Part No. 211131-A June 2001

4401 Great America Parkway Santa Clara, CA 95054

Release Notes for the Business Policy Switch 2000 DC



Copyright © 2001 Nortel Networks

All rights reserved. Printed in the USA. June 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.

Trademarks

NORTEL NETWORKS is a trademark of Nortel Networks.

Bay Networks, Optivity, Optivity Policy Services, and Business Policy Switch are registered trademarks and BayStack is a trademark of Nortel Networks.

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.

USA requirements only

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case users will be required to take whatever measures may be necessary to correct the interference at their own expense.

European requirements only

EN 55 022 statement

This is to certify that the Nortel Networks Business Policy Switch 2000 is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN 55 022 Class A (CISPR 22).

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case, the user may be required to take appropriate measures.

Achtung: Dieses ist ein Gerät der Funkstörgrenzwertklasse A. In Wohnbereichen können bei Betrieb dieses Gerätes Rundfunkstörungen auftreten, in welchen Fällen der Benutzer für entsprechende Gegenmaßnahmen verantwortlich ist.

Attention: Ceci est un produit de Classe A. Dans un environnement domestique, ce produit risque de créer des interférences radioélectriques, il appartiendra alors à l'utilisateur de prendre les mesures spécifiques appropriées.

EC Declaration of Conformity

This product conforms to the provisions of Council Directive 89/336/EEC and 73/23/EEC. The Declaration of Conformity is available on the Nortel Networks World Wide Web site at *http://libra2.corpwest.baynetworks.com/cgi-bin/ndCGI.exe/DocView/*.

Japan/Nippon requirements only

Voluntary Control Council for Interference (VCCI) statement

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準 に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波 妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ず るよう要求されることがあります。

Taiwan requirements

Bureau of Standards, Metrology and Inspection (BSMI) Statement

警告使用者:

這是甲類的資訊產品,在居住的環境中使用時,可能會造成射

頻干擾。在這種情況下,使用者會被要求採取某些適當的對策。

Canada requirements

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (Business Policy Switch 2000) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Business Policy Switch 2000) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

Australia and New Zealand Requirements only

This device has been tested and found to comply with the limits for a Class A digital device, pursuant to the Australian/ New Zealand standard AS/NZS 3548 set out by the Australian Communications Authority and Radio Spectrum Management Agency.

Nortel Networks NA Inc. software license agreement

NOTICE: Please carefully read this license agreement before copying or using the accompanying software or installing the hardware unit with pre-enabled software (each of which is referred to as "Software" in this Agreement). BY COPYING OR USING THE SOFTWARE, YOU ACCEPT ALL OF THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT. THE TERMS EXPRESSED IN THIS AGREEMENT ARE THE ONLY TERMS UNDER WHICH NORTEL NETWORKS WILL PERMIT YOU TO USE THE SOFTWARE. If you do not accept these terms and conditions, return the product, unused and in the original shipping container, within 30 days of purchase to obtain a credit for the full purchase price.

1. License grant. Nortel Networks NA Inc. ("Nortel Networks") grants the end user of the Software ("Licensee") a personal, nonexclusive, nontransferable license: a) to use the Software either on a single computer or, if applicable, on a single authorized device identified by host ID, for which it was originally acquired; b) to copy the Software solely for backup purposes in support of authorized use of the Software; and c) to use and copy the associated user manual solely in support of authorized use of the Software by Licensee. This license applies to the Software only and does not extend to Nortel Networks Agent software or other Nortel Networks software products. Nortel Networks Agent software or other Nortel Networks software products are licensed for use under the terms of the applicable Nortel Networks NA Inc. Software License Agreement that accompanies such software and upon payment by the end user of the applicable license fees for such software.

