancements (general)" (page 12)

- "802.1X RFC 3576" (page 12)

- "802.1AB Location TLV" (page 12)

- "802.1AB MED support" (page 12)

Other changes

The following sections describe other changes in Nortel Ethernet Routing Switch 2500 Series release 4.2:

File names for upgrade

File names are updated; see "File names for this release" (page 14).

Windows Vista

Windows Vista was added to the section "Browsers for Online Help" (page 17).

Hardware and software compatibility

Hardware and software compatibility information moves to this document. See "Supported software and hardware capabilities" (page 16).

Document changes

This document is reformatted to comply with the Nortel Customer Documentation Standards. For more information, see *Nortel Ethernet Routing Switch 2500 Series Documentation Roadmap* (NN47215-101).

Introduction

This document describes new features, hardware, upgrade alerts, known and resolved issues, and limitations for Nortel Ethernet Routing Switch 2500 Series, software release 4.2.

For information on how you can upgrade your version of Device Manager, see *Nortel Ethernet Routing Switch 2500 Series Fundamentals* (NN47215-102).

The Nortel Ethernet Routing Switch 2500 Series, supported by software release 4.2, includes the following switch models:

*   Nortel Ethernet Routing Switch 2526T

*   Nortel Ethernet Routing Switch 2550T

*   Nortel Ethernet Routing Switch 2526T-PWR

*   Nortel Ethernet Routing Switch 2550T-PWR

Configurations can vary from a stand-alone switch to a stack of up to 8 switches. A stack can consist of any combination of switches. One of the benefits of operating Nortel Ethernet Routing Switch 2500 Series switches in a stack is management efficiency; a stack is managed with a single IP address and software is available as a single image across all models.

These Release Notes provide the latest information about Software Release 4.2, as well as operational issues not included in the documentation suite.

For a complete list of documentation in the 2500 Series suite, see *Nortel Ethernet Routing Switch 2500 Series Documentation Road Map* (NN47215-101).

The information in these Release Notes supersedes applicable information in other documentation.

Navigation

The following topics are discussed in this document:

- "Resolved issues" (page 23)
- "Known issues and limitations" (page 25)

Important notices and new features

This section contains a brief synopsis of the new features in release 4.2 and any important notices.

Navigation

This section includes the following sections:

New features

This section lists the main software features supported on the Nortel Ethernet Routing Switch 2500 Series devices.

IP local and static routing

This release supports both local and static IP routing between VLANs on stand-alone and stack configurations. This release supports a maximum of 256 local and 32 static routes including a default route. You can enable or disable IP forwarding for all VLANs. IP Routing also supports the additional functionality of IP Blocking, UDP Forwarding and Proxy ARP.

Proxy ARP and UDP Forwarding

Release 4.2 supports Proxy ARP and UDP forwarding capabilities.

BootP and DHCP relay

Dynamic Host Configuration Protocol (DHCP) is a mechanism to assign a network IP address. It is built on top of existing BootP protocol and can be specified for DHCP, BootP or both.

This feature relays client requests to DHCP servers on different Layer 3 VLANs and relays server replies back to the clients.

You can configure BootP and DHCP relay with NNCLI, ACG, Web-based management and Device Manager.

Agent Auto Unit Replacement (AAUR)

Release 4.2 supports Agent Auto Unit Replacement (AAUR) functionality for software image in addition to configuration update (added in release 4.1). AAUR facilitates the automatic upgrade of the software agent image for a switching unit replaced in a stack.

Due to the Ethernet Routing Switch 2500 Series implementation of software licensing for stacking functionality, certain conditions must be met before you can automatically upgrade a software image on an Ethernet Routing Switch 2500 Series unit being replaced in an existing switch stack. For example, a switch with release 4.0 cannot be inserted into an existing stack. The following conditions must be met before you connect the stack ports of a replacement switch into a stack:

- The replacement Ethernet Routing Switch 2500 Series switch must have software release 4.1 or higher loaded.

