Release Notes for the BayStack 450 Switch

Part No. 302402-B Rev 00
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Bay Networks *Where Information Flows.™*

302402-B Rev 00

Bay Networks Where Information Flows.

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Introduction

These release notes contain important information about software version V1.0.1 for the BayStack™ 450 switch that may not be included in the related user guide (*Using the BayStack 450 Switch*, Bay Networks® part number 302401-A Rev 00).

The information in these release notes supersedes the applicable information in the user guide.

These release notes contain the following sections:

Bay Networks Online Documentation

To be sure you have the latest updates to your product documentation, including these release notes, visit the Bay Networks Web site at the following location:

http://www.support.baynetworks.com/Library/tpubs

Find the Bay Networks product for which you need documentation. Then locate the specific category and model or version for your hardware or software product. Using Adobe Acrobat Reader, you can open the manuals and release notes, search for the sections you need, and print them on most standard printers. You can download Acrobat Reader free from the Adobe Systems Web site, *www.adobe.com*.

Documentation sets and CDs are available through your local Bay Networks sales office or account representative.

Bug Fixes

The following problems have been corrected with software release version V1.0.1.

- With earlier software release versions, when the switch was broadcasting BootP requests, the BootP process would time out if a reply was not received within (approximately) 7 minutes. When the process timed out, the BootP request mode automatically changed to BootP Disabled mode. This action allowed the BootP Request mode (saved) settings to be overwritten by the software.

  This problem is resolved with this release (software release version V1.0.1 logs an entry into the Event Log and does not overwrite any BootP Request mode saved settings).

- With earlier software release versions, the switch would unexpectedly reset during certain conditions while the Port Mirroring and Port Configuration screens were being configured.

  This problem is resolved with this release.

- With earlier software release versions, using the Delete VLAN field in the VLAN Configuration screen to delete a VLAN caused configuration problems.

  This problem is resolved with this release.

- Earlier software release versions did not support the model 450-1LX MDA and caused a problem with the gigabit MDA failover process, affecting the model 450-1SR and model 450-1LR gigabit MDAs.

  This release supports the 450-1LX MDA and resolves the MDA failover problem.

Known Restrictions

The following are known restrictions that apply to software release V1.0.1:

- IEEE 802.1D spanning tree parameters cannot be configured from the console interface (CI) menus and screens.

  Configuration support is available through the Bridge MIB using Simple Network Management Protocol (SNMP). Refer to RFC 1493 for more information.

- During the switch initialization process, when connected to a console/terminal, *do not* press any of the keyboard keys until after the Bay Networks logo screen appears. Pressing any key before the Bay Networks logo screen appears could interfere with the switch initialization process and prevent you from accessing the console interface (CI) menus and screens. If this happens, cycle the switch power (power down, and then power up the switch) to initialize the switch.
- Tagged bridge protocol data units (BPDUs) are not supported in this release.
- The MultiLink Trunking feature only supports multiport network interface controllers (NICs) that are configured as a single MAC address, single IP address entity.
- The MultiLink Trunking feature does not support gigabit media dependent adapters (MDAs).
- If a MultiLink Trunk loses a link connection, the spanning tree does not recalculate the path costs.
- When monitoring outgoing frames on a full-duplex port that is a MultiLink Trunk member, Bay Networks recommends that you use the address-base mirroring mode. Using port-base mirroring with this type of configuration could result in some frames not being displayed.
- In full-duplex mode, all broadcast, multicast, and unicast frames with unknown destination addresses (DAs) are not mirrored for the following port-based mirroring modes:

  --> Port A and Port B-->

  <--> Port A and <--> Port B
- The BayStack 450 switch gigabit MDA ports comply with IEEE 802.3z Draft 3.2 and IEEE 802.3z Draft 4.1; however, the following restriction applies to the autonegotiation feature:

  Autonegotiation does not restart if an invalid code word is received from the link partner during the autonegotiation process. In cases where autonegotiation fails, disable and then enable autonegotiation from the console interface or TELNET session.
- RMON Alarms and Event entries are *not* saved to nonvolatile random access memory (NVRAM). When a reset condition or power-down sequence occurs, the entries are not preserved. This conforms to the current RFC 1757 standard. All RMON Alarms and Events must be reentered.

- The RMON Event Log table's secondary index is not incremented when all of the table's entries have been used. In this case, the existing indexes are reused. Thus, the index number cannot be used to indicate the total number of log entries received.
- When connecting a console terminal to an operating switch through the switch's serial Comm Port, the console may display a blank screen. This is a normal condition. Press [Ctrl]-C to refresh the screen.

Known Problems

The following problems are known to exist in software release version V1.0.1:

- Gigabit MDA ports count oversized frames (larger than 1785 bytes) as both oversized frames *and* as lost frames.
- MDAs must be *firmly secured* in the chassis for proper operation. Be sure to secure the MDA in the chassis by *firmly* tightening the two thumbscrews on the MDA front panel.
- When the autonegotiation setting on a gigabit MDA port is changed from enabled to disabled, it does not take effect until the port connection is physically disconnected and then reconnected.
- A link state cannot be established when a cable that is 100 percent utilized is plugged into a BayStack 450 switch port. As soon as a break in the traffic occurs, the link state is established.
- When the BayStack 450 switch is connected to an Alteon network interface controller (NIC), the switch learns invalid MAC addresses whenever autonegotiation for a gigabit MDA port is enabled (the invalid MAC addresses eventually age out).

