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BBI Quick Guide

Networking OS for 1/10Gb LAN Switch Module

FastFind Links

Hitachi Data Systems

MK-99CB2500038-00

Contents

Preface

This document describes how to use the Networking OS Browser-Based Interface (BBI) software is included with 1/10Gb LAN Switch Module. The BBI software lets you use your Web browser to access switch information and statistics, and to perform switch configuration via the Internet. This BBI Quick Guide provides an overview of how to access and use the N/OS Browser-Based Interface.

This preface includes the following information:

Notice: The use of 1/10Gb LAN Switch Module and all other Hitachi Data Systems products is governed by the terms of your agreement(s) with Hitachi Data Systems.

Intended Audience

This *BBI Quick Guide* is intended for network installers and system administrators engaged in configuring and maintaining a network. It assumes that you are familiar with your 1/10Gb LAN Switch Module, your Web browser, Ethernet concepts, IP addressing, the IEEE 802.1d Spanning Tree Protocol, and SNMP configuration parameters.

Product Version

This document revision applies to Networking OS for 1/10Gb LAN Switch Module version 7.8.

Release Notes

Read the release notes before installing and using this product. They may contain requirements or restrictions that are not fully described in this document or updates or corrections to this document.

Document Conventions

This document uses the following typographic conventions:

Convention	Description
Regular text bold	In text: keyboard key, parameter name, property name, hardware labels, hardware button, hardware switch. In a procedure: user interface item
Italic	Variable, emphasis, reference to document title, called-out term
`Screen text`	Command name and option, drive name, file name, folder name, directory name, code, file content, system and application output, user input
< > (angled brackets)	Variable (used when italic is not enough to identify variable).
[ ] (square bracket)	Optional values
{ } braces	Required or expected value
| vertical bar	Choice between two or more options or arguments
_(underline)	Default value, for example, [a_| b]

This document uses the following icons to draw attention to information:

Icon	Meaning	Description
	WARNING	This indicates the presence of a potential risk that might cause death or severe injury.
	CAUTION	This indicates the presence of a potential risk that might cause relatively mild or moderate injury.
NOTICE	NOTICE	This indicates the presence of a potential risk that might cause severe damage to the equipment and/or damage to surrounding properties.
	Note	This indicates notes not directly related to injury or severe damage to equipment.
	Tip	This indicates advice on how to make the best use of the equipment.

Convention for storage capacity values

Physical storage capacity values (for example, disk drive capacity) are calculated based on the following values:

Physical capacity unit	Value
1 kilobyte (KB)	1,000 (10^3) bytes
1 megabyte (MB)	1,000 KB or $1,000^2$ bytes
1 gigabyte (GB)	1,000 MB or $1,000^3$ bytes
1 terabyte (TB)	1,000 GB or $1,000^4$ bytes
1 petabyte (PB)	1,000 TB or $1,000^5$ bytes
1 exabyte (EB)	1,000 PB or $1,000^6$ bytes

Logical storage capacity values (for example, logical device capacity) are calculated based on the following values:

Logical capacity unit	Value
1 block	512 bytes
1 KB	1,024 (2^{10}) bytes
1 MB	1,024 KB or $1,024^2$ bytes
1 GB	1,024 MB or $1,024^3$ bytes
1 TB	1,024 GB or $1,024^4$ bytes
1 PB	1,024 TB or $1,024^5$ bytes
1 EB	1,024 PB or $1,024^6$ bytes

Getting Help

The Hitachi Data Systems customer support staff is available 24 hours a day, seven days a week. If you need technical support, log on to the Hitachi Data Systems Portal for contact information: https://portal.hds.com

Comments

Please send us your comments on this document: doc.comments@hds.com. Include the document title and number including the revision level (for example, -07), and refer to specific sections and paragraphs whenever possible. All comments become the property of Hitachi Data Systems Corporation.

Thank you!

1

Getting Started

This chapter briefly describes the software features and requirements for the Networking OS Browser-Based Interface (BBI), and explains how to access the BBI start page.

Feature

The network administrator can access switch configuration and monitoring functions through the BBI, a Web-based switch management interface. The BBI has the following features:

- Many of the same configuration and monitoring functions as the command-line interface
- Intuitive and easy-to-use interface structure
- Password protection
- Nothing to install; the BBI is part of the N/OS switch software
- Automatically upgraded with each new software release

Note: You can perform most configuration and monitoring tasks through the BBI.For a comprehensive set of commands, use the command-line interface. Refer to the Networking OS Command Reference for 1/10Gb LAN Switch Module.

Requirements

- 1/10Gb LAN Switch Module
- Installed Networking OS switch software
- PC or workstation with network access to the switch
- Frame-capable Web-browser software, such as the following:
  - Internet Explorer 7.0x or higher
  - Mozilla FireFox 8.x or higher
  - Google Chrome 16.x or higher
- JavaScript enabled in your Web browser

Switch Set Up

Before you can access the BBI, minimal configuration is required on the 1/10Gb LAN Switch Module.

IP Interface

At least one IP interface must be configured on the switch. Each IP interface address provides a point of access for Networking OS switch management.

The default management interface is 128 for IPv4 and 127 for IPv6.

For complete information about configuring IP interfaces, see your 1/10Gb LAN Switch Module *Application Guide*.

