NORTEL

Nortel Ethernet Routing Switch 2500 Series

Release Notes — Software Releases 4.1.0 and 4.1.1

NN47215-400 (323168-B)

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Release Notes for Nortel Ethernet Routing Switch 2500 Series Software Releases 4.1.0 and 4.1.1

Introduction

These are the Release Notes for the Nortel Ethernet Routing Switch 2500 Series Software Releases 4.1.0 and 4.1.1

The Nortel Ethernet Routing Switch 2500 Series family of devices is comprised of several purpose-built high-quality switching platforms that deliver an enterprise grade feature set with a special focus on delivering convergence features for either Voice over IP or Wireless deployments. Nortel Ethernet Routing Switch 2500 Series devices can provide support for Power over Ethernet (PoE) as well as reliability and security features that ensure the maximum network uptime.

Each Nortel Ethernet Routing Switch 2500 Series device has the following basic features:

- 1 RU High

- 24 or 48 10/100BaseT ports for network edge

- 2 front-panel 10/100/1000/SFP combo ports

- 2 rear-panel Gigabit Ethernet ports for use as either uplink or server connectivity in Standalone Mode or as stacking cascade ports in Stacking Mode

The Nortel Ethernet Routing Switch 2500 Series, supported by software releases 4.1.0 and 4.1.1, includes the following models:

- Nortel Ethernet Routing Switch 2526T

- Nortel Ethernet Routing Switch 2550T

- Nortel Ethernet Routing Switch 2526T-PWR

- Nortel Ethernet Routing Switch 2550T-PWR

These Release Notes provide the latest information about Software Releases 4.1.0 and 4.1.1, as well as operational issues not included in the documentation suite.

For a complete list of documentation in the 2500 Series suite, see "Related publications" (page 24).

The following topics are discussed in this document:

- "Software file names for this release" (page 8)

- "Secure software image" (page 9)

- "Software upgrade instructions" (page 10)

- "Hardware features in Release 4.1" (page 10)

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- "Related publications" (page 24)

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

Software file names for this release

The following table describes the Nortel Ethernet Routing Switch 2500 Series Software Release 4.1.0 software files.

Table 1
Software Release 4.1.0 Components

File description	File name
Standard (non-SSH) runtime image software version 4.1.0.000	2500_410000.img
Secure (SSH) runtime image software version 4.1.0.001	2500_410001.img
Boot/Diagnostic software version for 1.0.0.13	2500_10013_diag.bin

File description	File name
Java Device Manager software image (6.0.9.0) for Windows NT, Windows XP, Windows 2000, Windows 2003, and Windows Vista	jdm_6090.exe
Java Device Manager software image (6.0.9.0) for Solaris	jdm_6090_solaris_sparc.sh
Java Device Manager software image (6.0.9.0) for Linux	jdm_6090_linux.sh
Software Release 4.1 Management Information Base (MIB) definition files	Ethernet_Routing_Switch_25xx_MIBs_4.1.0.zip

The following table describes the Nortel Ethernet Routing Switch 2500 Series Software Release 4.1.1 software files.

Table 2
Software Release 4.1.1 Components

File description	File name
Standard (non-SSH) runtime image software version 4.1.1.000	2500_411000.img
Secure (SSH) runtime image software version 4.1.1.001	2500_411001.img
Boot/Diagnostic software version for 1.0.0.13	2500_10013_diag.bin
Java Device Manager software image (6.0.9.0) for Windows NT, Windows XP, Windows 2000, Windows 2003, and Windows Vista	jdm_6090.exe
Java Device Manager software image (6.0.9.0) for Solaris	jdm_6090_solaris_sparc.sh
Java Device Manager software image (6.0.9.0) for Linux	jdm_6090_linux.sh
Software Release 4.1 Management Information Base (MIB) definition files	Ethernet_Routing_Switch_25xx_MIBs_4.1.0.zip

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 v4.1 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 v4.1 software installed on the switch.