- The replacement Ethernet Routing Switch 2500 Series switch must have either a Stacking license file loaded (for order codes AL2500xxx-E6) with the rear ports configured and operating in Stacking Mode or be Stack Enabled (order codes AL2515xxx-E6) with the rear ports configured and operating in Stacking Mode (the default mode).

DHCP Snooping

DHCP snooping filters untrusted DHCP messages to provide network security. When you enable the DHCP Snooping feature, the Ethernet Routing Switch 2500 switch builds and maintains a DHCP binding table.

ARP Inspection

Dynamic ARP inspection is a security feature that restricts IP traffic on switch ports by filtering traffic based on the DHCP binding table and the IP source binding table. The IP traffic restriction that Dynamic ARP inspection imposes prevents traffic attacks caused when a host tries to use the IP address of a neighbor. When you enable Dynamic ARP inspection, the IP traffic is filtered based on the source IP address seen on the switch port

by referring to the address binding tables. The switch forwards IP traffic when the source IP address matches an entry in the address binding tables. Otherwise, the IP traffic is not forwarded.

To begin filtering on IP traffic, Dynamic ARP inspection must be enabled, in addition to DHCP snooping, on the switch port. From that point, IP traffic is filtered based on the address binding table entries. The Dynamic ARP inspection feature is managed from the NNCLI and Device Manager.

HTTPS and secure socket layer (SSL)

Release 4.2 release supports HTTPS and SSL functionality for secure management with Web-based management. HTTPS and SSL functionality requires that you run the secure runtime image on the Ethernet Routing Switch 2500 Series switch.

BPDU Filtering

Release 4.2 release supports BPDU Filtering. The BPDU Filtering feature provides a way to block an unwanted root selection process when you add an edge device, with Spanning Tree Protocol (STP) enabled, to the network. This feature prevents unknown devices from influencing an existing spanning tree topology. The BDPU filtering feature blocks the flooding of STP BPDUs from an unknown device on specified ports.

IP Source Guard

IP Source Guard is a Layer 2 security feature which uses the IP address binding learned through DHCP snooping. IP Source Guard ensures that only devices that have a valid IP address binding for a certain port are able to send traffic from that source IP address. Any other traffic with a different source unicast IP address is blocked to prevent masquerading as a different IP address.

802.1X (Unicast Request Support)

Release 4.2 supports additional EAP Multihost features implemented and planned on other Ethernet Routing Switch products. NNCLI, ACG, Web-based management and Device Manager support the Unicast EAP Requests in Multihost Mode (to prevent repeated EAP-responses from an already authenticated EAP-Supplicant because of multicast EAP-Request_ID transmissions).

802.1X (Non-EAP IP Phone Support)

Release 4.2 provides Non-EAP IP Phone support for Nortel IP Phones on EAP enabled ports for IP Telephony solutions. In this scenario, a PC uses an EAP client that is connected to a Nortel IP Phone that is not using EAP, and the Nortel IP Phone is connected to a Nortel Ethernet switch port with EAP enabled.

802.1X enhancements (general)

Release 4.2 provides additional enhancements. NNCLI, ACG, Web-based management and Device Manager support the following enhancements:

- RADIUS assigned VLAN for Non-EAP MAC authenticated host to allow the system to use the first radius-assigned VLAN value in Multihost NEAP operation.

- RADIUS assigned VLAN for EAP authenticated hosts to allow the system to use the first radius-assigned VLAN value in EAP Multihost operation.

TACACS+

This feature provides access control for the management of the switch through one or more centralized TACACS+ servers as an alternative to RADIUS. Additionally, TACACS+ provides separate authentication, authorization and accounting services.

802.1X RFC 3576

This feature allows RFC 3576 compliant RADIUS servers or third party NAC devices to dynamically change the VLANs on the switches, without requiring the client to initiate the 802.1x/RADIUS exchange. This feature also allows the server to actively terminate the user session. RFC 3576 captures additional RADIUS commands to support unsolicited messages, disconnect and Change of Authorization from the RADIUS server/NSNA.

802.1AB MED support

This feature enables additional VoIP plug and play capabilities by supporting the advertisement of IP Phone capabilities that specify VLAN and QoS with the 802.1AB Media Endpoint Discovery (MED) function.

