

Part No. 210676-D
August 2001

4401 Great America Parkway
Santa Clara, CA 95054

Release Notes for the Business Policy Switch 2000

Software Version 1.1.1



NORTEL
NETWORKS™

Copyright © 2001 Nortel Networks

All rights reserved. August 2001.

The information in this document is subject to change without notice. The statements, configurations, technical data, and recommendations in this document are believed to be accurate and reliable, but are presented without express or implied warranty. Users must take full responsibility for their applications of any products specified in this document. The information in this document is proprietary to Nortel Networks NA Inc.

The software described in this document is furnished under a license agreement and may be used only in accordance with the terms of that license. The software license agreement is included in this document.

Trademarks

BayStack, Business Policy Switch 2000, Nortel Networks, and the Nortel Networks logo are trademarks of Nortel Networks.

Adobe and Acrobat are trademarks of Adobe Systems Incorporated.

All other trademarks and registered trademarks are the property of their respective owners.

Statement of Conditions

In the interest of improving internal design, operational function, and/or reliability, Nortel Networks NA Inc. reserves the right to make changes to the products described in this document without notice.

Nortel Networks NA Inc. does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

Introduction

These release notes for the Nortel Networks Business Policy Switch 2000* software version 1.1.1 provide information about software and operational issues not included in the Business Policy Switch 2000 (BPS 2000) software version 1.0 and version 1.0.1 guides or version 1.1 Release Notes.

To obtain the software version 1.1.1, download the following files from the Customer Support World Wide Web site:

- bps2k111_10.img (software file)
- bps2kdiag_110.bin (diagnostics file)

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:

- JDM 5.3.1.0

These release notes provide information on version 1.1.1 and cover the following topics:

- [“Compatibility with BayStack 450 switches,”](#) next
- [“Enhancements”](#) on page 5
- [“Resolved issues”](#) on page 5
- [“Known issues”](#) on page 6
- [“Known limitations”](#) on page 7
- [“Related publications”](#) on page 8
- [“How to get help”](#) on page 10

Compatibility with BayStack 450 switches

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.

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* for complete information on interoperability and compatibility between the BPS 2000 and BayStack switches.

Although the BPS 2000 software version 1.1.1 is compatible with BayStack 450 software version 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.

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.



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.

Enhancements

The following enhancements are in version 1.1.1:

- The enhancements offered with the BPS 2000 software version 1.1.1 all increase the reliability and stack stability of the BPS 2000 switch.
- You can download a saved binary configuration file regardless of the hardware version you are using.
- The download utility verifies the integrity of the diagnostics file before writing it to the flash. (The software has always verified the operational file.)

Resolved issues

Refer to [Enhancements](#) for the issues resolved in version 1.1.1.

The following issues were resolved in version 1.1.0:

- 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 1.1.1 of the BPS 2000 software:

- When you download the images with a mixed, or Hybrid, stack, ensure that a BPS 2000 switch is Unit 1 and is the base unit. (CR Q00091217)
- The pre-defined Usernames for the login page of the Web-based management system are **uppercase** letters: RO or RW. (The documentation erroneously shows these user names as lower-case letters.) (CR 145225-1)
- 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 Java Device Manager (JDM) 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, 15 PID values are 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*.

Related publications

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

- Release Notes for the Business Policy Switch 2000 Software version 1.1* (part number 210676-C)

-
- *Release Notes for the Business Policy Switch 2000 Software version 1.0.1* (part number 210676-B)
 - *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)
 - *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 207809-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)

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.

How to get help

If you purchased a service contract for your Nortel Networks product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

If you purchased a Nortel Networks service program, contact one of the following Nortel Networks Technical Solutions Centers:

Technical Solutions Center	Telephone
Europe, Middle East, and Africa	(33) (4) 92-966-968
North America	(800) 2LANWAN or (800) 252-6926
Asia Pacific	(61) (2) 9927-8800
China	(800) 810-5000

An Express Routing Code (ERC) is available for many Nortel Networks 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 an ERC for your product or service, go to the www12.nortelnetworks.com/ URL and click ERC at the bottom of the page.