For more information on Stack licensing, see *Nortel Ethernet Routing Switch 2500 Series Overview – System Configuration (NN47215-500).*

Hardware features in Release 4.1

The following table describes the general hardware features supported by each Nortel Ethernet Routing Switch 2500 Series device:

Table 3
Hardware description by model

Nortel Ethernet Routing Switch model	Features
2526T	• 24 10/100BaseT RJ-45 front-panel ports (1-24) • 2 10/100/1000BaseT RJ-45 or SFP combo ports (25 & 26) • 2 1000BaseT RJ-45 rear-panel ports (27 & 28, in Standalone Mode)

Nortel Ethernet Routing Switch model	Features
2550T	• 48 10/100BaseT RJ-45 front-panel ports (1-48) • 2 10/100/1000BaseT RJ-45 or SFP combo ports (49 & 50) • 2 1000BaseT RJ-45 rear-panel ports (51 & 52, in Standalone Mode)
2526T-PWR	• 12 10/100BaseT RJ-45 front-panel PoE ports (1-12) • 12 10/100BaseT RJ-45 front-panel non-PoE ports (13-24) • 2 10/100/1000BaseT RJ-45 or SFP combo ports (25 & 26) • 2 1000BaseT RJ-45 rear-panel ports (27 & 28, in Standalone Mode)
2550T-PWR	• 24 10/100BaseT RJ-45 front-panel PoE ports (1-24) • 24 10/100BaseT RJ-45 front-panel non-PoE ports (25-48) • 2 10/100/1000BaseT RJ-45 or SFP combo ports (49 & 50) • 2 1000BaseT RJ-45 rear-panel ports (51 & 52, in Standalone Mode)

Software features in Release 4.1

This section lists the main software features supported on the Nortel Ethernet Routing Switch 2500 Series devices. For more information about these features, see the documents listed in .

General software features in ERS 2500 Series

The following table is a complete list of software features from the v4.0 software release.

Table 4
Complete list of software features from the v4.0 software release

BootP or Default IP Address	COS/DSCP - allows mapping the DSCP value (carried by IP frames) to 802.1p priority value	MAC address based security
BootP/TFTP for s/w & config	Rate Limiting (Bcast/Mcast)	RADIUS-based security
Download agent & diags w/out reset	SNTP	RADIUS Fallback

Username Password Enhancement	SNTP Timezone enhancement	Local password protection
Autosave configuration enhancements	Remote Logging	SNMP v3 security
Ping enhancement	Web Quick Start	SNMP- based network mgt
Writemem and save config Command	WEB HTTP download of ASCII	WEB-based management
Configurable SNMP trap port (only SNMP v1 & v2)	No Banner & CTRL-Y Skip	Local console via serial interface
Shutdown, reload enhancement	Autotopology (SONMP)	Telnet in (4 sessions) & Telnet out
Factory-default command	HTTP port change	NNCLI
Show MAC Address Enhancement	Autosave Disable	CLI QuickStart script
Show Port Enhancement	DNS - Domain Name Service	RMON (RFC1757): Statistics, History, Alarm and Events
VLAN Tagging Enhancement	Port based VLANs (256 max)	Syslog
802.1AB - LLDP	802.1Q VLAN tagging & 802.1p traffic class support / remarking	ASCII Config Generator (ACG)
802.1s - Multiple STP	Guest VLAN (SHSA)	EAPoL (802.1x) (SHSA only)
802.1w - Rapid STP	802.1D - Spanning Tree Protocol	DA Filtering
802.3ad - LACP	Port mirroring (ingress & egress)	Port Naming
802.3af - Power over Ethernet	MLT (6 trunks x 4 links)	CANA
802.3x flow control (Gig ports)	IGMP snooping / proxy	SSH

New software features in ERS 2500 Series Release 4.1

- Resilient stacking – up to 8 units (any combination of 2500's)

- Stack Licensing Mechanism

- Stack Monitor

- Stack Statistics

- Identify Unit (blink all LEDs)

- Unit Stack Uptime

- Distributed MLT / Distributed LAG (802.3ad)

- Auto Unit Replacement (AUR) function – config only

- Auto Detection and Configuration (ADAC) with 802.1AB interaction

- 802.1X EAP – MultiHost Multi-Authentication (MHMA)

- 802.1X EAP – MultiHost Single-Authentication (MHSA)

- 802.1X EAP – Non-EAP RADIUS MAC

Resilient stacking

The ERS 2500 series switches allow simultaneous bi-directional traffic forwarding on each stacking port, providing fail-safe stacking connectivity creating a virtual switch of up to 8 units in a single stack. Any combination or mixture of ERS2500 model switches is supported in a stack configuration.

To enable and use Stacking Mode functionality on the rear-ports of an ERS2500 switch, the switch must have a valid license.dat file installed or be a Stack Enabled ERS2500 series switch.