802.1AB Location TLV

This feature enables phase I of E911 location based services through the provisioning of location based information for each port of the switch. This location information is then shared with the end device through 802.1AB Location Based TLV.

Stack health check

This feature allows you to run a high level non-intrusive test to confirm stack operation and stack continuity so you can see the overall health of the stack.

VLACP

Release 4.2 supports Virtual Link Aggregation Control Protocol (VLACP) feature. NNCLI, ACG, Web-based management and Device Manager support VLACP.

MAC Security Autolearning

Release 4.2 release supports autolearning within MAC address based security. NNCLI, Web-based management and Device Manager support MAC Security Autolearning.

The MAC address-based security autolearning feature provides the ability to add allowed MAC addresses to the MAC Security Address Table automatically without user intervention. You can specify the number of MAC addresses that can be learned on the ports to a maximum of 25 addresses for each port. The switch only forwards traffic for those MAC addresses statically assigned to a port or autolearned on the port.

Stack Forced Mode

When you enable this feature in a stack of two switches, on the failure of a unit, the remaining switch retains the stack IP address ensuring continued management access to the remaining unit.

Software Exception Log

The v4.2 release supports the Software Exception Log function within NNCLI, Web-based management and Device Manager. A message is written to the customer accessible log to indicate that a software exception has been reported. For the failure of a non-base unit, the event is written to the base unit customer accessible log when the failed unit rejoins the stack.

CPU and memory utilization

The show CPU Utilization function has been added in the Ethernet Routing Switch 2500 Series release 4.2 software release to provide visibility of the Ethernet Routing Switch 2500 Series CPU operation and is supported in NNCLI, Web-based management and Device Manager.

The show Memory Utilization function has been added in the Ethernet Routing Switch 2500 Series release 4.2 software release to provide visibility of the Ethernet Routing Switch 2500 Series memory operation and is supported in NNCLI, Web-based management and Device Manager.

Show commands

Release 4.2 adds the following show commands to assist with troubleshooting switch operations:

- **show mac-address-table**
- **show ip route**
- **show ip arp**
- **show ip dhcp-relay**
- **show lacp aggr**
- **show lacp port**

NSNA release 2.0 (SSCP-LT)

The Ethernet Routing Switch 2500 supports a lightweight version of Secure Network Access Switch (SNAS) Communication Protocol (SSCP-LT), an open network access control (NAC) enforcement mechanism that communicates with Ethernet switches to perform VLAN transitions using a combination of SNMP and command line interface (NNCLI) commands. SSCP-LT works in combination with the MAC registration database and the Nortel Health Agent on Windows, Linux, and Mac OS X platforms to control access to network resources. SSCP-LT ensures that only authenticated and compliant endpoints can access corporate VLANs. Nonauthenticated or noncompliant endpoints can only access restricted VLANs.

File names for this release

The following table describes the Nortel Ethernet Routing Switch 2500 Series software release 4.2 software files.

Table 1
Software release 4.2 components

File description	File name
Standard (non-SSH) runtime image software version 4.2.0	2500_420002.img
Secure (SSH) runtime image software version 4.2.0	2500_420003.img Secure (SSH)
Boot/Diagnostic software version for 1.0.0.14	2500_10014_diag.bin
Device Manager software image (6.1.5.0) for Windows NT, Windows XP, Windows 2000, Windows 2003, and Windows Vista	jdm_615.exe
Java Device Manager software image (6.1.5.0) for Solaris	jdm_ 615_solaris_sparc.sh

File description	File name
Java Device Manager software image (6.1.5.0) for Linux	jdm_615_linux.sh
Software Release 4.2 Management Information Base (MIB) definition files	Ethernet_Routing_Switch_25xx_MIBs_4.2.zip

Supported traps and notifications

For a complete list of log messages generated by Ethernet Routing Switch 2500 Series Software Release 4.2, see Nortel *Ethernet Routing Switch 2500 Series Logs Reference* (NN47215-701).

