EZSwitchSetup

Administrator's Guide

Supporting Brocade 300, 5100, 5300, 6505, 6510, 6520, 7800, and VA-40FC

BROCADE

Contents

Preface

Document conventions

Text formatting conventions

The following text formatting conventions may be used in the flow of the text to highlight specific words or phrases.

Format	Description
bold text	Identifies command names
	Identifies keywords and operands
	Identifies the names of user-manipulated GUI elements
	Identifies text to enter at the GUI
italic text	Identifies emphasis
	Identifies variables and modifiers
	Identifies paths and Internet addresses
	Identifies document titles
`code`	Identifies CLI output
	Identifies command syntax examples

Command syntax conventions

The following text formatting conventions identify command syntax components.

Convention	Description
bold text	Identifies command names, keywords, and command options.
italic text	Identifies a variable.
value	In Fibre Channel products, a fixed value provided as input to a command option is printed in plain text, for example, **--show** WWN
[ ]	Syntax components displayed within square brackets are optional.
	Default responses to system prompts are enclosed in square brackets.

Convention	Description
{x|y|z}	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one.
	In Fibre Channel products, square brackets may be used instead for this purpose.
x|y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element. For example, member[member...]
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input enter the entire command at the prompt without the backslash
italic text	Identifies a variable.
bold text	Identifies command names, keywords, and command options.

Notes, cautions, and warnings

The following notices and statements may be used in this document. They are listed below in order of increasing severity of potential hazards.

NOTE
A note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

ATTENTION
An Attention statement indicates potential damage to hardware or data.

 CAUTION

A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.

 DANGER

A Danger statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations

Brocade Resources

Related publications

You can download additional publications supporting your product from the Brocade website at *www.brocade.com*.

*   Adapter documentation is available on the *Downloads and Documentation for Brocade Adapters* page. Select your platform and scroll down to the documentation section.
*   For all other products, select the Brocade product to open the individual product page, click the Brocade product name or image to open the individual product page. The user manuals are available in the resources module at the bottom of the page under the Documentation category.

Additional Brocade resources

To get up-to-the-minute information, go to *MyBrocade*. You can register at no cost to obtain a user ID and password.

Release Notes are available on *MyBrocade* under Product Downloads.

White papers, online demonstrations, and data sheets are available through the *Brocade website*.

Getting technical help

For product support information and the latest information on contacting the Technical Assistance Center, go to *http://www.brocade.com/services-support/index.html*

Contact Brocade Support 24x7

Use one of the following methods to contact the Brocade Technical Assistance Center.

Online	Telephone	Email
Preferred method of contact for non-urgent issues: • *My Cases* through MyBrocade • *Software downloads* & licensing tools • *Knowledge Base*	Required for Sev 1-Critical and Sev 2-High issues: • Continental US: 1-800-752-8061 • Europe, Middle East, Africa, and Asia Pacific: +800-AT FIBREE (+800 28 34 27 33) • For areas unable to access toll free number: +1-408-333-6061 • *Toll-free numbers* are available in many countries.	*support@brocade.com* Please include: • Problem summary • Serial number • Installation details • Environment description

Document feedback

Quality is our first concern at Brocade and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. You can provide feedback in two ways:

- Through the online feedback form in the HTML documents posted on *www.brocade.com*.
- By sending your feedback to *documentation@brocade.com*.

   Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

About This Document

Supported hardware and software

In those instances in which procedures or parts of procedures documented here apply to some switches but not to others, this guide identifies exactly which switches are supported and which are not.

Although many different software and hardware configurations are tested and supported by Brocade Communications Systems, Inc., documenting all possible configurations and scenarios is beyond the scope of this document.

The following platforms are supported by this release of EZSwitchSetup:

- Brocade 300 switch
- Brocade 5100 switch
- Brocade 5300 switch
- Brocade 6505 switch
- Brocade 6510 switch
- Brocade 6520 switch
- Brocade 7800 Extension Switch
- Brocade VA-40FC switch

What's new in this document

The following change has been made since this document was last released:

- Removed support for the Brocade 8000 switch
- Updated the *"EZSwitchSetup software and hardware requirements"* section

Introducing EZSwitchSetup

Overview of EZSwitchSetup

EZSwitchSetup is an easy-to-use graphical user interface application for setting up and managing your switch. It has the following components:

- EZSwitchSetup wizard (on the installation CD)
- EZSwitchSetup switch configuration wizard
- EZSwitchSetup Switch Manager

FIGURE 1 on page 8 illustrates the high-level workflow of EZSwitchSetup.

FIGURE 1 EZSwitchSetup components
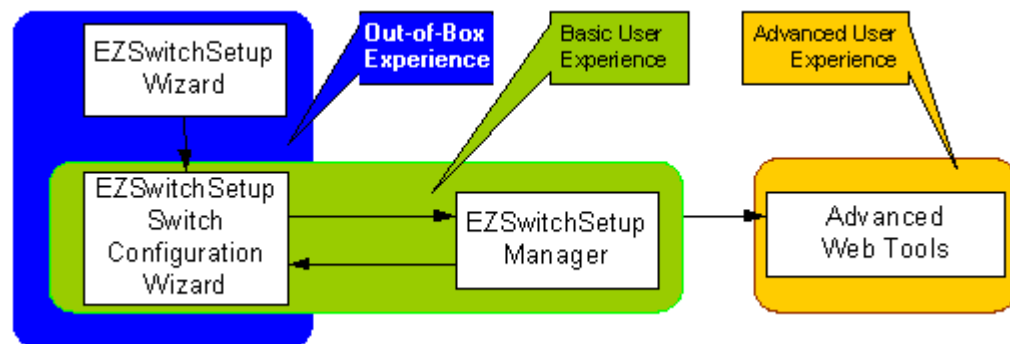
Chapter 2, "Setting Up Your Switch," describes how to use the EZSwitchSetup wizard and EZSwitchSetup switch configuration wizard to set up and configure your switch for the first time. For additional information about your switch, refer to the hardware reference manual.

Chapter 3, "Managing Your Switch," describes how to use the Switch Manager to monitor and manage your switch.

NOTE
Although your switch may have advanced capabilities, EZSwitchSetup is for a single-switch fabric with FC ports only. To configure and manage other features on your switch, use the command line interface, Web Tools, or Brocade Network Advisor.

EZSwitchSetup software and hardware requirements

You can run EZSwitchSetup on a SAN host computer or you can use a different computer that is not part of the SAN, such as a laptop.

EZSwitchSetup requires a browser that conforms to HTML version 4.0 and JavaScript version 1.0. The EZSwitchSetup installation CD automatically installs the correct Java Runtime Environment (JRE) for the disk-based installation wizard. This does not affect any pre-installed JREs, but other program components launched from the switch require Oracle JRE 1.7.0_25 or later installed on the host.

EZSwitchSetup is supported on the platforms shown in *TABLE 1* on page 9.

TABLE 1 Supported platforms

Operating system	Browser	JRE version
SUSE Linux Enterprise 11	Firefox 19	Oracle JRE 1.7.0_25
Red Hat Enterprise Linux 6.1 Adv (32-bit)	Firefox 19	Oracle JRE 1.7.0_25
Windows 7 Professional (x86)	Internet Explorer 10.0 Internet Explorer 9.0 Firefox 19	Oracle JRE 1.7.0_25
Windows Server 2008 Standard	Internet Explorer 10.0 Internet Explorer 9.0 Firefox 19	Oracle JRE 1.7.0_25
Windows 2003 Server, SP2	Internet Explorer 8.0 Internet Explorer 7.0 Firefox 19	Oracle JRE 1.7.0_25
Windows XP, SP3	Internet Explorer 8.0 Internet Explorer 7.0 Firefox 19	Oracle JRE 1.7.0_25

The minimum hardware requirements for a Windows system are as follows:

- 90 MB of hard drive space for the EZSwitchSetup installation directory
- 512 MB or more RAM for fabrics containing up to 15 switches
- A minimum of 8 MB of video RAM is also recommended
- An Ethernet port
- A serial (COM) port if you plan to connect to the serial port on the switch

Configuring Internet Explorer

Correct operation of EZSwitchSetup Switch Manager with Internet Explorer requires specifying the appropriate settings for browser refresh frequency and process model. Browser pages should be refreshed frequently to ensure the correct operation of Switch Manager.

1. Select **Tools** > **Internet Options**.
2. Select the **General** tab.
3. Click the **Settings** button under **Browsing history**.
4. Click **Every time I visit the webpage** in the **Temporary Internet Files and History Settings** dialog box, as shown in *Configuring Internet Explorer*.
5. Click **OK** to save the changes.

   FIGURE 2 Configuring Internet Explorer
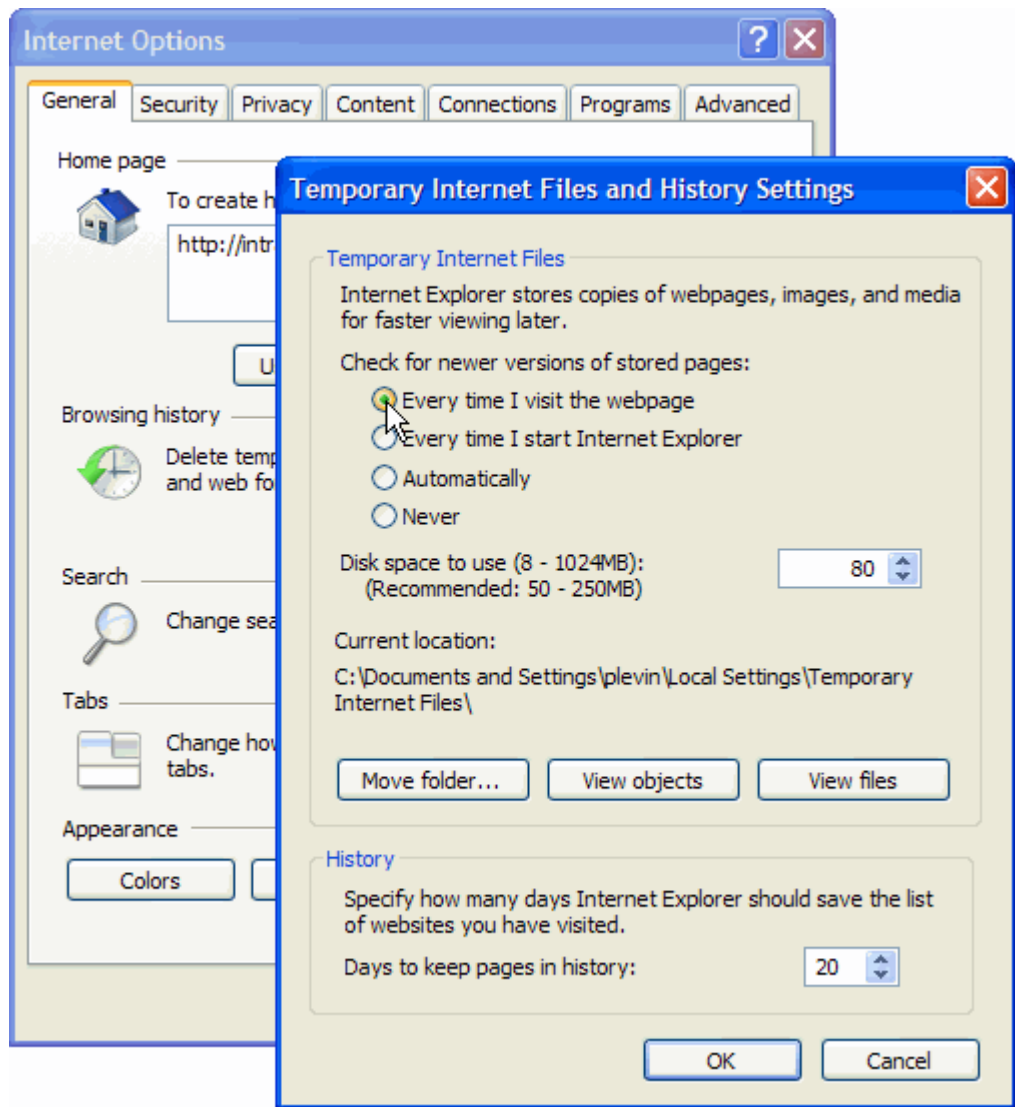
Supported switches

You can use EZSwitchSetup with the switches listed in *"Supported hardware and software" on page v*.