For more information on Resilient stacking feature, see *Nortel Ethernet Routing Switch 2500 Series Overview — System Configuration (NN47215-500).*

Stack Licensing Mechanism

Stacking functionality on ERS 2500 series switches is delivered in two different ways from the v4.1 software release:

- Stack Enabled units where the rear-ports are configured and operating in Stacking Mode by default from the factory. These units do not use a licensing mechanism or require a license file to use stacking functionality.

- Standalone units where the rear-ports are operating in Standalone Mode by default. These units use a licensing mechanism available through the purchase of an ERS2500 series Stacking License Kit and require the generation and installation of a license.dat file to unlock stacking functionality on a switch.

For more information on Stack Licensing, use of License Authorization Codes (LACs), depositing licenses in a license bank and generating license files, see *Nortel Ethernet Routing Switch 2500 Series Overview – System Configuration (NN47215-500).*

Stack Monitor

The Nortel ERS 2500 series switch monitors the stack, controls the frequency of trap sending, and logs an error in System Log when there is a failure or addition of a unit in the stack.

For more information on stack monitor, see *Nortel Ethernet Routing Switch 2500 Series Performance Monitoring — System Monitoring (NN47215-502).*

Stack Statistics
The Nortel ERS 2500 series switch enables the viewing of diagnostic and statistical information.

For more information on port statistics, see *Nortel Ethernet Routing Switch 2500 Series Performance Monitoring — System Monitoring (NN47215-502).*

Unit Stack Uptime
The Nortel ERS 2500 series switch displays the stack uptime for each unit in a stack and reports when requested.

For more information on displaying unit stack uptime, see *Nortel Ethernet Routing Switch 2500 Series Overview — System Configuration (NN47215-500).*

Distributed MLT / Distributed LAG (802.3ad)
The Nortel ERS 2500 series switch supports distributed link aggregation across multiple units in a stack.

Distributed MLT supports up to 6 trunk groups with a maximum of 4 members per group. It also supports Spanning Tree and Distributed MLT, where individual links may be on different units in a stack.

Distributed LAG supports up to 6 LA trunk groups with maximum of 4 active members per group. Link members can be ports from local unit or from any stack unit when operating in Stacking Mode. It also supports Standby link, Spanning Tree (Single link BPDU transmit/receive) and Marker Protocol Response PDU (Mandatory in 802.3ad).

For more information on DMLT / DLAG , see *Nortel Ethernet Routing Switch 2500 Series Configuration — VLANs, Spanning Tree, and MultiLink Trunking (NN47215-501).*

Auto Unit Replacement (AUR) function
The base unit in the Nortel ERS 2500 series switch allows replacing a failed non-base unit in a stack. The ERS 2500 family copies the configuration of the failed unit to the replaced unit and allows it to join the stack.

For more information on AUR, see *Nortel Ethernet Routing Switch 2500 Series Overview — System Configuration (NN47215-500).*

ADAC with 802.1AB interaction
ADAC enables "Plug and Play" of Nortel IP Phones. ADAC automatically configures ports for VLAN membership and QoS.
This feature operates in the following three modes:

Untagged Frames Basic: needed when the IP Phone is sending untagged traffic; the phone is plugged in and then it's generated traffic is prioritized.

Untagged Frames Advanced: needed when the IP Phone is sending untagged traffic; a special VLAN is created, called the Voice VLAN, and all the involved ports (the Call Server's port / the Uplink port, and the Telephony ports) are automatically added to this VLAN, and the tagging and PVID are configured appropriately.

Tagged Frames: same as the previous tagged mode of operation. The only difference is that it is needed when the IP Phone is configured to send/receive tagged traffic.

ADAC supports a maximum of 32 devices per port (IP Phones or other), but in most of the setups there would not be more than one IP Phone and one PC per port.
When using only LLDP-based detection a maximum of 16 devices are supported per port.

The 802.1AB (LLDP) system capabilities TLV is used to detect a LLDP enabled IP phone rather than using LLDP MEDs. Any IP Phone which supports LLDP should set the 5th bit to 1 in the Systems Capability TLV. Upon receiving the LLDPPDU, if the ERS2500 port is configured for ADAC and 802.1AB discovery, the switch will inspect the LLDPPDU for this bit setting in the Systems Capability TLV. If present, then the ERS2500 will determine that the device sending the LLDPPDU is an IP Phone and will trigger ADAC for that device on that port.

For more information on ADAC, see *Nortel Ethernet Routing Switch 2500 Series Configuration — VLANs, Spanning Tree, and MultiLink Trunking (NN47215-501).*

802.1X EAP – MHMA
The Nortel ERS 2500 series switch supports Multiple Host with Multiple Authentication (MHMA). This feature allows a finite number of EAP users or devices with unique MAC addresses on the port. MHMA support is on a per-port basis for an EAP-enabled port.

