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Release Notes for the Business Policy Switch 2000

Software Version 1.0.1



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Introduction

These release notes for the Nortel Networks Business Policy Switch 2000™ software version 1.0.1 provide information about software and operational issues not included in the Business Policy Switch 2000 (BPS2000) software version 1.0 guides.

These release notes provide information on version 1.0.1 and cover the following topics:

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Related publications

For more information about the BPS2000 switch, refer to:

- *Addendum to the Release Notes for the Business Policy Switch 2000*, part number 210676-A
- *Release Notes for the Business Policy Switch 2000*, part number 209320-A
- *Using the Business Policy Switch 2000*, part number 208700-A
- *Using Web-Based Management for the Business Policy Switch 2000*, part number 209570-A
- *Reference for the Business Policy Switch 2000 Management Software*, part number 209322-A

- *Getting Started with the Business Policy Switch 2000 Management Software*, part number 209321-A
- *Business Policy Switch 2000 Installation Instructions*, part number 209319-A

You can print selected technical manuals and release notes free, directly from the Internet. Go to the www.nortelnetworks.com/library/tpubs/ URL. Find the product for which you need documentation. Then locate the specific category and model or version for your hardware or software product. 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.

New features and enhancements

The following paragraphs describe the new features and enhancements offered with the BPS2000 software version 1.0.1.

New diagnostics

New diagnostics are available with software version 1.0.1. This new code corrects the display message for the MDAs used with the BPS2000 switch.

You obtain the new diagnostics directly from the Internet. Set your browser to www.support.baynetworks.com/software. Click on the file for the new diagnostics and click Go. The name of the new diagnostics code file is bps2k101.bin.

IGMP enhancements

The IGMP enhancements made in the software version 1.0.1 do not work in a mixed-stack configuration and do not affect the Fast JOIN/LEAVE functionality.

The enhancements affect the following processes:

- LEAVE message processing
- Fast JOIN

LEAVE message processing

With the new software version 1.0.1, the LEAVE messages are processed in all cases; that is, whether Fast JOIN/LEAVE is enabled or disabled. (In the previous software—version 1.0.0 of the BPS2000 software—LEAVE messages are processed only if Fast JOIN/LEAVE is enabled.)

The receipt of a LEAVE message tells the BPS2000 switch that a device on that port no longer requires the multicast stream. If the BPS2000 switch immediately stopped passing this multicast stream to that port, other multicast clients that share the port might be affected. So, the BPS2000 switch checks to see if other clients on that port are still participating in that particular multicast stream. To check, the BPS2000 switch sends out the RobustVal number of the Last Membership Query for that group to the port that received the LEAVE message. If a station does not report back to the BPS2000 switch, the switch prunes the ports of that multicast stream. In addition to acting on the received LEAVE message, the switch forwards the message to all ports. In this way, routers connected to any BPS2000 port receive the LEAVE message.

When the Fast JOIN/LEAVE functionality is enabled (robust value set to 0), the port is pruned from the multicast stream immediately, without sending any Last Membership Queries. In this case, multiple hosts receiving the same stream cannot be connected to a single port. If one host sends a LEAVE message, the other hosts will also be cut off until the other hosts send reports again.



Note: The RobustVal is a configurable parameter, and the parameter Last Membership Query Interval is 500 ms.

Fast JOIN

The 10-second delay to learn new groups is removed in software version 1.0.1, whether Fast JOIN/LEAVE is enabled or disabled, to prevent flooding.

Support for the BPS2000-4FX MDA

The software version 1.0.1 contains support for the BPS2000-4FX Media Dependent Adapter (MDA). For more information on this MDA, refer to *Using the Business Policy Switch 2000*, which is displayed on the Web site discussed in [“Related publications.”](#)

COPS readiness

The BPS2000 switch can interoperate with the Nortel Networks Optivity® Policy Server using Common Open Policy Services (COPS). For information about Optivity, go to the www.nortelnetworks.com/library/tpubs/ URL and scroll to the Optivity Network Management and IP Services section.

Resolved issue

The following issue was resolved in version 1.0.1:

- The ports on the BPS2000-4 TX MDA now autonegotiate correctly to 100 Mb/s full-duplex when they are connected to another BPS2000 port configured to autonegotiate.

Known issues

The following paragraphs discuss the known issues with the BPS2000.

High Speed Flow Control Autonegotiation

When the High Speed Flow Control Autonegotiation feature is set to enabled (the default), the port only advertises support for 1000 Mb/s operation, in full-duplex mode. If you experience problems between the Business Policy Switch and other network devices, set Autonegotiation to *disabled* on both sides of the link.

Device Manager

The following are known problems with Device Manager:

- Downloading software images—With this release, you cannot download BayStack™ 410 and BayStack 450 software images using the Device Manager in a mixed stack environment with Business Policy Switches. You can only download BayStack 410 and BayStack 450 software images to the mixed stack with the Web-based management interface or the console interface.
- Downloading diagnostic files—With this release, you cannot download BayStack 410 and BayStack 450 diagnostics using Device Manager in a mixed stack environment with the BPS2000. You can only download BayStack 410 and BayStack 450 diagnostics to the mixed stack with the Web-based management interface or the console interface.

Interoperability with Passport 12xx and 8xxx switches

The following are known problems when the BPS2000 switch with software version 1.0.1 interoperates with a Passport™ 12xx or 8xxx switch:

- Resetting a BPS stack that has a D-MLT link to the Passport switch may result in loss of connectivity. This issues exists only with Passport software versions 2.0.7.3 (12xx), 2.0.1.1 (81xx), and 3.0.2 (86xx) or lower versions.
- Resetting a Passport 86xx chassis containing a Passport 8624FX module that is connected to a BPS2000 switch may result in the Passport 8624FX module going off-line. This issues exists only with Passport software versions 3.0.2 or lower versions.

Known limitations

The following limitations are known to exist:

- Gigabit MDA—When viewing Active Phy information from the console interface, the console must be connected to the unit containing the Gigabit MDA (the BayStack 450-1SR MDA and the BayStack 450-1LLR MDA) to display the appropriate Phy information. Incorrect information may be displayed if you connect to a unit not containing a Gigabit MDA.
- Mixed stacks (hybrid stacks)—In order to upgrade BayStack 410 and BayStack 450 software in a hybrid stack, the stack must be fully redundant. All cables in the stack must be installed and operating properly. If the cables are not installed properly, the BayStack units will fail to upgrade. A message is displayed on consoles connected to BayStack 410 and BayStack 450 switches: `Primload Error - 2009 Switch will reset in 5 seconds...`