2. Restrictions on use; reservation of rights. The Software and user manuals are protected under copyright laws. Nortel Networks and/or its licensors retain all title and ownership in both the Software and user manuals, including any revisions made by Nortel Networks or its licensors. The copyright notice must be reproduced and included with any copy of any portion of the Software or user manuals. Licensee may not modify, translate, decompile, disassemble, use for any competitive analysis, reverse engineer, distribute, or create derivative works from the Software or user manuals or any copy, in whole or in part. Except as expressly provided in this Agreement, Licensee may not copy or transfer the Software or user manuals, in whole or in part. The Software and user manuals embody Nortel Networks' and its licensors' confidential and proprietary intellectual property. Licensee shall not sublicense, assign, or otherwise disclose to any third party the Software, or any information about the operation, design, performance, or implementation of the Software and user manuals that is confidential to Nortel Networks and its licensors; however, Licensee may grant permission to its consultants, subcontractors, and agents to use the Software at Licensee's facility, provided they have agreed to use the Software only in accordance with the terms of this license.

3. Limited warranty. Nortel Networks warrants each item of Software, as delivered by Nortel Networks and properly installed and operated on Nortel Networks hardware or other equipment it is originally licensed for, to function substantially as described in its accompanying user manual during its warranty period, which begins on the date Software is first shipped to Licensee. If any item of Software fails to so function during its warranty period, as the sole remedy Nortel Networks will at its discretion provide a suitable fix, patch, or workaround for the problem that may be included in a future Software release. Nortel Networks further warrants to Licensee that the media on which the Software is provided will be free from defects in materials and workmanship under normal use for a period of 90 days from the date Software is first shipped to Licensee. Nortel Networks will replace defective media at no charge if it is returned to Nortel Networks during the warranty period along with proof of the date of shipment. This warranty does not apply if the media has been damaged as a result of accident, misuse, or abuse. The Licensee assumes all responsibility for selection of the Software to achieve Licensee's intended results and for the installation, use, and results obtained from the Software. Nortel Networks does not warrant a) that the functions contained in the software will meet the Licensee's requirements, b) that the Software will operate in the hardware or software combinations that the Licensee may select, c) that the operation of the Software will be uninterrupted or error free, or d) that all defects in the operation of the Software will be corrected. Nortel Networks is not obligated to remedy any Software defect that cannot be reproduced with the latest Software release. These warranties do not apply to the Software if it has been (i) altered, except by Nortel Networks or in accordance with its instructions; (ii) used in conjunction with another vendor's product, resulting in the defect; or (iii) damaged by improper environment, abuse, misuse, accident, or negligence. THE FOREGOING WARRANTIES AND LIMITATIONS ARE EXCLUSIVE REMEDIES AND ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Licensee is responsible for the security of its

own data and information and for maintaining adequate procedures apart from the Software to reconstruct lost or altered files, data, or programs.

4. Limitation of liability. IN NO EVENT WILL NORTEL NETWORKS OR ITS LICENSORS BE LIABLE FOR ANY COST OF SUBSTITUTE PROCUREMENT; SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES; OR ANY DAMAGES RESULTING FROM INACCURATE OR LOST DATA OR LOSS OF USE OR PROFITS ARISING OUT OF OR IN CONNECTION WITH THE PERFORMANCE OF THE SOFTWARE, EVEN IF NORTEL NETWORKS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE LIABILITY OF NORTEL NETWORKS RELATING TO THE SOFTWARE OR THIS AGREEMENT EXCEED THE PRICE PAID TO NORTEL NETWORKS FOR THE SOFTWARE LICENSE.

5. Government licensees. This provision applies to all Software and documentation acquired directly or indirectly by or on behalf of the United States Government. The Software and documentation are commercial products, licensed on the open market at market prices, and were developed entirely at private expense and without the use of any U.S. Government funds. The license to the U.S. Government is granted only with restricted rights, and use, duplication, or disclosure by the U.S. Government is subject to the restrictions set forth in subparagraph (c)(1) of the Commercial Computer Software—Restricted Rights clause of FAR 52.227-19 and the limitations set out in this license for civilian agencies, and subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause of DFARS 252.227-7013, for agencies of the Department of Defense or their successors, whichever is applicable.