Your switch must meet the following requirements:

- The switch must be connected to an Ethernet LAN that is accessible by the host. If it is not, the system issues the message "Page not Found."
- The switch must have licensed FC ports. If the switch has no licensed FC ports, you must first install a Ports on Demand (POD) license and then enable the affected ports. For more information, refer to *"Adding a port license" on page 36*.
- The switch must be in a single-switch fabric. If your switch connects to another switch (if there is an E_Port on the switch), you cannot manage the switch using EZSwitchSetup until you disconnect the switch connection.

NOTE
If there is an E_Port on the switch and if there is a zone conflict, then the fabric is segmented; in this case, the switch is in a fabric by itself and EZSwitchSetup treats it as a single-switch fabric.

You cannot use EZSwitchSetup to manage a switch that has any of the following features enabled:

- Virtual Fabrics with non-default logical switches
- Access Gateway
- User-defined Admin Domains

You can, however, use the EZSwitchSetup wizard to discover these switches and set their IP addresses. The Brocade VA-40FC switch comes preconfigured in Access Gateway mode. If you use the EZSwitchSetup wizard to discover the Brocade VA-40FC switch and set the IP address, Web Tools will launch automatically for you to manage the Access Gateway features.

Language support for EZSwitchSetup

The EZSwitchSetup wizard and the Switch Manager interface display the following languages:

- English (default)
- Brazilian Portuguese
- French
- German
- Italian
- Japanese
- Korean
- Simplified Chinese
- Spanish
- Traditional Chinese

When you launch EZSwitchSetup, the interface detects the operating system and language environment and installs and displays the appropriate language. For example, if you set up the switch using a German operating system, EZSwitchSetup installs the German language interface and displays text, messages, and labels in that language.

If localization resources are not fully available in the user host environment, EZSwitchSetup uses the default language, English.

Regardless of the local language, the following is displayed in English:

- User input, which must consist of printable ASCII characters
- Switch-based information (such as firmware version and switch name)
- Some globally accepted industry terms (such as SAN and HBA)
- The End User License Agreement (EULA)
- System files (such as the summary file, setting file, and log file)

Setting Up Your Switch

Installing and running the EZSwitchSetup wizard

You can run EZSwitchSetup from a computer you are currently using for SAN administration, or you can use a different computer that is not part of the SAN, such as a laptop. In this chapter, the computer running EZSwitchSetup is called the *setup computer*.

The first step in setting up your switch is to install the EZSwitchSetup wizard, which is located on the EZSwitchSetup installation CD.

1. Insert the EZSwitchSetup CD into the CD-ROM drive of your setup computer.

   • On Windows: The installer will autostart in about a minute.
   • On Linux: Navigate to the following path location on the CD-ROM:

   CDROM_Path/CDROM_Installers/Linux/Disk1/InstData/VM/install.bin

2. Install EZSwitchSetup following the onscreen directions.

   Installation will take a few minutes after you click **OK**.

3. Click **Done** on the last window (shown in *FIGURE 3* on page 12) to exit the installer.

   FIGURE 3 EZSwitchSetup Installer window
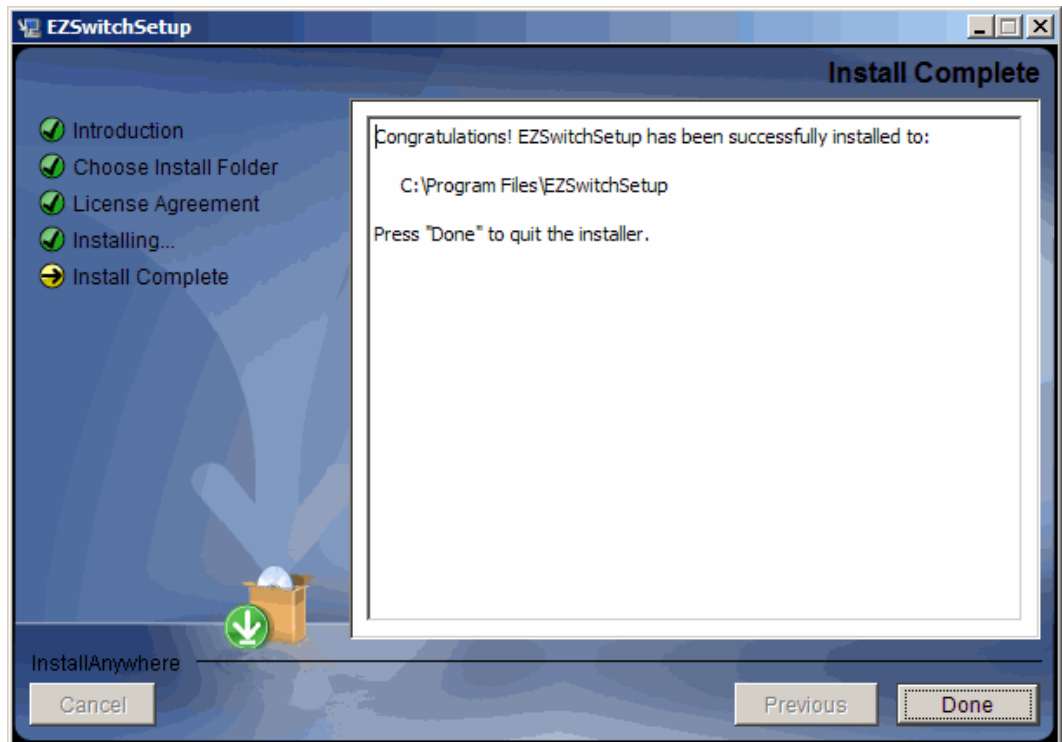
On Windows, EZSwitchSetup starts automatically after it is installed. If it does not, refer to *Launching the EZSwitchSetup wizard* on page 13 to launch the EZSwitchSetup wizard manually.

On Linux, follow the procedure in *Launching the EZSwitchSetup wizard* on page 13 to launch the EZSwitchSetup wizard.

Launching the EZSwitchSetup wizard

Perform the following, depending on your operating system:

- On Windows: EZSwitchSetup starts automatically after it is installed. If it does not, then from the **Start** menu, select **Programs** > **EZSwitchSetup** > **EZSwitchSetup**
- On Linux: EZSwitchSetup does not start automatically, so you must start it manually.

NOTE
The Linux installation requires root access.

The EZSwitchSetup wizard starts, as shown in *FIGURE 4* on page 13.

FIGURE 4 EZSwitchSetup introduction window
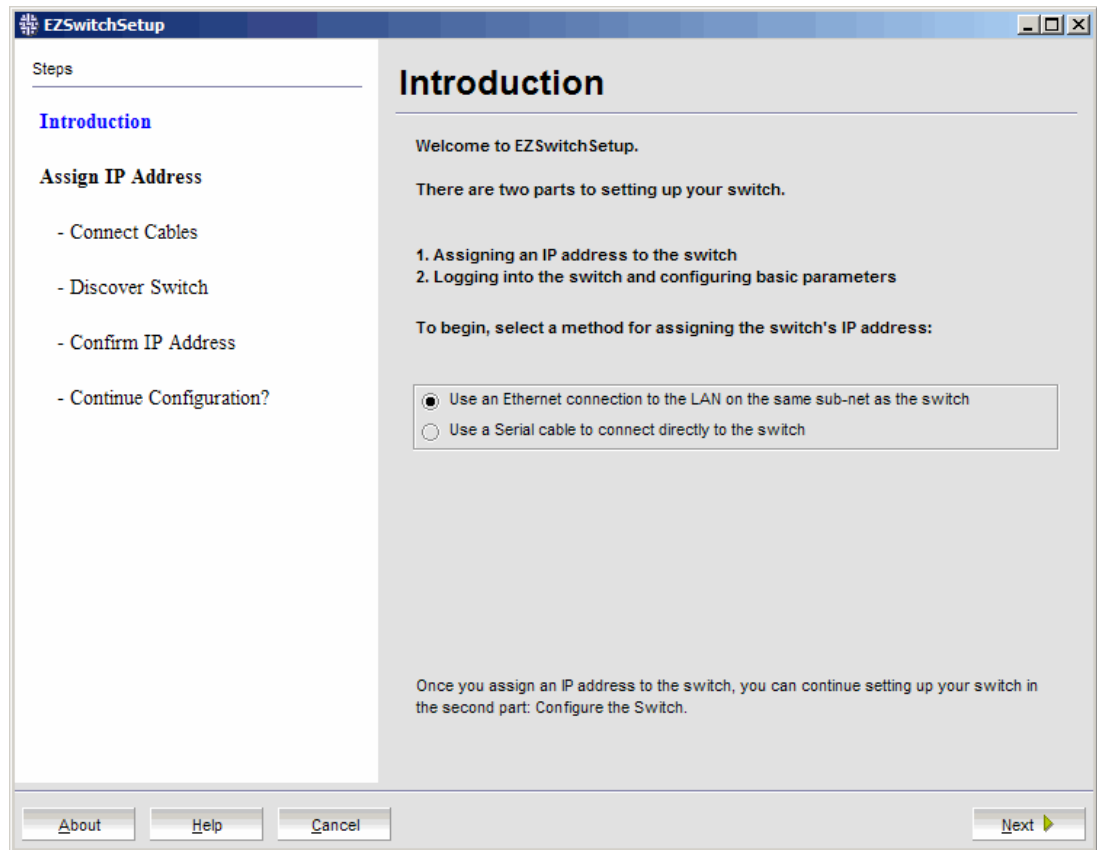
Connecting cables

1. Choose the method of connecting to your LAN.

   You have the choice of using a serial connection or an Ethernet connection to your LAN to set the IP address for the switch. The Ethernet connection is generally more convenient and preferred. Use the serial connection if it is not possible or not convenient to connect the host on the same subnet as the switch.

2. Click **Next**.

   The **Connect Cables** window is displayed (*FIGURE 5* on page 14).

   FIGURE 5 Connect Cables window (Ethernet version, without serial cable)

FIGURE 6 on page 16 shows the cables connecting to the Brocade Fibre Channel switch, setup computer, Ethernet hub or switch, and network.