For a complete list of SNMP traps generated by Ethernet Routing Switch 2500 Series Software Release 4.2, see Nortel *Ethernet Routing Switch 2500 Series Troubleshooting* (NN47215-703).

Device Manager installation requirements

Device Manager is supported on Windows, Solaris, and Linux.

See *Nortel Ethernet Routing Switch 2500 Series Fundamentals* (NN47215-102) for more information on Device Manager installation requirements.

Windows
The minimum system requirements for installing Device Manager on Microsoft Windows Vista, Windows 2000, Windows 2003 (Professional) and Windows XP are:

- 512 MB of RAM

- 400 MB space on hard drive

Solaris
Solaris™/Sun™OS 2.8, 2.9, and 2.10/5.8, 5.9, and 5.10
Device Manager requires Solaris 8 as a minimum requirement. The minimum system requirements for installing Device Manager on Solaris are:

- 512 MB RAM

- 400 MB space on hard drive

Linux
The minimum system requirements for installing Device Manager on Linux are:

- 512 MB RAM

- 400 MB space on hard drive

Secure software image

The Ethernet Routing Switch Software can be installed using a secure image that provides the following features:

*   Secure Shell (SSH) connections

*   SHA-based user authentication and DES-based privacy encryption

These features are not available with the standard software image.

Software upgrade instructions

If you must upgrade the Nortel Ethernet Routing Switch 2500 Series software, follow this procedure:

Step	Action
1	Backup the binary configuration file to a TFTP server.
2	Upgrade the boot/diagnostic code, if a new version is available. The system reboots after this step.
3	Upgrade the software image.

—End—

Software release 4.2 adds support for Stacking Mode functionality on the rear-ports. This capability is delivered using a license file mechanism for ERS2500 switches for order codes AL2500xxx-E6.

Stack Enabled ERS2500 switches (order codes AL2515xxx-E6) do not use a license file mechanism for stacking capability and ship with release 4.2 software installed on the switch.

For more information on Stack licensing, see *Nortel Ethernet Routing Switch 2500 Series Fundamentals (NN47215-102).*

Supported software and hardware capabilities

The following table summarizes the known capabilities for the Nortel Ethernet Routing Switch 2500 Series software release 4.2.

Table 2
Supported capabilities for the Nortel Ethernet Routing Switch 2500 Series

Feature	Maximum number supported
QoS egress queues	4
VLANs	256

Feature	Maximum number supported
Spanning Tree Groups in STPG and RSTP modes	1
Multiple Spanning Tree Instances (MSTI) in MSTP mode	8
MAC addresses	16000
MultiLink Trunking (MLT), Link Aggregation (LAG) groups	6
Links for each MLT or LAG	4
802.1x EAP scaling (clients for each port)	32
ADAC (IP Phones)	1 for each port 24/48 switch 192/384 for each stack
Jumbo frame support	9 K bytes

Browsers for Online Help

Nortel supports the following browsers for Java Device Manager Online Help:

- Netscape
- Internet Explorer

Netscape specifics

If you use Netscape as your Web browser, to ensure that the topics and table of contents display correctly when making a context call to on-line Help, perform the following procedure once, before requesting Help on a topic.

Configuring Netscape

Step	Action

1   Start the Netscape browser.

2   From the **Tools** menu, select **Options**.

*An **Options** window opens.*

3   In the **Security and Privacy** panel of the **Options** window, click **Site Controls**.

*An **Options - Site Controls** window opens.*

4   Ensure that the **Site List** tab is selected.

5   Select **Local Files** in the **Master Settings** area of the window.

6 Select **Internet Explorer** in the **Rendering Engine** area of the window.

7 Click **OK** to close the **Options - Site Controls** window.

—End—

SFP transceiver compatibility

The following table lists the SFP transceiver compatibility.