Enabling/Disabling BBI Access

By default, BBI access is disabled for HTTP, and enabled for HTTPS. If you need to enable HTTP access, use the following command from the command-line interface:

```
Router (config)# [no] access http enable
```

For more information on the accessing and configuring the switch through the command-line interface, see your *Command Reference*.

Web Browser Set Up

Most modern Web browsers work with frames and JavaScript by default, and require no additional set up. However, you should check your Web browser's features and configuration to make sure frames and JavaScript are enabled.

Note: JavaScript is not the same as Java. Please make sure that JavaScript is enabled in your Web browser.

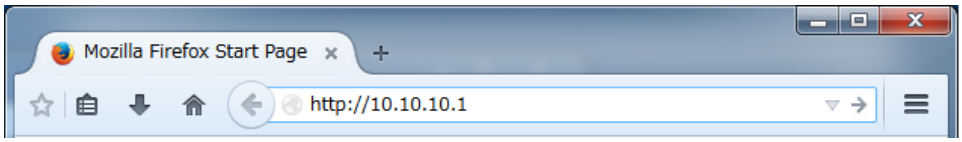
Starting the BBI

When the switch and browser set up is done, follow these steps to launch the BBI:

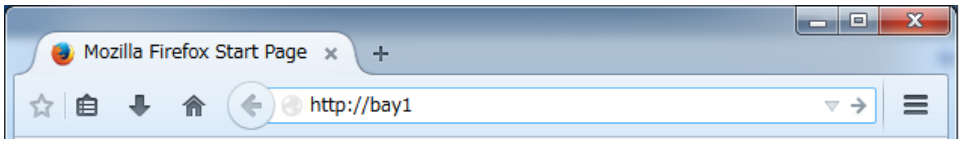
1. Start your Web browser.
2. Enter the switch IP interface address in the Web browser's URL field.

For example, consider an IP interface with a network IP address of 10.10.10.1

You could enter the following:



If the IP interface's address has a name on your local domain name server, you could enter the name instead. For example, you could enter the following:



3. Log in to the switch.

If your switch and browser are properly configured, you are asked to enter a password:

Enter the account name and password for the switch's administrator or user account.

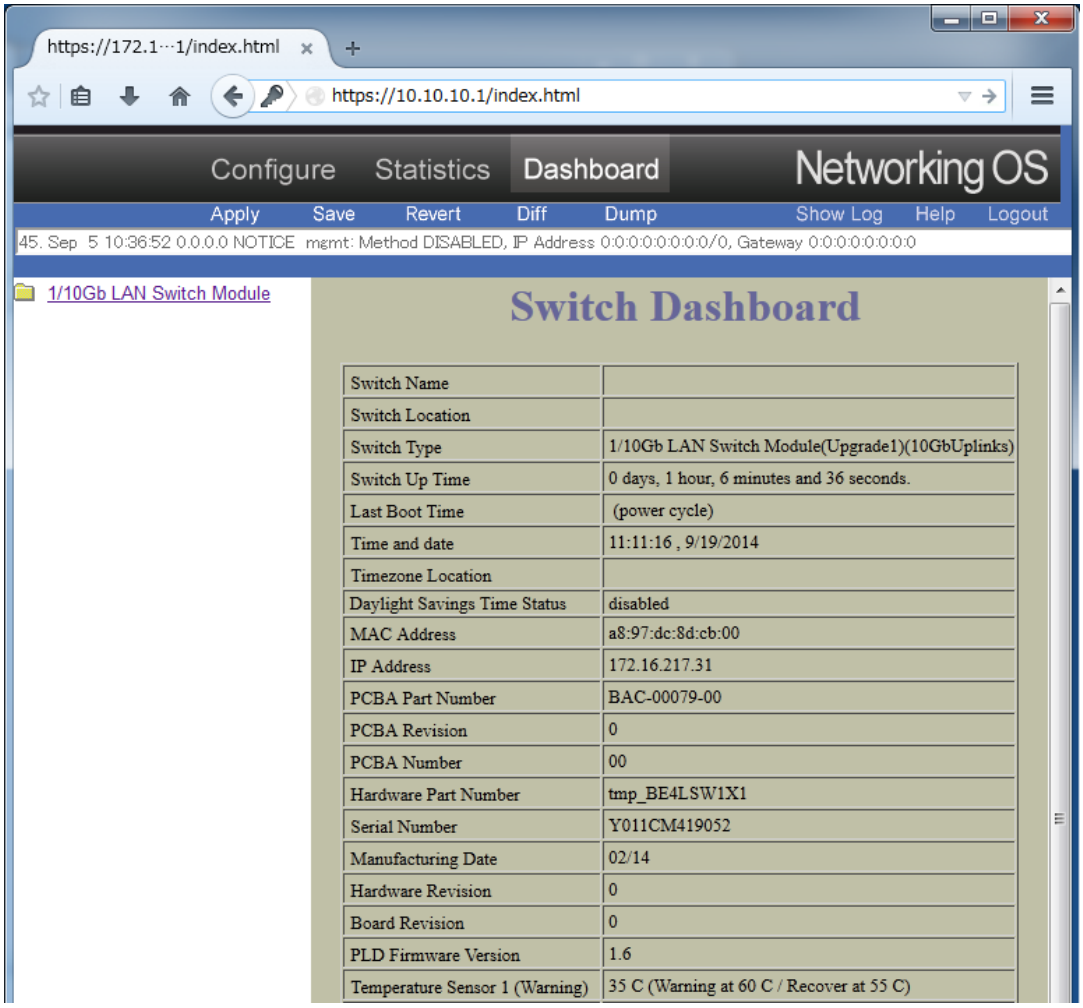
The default user name and password is as follows:

- User name is **USERID**.
- Password is **PASSW0RD** (the 0 in PASSW0RD is a zero).

