BayStack 410/450
Software Release 4.5.4

1. Release Summary

Release Date: 14-Dec-2005
Purpose: Software release to add the Stack Configuration Monitor feature and to address customer found software issues.

2. Important Notes Before Upgrading to This Release

Starting with the 4.5.4 software release, the Interoperability Software Version Number (ISVN) has changed to 3. When working with a mixed stack, you ***must*** ensure that the ISVNs are identical.
If the ISVNs are not the same, the stack will not form. See **Compatibility** below for compatible software versions for mixed stacks.

3. Platforms Supported

BayStack 410/450

4. Notes for Upgrade

Please see "Release Notes for the BayStack 450 10/100/1000 Switch" (Part No. 214110-D, available at http://www.nortel.com/support. In the Product Finder, select Ethernet Switches under Switches & Hubs, and then select Ethernet Switch 450-24T) for details on how to upgrade your switch.

Filenames for This Release

Filename	Module or File Type	File Size (bytes)
b450_4546.img	Agent code image	884,784
b450_148_diag.bin	Diagnostic/Boot Code	39,396

5. Version of Previous Release

Software Version 4.5.2

6. Compatibility

The software version 4.5.4 is compatible with Ethernet Switch 460/470/BPS software versions 3.1.8 and 3.5.3 and higher.
This software release is managed with Java Device Manager (JDM) release 5.9.5
The 5.9.6 release for JDM will include support for the stack monitor feature.

7. Changes in This Release

New Features in This Release

Stack Monitor

The Stack Monitor feature provides the ability to monitor the health of a stack by monitoring the number of active units in the stack. With stacked switches, MLT links are often connected to separate units in a distributed MLT (DMLT). In the event that the connections between switches in the stack fail, a situation can arise where the DMLT links are no longer connected to a single stack, but to a combination of units that are no longer connected to each other. From the other end of the DMLT, the trunk links appear to be functioning properly, however, as traffic is no longer flowing between the units connectivity problems can occur.

To address this issue, Release 4.5.4 software supports the Stack Monitor feature. When a stack is broken, this feature allows the remaining portion of the stack and any units that have been disconnected from the stack to send SNMP traps. If the stack or the disconnected units are still connected to the network, they generate log events and send trap messages to the management station to notify the administrator of the event. Once the problem is detected, the stack and disconnected units continue to generate log events and send traps at a user-configurable interval until the situation is remedied or the feature is disabled.
No actions are taken to change the current operation of the standalone units or the stack.

MIB support for this feature will be released at a later date.

Control Parameters

You can configure the Stack Monitor by setting the following parameters:

- Stack Monitor enable and disable (default: disabled)
- expected stack size (range: 2 to 8 units; default: 2)
- trap and event logging interval (range: 30 to 300 seconds; default: 60)

The Stack Monitor settings are saved to NVRAM and distributed to all units within a stack.
When the Stack Monitor functionality is enabled, the feature determines the number of units currently in the stack and automatically sets the correct value for the expected stack size parameter.
Once the feature is enabled, any change to the number of units in the stack triggers the sending of traps.
To ensure that disconnected switches can send traps, Nortel recommends that you set a switch IP on any units that have MLT links. This ensures that the units have the IP capability to send traps if they become standalone units. While this requires additional IP addresses, it also provides the greatest possibility for management station notification and operator intervention.

Configuring the Stack Monitor from the Console Interface

You can use the Stack Monitor Menu to configure the Stack Monitor feature.

The Switch menu now includes the Stack Configuration Monitor Selection:

```
                        Switch Configuration Menu


                    MAC Address Table
                    MAC Address-Based Security...
                    EAPOL Security Configuration...
                    VLAN Configuration...
                    Port Configuration...
                    High Speed Flow Control Configuration...
                    MultiLink Trunk Configuration...
                    Port Mirroring Configuration...
                    Rate Limiting Configuration...
                    IGMP Configuration...
                    Display Port Statistics
                    Clear All Port Statistics
                    Trap Control
                    Link Flap Detection
                    Stack Configuration Monitor
```

When selected, the Switch Configuration Monitor Menu is presented:

```
                            Stack Configuration Monitoring


    Checking                          [ Disabled ]
    Stack Size (2-8)                 [ 2 ]
    Trap Interval (30-300)          [ 30 ]
```

The configuration parameters are summarized in the table below.