6. Use of software in the European Community. This provision applies to all Software acquired for use within the European Community. If Licensee uses the Software within a country in the European Community, the Software Directive enacted by the Council of European Communities Directive dated 14 May, 1991, will apply to the examination of the Software to facilitate interoperability. Licensee agrees to notify Nortel Networks of any such intended examination of the Software and may procure support and assistance from Nortel Networks.

7. Term and termination. This license is effective until terminated; however, all of the restrictions with respect to Nortel Networks' copyright in the Software and user manuals will cease being effective at the date of expiration of the Nortel Networks copyright; those restrictions relating to use and disclosure of Nortel Networks' confidential information shall continue in effect. Licensee may terminate this license at any time. The license will automatically terminate if Licensee fails to comply with any of the terms and conditions of the license. Upon termination for any reason, Licensee will immediately destroy or return to Nortel Networks the Software, user manuals, and all copies. Nortel Networks is not liable to Licensee for damages in any form solely by reason of the termination of this license.

8. Export and re-export. Licensee agrees not to export, directly or indirectly, the Software or related technical data or information without first obtaining any required export licenses or other governmental approvals. Without limiting the foregoing, Licensee, on behalf of itself and its subsidiaries and affiliates, agrees that it will not, without first obtaining all export licenses and approvals required by the U.S. Government: (i) export, re-export, transfer, or divert any such Software or technical data, or any direct product thereof, to any country to which such exports or re-exports are restricted or embargoed under United States export control laws and regulations, or to any national or resident of such restricted or embargoed countries; or (ii) provide the Software or related technical data or information to any military end user or for any military end use, including the design, development, or production of any chemical, nuclear, or biological weapons.

9. General. If any provision of this Agreement is held to be invalid or unenforceable by a court of competent jurisdiction, the remainder of the provisions of this Agreement shall remain in full force and effect. This Agreement will be governed by the laws of the state of California.

Should you have any questions concerning this Agreement, contact Nortel Networks, 4401 Great America Parkway, P.O. Box 58185, Santa Clara, California 95054-8185.

LICENSEE ACKNOWLEDGES THAT LICENSEE HAS READ THIS AGREEMENT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS. LICENSEE FURTHER AGREES THAT THIS AGREEMENT IS THE ENTIRE AND EXCLUSIVE AGREEMENT BETWEEN NORTEL NETWORKS AND LICENSEE, WHICH SUPERSEDES ALL PRIOR ORAL AND WRITTEN AGREEMENTS AND COMMUNICATIONS BETWEEN THE PARTIES PERTAINING TO THE SUBJECT MATTER OF THIS AGREEMENT. NO DIFFERENT OR ADDITIONAL TERMS WILL BE ENFORCEABLE AGAINST NORTEL NETWORKS UNLESS NORTEL NETWORKS GIVES ITS EXPRESS WRITTEN CONSENT, INCLUDING AN EXPRESS WAIVER OF THE TERMS OF THIS AGREEMENT.

Contents

Introduction	9
Business Policy Switch 2000 DC	10
Feature	10
Business Policy Switch 2000 DC power supply specifications	10
Installing the Business Policy Switch 2000 DC	11
Connecting the power cord to the DC connector	11
Grounding the switch	13
Turning on the power breaker	13
Business Policy Switch 2000 DC LED display panel	14
IGMP Fast JOIN and LEAVE	17
Configuring with the console interface (CI)	18
Configuring with the Web-based management system	19

8 Contents

Introduction

These release notes contain important information about Nortel Networks Business Policy Switch 2000 DC[™] software and operational issues not included in the following related guides:

- Installing the Business Policy Switch 2000 (part number 209319-A)
- *Getting Started with the Business Policy Switch 2000* (part number 209321-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 Operations* (part number 209321-A)
- Release Notes for the Business Policy Switch 2000 (part number 209320-A)



Note: Go to the nortelnetworks.com URL and select Customer Support and Documentation, then locate the Business Policy Switch 2000 section for the most recent product information.

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 www.adobe.com to download a free copy of Acrobat Reader.