For more password information, see your *Command Reference*.

4. Allow the BBI Dashboard page to load.

When the proper account name and password combination is entered, the BBI Dashboard page is displayed in your browser's viewing area. There may be a slight delay while the Dashboard page is being initialized. You should not stop the browser while loading is in progress. When loading is complete, a folder icon appears in the left-hand navigation window.



Switch Name	
Switch Location	
Switch Type	1/10Gb LAN Switch Module(Upgrade1)(10GbUplinks)
Switch Up Time	0 days, 1 hour, 6 minutes and 36 seconds.
Last Boot Time	(power cycle)
Time and date	11:11:16 , 9/19/2014
Timezone Location	
Daylight Savings Time Status	disabled
MAC Address	a8:97:dc:8d:cb:00
IP Address	172.16.217.31
PCBA Part Number	BAC-00079-00
PCBA Revision	0
PCBA Number	00
Hardware Part Number	tmp_BE4LSW1X1
Serial Number	Y011CM419052
Manufacturing Date	02/14
Hardware Revision	0
Board Revision	0
PLD Firmware Version	1.6
Temperature Sensor 1 (Warning)	35 C (Warning at 60 C / Recover at 55 C)

Note: The sample screens that appear in this document might differ slightly from the screens displayed by your system. Screen content varies based on the type of switch unit that you are using and the firmware versions and options that are installed.

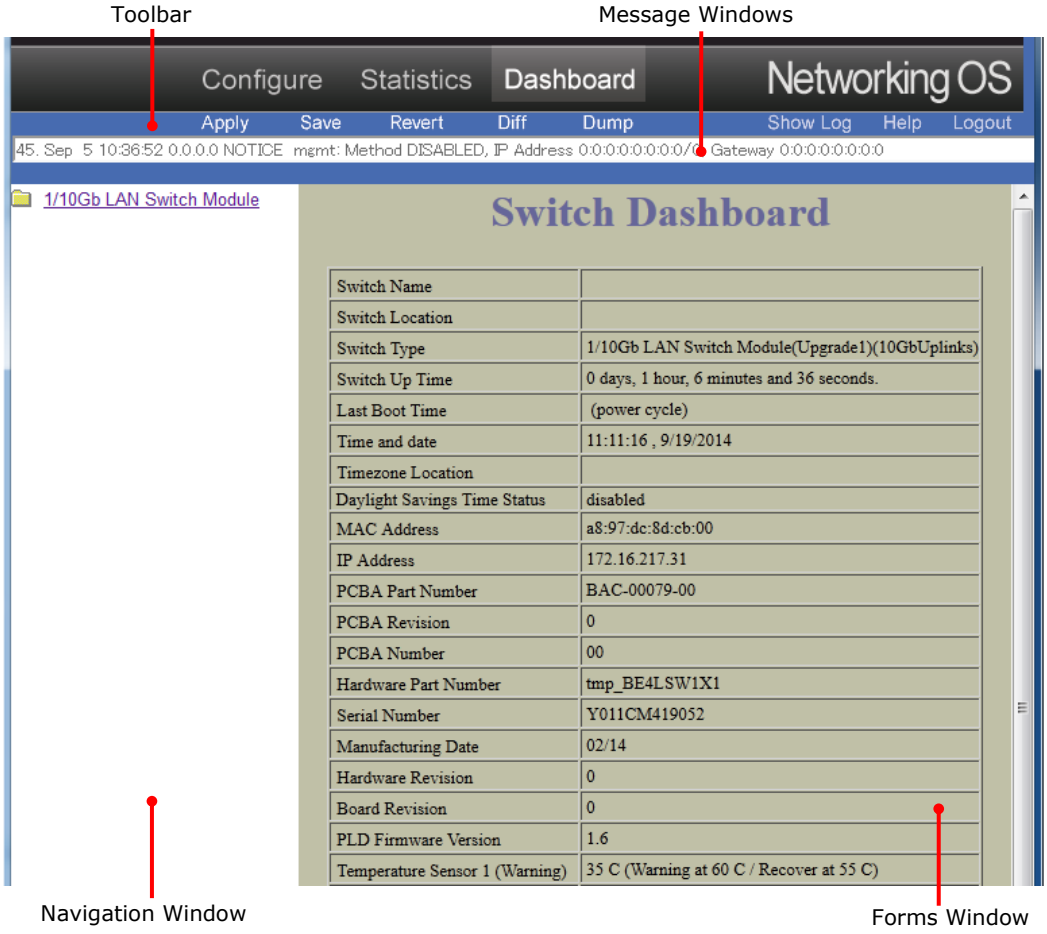
2

Browser-Based Interface Basics

This chapter briefly describes the basic outline for the Networking OS Browser-Based Interface (BBI), and explains the overview of the BBI page.

Browser-Based Interface Basics

Once you are properly logged in, the Networking OS Browser-Based Interface (BBI) appears in your Web browser's viewing window:



There are four main regions on the N/OS BBI screen:

- The toolbar is used for selecting the context for your actions in the other windows.
- The navigation window is used for selecting particular items or features to act upon.
- The forms window is used for viewing or altering switch information.
- The message window is used for displaying the most recent switch syslog mes- sages and events.