Dynamic RADIUS VLAN assignment is supported for only the first successfully authenticated EAP client that changes the current switch Port VLAN ID.

For more information on MHMA, see *Nortel Ethernet Routing Switch 2500 Series Security — Configuration and Management (NN47215-505).*

802.1X EAP – MHSA

The Nortel ERS 2500 series switch supports Multiple Host Single Authentication (MHSA). This feature is intended primarily to accommodate printers and other dumb devices sharing a hub with EAPOL clients. Multiple Host (MAC) Single Authentication (MHSA) supports a finite (user defined) number of EAP or non-EAP MACs on a port after the first successful authentication.

MHSA is a more restrictive implementation of support for non-EAPOL hosts on EAPOL enabled ports. MHSA support is on a per-port basis for an EAPOL enabled port.

Dynamic RADIUS VLAN assignment is supported for only the first successfully authenticated EAP client that changes the current switch Port VLAN ID.

For more information on MHSA, see *Nortel Ethernet Routing Switch 2500 Series Security — Configuration and Management (NN47215-505).*

802.1X EAP –Non-EAP RADIUS MAC

The Nortel ERS 2500 series switch supports Non-EAP MAC (NEAP). The NEAP MACs may be locally configured within EAP configurations, or RADIUS authenticated MAC addresses. This feature allows access to a finite number of non-EAPOL users or devices with unique MAC addresses on the port.

For more information on NEAP, see *Nortel Ethernet Routing Switch 2500 Series Security — Configuration and Management (NN47215-505).*

Supported software and hardware capabilities

The following table summarizes the known capabilities for the Nortel Ethernet Routing Switch 2500 Series Software Releases 4.1.0 and 4.1.1.

Table 5
Supported capabilities for the Nortel Ethernet Routing Switch 2500 Series

Feature	Maximum number supported
QoS egress queues	4
VLANs	256
Spanning Tree Groups in STPG and RSTP modes	1
Multiple Spanning Tree Instances (MSTI) in MSTP mode	8
MAC addresses	16000

Feature	Maximum number supported
MultiLink Trunking (MLT), Link Aggregation (LAG) groups	6
Links per MLT or LAG	4
802.1x EAP scaling (clients per port)	32
ADAC (IP Phones)	1 per port 24/48 per switch 192/384 per stack
Jumbo frame support (Gigabit ports only)	9K bytes

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

The two rear facing 1000Base-T ports on all ERS 2500 series switches are capable of supporting two different functional "modes" of operation. They are "Standalone Mode" and "Stacking Mode" operation.

In Standalone 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 8 ERS 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 ERS 2500 series Stacking License Kit (one license required per switch), required for switch order codes AL2500xxx-E6.

2. By means of stack enabled versions of ERS 2500 switches where the rear ports are factory pre-enabled and configured in Stacking Mode by default and are ready to stack - with new order codes AL2515xxx-E6. No licensing mechanism is used or required with these switches.

Feature limitations in Releases 4.1

The following lists the feature limitations in the Nortel Ethernet Routing Switch 2500 Series Software Releases 4.1.

- Supports only 16k MACs

- 802.1D: one Spanning Tree Group for all ports

- Rate Limiting: settings per box, in packets per second

- Port Mirroring: one-to-one mirroring only

- IP Manager: up to 10 allowed IP addresses

- RMON: 400 alarms/events

- VLAN: port-based, IVL only

- IGMP: IGMPv1 and IGMPv2 supported; up to 244 Multicast Groups

- SSH: v2 only, no SSL support

- ADAC: up to 32 devices per port (IP Phones or other) / 16 when using only LLDP-based detection

- 802.1x NEAP: up to 32 MACs allowed per port

- 802.1x MHSA: up to 32 MACs allowed per port

- 802.1x MHMA: upto 32 EAP clients allowed per port

Known issues and limitations in Releases 4.1.0 and 4.1.1

The following table describes known limitations and considerations in the Nortel Ethernet Routing Switch 2500 Series Software Releases 4.1.0 and 4.1.1.

Table 6
Known issues and limitations in ERS 2500 Series Software Releases 4.1.0 and 4.1.1

Reference Number	Description
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 CLI also.
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 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.