NOTE
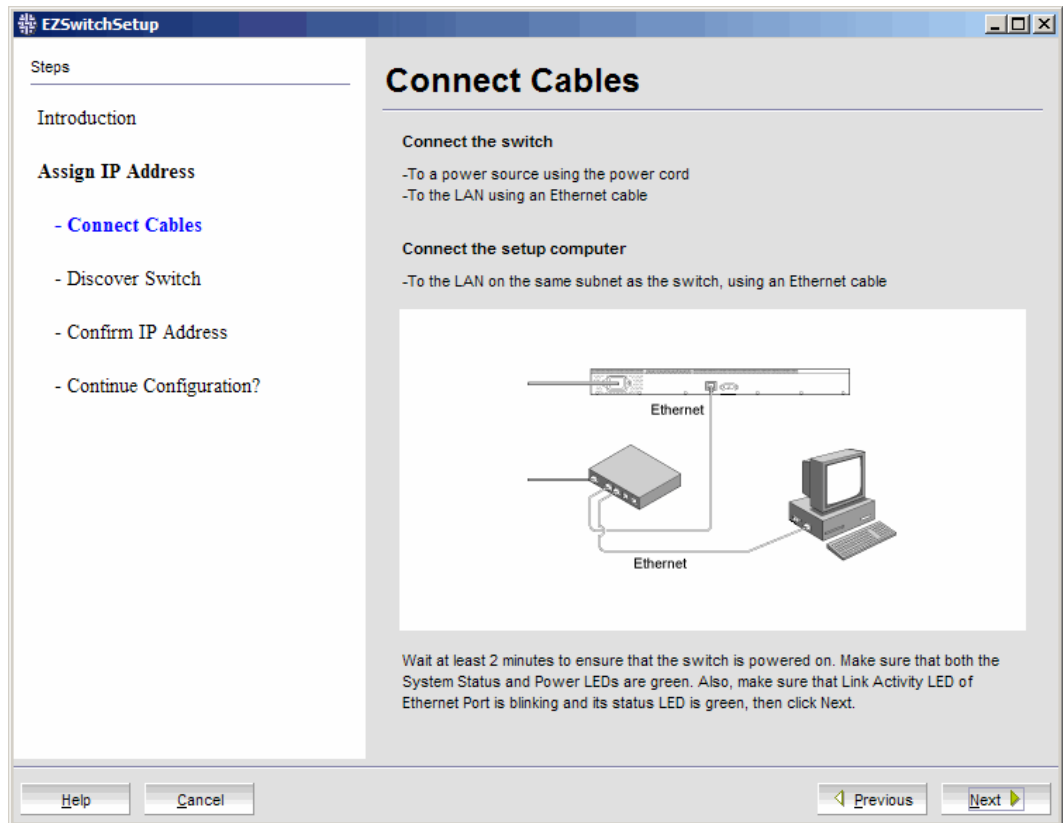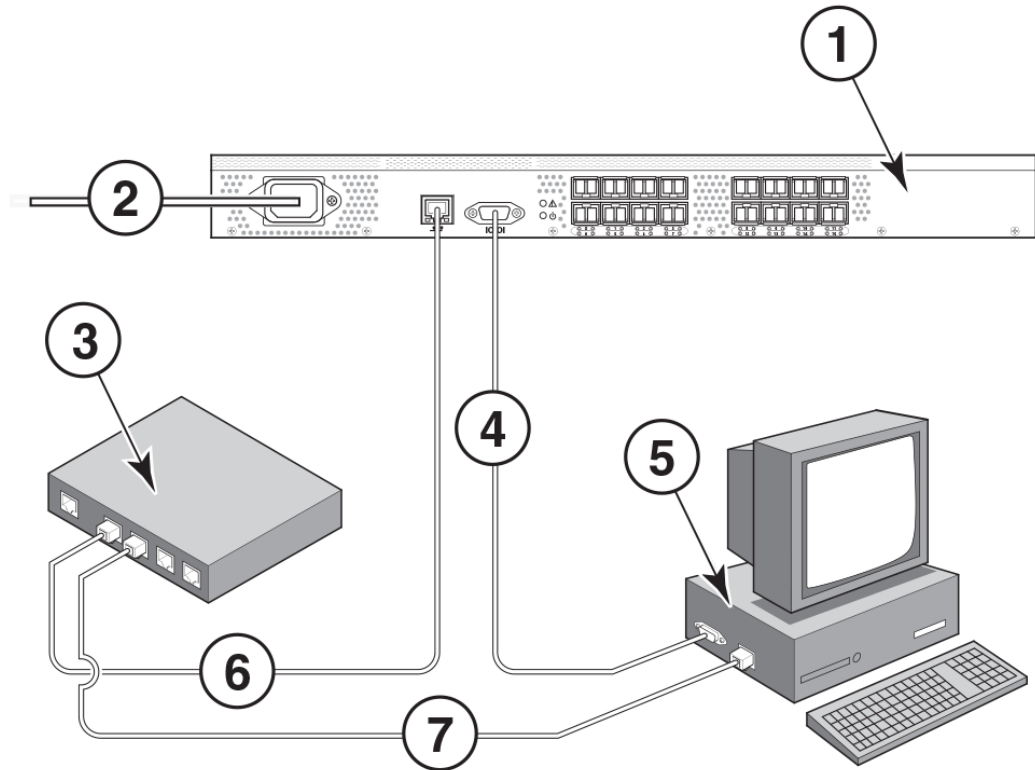Not all switches have their serial and Ethernet connectors in the same place as in FIGURE 6 on page 16. Refer to the hardware documentation to determine the correct placement of the serial and Ethernet connections.

1	Brocade switch	6	Ethernet cable from hub to Brocade switch
2	Power cable	7	Ethernet cable from setup computer to Ethernet hub or switch
3	Ethernet hub or switch		
4	Serial cable		
5	Setup computer		

FIGURE 6 Cable connections

3. Connect the power cord to the switch and plug in to a power source.

   The switch power and status LEDs display amber and then change to green, which usually takes from one to three minutes. Refer to your switch hardware manual for the location of the LEDs.

4. Connect an Ethernet cable from the Brocade switch to the LAN you want to use for your management connection through an Ethernet hub or switch. If you chose to use your Ethernet connection for setup in step 1, this is the connection you will use. If you chose the serial cable connection in step 1, you should still connect the Ethernet cable so the Ethernet connection will be available when you start the EZSwitchSetup Switch Manager.

5. If you are using a serial connection for setup, connect your setup computer to the serial port on the switch, using the serial cable shipped with the switch. If you cannot locate the serial cable that came with the switch, you will need to find one that has the appropriate connectors. Do not use a null-modem cable. The serial connection settings are as follows:

   - Bits per second: 9600
   - Databits: 8
   - Parity: None
   - Stop bits: 1
   - Flow control: None

6. Click **Next**.

EZSwitchSetup attempts to discover the switch. If your switch discovery fails, refer to *TABLE 2* on page 22 for details on how to recover your switch.

If you are using the serial connection, the **Set Switch IP Address** window is displayed, and you can go to step 5. You can now remove the serial cable from the switch, but keep it available in case you lose your network connection and need to revise any of the information you entered.

If you are using an Ethernet LAN connection, a **Discover Switch** window is displayed.

FIGURE 7 First Discover Switch window
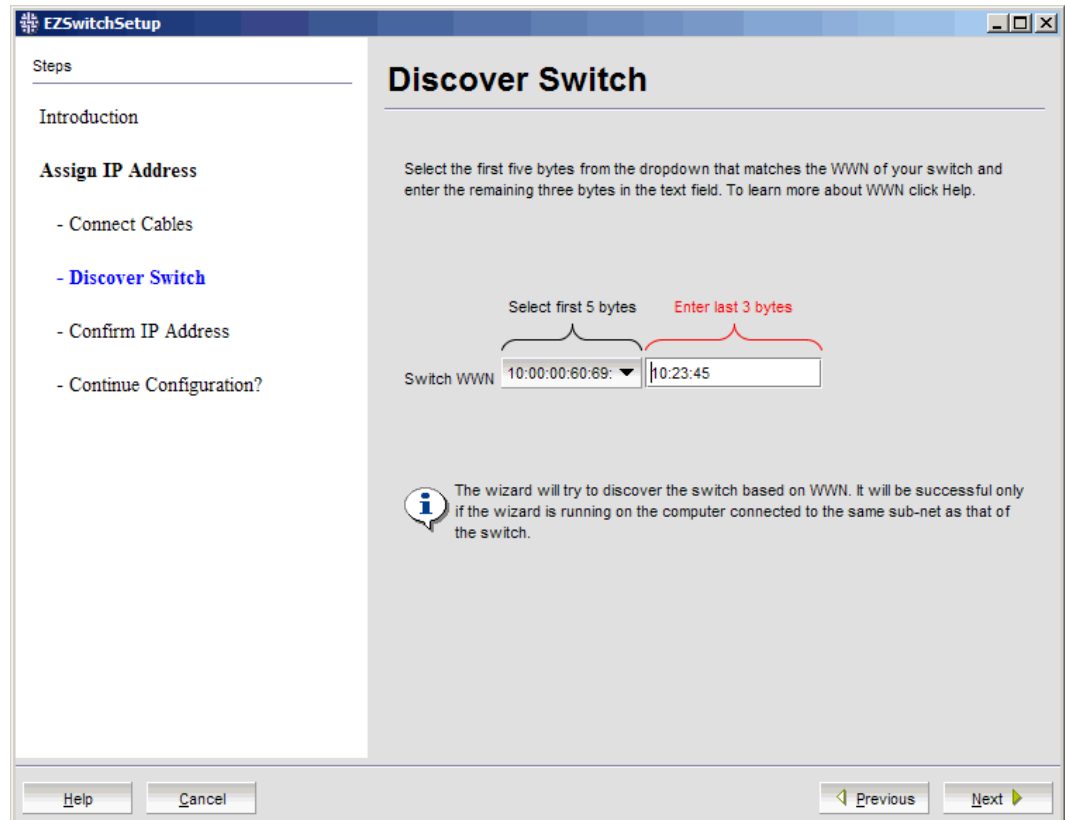
Discovering the switch

1. Locate the WWN for your switch on the switch ID pull-out tab located on the bottom of the port side of the switch.
2. From the **Switch WWN** list (*FIGURE 7* on page 17), choose the switch's WWN prefix numbers and then enter the last six alphanumeric digits of your switch's WWN. Each two alphanumeric digits must be separated by a colon.
3. Click **Next**.

   When EZSwitchSetup discovers the switch, it displays the discovered IP addresses (IPv4 and IPv6), as shown in *FIGURE 8* on page 17.

   If you are setting up the switch for the first time, the IP addresses are placeholder addresses that were assigned at the factory and you must provide valid addresses.

FIGURE 8 Second Discover Switch window
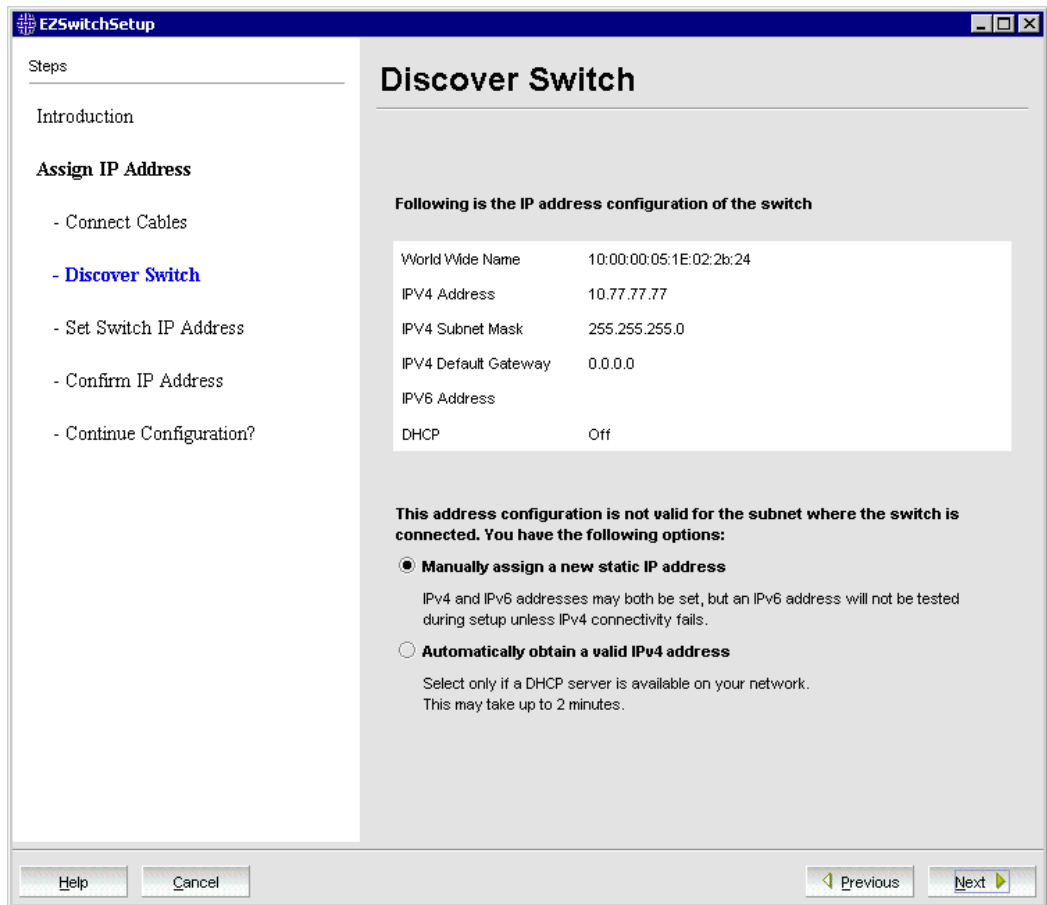
4. Select an option for assigning the IP address and click **Next**. The options vary depending on the configuration of your switch:

- **Keep the current switch IP configuration**

This option is available only if EZSwitchSetup detected a valid IP address. Skip to *Confirming IP addresses* on page 19.

