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Release Notes for the Business Policy Switch 2000

Software Version 1.2



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NETWORKS™

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Introduction

These release notes for the Nortel Networks* Business Policy Switch 2000* software version 1.2 provide information about software and operational issues not included in the Business Policy Switch 2000 (BPS 2000) software version 1.2 guides.

To obtain the software version 1.2, download the following files from the Customer Support World Wide Web site:

- bps2k120_28.img (software file)
- bps2kdiag_110.bin (diagnostics file)



Note: When you are downloading with a mixed (or Hybrid) stack, ensure that a BPS 2000 switch is Unit 1 and is the base unit.

To obtain the Java* Device Manager (DM) software to manage the BPS 2000, download the following file from the Customer Support World Wide Web site:

- DM 5.3.1.0

These release notes provide information on version 1.2 and cover the following topics:

- [“Compatibility with BayStack 450 switches,”](#) next
- [“New features and enhancements”](#) on page 5
- [“Resolved issues”](#) on page 6
- [“Known issues”](#) on page 6
- [“Known limitations”](#) on page 9
- [“Related publications”](#) on page 11
- [“How to get help”](#) on page 12

Compatibility with BayStack 450 switches

The BPS 2000 software version 1.2 is compatible with BayStack* 450 software versions 4.0 and 4.1.

You can stack the BPS 2000 up to 8 units high. There are two types of stacks:

- Pure BPS 2000 —This stack has *only* BPS 2000 switches. It is sometimes referred to as a pure stack. The stack operational mode for this type of stack is Pure BPS 2000 Mode.
- Hybrid—This stack has a combination of BPS 2000 switches *and* BayStack 450 and/or BayStack 410 switches. It is sometimes referred to as a mixed stack. The stack operational mode for this type of stack is Hybrid Mode.

All BPS 2000 switches in the stack must be running the identical version of software, and all the BayStack switches must be running the identical version of software.

When you are working with a mixed stack, you *must* ensure that the Interoperability Software Version Numbers (ISVN) are identical. That is, the ISVN number for the BayStack 450 switch and BayStack 410 switch must have the same ISVN as the BPS 2000. If the ISVNs are not the same, the stack does not operate. The ISVNs and the accompanying software release are:

- ISVN 1
 - BayStack 410 or Bay Stack 450—version 3.1
 - BPS 2000—versions 1.0 and 1.0.1
- ISVN 2
 - BayStack 10 or BayStack 450—versions 4.0 and 4.1
 - BPS 2000—versions 1.1, 1.1.1, and 1.2

In sum, the stacking software compatibility requirements are as follows:

- Pure BPS 2000 stack—All units must be running the same software version.
- Pure BayStack 450 stack—All units must be running the same software version.
- Hybrid stack:
 - All BPS 2000 units must be running the same software version.
 - All BayStack 410 units must be running the same software version.
 - All BayStack 450 units must be running the same software version.
 - All software versions must have the identical ISVN.

To find out which version of the BPS 2000 software is running, use the Console Interface (CI) menus or the Web-based management system:

- CI menus—From the main menu of the Console, choose Systems Characteristics menu. The software currently running is displayed in sysDescr.
- Web-based management system—Open the System Information page, which is under Administration on the main menu. The software currently running is displayed in the sysDescription field.

Refer to Appendix B of the *Using the Business Policy Switch 2000 Software Version 1.2* for complete information on interoperability and compatibility between the BPS 2000 and BayStack switches.

Although the BPS 2000 software version 1.2 is compatible with BayStack 450 software versions 4.0 and 4.1, when you operate a mixed stack of BPS 2000 and BayStack 450 switches, some of the BayStack 450 software version 4.1 enhancements may not be accessible.

New features and enhancements

The descriptions and management instructions for these new features are found in *Using the Business Policy Switch 2000 Software Version 1.2*, *Reference for the Business Policy Switch 2000 Command Line Interface Software Version 1.2*, *Using Web-Based Management for the Business Policy Switch 2000 Software Version 1.2*, and *Reference for the Business Policy Switch 2000 Management Software Version 1.2*. Refer to [“Related publications” on page 11](#) to access these publications.