Table 3
SFP transceiver compatibility

Supported SFPs	Description	Minimum software version	Part number
Small form factor pluggable (SFP) transceivers			
1000BaseSX DDI SFP	850 nm LC connector	4.2.0	AA1419048-E6
1000BaseLX DDI SFP	1310 nm LC conn	4.2.0	AA1419049-E6
1000Base-SX SFP	850 nm LC connector	4.0.0	AA1419013-E5
1000Base-SX SFP	850 nm MT-RJ connector	4.0.0	AA1419014-E5
1000Base-LX SFP	1310 nm LC connector	4.0.0	AA1419015-E5
1000BaseCWDM-XD SFP	1470 nm LC connector, up to 40 km	4.0.0	AA1419025-E5
1000BaseCWDM-XD SFP	1490 nm LC connector, up to 40 km	4.0.0	AA1419026-E5
1000BaseCWDM-XD SFP	1510 nm LC connector, up to 40 km	4.0.0	AA1419027-E5
1000BaseCWDM-XD SFP	1530 nm LC connector, up to 40 km	4.0.0	AA1419028-E5
1000BaseCWDM-XD SFP	1550 nm LC connector, up to 40 km	4.0.0	AA1419029-E5
1000BaseCWDM-XD SFP	1570 nm LC connector, up to 40 km	4.0.0	AA1419030-E5
1000BaseCWDM-XD SFP	1590 nm LC connector, up to 40 km	4.0.0	AA1419031-E5
1000BaseCWDM-XD SFP	1610 nm LC connector, up to 40 km	4.0.0	AA1419032-E5
1000BaseCWDM-ZX SFP	1470 nm LC connector, up to 70 km	4.0.0	AA1419033-E5

Supported SFPs	Description	Minimum software version	Part number
1000BaseCWDM-ZX SFP	1490 nm LC connector, up to 70 km	4.0.0	AA1419034-E5
1000BaseCWDM-ZX SFP	1510 nm LC connector, up to 70 km	4.0.0	AA1419035-E5
1000BaseCWDM-ZX SFP	1530 nm LC connector, up to 70 km	4.0.0	AA1419036-E5
1000BaseCWDM-ZX SFP	1550 nm LC connector, up to 70 km	4.0.0	AA1419037-E5
1000BaseCWDM-ZX SFP	1590 nm LC connector, up to 70 km	4.0.0	AA1419039-E5
1000BaseCWDM-ZX SFP	1610 nm LC connector, up to 70 km	4.0.0	AA1419040-E5

See *Nortel Ethernet Routing Switch 2500 Series Installation*, NN47215-300 for more information.

Important note on use of the two rear 1000Base-T (RJ-45) ports (all models)

The two rear facing 1000Base-T ports on all Ethernet Routing Switch 2500 Series switches are capable of supporting two different functional modes of operation. They are Stand-alone Mode and Stacking Mode operation.

In Stand-alone Mode, the rear ports can be used as normal Ethernet ports to connect a server, host or as uplink ports, and support the same configuration options as all front panel ports.

In Stacking Mode, the rear ports allow resilient stacking of up to eight Ethernet Routing Switch 2500 switches in any combination to form a single virtual switch.

ATTENTION

Stacking capability is delivered in two distinctively different ways on ERS 2500 series switches.

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1. By means of software using a licensing mechanism available through the purchase of an Ethernet Routing Switch 2500 series Stacking License Kit (one license required for each switch), required for switch order codes AL2500xxx-E6.

2. By means of stack enabled versions of Ethernet Routing Switch 2500 switches where the rear ports are factory pre-enabled and configured in Stacking Mode by default and are ready to stack—with order codes

AL2515xxx-E6. Ethernet Routing Switch 2500 switches do not use or require a license file.

Supported standards, RFCs and MIBs

The following sections list the standards, RFCs and MIBs supported in Release 4.2.