- **Manually assign a new static IP address**

If you select this option and click **Next**, the **Set Switch IP Address** window is displayed (*FIGURE 9* on page 18). Continue with step 5 to enter the IP address.

- **Automatically obtain a valid IPv4 address**

Select this option only if a DHCP server is available on your network. When you click **Next**, an IP address is automatically obtained from the DHCP server and the **Confirm IP Address** window is displayed. Skip to *Confirming IP addresses* on page 19.

FIGURE 9 Set Switch IP Address window
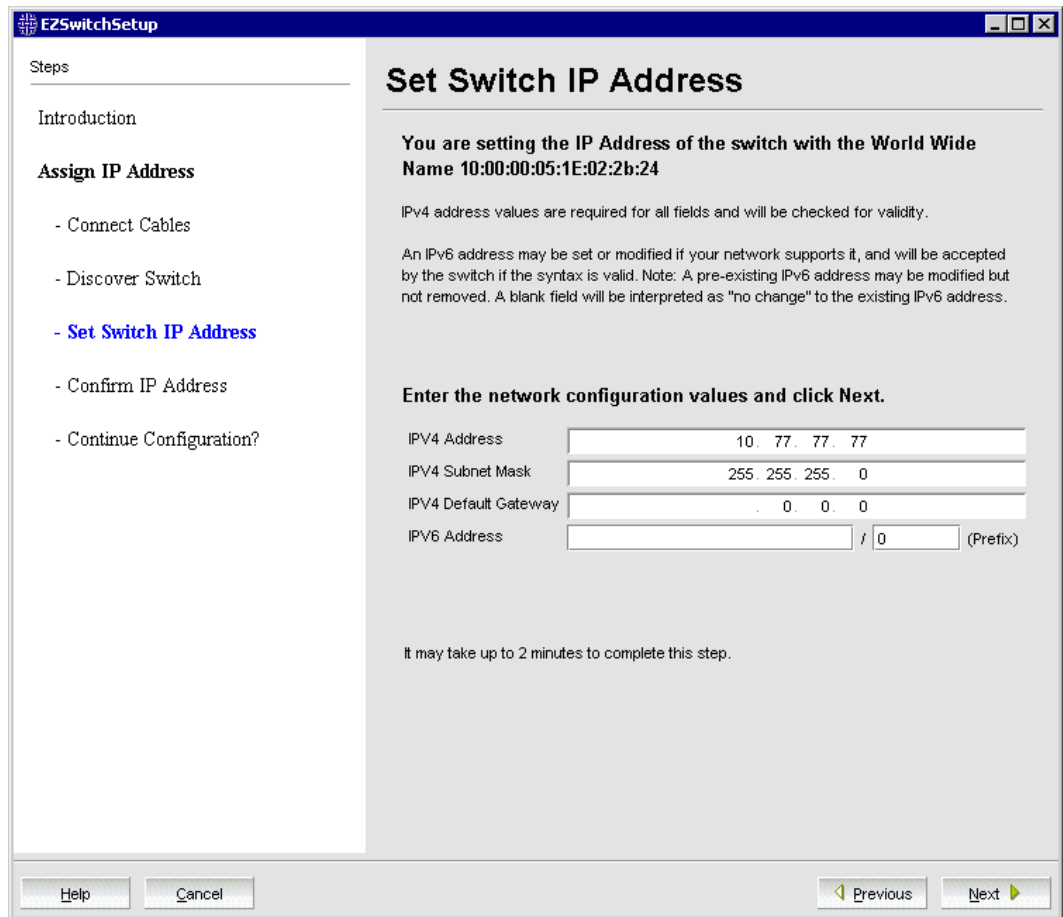
NOTE
Beginning at *5* on page 19, the steps are the same for both serial and Ethernet connections.

5. If you are setting up the switch for the first time, the addresses shown are not valid. If you click **Next** with these addresses in place, EZSwitchSetup returns an error message.

   To set up IPv4 addresses, edit the address information on the **Set Switch IP Address** window to create static addresses appropriate for your LAN connection.

   To set up IPv6 addresses, enter the IPv6 address and prefix in the spaces provided.

6. Click **Next**.

   EZSwitchSetup attempts to log in using default credentials. If you have already changed your admin password, you will be prompted to enter your new password.

   Proceed to *Confirming IP addresses* on page 19.

Confirming IP addresses

The **Confirm IP Address** window (*FIGURE 10* on page 19) is displayed after you have assigned IP addresses, using either a serial connection or an Ethernet connection.

FIGURE 10 Confirm IP Address window

1. Check the displayed addresses carefully to be sure they are correct, then click **Next**.

    The **Continue Configuration?** window is displayed (*FIGURE 11* on page 20).

2. Select one of the following continuation options:

    • **Continue setting up your target switch with EZManager**

    Select this option if you intend to use EZSwitchSetup Switch Manager as your primary management program for this switch.

    • **Discover another switch on the same subnet for IP assignment only**

    Select this option to discover another switch and set the IP address.

    If you select this option, EZSwitchSetup Switch Manager will not be the default management tool for this current target switch. To set up EZSwitchSetup Switch Manager as the management tool for this switch, you must discover it again with EZSwitchSetup and select the first continuation option.

    • **Exit EZSwitchSetup**

    Select this option if you want to use EZSwitchSetup as an IP configuration tool, but do not want to use EZSwitchSetup Switch Manager as a management tool for the switch.

    FIGURE 11 Continue Configuration?
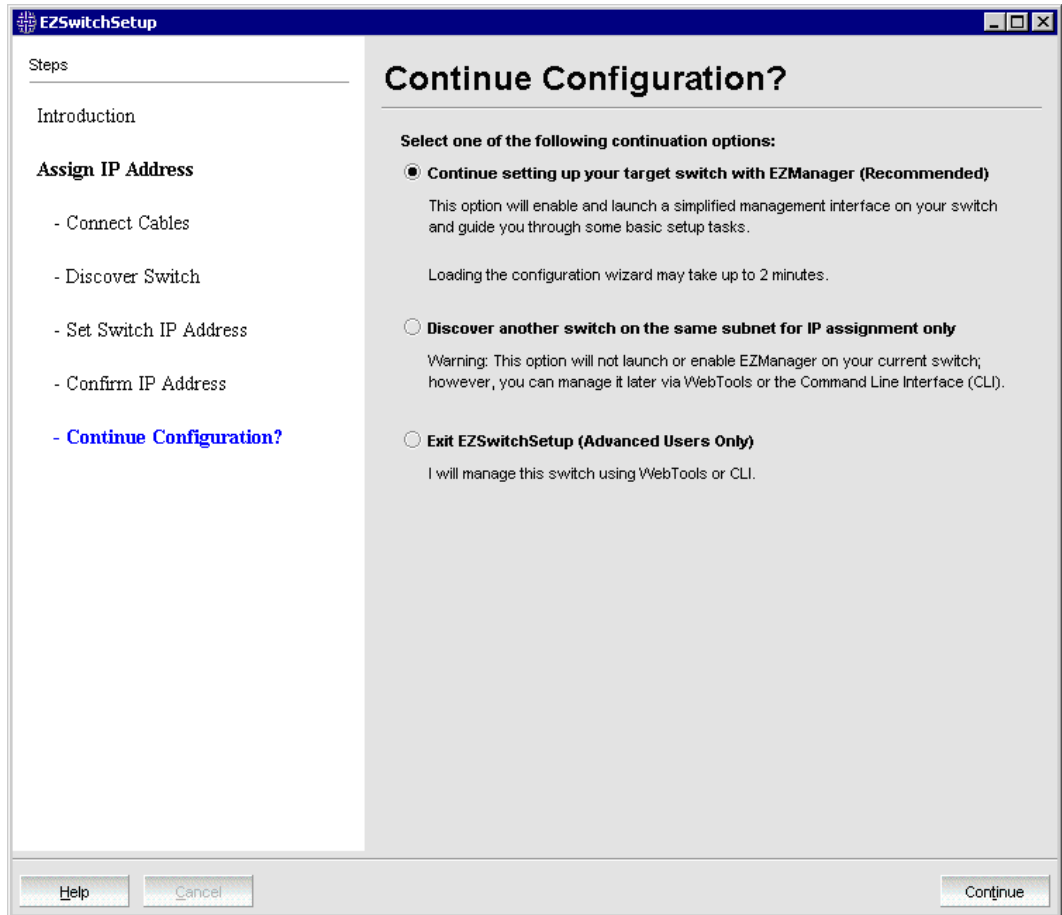
3.   Click **Continue**.

Depending on the option selected, one of the following outcomes occurs:

- If you selected **Continue setting up your target switch with EZManager**, a dialog box displays warning you that EZSwitchSetup supports only single-switch fabrics. Click **OK** to start the EZSwitchSetup Switch Manager.

A browser window opens, and the **Switch Configuration Welcome** window is displayed (*FIGURE 12* on page 23). This may take a few minutes.

If the EZSwitchSetup switch configuration wizard does not launch, you must launch it manually by specifying the URL in a browser:

http://switch-ip-address

If the switch discovery fails, refer to *Switch discovery failure* on page 22 for details on how to recover your switch.

- If you selected **Discover another switch on the same subnet for IP assignment only**, the **Discover Switch** window displays (*FIGURE 7* on page 17). Go to *Discovering the switch* on page 17 and provide the WWN for the next switch.
- If you selected **Exit EZSwitchSetup**, the EZSwitchSetup switch configuration wizard closes.

Switch discovery failure

During the setup of your switch, the switch discovery may fail. There may be several reasons why switch discovery fails. *TABLE 2* on page 22 lists symptoms and related suggestions to recover the switch.

TABLE 2   Discovery recovery

Symptom	Correction
For serial connections:	
The setup computer COM port is busy.	The port is being controlled by another communications program. Stop all other third-party communications programs.
	The port settings are in conflict with another device. Check your IRQ settings.
	On Windows systems:
	By default, COM1 and COM3 use IRQ4, while COM2 and COM4 use IRQ3. If another device is sharing the IRQ of the port, you must change the IRQ of the conflicting device. Hardware conflicts can also occur with the I/O address of the COM port. The 8514a video chip or its clones (S3 chip set) on some video cards create a conflict with COM4 because they use the same address of 02E8.
The switch does not respond to commands during a serial connection.	The serial cable may not be connected properly between the setup computer and the switch. Check the serial cable to ensure it is secured.
The switch does not power up.	Verify that the switch's power cable is securely plugged into a proper outlet and that the switch's power button is turned on.
The switch's serial adapter does not work.	Verify that the cable is good by replacing the cable or trying it on another known working device.
	If the cable is good, then call your support provider for further instructions.
For Ethernet connections:	
The WWN is not entered correctly.	Verify that the WWN is correct.
The target switch is not on the same subnet as the host.	Connect the host to the same subnet as the target switch. If it is not possible or convenient to do so, use the serial connection to set the IP address.
The target switch has no IP address instead of the factory default 10.77.77.77.	Use the serial connection to set the IP address.
You have requested automatic address assignment in an environment where a DHCP server is not available.	Use the serial connection to set a reachable address.