These release notes contain the following sections:

- "Business Policy Switch 2000 DC" next
- "Installing the Business Policy Switch 2000 DC" on page 11
 - "Connecting the power cord to the DC connector" on page 11
 - "Grounding the switch" on page 13
 - "Turning on the power breaker" on page 13
- "Business Policy Switch 2000 DC LED display panel" on page 14
- "IGMP Fast JOIN and LEAVE" on page 17

Business Policy Switch 2000 DC

The Business Policy Switch 2000 DC is available with Business Policy Switch 2000[™] Version 1.1.

The features of Business Policy Switch 2000 DC are identical to those of the Business Policy Switch 2000 except for power requirements and redundancy.

Feature

A 100 Watt DC-DC Converter, housed inside the Business Policy Switch 2000 DC, provides power for the switch. It converts -48 Volts DC power to the voltage levels required by switch components.

Business Policy Switch 2000 DC power supply specifications

Table 1 lists the Business Policy Switch 2000 DC power supply specifications.

Item	Specification
Input power	maximum 130 Watts
Operating temperature	from 0 to +55 degrees Celsius
Maximum input current rating	-48 Volts DC at 2.75 Amps
Input voltage	-48 Volts DC
Output voltage	+5.0 Volts, +3.3 Volts, +2.5 Volts
Output power	maximum 100 Watts (continuous)

Table 1 Business Policy Switch 2000 DC power supply specifications

Installing the Business Policy Switch 2000 DC

This section describes installing the Nortel Networks Business Policy Switch 2000 DC.

Caution: The DC power input source for the Business Policy Switch 2000 DC power supply must be restricted to an output that is limited to Safety Extra Low Voltage (SELV) output per IEC950 Definition. This input power source must be reliably connected to ground and electrically isolated from the AC source.

For branch circuit over-current protection for the DC source, please check your national code requirements. For U.S. installations, follow NEC article 422-28(e) and 422-30.



Note: Nortel Networks does not supply the cables for connecting the Business Policy Switch 2000 DC power supply to the DC input source. You should select a cable that complies with the electrical code of the country where you intend to use the DC power supply. The DC connector to the power supply is supplied.

Connecting the power cord to the DC connector

To connect the power cord to the DC connector:

- 1 Select a 12-gauge, 3-conductor cable, such as an SOW-A, Type 90C, that accommodates DC input and frame ground.
- 2 Strip the outer cable jacket to expose the insulated conductor cables inside.
- **3** Strip the insulated conductor cables to 0.2755 inch (7 mm) from the end.
- **4** Use a screwdriver to loosen and remove the screws on the top of the connector cover (part number 203070-A), and remove the cover (Figure 1).

Figure 1 Removing the connector cover



5 Feed the cable ends into the connector and connect the wires with the positive conductor on the top, the chassis ground in the center, and the negative conductor on the bottom (Figure 2).





6 Replace the connector cover, taking care that the cable sits in the groove in the connector case, and secure with two screws (Figure 3).

Figure 3 Replacing the connector cover



Grounding the switch

Before turning on power to the switch, Nortel Networks recommends that you use the ground stud on the switch as a system ground. See (Figure 4) in "Turning on the power breaker".

Turning on the power breaker

After all other modules have been installed in the chassis, you can turn on the power breaker (Figure 4).



Business Policy Switch 2000 DC LED display panel

Figure 5 shows the Business Policy Switch 2000 DC LED display panel.





10024EA

Table 1 describes the Business Policy Switch 2000 DC LEDs.

 Table 2
 Business Policy Switch 2000 DC LEDs

Label	Туре	Color	State	Meaning
Pwr	Power status	Green	On	DC power is available to the switch's internal circuitry.
			Off	There is no power to the switch or the power supply failed.
Status	System status	Green	On	Self-test passed successfully and switch is operational.
			Blinking	A nonfatal error occurred during the self-test.
			Off	The switch failed the self-test.
Cas Up	Stack mode		Off	The switch is in standalone mode.