Standards

The following IEEE Standards contain information pertinent to the Nortel Ethernet Routing Switch 2500 Series:

- IEEE 802.1D (Standard for Spanning Tree Protocol)
- IEEE 802.3 (Ethernet)
- IEEE 802.3u (Fast Ethernet)
- IEEE 802.3x (Flow Control)
- IEEE 802.3z (Gigabit Ethernet)
- IEEE 802.3ab (Gibabit Ethernet over Copper)
- IEEE 802.3ad (Link Aggregation)
- IEEE 802.1AB (Link Layer Discovery Protocol)
- IEEE 802.1s (Multiple Spanning Tree Protocol—MSTP)
- IEEE 802.3af (Power over Ethernet)
- IEEE 802.1p (Prioritizing)
- IEEE 802.1w (Rapid Spanning Tree Protocol—RSTP)
- IEEE 802.1Q (VLAN Tagging)
- IEEE 802.1X (EAPoL)

RFCs and MIBs

For more information about networking concepts, protocols, and topologies, consult the following RFCs and MIBs:

- RFC 826 (ARP)
- RFC 951 (BootP)
- RFC 2131 (BootP/DHCP Relay Agent)
- RFC 1945 (HTTP v1.0)
- RFC 792 (ICMP)
- RFC 1112 (IGMPv1)
- RFC 2236 (IGMPv2)
- RFC 791 (IP)

- RFC 894 (IP over Ethernet)

- RFC 2138 (RADIUS)

- RFC 2865 (RADIUS)

- RFC 3576 (RADIUS)

- RFC 1271 (RMON)

- RFC 1757 (RMON)

- RFC 1157 (SNMP)

- RFC 3410 (SNMPv3)

- RFC 3413 (SNMPv3 Applications)

- RFC 3411 (SNMP Frameworks)

- RFC 3412 (SNMP Message Processing)

- RFC 3414 (SNMPv3 USM)

- RFC 3415 (SNMPv3 VACM)

- RFC 793 (TCP)

- RFC 854 (Telnet)

- RFC 1350 (TFTP)

- RFC 768 (UDP)

- RFC 1493 (Bridge MIB)

- RFC 2737 (Entity MIBv2)

- RFC 1643 (Ethernet MIB)

- RFC 2665 (Ethernet MIB)

- RFC 1573 (Interface MIB)

- RFC 2233 (Interface MIB)

- RFC 2863 (Interfaces Group MIB)

- RFC 1213 (MIB-II)

- RFC 2674 (Q-BRIDGE-MIB)

- RFC 4673 (RADIUS Dynamic Authorization Server MIB)

- RFC 2819 (RMON MIB)

- Bay Networks proprietary MIBs

  — s5Chass MIB

  — s5Agent MIB

  — s5Ecm MIB (Ethernet Common)

— s5emt MIB (multi-segment topology)

— RapidCity Enterprise MIB

Resolved issues

Use the information in this section to learn more about issues resolved in this release.

The following table describes the issues in previous software releases for the Ethernet Routing Switch 2500 Series that have been resolved in software release 4.2.

Table 4
Issues resolved in ERS 2500 Series software release 4.2

Reference Number	Description
Q01687454	No telnet session can be opened during VLAN display. Another session must be opened after VLAN display. Resolved.
Q01688663	The rear-ports related commands are hidden when the switch is part of a stack. Resolved.
Q01741602	Ping does not work between DUTs connected with eight links LAG in certain conditions. Resolved.
Q01507984	Currently, QoS Policy configuration (Strict, Weighted Round-Robin, Bounded Round-Robin) with corresponding Q weights and Traffic Class Priority can only be configured using the Web-based management interface. These fields should be configurable from the NNCLI also. Resolved.
Q01721997	After the link on a port goes down, while several hosts are authenticated in MHMA mode on the same port. The hosts are shown in Initialize state in the command output for: `#show eapol multihost status` Resolved.
Q01747943	Resetting of the base unit of a stack is not recommended when a dynamically 802.3AD Trunk includes ports from the base unit. Resolved.
Q01784784	The correct MTU value for combo ports is 9216. Resolved.
Q01776891	LLDP-MED is supported in the 4.1 release. Resolved.

Known issues and limitations

Use the information in this section to learn more about known issues and limitations. Where appropriate, use the workarounds provided for these.

Navigation

Known issues

The following table describes known limitations and considerations in the Nortel Ethernet Routing Switch 2500 Series software release 4.2.