Configuring the switch

The EZSwitchSetup switch configuration wizard steps you through the process of changing your administrative password and zoning. You begin at the **Welcome to Switch Configuration** window.
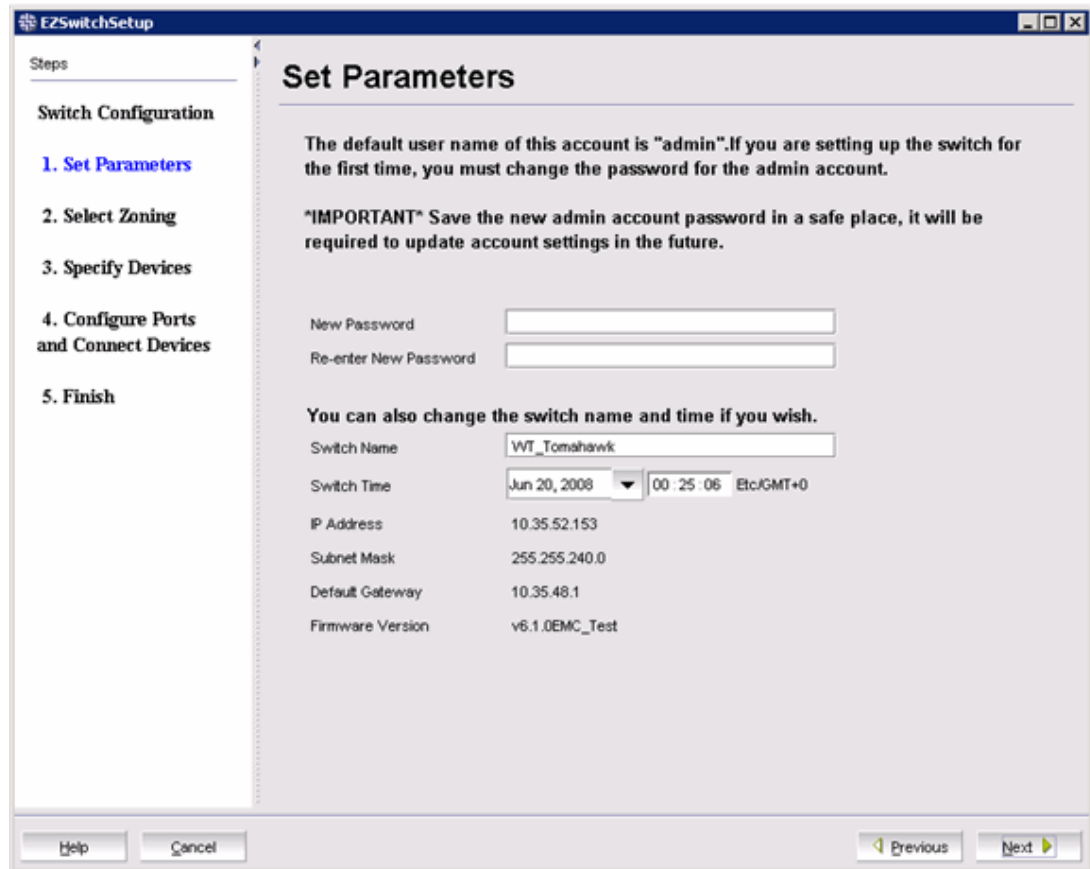
FIGURE 12 Welcome to Switch Configuration window

Click **Next** to begin.

The **Set Parameters** window is displayed.

FIGURE 13 EZSwitchSetup Set Parameters window

Setting switch parameters

1. Follow the onscreen directions to set a new admin password for the switch. Make sure to record your password and keep it in a secure location for future reference.
2. *Optional*: Enter a new name for the switch and set the correct date and time.
3. Click **Next**. The **Select Zoning** window is displayed.

Zoning selection options

The next step in configuring your switch is to select zoning. There are three choices:

- **Typical Zoning** creates a port-based zoning scheme based on the connections made on the **Configure Ports and Connect Devices** window. This zoning scheme creates a two-member zone for every possible pairing of HBA (H) and storage (S) ports connected on the **Configure Ports and Connect Devices** window. This ensures that any host device connected to an H port is able to communicate with any storage device connected to an S port.

NOTE
You can use Typical Zoning for dual-capable devices (devices that are configured to function both as initiators and targets), but in Typical Zoning mode, these devices are recognized as targets by EZSwitchSetup and are rejected if attached to a host port.

- **Custom Zoning** allows you to customize which initiators access which targets, and creates a device-based zoning scheme based on your choices. The HBAs and storage devices should already be connected to the switch. Custom Zoning provides a device accessibility matrix for you to modify; it then automatically creates zones based on that matrix. Custom Zoning supports only single-switch fabrics. If you select this option, when you click **Next**, the EZSwitchSetup switch configuration wizard closes and the EZSwitchSetup Switch Manager application opens.
- **Advanced Zoning** allows you complete customization of your zoning and should be used if you are familiar with zoning and zoning practices. If you select this option, when you click **Next**, the EZSwitchSetup switch configuration wizard closes and the Advanced Management application (Web Tools) opens. For specific information about using Web Tools for zoning, refer to the Web Tools Administrator's Guide.

FIGURE 14 Select Zoning window
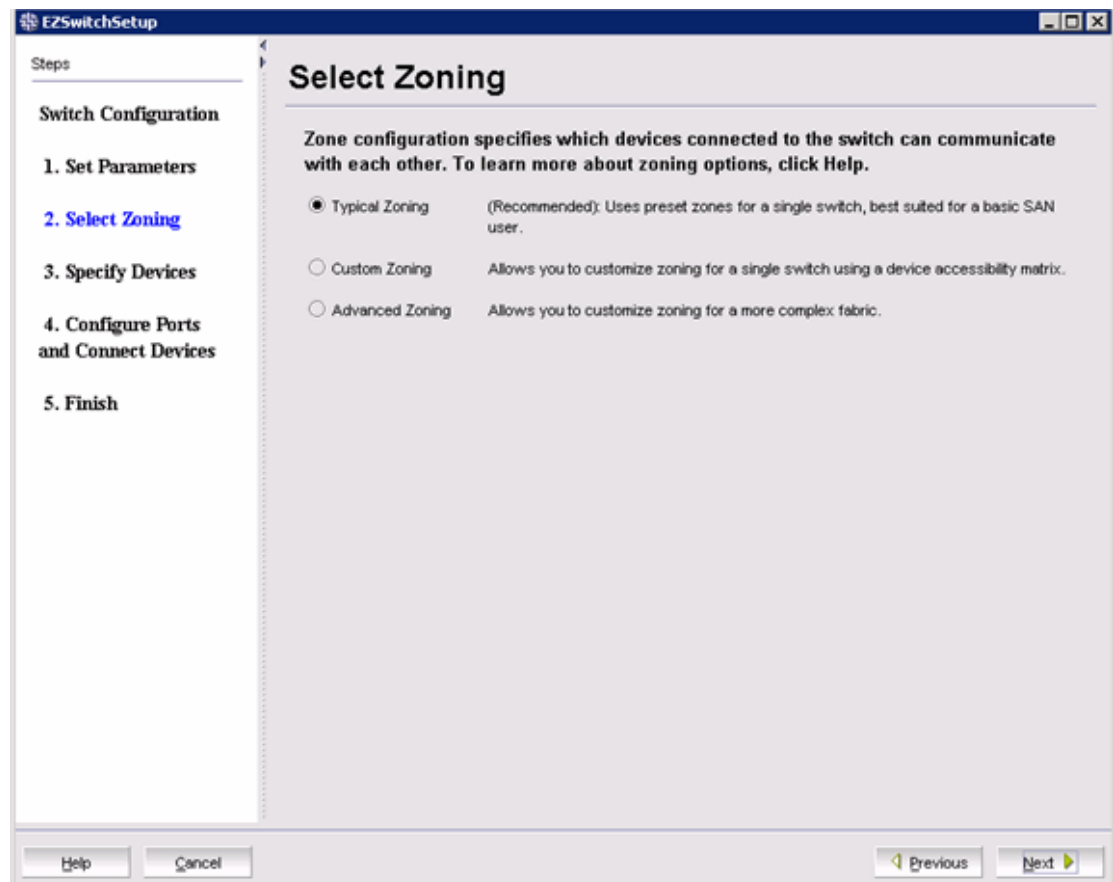
Typical Zoning is the default and the following procedure directs you to select **Typical Zoning.** When you select **Typical Zoning**, the EZSwitchSetup switch configuration wizard automatically configures the zones for you and shows you how to connect the devices to the switch.

Configuring zones on the switch

1. On the **Select Zoning** window (*Figure 14*), select **Typical Zoning**.

   If you want to use one of the other zone settings, refer to *"Editing the zoning configuration" on page 43* for instructions on configuring Custom Zoning; refer to the Web Tools Administrator's Guide for information on Advanced Zoning.

2. Click **Next**.

The **Specify Devices** window is displayed.

Specifying devices

On the **Specify Devices** window, complete the following steps.

1. Enter the number of HBA connections that you want to attach to the switch. Be sure to include existing HBA connections, and any additional HBA connections you plan to make in the current setup session. You can change this setting later if you want to add or remove HBA connections.

2. Enter the number of storage connections you want to attach to the switch. Be sure to include existing storage connections, and any additional storage connections you plan to make in the current setup session. You can change this setting later if you want to add or remove storage connections.

    EZSwitchSetup uses these values to verify that all your current and planned devices are properly connected for the zoning scheme that will be created. Note that Typical Zoning ensures that every connected host device will be able to communicate with every connected storage device.

3. Click **Next**. The **Configure Ports and Connect Devices** window is displayed.

    FIGURE 15 Specify Devices window
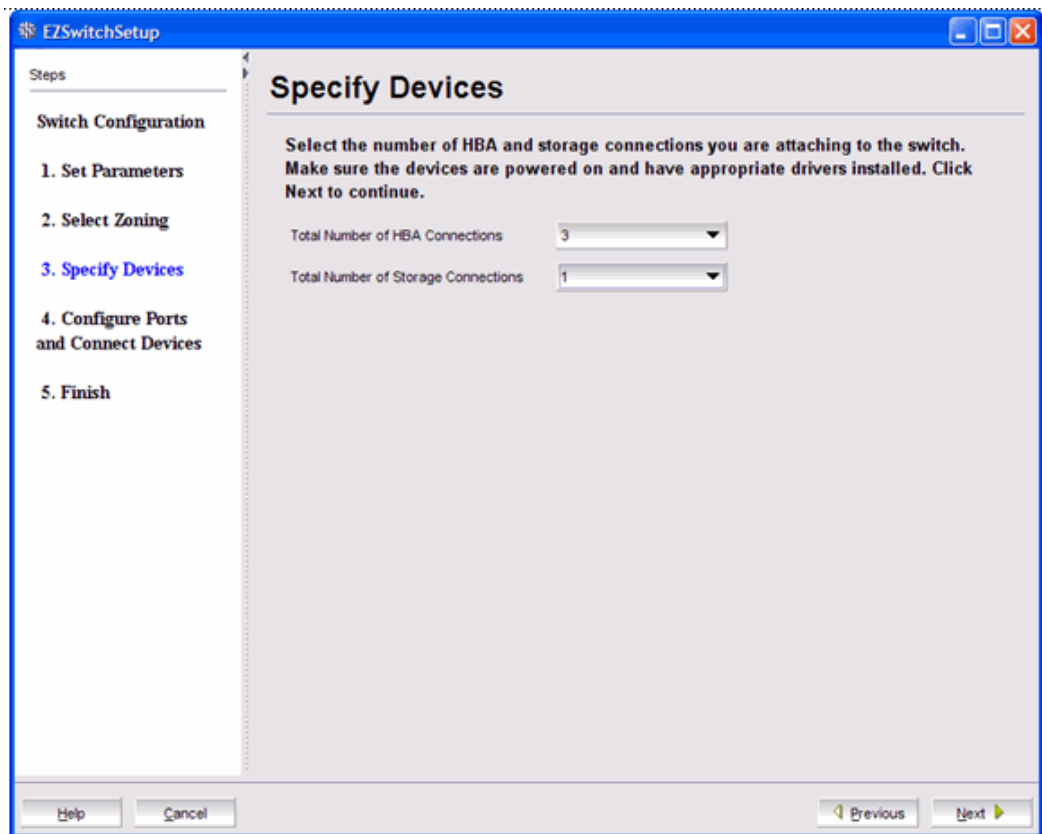

Connecting devices and completing the setup

The final step in the switch configuration is to connect your devices to the switch in a way that matches a configured array of connection reservations (HBA or storage) on the ports. In the interactive switch

graphic that is displayed on the **Configure Ports and Connect Devices** window, these connection reservations are shown by the letters **H** or **S** against a blue or green background on the ports, and will automatically match the types of the devices that have already been connected, with existing connections shown as green lines that connect the ports with icons representing the devices. If you have indicated on the **Specify Devices** window that you intend to connect more devices, connection reservations of matching types will also have been made for your planned devices, with dotted blue lines to show you where these devices should be attached. Finally, as you attach the new devices, the dotted blue lines will change to solid green (for correctly attached devices) or to solid red (when devices are attached at ports with non-matching reservations). When a red line appears, the mismatch may be corrected either by moving the device to a different port as suggested by a dotted blue line for a device of that type, or by changing the reservation type of the port where the device is currently connected by clicking on the port icon. In either case, the solid red and dotted blue lines should both disappear, and be replaced by a single solid green line to indicate the correct connection. For connected devices, you can also view details of the device by pausing on the host or storage icon.