The following new features and enhancements are offered with the BPS 2000 software version 1.2:

- The software version 1.1.1 enhancements that increase the reliability and stack stability of the BPS 2000 switch
- 256 VLANs
- CLI management system
- Multiple spanning tree groups
- ASCII configuration file
- IP Manager list

Resolved issues

The stack stability was greatly enhanced in version 1.1.1.

The following issues were resolved in version 1.1:

- You can download BayStack 410 and BayStack 450 software images (and diagnostics) using the Device Manager in a mixed stack environment with Business Policy Switches.

Using DM with a mixed stack and you choose Edit > File System, you can specify either the image for the BPS 2000 or the image for the BayStack, or both to download the software image(s).

- The BootP timeout for the BPS is now set to five minutes, which matches the BootP timeout value for the BayStack 450 switch. (CR 13161-1)
- BootP values set to either Always or When Needed are retained during a switch reset. (CR 126842-1)

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 BPS 2000.

The following issues are known to be included in version 1.2 of the BPS 2000 software:

- There is a known issue with IGMP Snooping/Proxy. This issue occurs only when you use a mixed (Hybrid) stack and multiple VLANs are configured.

The workaround is either to use software version 1.1.1 or to disable spanning tree. (This issue will be resolved in an upcoming patch release.)

- MAC address-based security is unavailable on MultiLink Trunking ports.

- Before upgrading to BPS 2000 software version 1.2, save the software version 1.1 configuration as a binary configuration file in case you need to downgrade to software version 1.1.



Note: If you need to downgrade from BPS 2000 software version 1.2, save the configuration as a binary configuration file. The configuration files will be set to factory defaults as part of the downgrade process.

- If you are working with a mixed, or Hybrid, stack and are downgrading the software, the BPS 2000 units will reset to factory default but the BayStack 450 units will not default.

The workaround is to default the entire stack.

- If you want to assign a port that is part of a MultiLink Trunking (MLT) group to a QoS interface group, you must first disable the trunk the port belongs to. After you complete your configuration, you can re-enable the trunk. (CR Q00024943)
- When you are working with QoS configurations and you delete a filter, that filter will continue to operate until you reset the BPS 2000. (CR Q00071760)
- When working in a mixed stack with BayStack 450 v.4.0/4.1 and BPS 2000 v.1.2, only the BPS 2000 displays the IP address of the stack. (CR Q00079143)
- In the CLI, the `show logging` and `clear logging` commands do not function correctly. (CR Q00047028)
- When using the CLI and entering the IP address and mask in the form of A.B.C.D/<0-32>, you can also enter the values in the form of A.B.C.D/E.F.G.H.
- Be aware that the system may take some time for the ASCII config file with extensive configurations to complete. (CR Q00091334)
- Occasionally when you have disabled MAC address-based security, the ports will still register as an intrusion. (CR Q00092007, Q00091998)

The workaround is to reset the stack.

- The port speed and duplex you set using the ASCII configuration file may show correctly in the console display that shows port speed and duplex. The actual speed and duplex will be what you set with the configuration file, but the console display for these parameters may be incorrect. (CR Q00083014)

The workaround is to use the CLI.

- When you are using DM to display the spanning tree group memberships, the port members may not display correctly. (CR Q00093350)

The workaround is to double-check the spanning tree group memberships using the console interface (CI) menus, the CLI, or the Web-based management system.

- EAP configuration changes made at one console or using DM may not automatically display on other consoles. (CR Q00044484, CR Q00045315)

The workaround is refresh the console and the correct data displays.

- IGMP Proxy may not work correctly on tagged ports with multiple VLANs in multiple spanning tree groups. (CR Q00084861)
- If you rapidly add and delete VLANs using DM, some of the VLANs may not be configured.

The workaround is allow a few seconds to elapse between adding and deleting ports and VLANs if you are using DM.

- The ASCII configuration file does not support multiple spanning tree operations. (CR Q00088185)

Use the CI menus, CLI, the Web-based management system, or DM to configure multiple spanning tree groups.