Toolbar/Context Tabs

The toolbar is used for setting the context for your actions in the application. There are three context tabs:

Configure	When selected, you can access the switch configuration forms. Configuration forms can be altered only if you are logged in using the administrator account. Select an item in the navigation window to display the desired configuration form in the forms window.
Statistics	When selected, you can view information about switch performance. Select an item in the navigation window to display the desired statistics in the forms window.
Dashboard	This context tab is selected by default when the BBI is first activated. When selected, basic switch information and status can be viewed in the forms window. Select an item in the navigation window to display the desired dashboard information in the forms window.

The selected context tab is highlighted, to remind you of the current context mode.

Commands

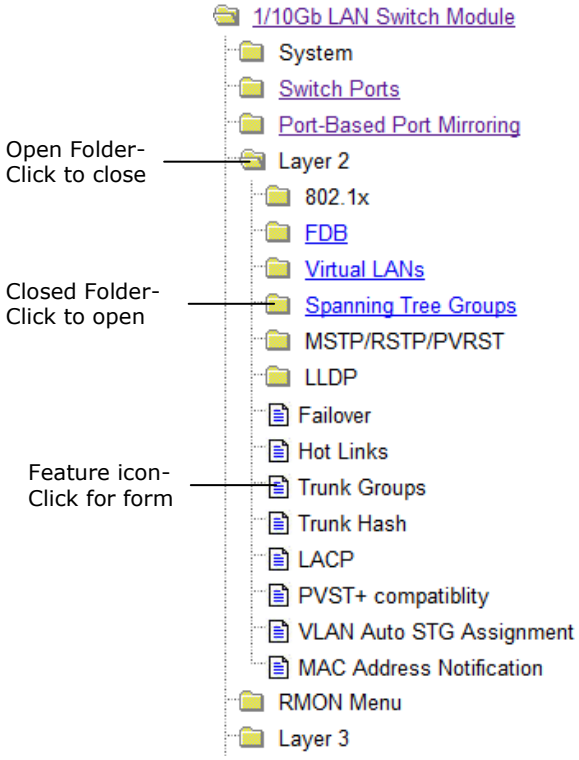
The following general commands are available on the toolbar:

Save to Active Config	Saves the current configuration to the startup configuration block.
Save to Backup Config	Saves the current configuration to the backup configuration block.
Show Config	Opens a new Web-browser window that displays the running configuration.
Show Log	Opens a new Web-browser window that displays the most recent switch log messages. Close the log browser when finished.
Help	Opens a new Web-browser window that displays basic online help information. Close the Help browser when finished.
Logout	Log off the switch and exit the BBI.

Navigation Window

The navigation window is used for selecting a particular switch feature to act upon. Status, statistics, or configuration forms for the selected item will appear in the forms window, depending on the context chosen on the toolbar.

The navigation window contains a tree of folders, sub-folders, and feature icons:



You can click on any closed folder to open it and reveal its contents. Click on any open folder to close it. Click on any feature icon to load the appropriate status, statistics, or configuration form in the forms window.

Some folders also have forms. If the name of the folders is underlined, click on the name to display the appropriate form.

Forms Window

When a feature icon is selected on the navigation window, a status, statistics, or configuration form is displayed in the forms window. The exact nature of the form depends on the current context selected on the toolbar, as well as the type of information available. Not all feature icons have forms for all contexts.

Some forms display switch information such as settings, status, or statistics. Others allow you to make configuration changes to switch parameters.

Message Window

Switch log messages are generated by events such as login/logout activity, password changes, configuration changes, and switch reboot. The BBI records the most recent messages and displays each one briefly in the message window. When the last message has been displayed, the cycle is repeated.

To view all messages at the same time, select the Show Log command on the toolbar. A new Web-browser window will be opened to display the log information. Close the window when finished.

3

Configuring the Switch

The Networking OS Browser-Based Interface (BBI) can be used to view and change switch configuration parameters. The same configuration parameters that are available through the switch's command-line interface are present on the BBI configuration forms.

The following provides a basic outline for switch configuration. You should first be familiar with configuration as covered in the N/OS Command Reference.

Note: You must be logged in using the administrator account in order to change switch configuration settings.

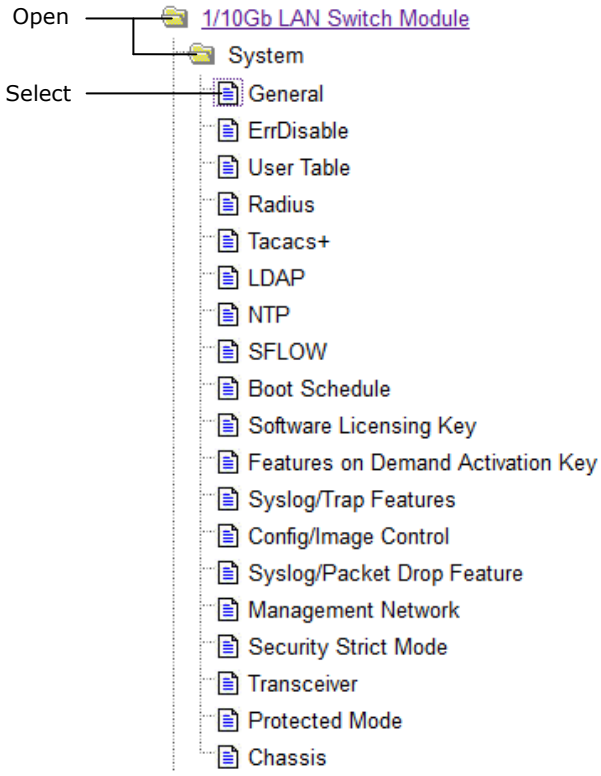
- ☐ Configuration Steps
- ☐ Using the BBI to Load Switch Software
- ☐ Steps for Displaying Statistics