Table 5
Known issues and limitations in ERS 2500 Series release 4.2

Reference Number	Description
Q01525768	Device Manager does not provide an option to log in using 3DES privacy protocol. If you configure an SNMPv3 user with SHA authentication and 3DES privacy protocol, the user cannot log in to the device using Device Manager.
Q01491509	In MSTP or RSTP, if the TxHoldCount is modified, the TxCount value is not zeroed.
Q01483088	The following error message appears when a broadcast storm occurs: `(tIdt):  panic:  netJobAdd:  ring buffer overflow!`
Q01483689	The Ethernet Routing Switch 2500 Series does not forward packets to multicast address 01-00-00-00-xy-00.
Q01512937	When the Avago LX SFP is installed in the SFP GBIC slot, the switch recognizes the SFP, but no link is possible.
Q01498529	If the PD Detect Type on an Ethernet Routing Switch 2500-PWR is set to 802.3af and Legacy, and a PoE port on the switch is connected to a non-PoE device, the status for the PoE port can appear incorrectly as InvalidPD rather than Detecting.

Reference Number	Description
Q01510139	If you connect two Ethernet Routing Switch 2500-PWR Series units using PoE ports (anywhere from eight to 12 connections) and the PD Detect Type is set to 802.3 af and Legacy, after a period of minutes (maximum 3), one of the units interprets the other as a valid PD and begins delivering power through one of the PoE ports. If you then unplug the unit receiving PoE power, it remains powered and continues to forward traffic.
Q01501869	After a Spanning Tree topology change, the entries in the MAC address table only age out after the expiration of the default aging time, rather than the forward delay time. This issue only occurs if the forward delay time is set to 4 seconds.
Q01567158	If you set up an MLT containing rear ports and combo ports, multicast and broadcast traffic travels down the first rear port instead of the lowest active MLT port.
Q01682700	When a user is changing the EAPoL Multihost Global Settings through DM, increase the timeout value to the maximum value of 30 seconds to prevent the display of erroneous timeout messages.
Q01729434	NT recommends autonegotiation be enabled on the shared copper 10/100 copper ports. Use the Custom Autonegotiation Advertisements (CANA) feature to limit the advertisements of the shared ports if a user wants to force them to operate in a particular speed and duplex.
Q01747869	The number of characters that can be introduced for a password in the Web-based management login page is limited to 15, although the authentication type can be RADIUS and the password configured on the RADIUS server is greater than 15. **ATTENTION** Users configured on the Radius server should not have a password longer than 15 characters.
Q01754223	When configuring a DMLT on 2 or more units, Nortel recommends to use the same rate-limit settings on the units. If the rate-limit settings are different, DMLT ports could become administratively shutdown after initiating a boot session.
Q01744852	In a specific setup, first MLT link might go down after reboot/power cycle if auto-negotiation is disabled. Nortel recommends that all MLT ports should have auto-negotiation enabled.
Q01759611	After configuring RMON alarms on a stack, Nortel recommends that you do not use the renumbering units feature, because RMON alarms are not relocated to corresponding ports accordingly.
Q01760981	If a switch and a loop are connected using a link, and you create a loop on the hub, then the switch does not go in to a Forwarding State even when the loop is removed.