The **Next** button for this window is not enabled until all non-matching or missing connection issues (indicated by solid red and dotted blue lines) have been resolved.

If you change your mind about the number of devices you want to connect, you can click the **Previous** button and adjust the values you have selected in the device type lists on the **Specify Devices** window. You must always select at least as many devices of each type as have been connected, and you must also connect as many devices of each type as you have selected. On the **Configure Ports and Connect Devices** window, you can also pre-reserve some additional currently unoccupied ports for future HBA or storage connections. These additional reservations are also reflected in the zoning scheme, and are shown on the **Devices view** window in the EZSwitchSetup Switch Manager application to remind you where these additional devices can be connected. The default reservation type is HBA.

FIGURE 16 Configure Ports and Connect Devices window
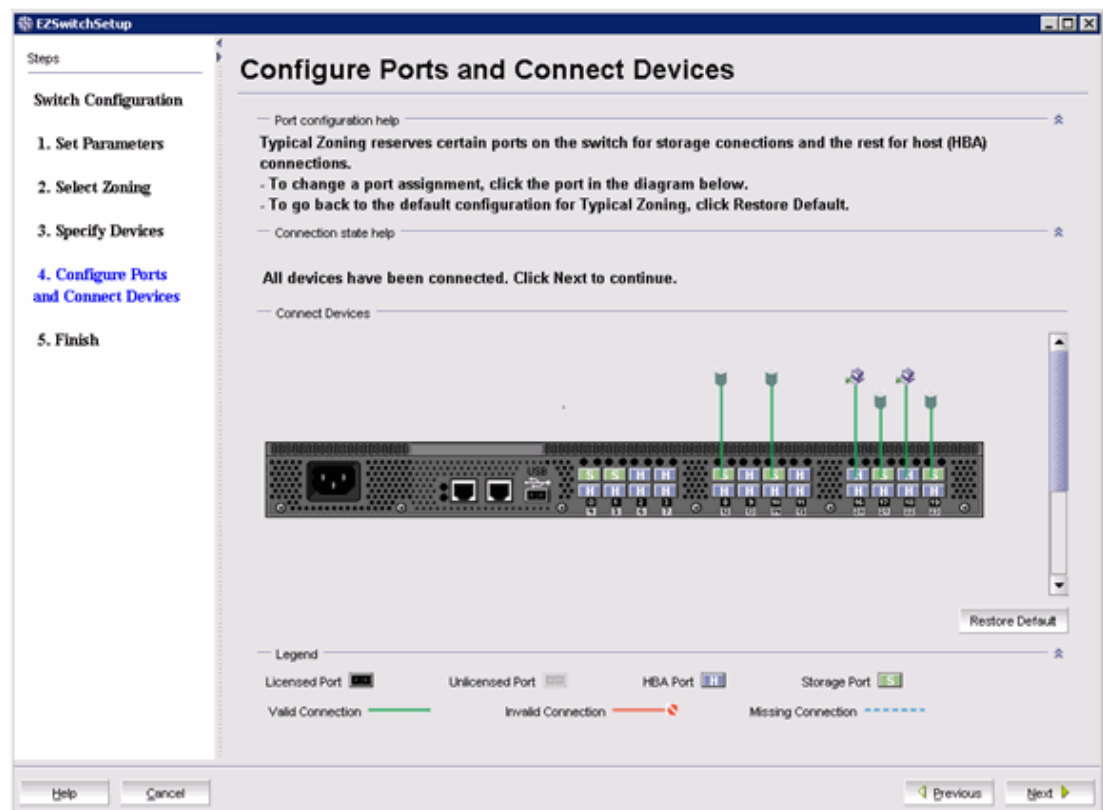
When you click **Next** on the **Configure Ports and Connect Devices** window, if Typical Zoning is used, the final set of connection reservations shown on the window is translated internally into a zoning scheme that ensures that every correctly connected host device can communicate separately with every correctly connected storage device. If this is not what you want (for example, if you want to partition your devices so that each HBA can communicate with some storage devices but not others), then you should re-run the EZSwitchSetup switch configuration wizard and select **Custom Zoning** or **Advanced Zoning** instead of **Typical Zoning**.

Use the following procedure to make the physical connections.

1. Install the small form-factor pluggable (SFP) transceivers in the Fibre Channel ports shown onscreen. (Refer to *FIGURE 16* on page 27.)

   a)   Remove any protector plugs from the SFP transceivers to be used.

   b)   Position and insert each SFP transceiver as required (right side up in the top row of ports and upside down in the bottom row of ports) until it is firmly seated.

   c)   Close the latching bale.
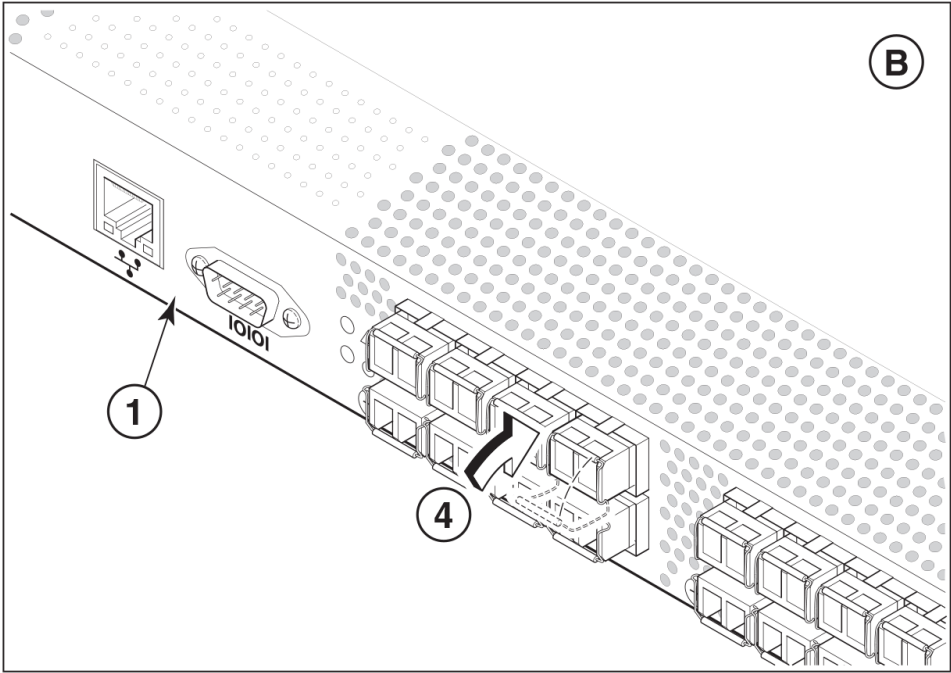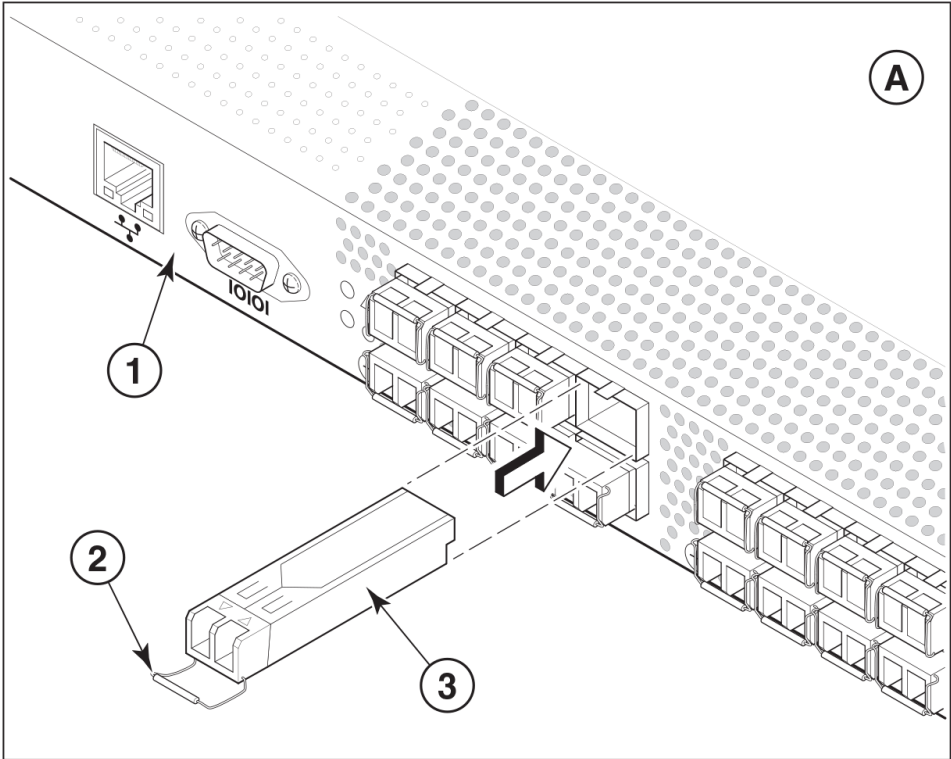
1	Brocade switch	**3**	Position SFP and insert until firmly seated
2	Open the SFP latching bale	**4**	Close the latching bale

FIGURE 17 Installing SFP transceivers

2. Connect Fibre Channel cables from the switch to your host and storage devices. Ensure that the physical connections are exactly as indicated on the **Configure Ports and Connect Devices** window.

   a) Remove any plastic protectors from the Fibre Channel cable ends, and position the cable connector so that it is oriented correctly.

   b) Insert the cable connector into the SFP transceiver until it is firmly seated and the latching mechanism clicks, as shown in *FIGURE 18* on page 30.

      The **Configure Ports and Connect Devices** window provides visual feedback as you cable the switch. A green line indicates that the connection is correct, a red line indicates an invalid connection, and a blue line indicates a missing connection.
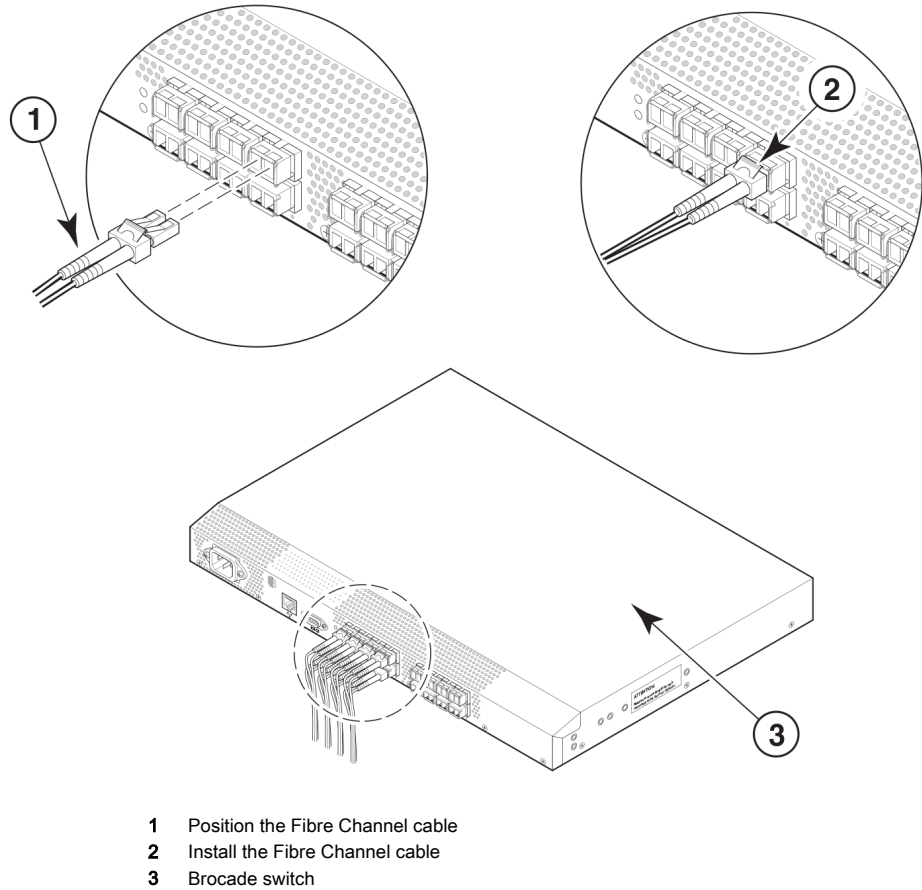

1	Position the Fibre Channel cable
2	Install the Fibre Channel cable
3	Brocade switch

FIGURE 18 Installing Fibre Channel cable into an SFP transceiver

3. Verify that the connections displayed on the **Configure Ports and Connect Devices** window are all green.

4. Click **Next** .

   The **EZSwitchSetup Configuration Finish** window is displayed.