  This problem occurs only when the switch is reset (via the console interface main menu or during a power cycle) and does not affect the correct operation of the BayStack 450 switch.

Upgrading the BayStack 450 Firmware

The BayStack 450 switch firmware provides a code load facility that allows you to upgrade the firmware image over any switch port, including any MDA ports.

Note: When upgrading the firmware image to software version V1.0.1, you must download *two images* (the *boot code image* and the *agent image*) for proper operation of the switch. The new boot code image must be downloaded *before* the agent image is downloaded.

Accessing the Firmware Images

You can access the firmware image files directly from the internet, as follows:

1. **Go to** *support.baynetworks.com/software/ethernet/baystack_450.html*
2. **Under the Operational Software heading, click on Version 1.0.1 at the BayStack 450 boot code link.**

   Follow the prompts to download the BayStack 450 boot code image. The boot code image filename is *b4501011.img*
3. **After the BayStack 450 boot code image is downloaded, click on Version 1.0.1 at the BayStack 450 agent link.**

   Follow the prompts to download the BayStack 450 agent image. The agent image filename is *b4501012.img*

Be sure to download the BayStack 450 boot code image *first*, then download the BayStack 450 agent image.

Upgrade Restrictions

The following restrictions apply when upgrading the switch firmware:

- The firmware cannot be upgraded through a port that is configured for *tagged* traffic.
- The port connection to the load host cannot be through a MultiLink Trunk.
- During the load process, the ports are configured as follows:

  - Twisted-pair ports: autonegotiation enabled.

  - Fiber optic ports: 100 Mb/s, half-duplex.

- Gigabit MDA ports: autonegotiation disabled, Preferred Phy set to Right.

For detailed information about downloading a new software image, see “Chapter 3, “Using the Console Interface,” in the *Using the BayStack 450 Switch* user guide.

Connecting to Accelar Gigabit Ports

The BayStack 450 switch supports gigabit MDA port connections to the Bay Networks Accelar™ switch gigabit ports, with the following restriction:

- Autonegotiation *is not* supported on the Accelar 1000BaseSXWG (ASIC Version GMAC 2). When connecting to this version, disable autonegotiation on the BayStack 450 switch gigabit MDA port.

Autonegotiation *is* supported on the Accelar 1000BaseSXWG (ASIC Version GMAC 4). When connecting to this version, set autonegotiation to enabled (or disabled) at both ends of the communications link. The autonegotiation setting must be identical at both ends of the communications link.

You can determine the ASIC version number for the 1000BaseSXWG gigabit card using the following command from the Accelar console port:

```
Accelar-1100# sh sys info
```

1000BASE-LX Connectors

The 1000BASE-LX (gigabit) MDAs use a longwave 1300 nm fiber optic transceiver to connect devices over single-mode (3 kilometers) or multimode (550 meters) fiber optic cables.

Note: The transceiver must be mode conditioned externally via a special offset SMF/MMF patch cord for 1000BASE-LX multimode applications. The offset SMF/MMF patch cord allows the same transceiver to be used for both multimode and single-mode fiber. See your Bay Networks sales representative for more information about the SMF/MMF patch cord.

The optical performance of this transceiver cannot be guaranteed when connected to a multimode fiber plant without the use of the special offset SMF/MMF (mode conditioning) patch cord.

The 1000BASE-LX MDA transceiver is designed to mechanically accomodate the *single-mode ferrules* used on one end of the special offset SMF/MMF patch cord.

Multimode ferrules can bind and cause damage to the transceiver.

Caution: Do not connect multimode cables directly into the 1000BASE-LX MDA transceiver. Connect a special offset SMF/MMF patch cord into the transceiver, and then connect the multimode cable into the SMF/MMF patch cord.

For more information about gigabit transmission over fiber optic cable and mode conditioning, refer to the following publication:

Reference Note: Gigabit Ethernet Physical Layer Considerations
(Bay Networks part number 201540-B).

The publication is available on the World Wide Web at
support.baynetworks.com/library/tpubs/

At the Web site, click on Accelar under the Routing Switches heading.

Replacing MDAs

When replacing an installed MDA with another type of MDA, complete the following steps to clear the NVRAM:

1. **Power down the BayStack 450 switch.**

   Remove the AC power cord from the power source.

2. **Remove the installed MDA.**

   Loosen the thumbscrews and remove the MDA.

3. **Cycle the switch power.**

   Power up the switch and wait for the Bay Networks logo screen to appear (approximately 10 seconds); then power down the switch.

4. **Install the replacement MDA.**

   Be sure to *firmly* tighten the two thumbscrews on the MDA front panel (refer to the MDA installation documentation).

5. **Power up the switch.**

Correction to User Guide

The following errors appear in *Using the BayStack 450 Switch* (Bay Networks part number 302401-A Rev 00):

- Table 3-2 on page 3-8 incorrectly lists the default value for the BootP Request Mode as BootP When Needed. The correct default value is BootP Disabled.
- Table E-1 on page E-1 incorrectly lists the default value for the BootP Request Mode as BootP When Needed. The correct default value is BootP Disabled.
- Figure 1-4 on page 1-7 incorrectly lists item 3 as the Filter Panel (future expansion). The correct description of item 3 is Filler Panel (future expansion).
- Page 1-15 and page 3-1 of the user guide state that you can manage the switch using the Bay Networks Optivity® network management software.

  The BayStack 450 switch will be supported by a *future release* of the Bay Networks Optivity network management software.