Reference Number	Description
Q01480212	Port-mirroring mode XTX mirrors egressed traffic on the mirrored port but does not mirror control packets generated by the switch. The monitor port does not receive copies of the generated control packets that egress from the mirrored port.
Q01482942	In the NNCLI Quick Start menu, if you enter a very long read-only or read-write community string (more than 32 characters), you cannot delete all of the entered characters.
Q01777899 Q01777910	When making configuration changes to the switch, allow at least 30 seconds after the last change is made before any power interruption occurs.
Q01493771	Rate limiting counts packets from the beginning of each second. When the number of packets reaches the value of the rate limit, all remaining packets are dropped until the end of the second, meaning that no packets are transmitted during the remaining interval. As a result, the packets are not evenly distributed over the course of a second. They are only sent at the beginning of the second. This means that if packet counters are not perfectly synchronized with the beginning of each second, the counters can register a number of packets that does not represent the actual number of packets transmitted during that second. For example, a packet counter can register a rate limit of 5000 pps as a variable rate alternating between 2100 and 8900 pps.
Q01785422	In stack statistics, the counter shown for Transmitted Undersize is actually Transmitted Oversize.
Q01775878	The 'Admin Status' parameter of `show eapol command` displays the port status for hosts using an EAP client for authentication. In case of a Non-EAP clients, the status of all Non-EAP clients currently active on switch can be seen using `show eapol multihost non-eap-mac status` command.
Q01685277	The Show Logging message output incorrectly displays the ring information for the Stack Manager. Stack Mgr: Ring: B 1/1 - D 2/2 - D 3/3 - D 4/4 - D 5/5 - D 6/6 - D 7/7 - D 8/8
New in release 4.2	
Q01910550-02	If you change the stack password in stack mode, the password for the switch also changes to the stack password.
Q01879033	Use NNCLI or Device Manager to display MED TLVs information for neighbors. You cannot view MED TLVs information for neighbors in Web-based management.
Q01861411-01	Current Web-based management does not support the creation of snmpv2C—new style communities.
Q01876616	Logging Events Disable is ignored under Temporary Base Unit. A stack will continue to log events for all the stack units if Logging Events is set to disable under Temporary Base Unit. Workaround: Once the new unit rejoins the stack, enter the `logging disable` command once more so the configuration affects the whole stack.

Reference Number	Description
Q01874700	If you issue the `show port-mirroring` command repeatedly right after the `set port-mirroring` command the feature state appears as enabled. Port mirroring is actually disabled, but the `set port-mirroring` command takes a while to become effective. If you issue the `show port-mirroring` command after 5-10 seconds, port mirroring appears as disabled.
Q01862983	A longer join stack time is expected for an eight switch stack loaded with large configuration.
Q01874770	The system sends three stack monitor traps at the same time after 1 min. 5 sec. if a unit fails (power off) with stack monitor enabled. The system does not send any other traps during this period (link up or down).
Q01925054	Some ports will still be enabled if you try to administratively disable all ports at the same time in an eight switch stack with a heavy configuration loaded.
Q01935551	To download the diagnostic code to a switch or stack, you must explicitly specify the diag field in the NNCLI command.
Q01921814	If you administratively disable links with IPSG configured on LACP-enabled ports, the IP filters installed by IPSG on the LACP trunk may not be removed.
Q01930298	Verify your ASCII configuration if the stack does not join after you download it. A configuration error in the file can cause the stack operation to fail.
Q01914790	An ARP request that comes from a device with L3 enabled may be rejected by ARP inspection due to the mismatch of the source MAC addresses. In this case, the L3 application alters the MAC address of the device.
Q01950079	The system resets the user-configurable user names when you upgrade to release 4.2 to the default values (RO, RW). The system does save the passwords when you upgrade to release 4.2.

Known limitations

The following table lists the feature limitations in the Nortel Ethernet Routing Switch 2500 Series release 4.2.

Table 6
Known limitations

Reference number	Description
1	Supports only 16k MACs
2	802.1D: one Spanning Tree Group for all ports
3	Rate Limiting: settings for each box, in packets per second
4	Port Mirroring: one-to-one mirroring only
5	IP Manager: up to 10 allowed IP addresses
6	RMON: 400 alarms and events
7	VLAN: port-based, IVL only

Reference number	Description
8	IGMP: IGMPv1 and IGMPv2 supported; up to 244 Multicast Groups
9	ADAC: up to 32 devices for each port (IP Phones or other) or 16 when using only LLDP-based detection
10	802.1x NEAP: up to 32 MACs allowed for each port
11	802.1x MHSA: up to 32 MACs allowed for each each port
12	802.1x MHMA: upto 32 EAP clients allowed for each port
13	Due to an existing Ethernet Routing Switch 2500 Series hardware limitation, you can only enable IP Source Guard on a maximum of four ports simultaneously in the Ethernet Routing Switch 2500, no matter which operating mode (stand-alone or stacking) you use. (Q01878909)

Nortel Ethernet Routing Switch 2500 Series

Release Notes — Software Release 4.2

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