   FIGURE 19 EZSwitchSetup Configuration Finish window
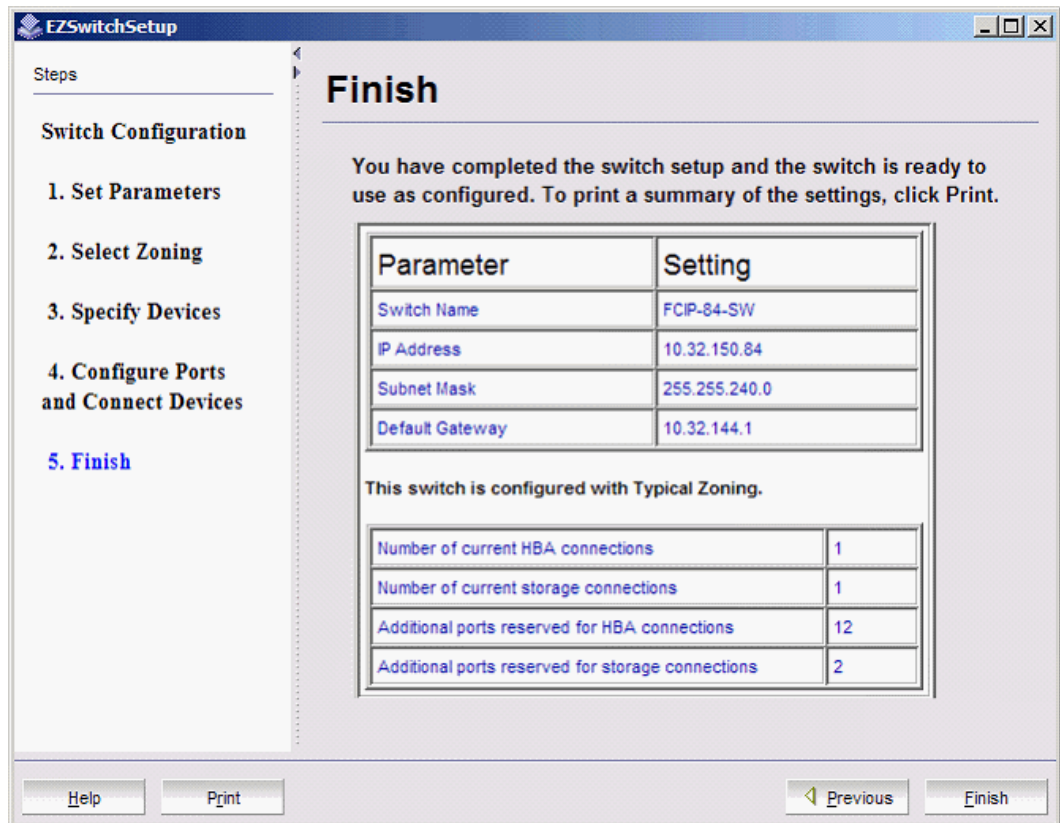
5. Click **Finish** to complete the switch setup.

   You are now ready to configure the storage component of the SAN using the documentation that came with the storage server.

   If you want to monitor the switch, then you need to launch the EZSwitchSetup Switch Manager. Refer to *Managing Your Switch* on page 32 for instructions on using this interface.

Managing Your Switch

Switch Manager overview

The EZSwitchSetup Switch Manager is a simplified version of Web Tools. It streamlines switch management by providing an easy-to-use subset of basic switch management tasks.

You can use the EZSwitchSetup Switch Manager to perform the following functions:

- Monitor the switch, including port and field-replacable unit (FRU) status
- Manage Custom Zoning
- Perform basic switch configurations
- Add Ports on Demand (POD)

The Switch Manager works for a single-switch fabric only. It displays only the switch and associated tasks, without fabric information.

FIGURE 20 on page 32 shows an example of the initial Switch Manager window. The appearance may vary depending on the switch model. The following sections describe the components of the window.

FIGURE 20 EZSwitchSetup Switch Manager components
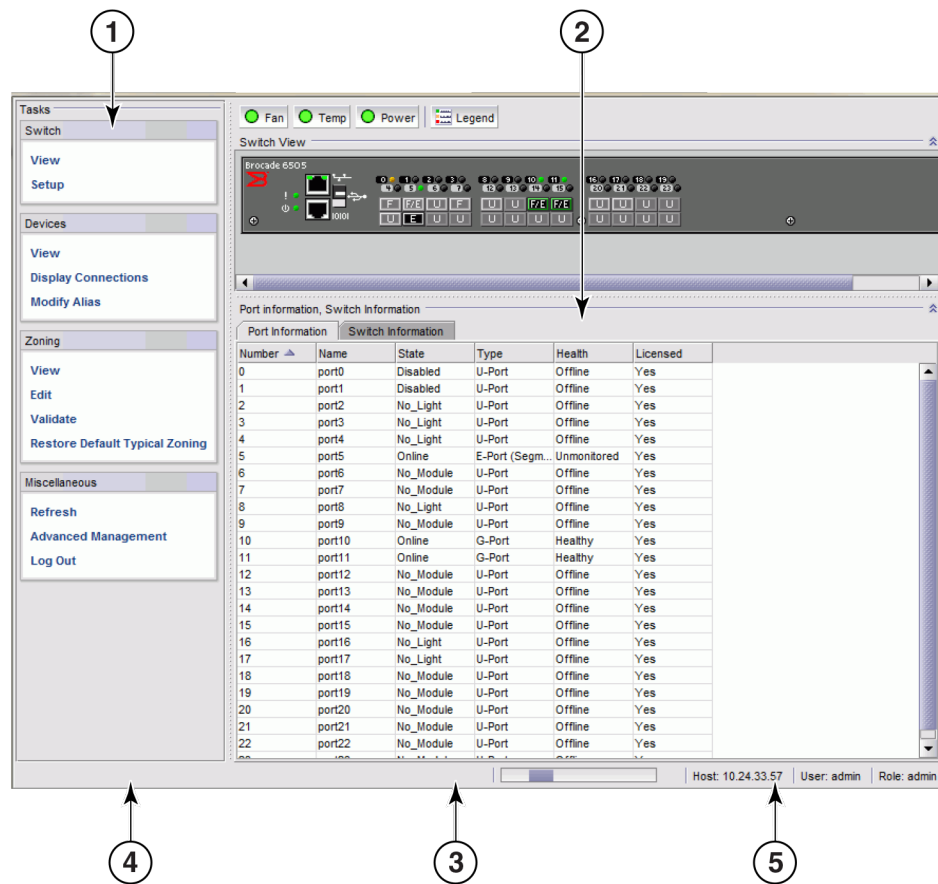
1	Tasks panel	4	Progress indicator
2	Content page	5	User name, IP address, and user role
3	Status bar		

Tasks panel

The left pane of the Switch Manager is the tasks panel, which displays all tasks:

- **Switch** tasks enable you to view the port information or switch information, enter into switch setup, or add port licenses.
- **Devices** tasks enable you to view the devices attached to the switch, display the device connections, and modify a device alias.
- **Zoning** tasks enable you to view the zoning on the device, edit the zoning, validate the zoning, or restore the default typical zoning.
- **Miscellaneous** tasks include refreshing the onscreen data, advanced management of the switch, and logging out.

The switch's **Port Information** tab is shown by default when Switch Manager launches.

Switch View

The **Switch View** displays a graphical view of the switch, and contains a set of status buttons. The status buttons (**Fan**, **Temp**, and **Power**) enable access to status information for each listed element.

Click **Refresh** under **Miscellaneous** to update the information on the window with the current switch information. The display refreshes automatically each time you select a different task in the **Tasks** panel.

Content page

When you select a task in the **Tasks** panel, the content for that task displays in the content page of the window. A content page may contain tabs, display information, launch a wizard, or display a dialog box. Figure 21 shows the information displayed on the **Port Information** tab, and shows a shortcut menu that provides copy and export functions.

FIGURE 21 Content page, Port Information tab

NOTE
You must accept the Brocade Certificate at the beginning of the login to EZSwitchSetup Switch Manager to enable the copy and export functions.

- Click **Export Row** or **Export Table** to save the information to a tab-delimited text file.
- Click **Copy** 'text', **Copy Row,** or **Copy Table** to copy the contents of the table in tab-delimited text format that can be pasted into a spreadsheet. **Copy** 'text' copies only the contents of the selected cell, **Copy Row** copies the entire row, and **Copy Table** copies the entire table.
- Click **Search** to search for a specific text string in the table.

Type a text string in the field that displays on the table, and press **Enter**. This is an incremental search and allows a maximum of 24 including the wildcard characters: question mark (?) and asterisk (*). The first row containing the text string is highlighted. To find the next match, press the down arrow. To find the previous match, press the up arrow.

If the text string is not found in the table, the text turns red.

Status bar

The status bar appears at the bottom of the window is divided into the following sections:

- **Progress indicator**

When Switch Manager is sending data to or retrieving data from the switch, this indicator is animated.

- **User name and IP address**

The status bar displays your user name, role, and the IP address of the switch to which you are connected.

Launching the EZSwitchSetup Switch Manager

You can launch Switch Manager on any workstation with a compatible browser installed. For a list of compatible browsers, refer to *Table 1 on page 2*. Switch Manager also supports HTTPS, if that protocol is enabled for the switch. For more information on enabling HTTPS on your switch, refer to the Fabric OS Administrator's Guide.
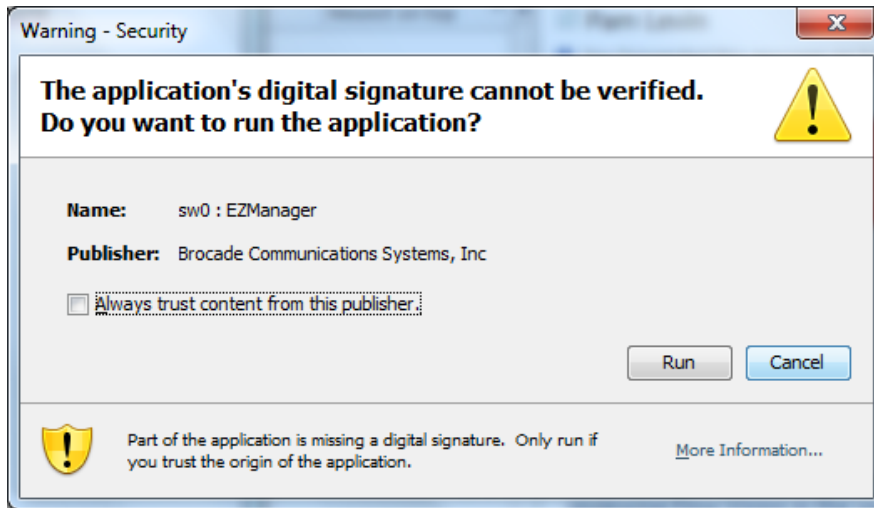
1. Launch a browser and type the IP address of the switch in the **Address** field, and press **Enter**.