Parameters	**Description**
Checking	Enables or Disables Stack Monitoring Operation (default is disabled).
Stack Size <2-8>	Sets the size of the stack to be monitored. Valid range is 2 to 8 (default is 2).
Trap Interval <30-300>	Sets the interval between traps, in seconds. Valid range is 30 to 300 (default is 60).

Configuration using Java Device Manager (JDM)

JDM version 5.9.6 will include a new tab for viewing and modifying Stack Configuration Monitor parameters as shown below.

To open the Stack Monitor tab:

1 Select the chassis.

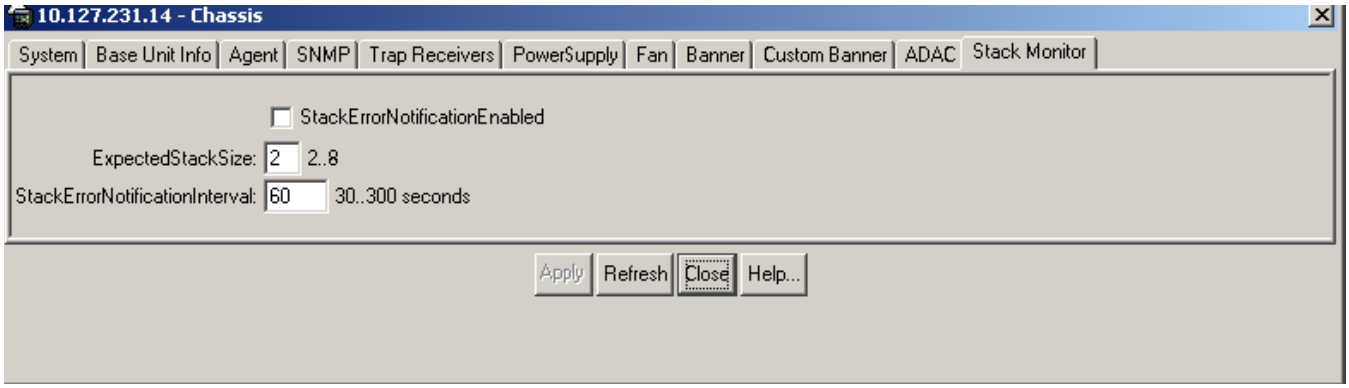
2 From the shortcut menu, choose Edit > Chassis.

The Chassis dialog box opens with the System tab displayed.

3 Click the Stack Monitor tab.

The Stack Monitor tab opens.

Stack Monitor Tab



The Stack Monitor Tab field values are as detailed previously for the Switch Configuration Monitor Menu.

Old Features Removed From This Release

None.

Problems Resolved in This Release

The root bridge and designated port information displayed in JDM was incorrect **(Q00966325)**.

When using RADIUS authentication, the station MAC address was reported incorrectly, causing authentication to fail **(Q01003703-01).**

When upgrading/downgrading the SW images of a mixed stack and the loading unit was a 450, the units would sometimes not receive the new image **(Q01070410).**

An EAP Request Identity packet containing a value in the network-id field would cause the XP client to fail the authentication process **(Q01072058).**

When IGMP Proxy was disabled, on a 450, multicast traffic was blocked for 1-2 minutes **(Q01087947).**

A topology map for a BayStack 450 would not show all links in an MLT. This was due to topology packets being sent on only the first active link. They are now sent out on all the links of an MLT/DMLT trunk **(Q01108050).**

When a BayStack 450 Gig port was disabled, the connected device would still show the link as up **(Q01148373).**

When a BayStack 450 Gig port was disabled, it continued to pass multicast and broadcast traffic **(Q01148498).**

BayStack 450 switch did not properly process the VLAN information passed on to it by the authentication server **(Q01171707).**

In the 4.5.2 code, host membership reports from a connected PC client were looped on the MLT **(Q01225821).**

When Ctrl-P and Ctrl-N were pressed several times on the STP screen, the unit would reset **(Q01241486).**

8. Outstanding Issues

None.

9. Known Limitations

Disabling Gig MDA ports will not cause the link on the other end to drop if autonegotiation is disabled for those ports. This is due to a hardware limitation.

10. Documentation Corrections

For other known issues, please refer to the product release notes and technical documentation available from the Nortel Technical Support web site at: http://www.nortel.com/support .

To access more technical documentation, search our knowledge base, or open a service request online, please visit Nortel Technical Support on the web at: http://www.nortel.com/support