Label	Туре	Color	State	Meaning
		Green	On	The switch is connected to the <i>upstream</i> unit's Cascade A In connector.
		Amber	On	This unit has detected a problem with the switch connected to the cascade up connector. In order to maintain the integrity of the stack, this unit has bypassed its upstream neighbor and has wrapped the stack backplane onto an alternate path.
		Amber or Green	Blinking	The software revision is incompatible software revision or is unable to obtain a unit ID because the Renumber Stack Unit table is full. The unit is on the ring but cannot participate in the stack configuration.
Cas Dwn	Stack mode		Off	The switch is in standalone mode.
		Green	On	The switch is connected to the <i>downstream</i> unit's Cascade A Out connector.
		Amber	On	This unit has detected a problem with the switch connected to the cascade down connector. In order to maintain the integrity of the stack, this unit has bypassed its downstream neighbor and has wrapped the stack backplane onto an alternate path.
		Amber or Green	Blinking	The software revision is incompatible software revision or is unable to obtain a unit ID because the Renumber Stack Unit table is full. The unit is on the ring but cannot participate in the stack configuration.

 Table 2
 Business Policy Switch 2000 DC LEDs (continued)

Label	Туре	Color	State	Meaning
Base	Base mode	Green	On	The switch is configured as the stack base unit.
			Off	The switch is <i>not</i> configured as the stack base unit (or is in standalone mode).
			Blinking	Stack configuration error: indicates that <i>multiple</i> base units or <i>no</i> base units are configured in the stack.
		Amber	On	This unit is operating as the stack configuration's <i>temporary base unit</i> . This condition occurs automatically if the base unit (directly downstream from this unit) fails.
				 If this happens, the following events take place: The two units directly upstream and directly downstream from the failed unit automatically wrap their cascade connectors and indicate this condition by lighting their Cas Up and Cas Dwn LEDs (see Cas Up and Cas Dwn description in this table).
				• If the temporary base unit fails, the next unit directly downstream from this unit becomes the new temporary base unit. This process can continue until there are only two units left in the stack configuration.
				This automatic failover is a temporary safeguard only. If the stack configuration loses power, the temporary base unit will not power up as the base unit when power is restored. For this reason, you should always assign the temporary base unit as the base unit (set the Unit Select switch to Base) until the failed unit is repaired or replaced.
10/100	10/100 Mb/s port speed	Green	On	The corresponding port is set to operate at 100 Mb/s, and the link is good.
	indicator	Green	Blinking	The corresponding port has been disabled by software.
		Amber	On	The corresponding port is set to operate at 10 Mb/s, and the link is good.
		Amber	Blinking	The corresponding port has been disabled by software.
			Off	The link connection is bad, or there is no connection to this port.
Activity	Port activity	Green	Blinking	Indicates network activity for the corresponding port. A high level of network activity can cause the LEDs to appear to be on continuously.

 Table 2
 Business Policy Switch 2000 DC LEDs (continued)

IGMP Fast JOIN and LEAVE

Note: The software for the Business Policy Switch 2000 DC is identical to the software for the Business Policy Switch 2000. Business Policy Switch 2000 DC will show Business Policy Switch 2000 as the product name in all applications software.

Note: The Fast JOIN and LEAVE feature for IGMP is available *only* when the operational mode for the Business Policy Switch 2000 is set to BPS 2000. If the operational mode is set to hybrid (or mixed) mode, the Fast JOIN and LEAVE feature is not available. To set the operational mode, refer to *Using the Business Policy Switch 2000* and *Using Web-based Management for the Business Policy Switch 2000*.

When enabled, the Fast JOIN and LEAVE feature adds the following functionality to IGMP:

- When the Business Policy Switch 2000 receives the first report of a multicast IP group, the switch does *not* flood the traffic addressed to that group for the first 10 seconds. The switch begins pruning traffic within 100 milliseconds.
- When the switch receives the LEAVE message, the switch prunes that port, sending the LEAVE message within 100 milliseconds.