Configuration Steps

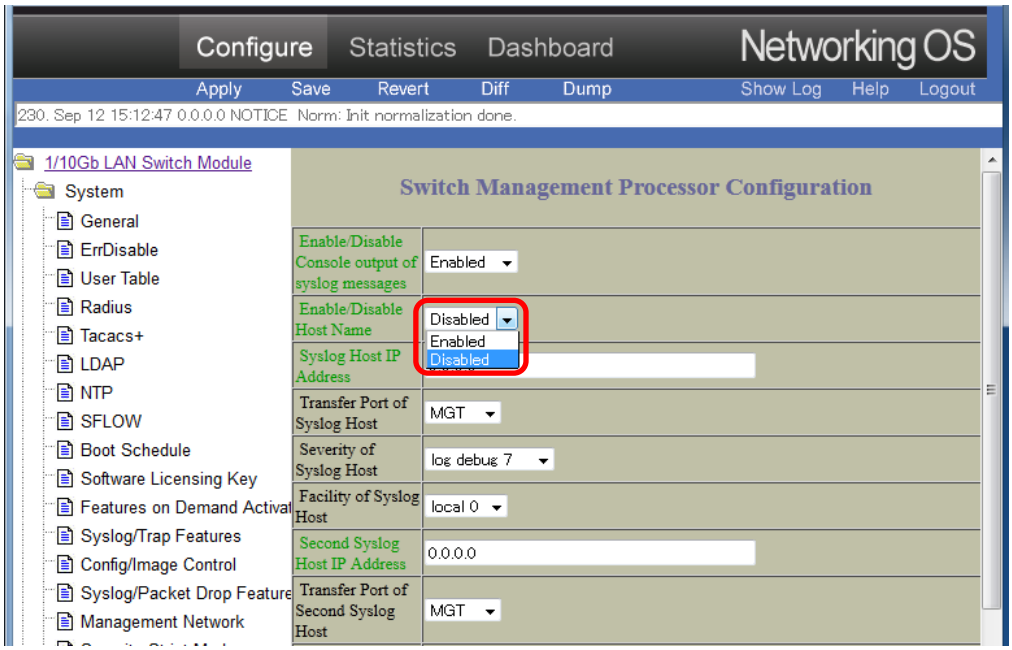
Follow these basic steps for viewing or configuring switch parameters:

1. Click the Configure context tab in the N/OS toolbar:

2. Select a feature icon in the navigation window. For example:



3. View or make changes to the settings shown in the forms window. For example:



Note: Fields which must be configured for proper switch operations are highlighted on the forms in GREEN type. Items which load other forms when selected are underlined.

4. Click the Submit button on the bottom of the form to submit the form contents to the switch.

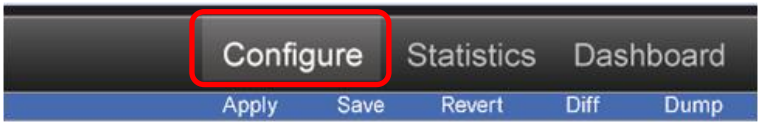
Using the BBI to Load Switch Software

You can use the Browser-Based Interface to load software onto the 1/10Gb LAN Switch Module. The software image to load can reside in one of the following locations:

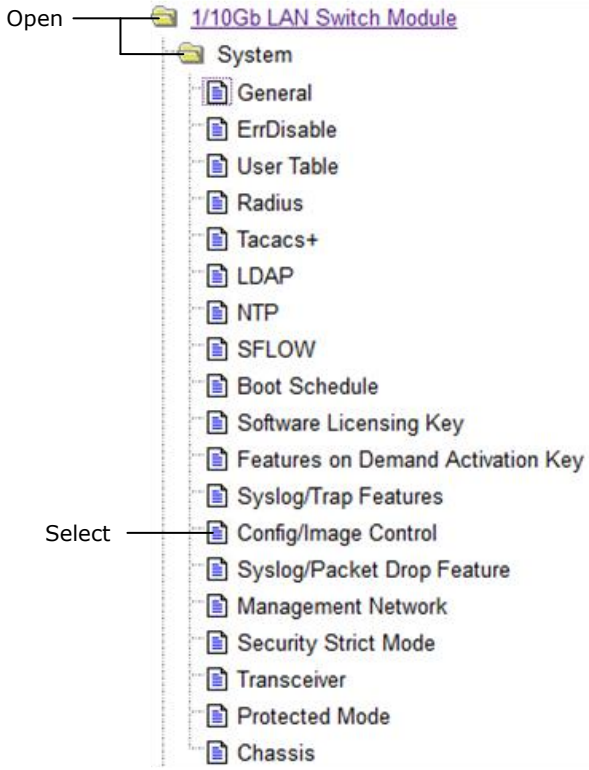
- FTP server
- TFTP server
- Local computer

After you log onto the BBI, perform the following steps to load a software image:

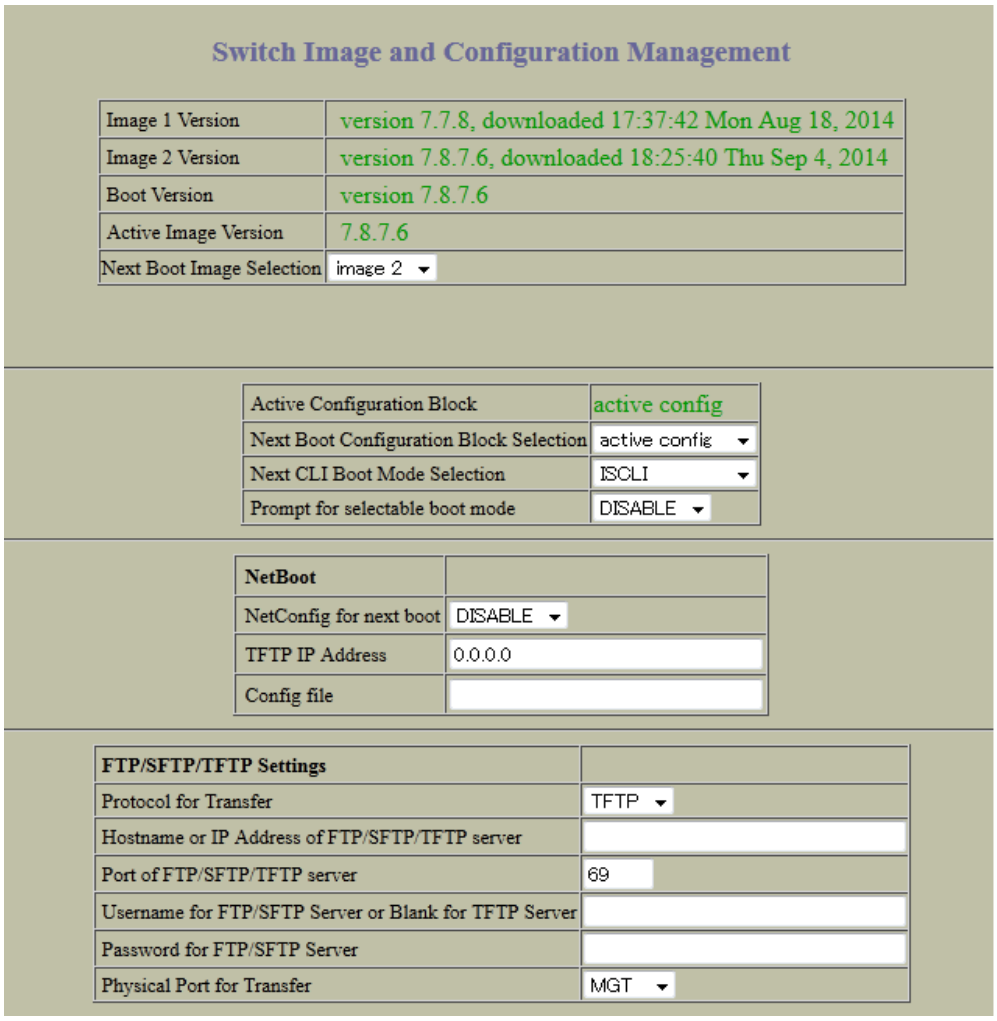
1. Click the Configure context tab in the N/OS toolbar:



2. In the Navigation Window, select System > Config/Image Control.



The Switch Image and Configuration Management page appears.



Switch Image and Configuration Management

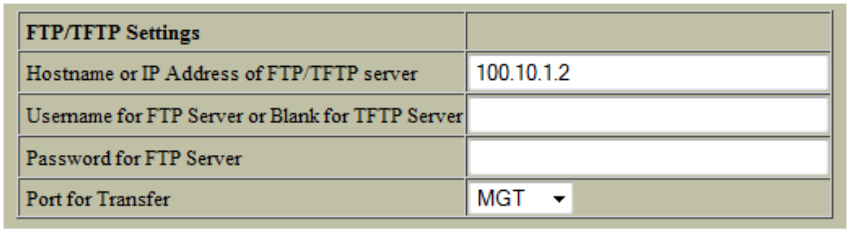
Image 1 Version	version 7.7.8, downloaded 17:37:42 Mon Aug 18, 2014
Image 2 Version	version 7.8.7.6, downloaded 18:25:40 Thu Sep 4, 2014
Boot Version	version 7.8.7.6
Active Image Version	7.8.7.6
Next Boot Image Selection	image 2

Active Configuration Block	active config
Next Boot Configuration Block Selection	active config
Next CLI Boot Mode Selection	ISCLI
Prompt for selectable boot mode	DISABLE

NetBoot	
NetConfig for next boot	DISABLE
TFTP IP Address	0.0.0.0
Config file	

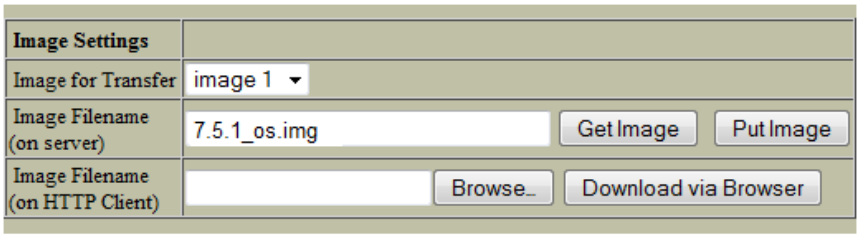
FTP/SFTP/TFTP Settings	
Protocol for Transfer	TFTP
Hostname or IP Address of FTP/SFTP/TFTP server	
Port of FTP/SFTP/TFTP server	69
Username for FTP/SFTP Server or Blank for TFTP Server	
Password for FTP/SFTP Server	
Physical Port for Transfer	MGT

3. If you are loading software from your computer (HTTP client), go to Step 4. If you are loading software from a FTP/TFTP server, enter the server's information in the FTP/TFTP Settings section.