Q01755150-01	The note refers to a 25xx standalone.
	When configuring spanning tree cost and priority for a MLT (all MLT members must have the same STP configuration) using CLI-interface commands, enter interface mode by including the first port of the MLT. For example,
	
	`2550T(config)#mlt 1 en mem 1-4`
	
	`2550T(config)#int fa 1-2`
	
	`2550T(config-if)#span learn fast cost 10 prio`
	
	`2550T(config-if)#show span port 1-4`
	
	`Port  Trunk  Participation   Priority  PathCost  State`
	`1     1      Fast Learning   16        10        Forwarding`
	`2     1      Fast Learning   16        10        Forwarding`
	`3     1      Fast Learning   16        10        Forwarding`
	`4     1      Fast Learning   16        10        Forwarding`

Reference Number	Description
	If the 1st port of the MLT is not included, the STP priority and path cost for the MLT is not modified.
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 not to use renumbering units feature, because RMON alarms are not relocated to corresponding ports accordingly.
Q01747943	Resetting of the base unit of a stack is not recommended when a dynamically 802.3ad Trunk includes ports from the base unit.
Q01375790-01	The ACG file (running config) doesn't support any LLDP settings.
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.
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`
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 CLI 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.

Reference Number	Description
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.
Q01784160	Nortel recommends customers using the "What's up Gold" (WUP) application for network management functions to use versions prior to v11 of WUG with ERS2500 software release 4.0.0 and 4.1.0 for switch interrogation using the Telnet function. This issue is fixed in Release 4.1.1.
Q01785422	In stack statistics, the counter shown for "Transmitted Undersize" is actually "Transmitted Oversize".
Q01784784	The correct MTU value for combo ports should be 9216.
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.
Q01785069	A 'bsnConfigurationSavedToNvram' trap is periodically logged even when no configuration is performed. This issue is fixed in Release 4.1.1.
Q01786972	An error message is displayed when trying to activate the port mirroring with the monitor port and mirrored port on different units (if operating in stack).
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
Q01785360	The ERS 2500 Series switches generate a trap and log the topology change as a configuration switch (Trap: bsnConfigurationSavedToNvram). This issue is fixed in Release 4.1.1.
Q01798378	Stack licensing issue - In certain conditions, after the second boot the license can be lost. This issue is fixed in Release 4.1.1.

Issues resolved in Release 4.1.0

The following table describes the issues in previous software releases for the Ethernet Routing Switch 2500 Series that have been resolved in Software Release 4.1.0.

Table 7
Issues resolved in ERS 2500 Series Software Release 4.1.0

Reference Number	Description
Q01565331	In the Web-based interface Configuration > Port Management page, if you apply a speed/duplex value to all switch ports, the configuration is applied to the rear 1000BaseT ports as well. However, this can cause errors as the rear ports cannot operate other than at 1000Mbs/full.

Q01565324	When the switch configuration is saved to ACG, the command lines relating to STP hello time, max age out, fwd delay and priority properties include an STP number:
	
	`spanning-tree cost-calc-mode dot1d`
	
	`spanning-tree stp 1 priority 8000`
	
	`spanning-tree stp 1 hello-time 2`
	
	`spanning-tree stp 1 max-age 20`
	
	`spanning-tree stp 1 forward-time 15`
	
	The lines containing stp 1 cause errors when applying the file to the switch. From the Web-based interface, ACG file execution stops at the first error encountered. However, with the CLI, the entire file runs to its completion, only displaying errors as they occur.
	As a result, Nortel recommends that you use the CLI to work around this issue. To do so, you can manually correct the ASCII configuration file and download the file. Or you can download the file as is with the errors and after the file execution stops manually execute the four CLI commands to correct the values.

Q01567597	Upon setting the terminal width to 132, EAP information is displayed incorrectly when running the show running-config command.
Q01567101	If you set the Telnet inactivity timeout to 0, this causes errors in your system. The sysUpTime displays improperly, and you are unable to launch another Telnet session to the switch. As a workaround to this issue, set the Telnet inactivity timeout to a value other than 0.
Q01569236	The rate limiting feature can only limit broadcast and multicast traffic up to a limit of 65535 pps. Do not set the rate limit to a higher value.
Q01567347	To log out of Web-based management on the Ethernet Routing Switch 2500 Series, be sure to choose Administration > Logout from the main menu. If you end a Web-based management session by clicking close (X) in the Web browser, and then attempt to reconnect to the switch using the Web browser, the following error can appear: "501 error – Server Not Implemented " (or "Server Busy"). This issue only applies when password authentication (local or RADIUS) is enabled on the switch. In this case, you must wait for a timeout period of approximately 10 minutes before attempting to reconnect to the switch. Additionally, in sites where DNS host resolution is used, the HTTP error can appear for extended periods much longer than 10 minutes.