When Fast JOIN and LEAVE is enabled, the user can have only *one* host per Business Policy Switch 2000 port for the uninterrupted multicast stream. If you have more than one host connected to a single port (for example, another switch), receiving the same multicast stream and one host sends a LEAVE message, the multicast stream will stop flowing to all of the hosts associated with that port. Other hosts must send a new IGMP report to begin receiving the multicast stream again.

-

Note: You cannot enable *both* Fast JOIN and LEAVE *and* Robust Value. When you enable the Fast JOIN and LEAVE value, the Robust Value *always* remains at the default value of 2, although the displayed value is 0.

Configuring with the console interface (CI)

To enable Fast JOIN and LEAVE using the CI menus:

- 1 Check that the operational mode is BPS 2000.
 - **a** Choose Switch Configuration Menu from the Main Menu.
 - **b** Choose Stack Operational Mode.
 - **c** Ensure that the Current Operational Mode reads Pure BPS 2000 (not Hybrid).
- **2** Choose IGMP Configuration (or press g) from the Switch Configuration Menu screen.

The IGMP Configuration screen opens (Figure 6).

Figure 6 IGMP Configuration screen

```
IGMP Configuration
                        VLAN:
                                                  1 1
                        Snooping:
                                             [ Enabled ]
                        Proxy:
                                            [Enabled]
                        Robust Value:
                                            [2]
                        Query Time:
                                             [ 125 seconds ]
                        Set Router Ports: [ Version 1 ]
                         Static Router Ports
                       7-12
            1-6
                                13-18
                                            19-24
                      ----
                                 _ _ _ _ _ _
                                            ----
 Unit #1
           _ _ _ _ _ _
                      - X - - - -
                                 - X - - - -
                                            _ _ _ _ _ _
 Unit #2
           - X - - - X
                      _ _ _ _ _ _
                                 ----
                                            - - - - - -
KEY: X = IGMP Port Member (and VLAN Member), - = Not an IGMP Member
Use space bar to display choices, press <Return> or <Enter> to select
choice. Press Ctrl-R to return to previous menu. Press Ctrl-C to
return to Main Menu.
```

- **3** In the Robust Value field, enter **0**.
- 4 Press Ctrl-C to return to the Main Menu.

To disable Fast JOIN and LEAVE using the console menus:

- 1 Choose Switch Configuration from the Main Menu, and choose IGMP Configuration (or press g) from the Switch Configuration Menu screen.
- 2 In the Robust Value field, enter 2 (default value) or the number you want to specify in the field.
- **3** Press Ctrl-C to return to the Main Menu.

Configuring with the Web-based management system

To enable Fast JOIN and LEAVE using the Web-based management interface:

- 1 Check that the operational mode is BPS 2000.
 - **a** Choose Configuration > Stack Operational Mode from the Main Menu.
 - **b** Ensure that the Current Stack Operational Mode displays Pure BPS 2000 Stack (not Hybrid).
- 2 Choose Application > IGMP > IGMP VLAN Configuration from the Main Menu.
- **3** Click the Action tab.

The IGMP: VLAN Configuration page opens (Figure 7).

Figure 7 IGMP: VLAN Configuration page

IGMP VLAN S	etti	ng																								
VLAN	1																									
Snooping	En	able	d	-																						
Proxy	En	able	d	•																						
Robust Value	2	_		16	4)																					
Query Time	125			sec	ond	s i	1 5	12)																		
		Static Router Ports (Version 1)																								
Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Unit 1																										
Unit 2																										
Unit 3																										
											Sta	tic F	lout	er P	orts	(Ve	rsio	n 2)								
Port	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Unit 1																										
Unit 2																										
Unit 3																										

- 4 In the Robust Value field, enter 0.
- **5** Click Submit.

To disable Fast JOIN and LEAVE using the Web-based management system:

- 1 Choose Application > IGMP > IGMP VLAN Configuration from the Main Menu.
- **2** In the Robust Value field, enter 2 (default value) or the number you want to specify.
- **3** Click Submit.