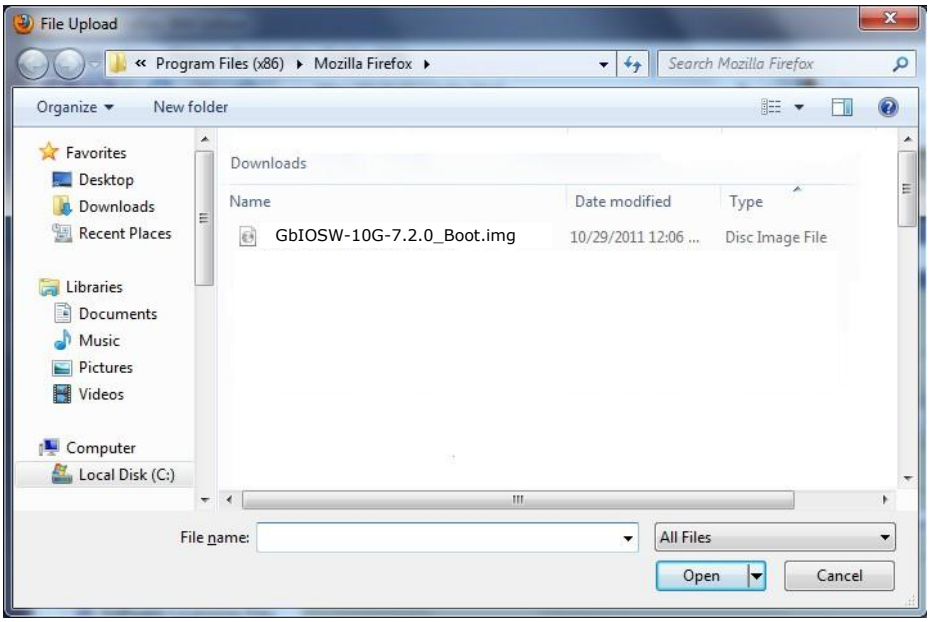


FTP/TFTP Settings	
Hostname or IP Address of FTP/TFTP server	100.10.1.2
Username for FTP Server or Blank for TFTP Server	
Password for FTP Server	
Port for Transfer	MGT

4. In the Image Settings section, select the image version you want to replace(Image for Transfer).



- If you are loading software from a FTP/TFTP server, enter the file name and click **Get Image**.
- If you are loading software from your computer, click **Browse**. In the File Download Dialog, select the file and click **OK**. Click **Download via Browser**.



Once the image has loaded, the page refreshes to show the new software.

4

Viewing Statistics

The Networking OS Browser-Based Interface (BBI) can be used to view a variety of switch performance statistics. The same statistics that are available through the switch's command-line interface are present on the BBI statistics forms.

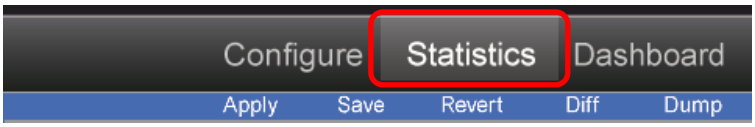
The following provides a basic outline for viewing statistics. You should first be familiar with available statistics as covered in the N/OS *Command Reference*.

- ☐ Steps for Displaying Statistics

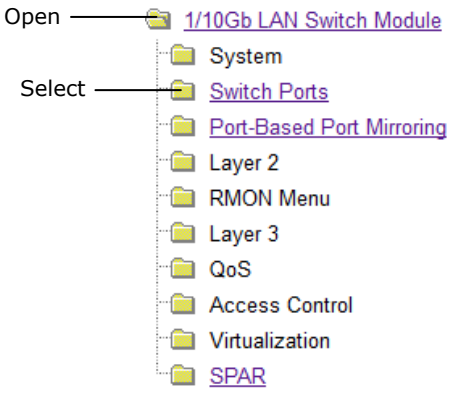
Steps for Displaying Statistics

Follow these basic steps for viewing switch statistics:

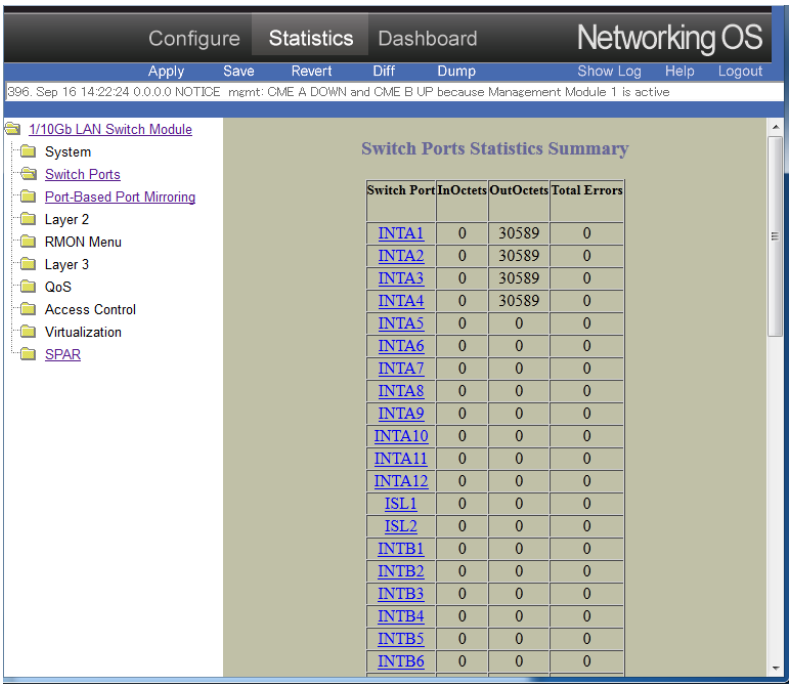
1. Select the Statistics context tab in the N/OS toolbar:



2. Select a feature icon or underlined folder in the navigation window. For example:



3. View the statistics in the forms window. For example:



Note: Items which load other forms when selected are underlined.

5

The Dashboard

The Networking OS Browser-Based Interface (BBI) can be used to view the present settings and operating status of a variety of switch features. The same information available through the switch's command-line interface is present on the dashboard forms.

The following provides a basic outline for viewing the dashboard forms. You should first be familiar with configuration as covered in the N/OS *Command Reference*.

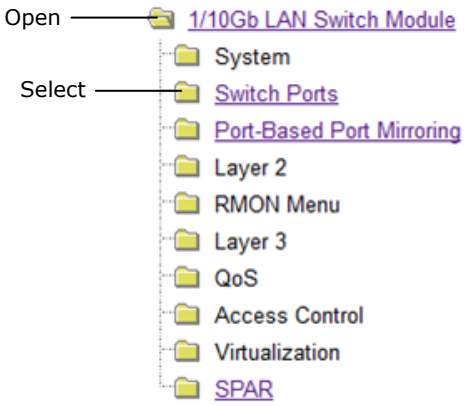
- ☐ Steps for Displaying Dashboards

Steps for Displaying Dashboards

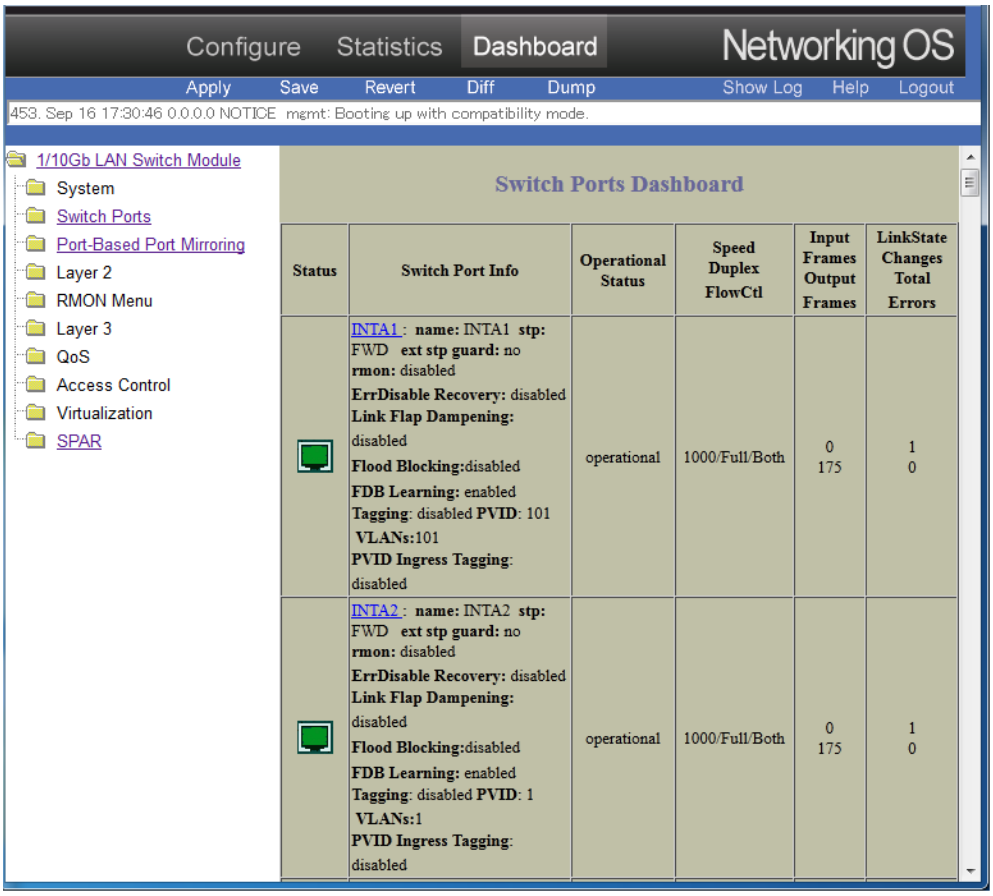
Follow these basic steps for viewing switch dashboard forms:

1. Select the Dashboard context tab in the BBI toolbar:

2. Select a feature icon in the navigation window. For example:



3. View information shown in the forms window. For example:



Note: Items which load other forms when selected are underlined.

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