Reference Number	Description
	This problem occurs when the switch DNS name rather than the switch IP address is used in the URL field of the Web browser. In this case, you can work around the issue by entering the switch IP address directly in the URL field of the Web browser. In either case, when this issue occurs, you can still open administrative connections to the switch using the Console port, Telnet, and Device Manager. This issue does not impact performance or forwarding operation of the switch.
Q01559679	When DSCP mapping is enabled on the switch and VLAN port remarking is enabled on a port, some packets egressing the port can be assigned the priority specified by the DSCP mapping rather than the VLAN port remarking. The workaround for this issue is to reset the switch after you configure DSCP mapping.
Q01587161	When you run Telnet or SSH sessions from Linux, if you enter **ping** with no additional parameters and press **Enter**, the Telnet or SSH session freezes. To work around this issue, specify the desired parameters in the ping command line before pressing **Enter**. For example: **ping 192.168.0.1**. This issue does not occur with Telnet and SSH sessions opened from Windows or Solaris.
Q01479382	Enterprise Switch Manager (ESM) 6.1 now supports Ethernet Routing Switch 2500 series switches.

Issues resolved in Release 4.1.1

The following table describes the issues in previous software releases for the Ethernet Routing Switch 2500 Series that have been resolved in Software Release 4.1.1.

Table 8
Issues resolved in ERS 2500 Series Software Release 4.1.1

Reference Number	Description
Q01785069	A 'bsnConfigurationSavedToNvram' trap is periodically logged even when no configuration is performed.
Q01784160	Nortel recommends customers using the "What's up Gold" (WUG) application for network management functions to use versions prior to v11 of WUG with ERS2500 software release 4.0.0 and 4.1.0 for switch interrogation using the Telnet function.
Q01785360	The ERS 2500 Series switches generate a trap and log the topology change as a configuration switch (Trap: bsnConfigurationSavedToNvram).
Q01798378	Stack licensing issue - In certain conditions, after the second boot the license can be lost.

Related publications

Refer to the following publications for more information about the Nortel Ethernet Routing Switch 2500 Series, Software Release 4.1:

- *Regulatory Information for the Nortel Ethernet Routing Switch 2500 Series (NN47215-100)*

- *Nortel Ethernet Routing Switch 2500 Series Quick Installation Guide (NN47215-300)*

- *Nortel Ethernet Routing Switch 2500 Series Overview — System Configuration* (NN47215-500)

- *Nortel Ethernet Routing Switch 2500 Series Configuration — VLANs, Spanning Tree, and MultiLink Trunking* (NN47215-501)

- *Nortel Ethernet Routing Switch 2500 Series Performance Management — System Monitoring* (NN47215-502)

- *Nortel Ethernet Routing Switch 2500 Series Configuration — IP Multicast* (NN47215-503)

- *Nortel Ethernet Routing Switch 2500 Series Configuration — Quality of Service* (NN47215-504)

- *Nortel Ethernet Routing Switch 2500 Series Security — Configuration* (NN47215-505)

- *Nortel Ethernet Routing Switch 2500 Series — Troubleshooting (NN47215-700)*

How to get help

This section explains how to get help for Nortel products and services.

Getting help from the Nortel web site

The best way to get technical support for Nortel products is from the Nortel Technical Support web site:

www.nortel.com/support

This site provides quick access to software, documentation, bulletins, and tools to address issues with Nortel products. More specifically, the site enables you to:

- download software, documentation, and product bulletins

- search the Technical Support web site and the Nortel Knowledge Base for answers to technical issues

- sign up for automatic notification of new software and documentation for Nortel equipment

- open and manage technical support cases

Getting help through a Nortel distributor or reseller

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.

Getting help over the phone from a Nortel Solutions Center

If you do not find the information you require on the Nortel Technical Support web site, and have a Nortel support contract, you can also get help over the phone from a Nortel Solutions Center.

In North America, call 1-800-4NORTEL (1-800-466-7835).

Outside North America, go to the following web site to obtain the phone number for your region:

www.nortel.com/callus

Getting help from a specialist by using an Express Routing Code

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:

www.nortel.com/erc

Nortel Ethernet Routing Switch 2500 Series

Release Notes — Software Releases 4.1.0 and 4.1.1

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