- You can use the Web-based management system to configure and display VLANs. However the Port Information page displays only 125 of the possible 256 VLANs. (CR Q00101635)

The workaround is to use the CI menus to display all 256 VLANs.

The following issues are known to be included in version 1.1 of the BPS 2000 software:

- The Multicast Group Membership table may display duplicate entries when the switch is in Distributed MultiLink Trunking (D-MLT) mode. However, the trunks function properly; this is a display problem only. (CR 138095-1)
- In a BPS 2000-only stack, the entire stack is reset to default values when you return the base unit to default values. (CR 145501-1)
- To disable a port that is part of a MultiLink Truck (MLT) group, use either Device Manager (DM) or the Console Interface (CI) management system menus (you can use the Telnet connection). With the Web-based management system, you may be unable to disable ports that are part of MLTs. (CR 146607-1)

- 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.
- 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.
 - When you remove a Gigabit MDA from a switch, the Active Phy of the effected unit displays the new status. However, occasionally, the Active Phys of the other units in the stack or remote units will not display the new status.

Known limitations

The following limitations are known to exist:

- The current usable filters with software version 1.1 for the BPS are:
 - 50 policies
 - 200 IP filters and filter groups
 - 24 IP filters with same Source Address (18 nested subnets)
 - 14 Layer 2 filters and filter groups
 - 50 meters
 - 50 actions
 - Metered data consumes 2 filters
- 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...`

- You can configure protocol-based VLANs, with a sum total of “N” PID values not to exceed 14 ([Table 1](#)). If you are not running the spanning tree protocol, you have 15 PIDs available.

Table 1 Protocol and PID values

| Protocol Name | Number of PID values (N) |
|------------------|--------------------------|
| Ip Ether2 | 2 |
| Ipx 802.3 | 1 |
| Ipx 802.2 | 1 |
| Ipx Snap | 2 |
| Ipx Ether2Snap | 2 |
| ApITk Ether2Snap | 2 |
| DecLat Ether2 | 1 |
| DecOther Ether 2 | 10 |
| Sna 802.2 | 2 |
| Sna Ether2 | 1 |
| NetBios 802.2 | 2 |
| Xns Ether2 | 2 |
| Vines Ether2 | 1 |
| Ipv6 Ether2 | 1 |
| Usrdef | 1 |
| Rarp Ether2 | 1 |

For more information on Predefined Protocol Identifiers (PIDs), hexadecimal values, and associated protocols, refer to *Using the Business Policy Switch 2000 Software Version 1.2*.

Related publications

For more information about the BPS 2000 switch, refer to:

- *Using the Business Policy Switch 2000 Software Version 1.2* (part number 208700-B)
- *Using Web-Based Management for the Business Policy Switch 2000 Software Version 1.2* (part number 209570-B)
- *Reference for the Business Policy Switch 2000 Management Software Version 1.2* (part number 209322-B)
- *Reference for the Business Policy Switch 2000 Command Line Interface Software Version 1.2* (part number 212160-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)
- *Installing Media Dependent Adapters (MDAs)* (part number 302403-F)-
- *Managing Policy Information in Optivity Policy Services for Business Policy Switch* (part number 306969-D)
- *Installing Optivity Policy Services for Business Policy Switch* (part number 306972-C)
- *Task Map - Installing the OPS for BPS Product Family* (part number 306976-C)
- *Release Notes for Optivity Policy Services for the Business Policy Switch Version 1.0* (part number 306975-C)
- *Known Anomalies for Optivity Policy Services for the Business Policy Switch Version 1.0* (part number 306974-C)
- *Using the Optivity Quick2Config 2.2 Client Software* (part number 207810-B)
- *Installing and Administering Optivity Quick2Config 2.2* (part number 207890-B)
- *Configuring Business Policy Switches with Optivity Quick2Config 2.2* (part number 311208-A)
- *Release Notes for Optivity Quick2Config for Business Policy Switch 2000, v.2.2.1* (part number 310621-A)

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| Europe, Middle East, and Africa | (33) (4) 92-966-968 |
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| Asia Pacific | (61) (2) 9927-8800 |
| China | (800) 810-5000 |

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