   FIGURE 22 Java Web Start dialog box
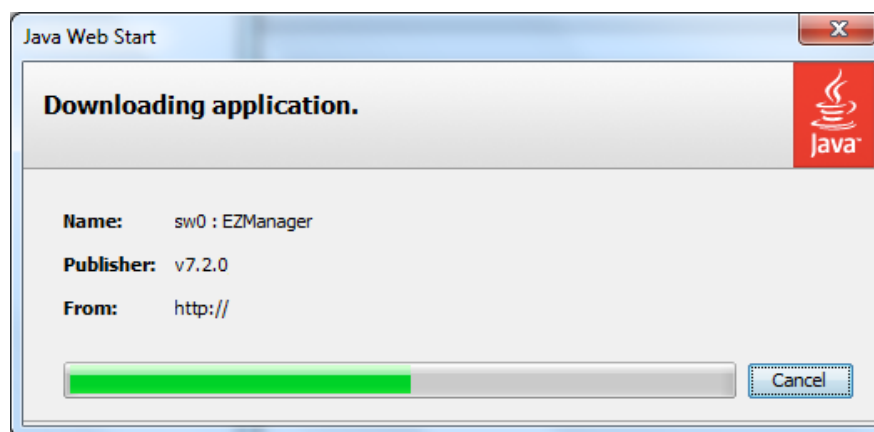
If this is the first time the application has been started, a **Warning - Security** dialog box is also displayed.
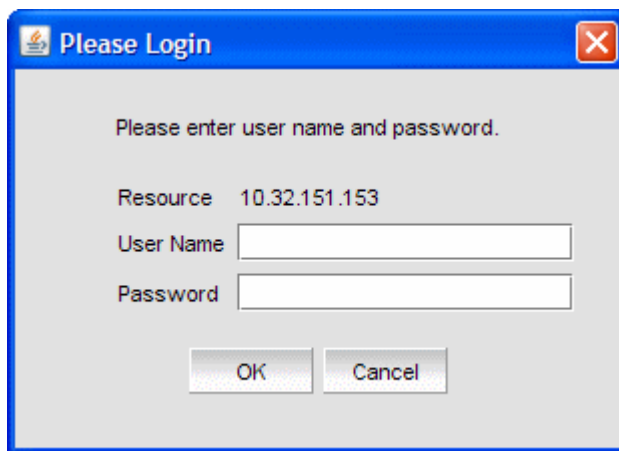
FIGURE 23 Warning - Security dialog box

2. If the **Warning - Security** dialog box is displayed, select **Always trust content from this publisher** and click **Run**.

The **Login** dialog box is displayed.

FIGURE 24 Login dialog box

Logging in

If the switch is set up and configured with EZSwitchSetup, the EZSwitchSetup Switch Manager launches when you log in to EZSwitchSetup Switch Manager. If not, Web Tools launches.

Switch Manager supports only single-switch fabrics. If your switch is connected to another switch, Switch Manager displays a message and exits. You must disconnect the switch from all other switches and relaunch EZSwitchSetup Switch Manager.

1. Type your user name and password.

2. Click **OK**.

A Switch Manager session is established, and the **Switch View** is displayed.

Switch Manager sessions

A *session* is defined as the connection between the Switch Manager client and its managed switch. A session is established when you log in to a switch through EZSwitchSetup. A session remains in effect until you log out or the session times out due to inactivity.

Logging out

You can end your Switch Manager session either by selecting **Log Out** under **Miscellaneous** in the **Tasks** panel, or by closing the browser window. All windows belonging to the session are invalidated (after a short delay they appear dimmed and unavailable, but you must close them manually), and the session is terminated.

Viewing switch information

Using EZSwitchSetup Switch Manager, you can view the following:

- Switch status, including port status
- Temperature, fan, and power supply status
- HBA and storage connections to the switch
- Information about devices connected to the switch
- Accessibility between HBAs and storage

To view the Switch information, perform the following steps.

1. Click **View** in the **Tasks** panel under **Switch**.
2. Click the **Switch Information** tab to display the **Switch View**.

    FIGURE 25 on page 37 displays the **Switch View** for a Brocade 6520 switch.

    FIGURE 25 Graphical view of switch
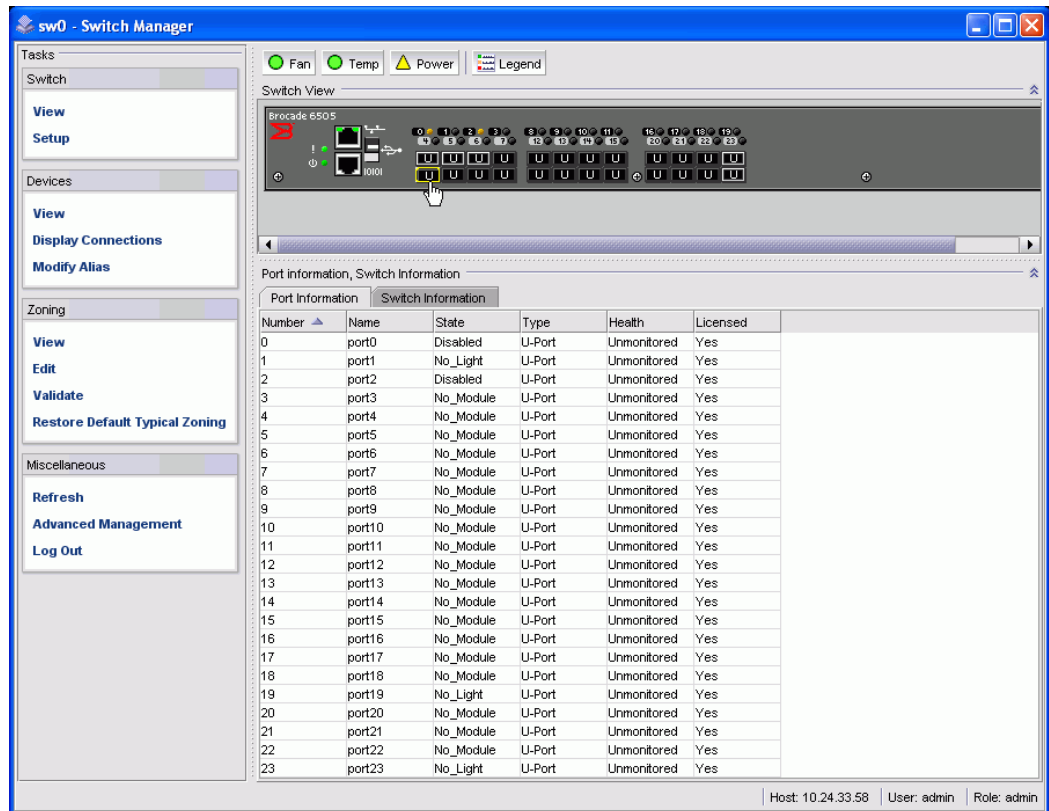
The **Switch View** is a real-time view of switch and port status. The display is updated approximately once every 15 seconds. From the display you can determine the following:

- Fan status
- Temperature status
- Power supply status
- Status and type of each port

Viewing the status indicator legend

The **Fan**, **Temp**, and **Power** buttons indicate overall status:

- Green circle (healthy)
- Yellow triangle (marginal)
- Red diamond (critical)
- Black and yellow striped square (unmonitored)

To view the legend for the status indicators, click the **Legend** button.

The legend view opens. *FIGURE 26* on page 38 shows the status indicators that can appear on the **Fan**, **Temp**, and **Power** buttons.

FIGURE 26 Fan, temperature, and power supply legend

Viewing fan, temperature, and power supply status

To view fan, temperature, or power supply status, click the **Fan**, **Temp**, or **Power** button.

FIGURE 27 on page 39 shows the **Fan** view. The **Fan** view shows the number of fans and their operating states.

FIGURE 27 Fan status

FIGURE 28 on page 39 shows the **Temperature** view. The **Temperature** view displays the number of temperature sensors, their status, and the temperature in Centigrade and Fahrenheit.

FIGURE 28 Temperature status

FIGURE 29 on page 40 shows the **Power Supply** view. The **Power Supply** view displays the number of power supplies in the switch and their status.

FIGURE 29 Power supply status

Port status

The **Switch View** displays port graphics with blinking LEDs, simulating the physical appearance of the ports. One or two LEDs are associated with each port, depending on the switch model. One of the LEDs indicates port status, while the other indicates port speed. For LED information, refer to the hardware documentation for the switch you are viewing.

NOTE
All of the 8 Gbps and 16 Gbps Brocade switches do not have port speed LEDs, but only port status LEDs.

The background color of the port icon indicates the port status:

• Green (healthy)
• Yellow (marginal)

- Red (critical)
- Gray (unmonitored)

If the entire port icon is blue, the port is buffer-limited. A port is operating in *buffer-limited* mode when the number of buffers allocated to the port is less than the number of buffers needed by the port to utilize the port at full bandwidth.

If a group of port icons is gray (unmonitored), those ports are not licensed.

FIGURE 30 on page 41 shows port icons and associated LEDs from a Brocade 6520 switch. The layout is similar for all switches, but varies according to switch type. The blinking LEDs indicate port status.

FIGURE 30 Port and LED status color-coded information in the port icon in Switch View
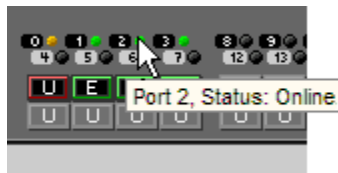

Pause the pointer over the port icon to view the port number, port type, and port status, as shown in *FIGURE 31* on page 41.

FIGURE 31 Displaying port information
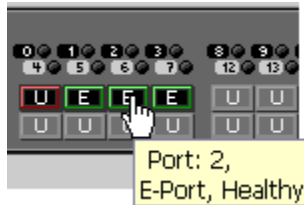
Pause the pointer over the LEDs to view details about the port state, as shown in *FIGURE 32* on page 41.

FIGURE 32 Port State LEDs

FIGURE 33 on page 41 shows the port icon toggling effect. When you pause the pointer over a port icon, the icon is highlighted with a yellow border.

FIGURE 33 Port icon toggling

Switch Information tab

The **Switch Information** tab is the default information tab under **Port Information, Switch Information** on the **Switch View** (*FIGURE 34* on page 42). Detailed switch information is displayed as a list of properties, which may be viewed, copied, or exported by category.

FIGURE 34 Switch Information tab

Port Information tab

Select the **Port Information** tab to view the port information (*FIGURE 35* on page 42). Detailed port information is displayed as a categorized list of properties, which may be viewed, copied, or exported by category.

FIGURE 35 Port Information tab

Changing switch information

From the Switch Manager, you can relaunch the EZSwitchSetup switch configuration wizard to perform the following tasks:

- Change the switch name.
- Change the switch time.
- Change the admin password.
- Change the zoning configuration type.

EZSwitchSetup switch configuration wizard was launched the first time you set up the switch.

1. Click **Setup** under **Switch** in the **Tasks** panel.

   The EZSwitchSetup switch configuration wizard launches.

2. Follow the instructions in the wizard.

   You can optionally change the switch name, switch time, and admin password. When prompted, you must select a zoning configuration.

Adding a port license

EZSwitchSetup Switch Manager allows you to enable Ports on Demand (POD) if you have a license available. For example, for the Brocade 7800, you can add the 7800 Upgrade License to activate ports 4-25. This option is not available if all ports are already licensed.

1. Click **Add Port License** under **Switch** in the **Tasks** panel.

   The **Add Port License** dialog box is displayed.

   FIGURE 36 Add Port License dialog box
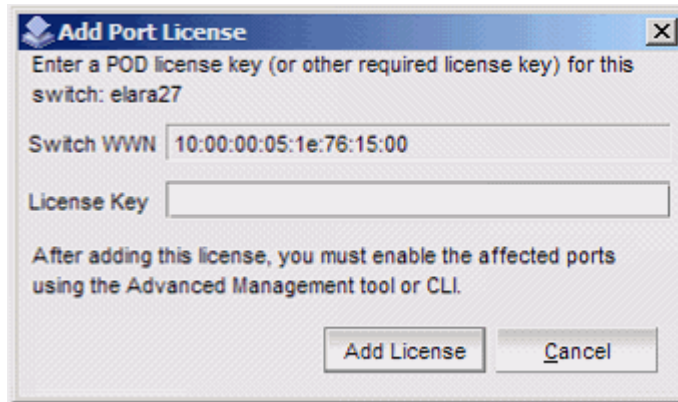
2. Enter the license key to add the additional ports.

3. Click **Add License**.

   The ports can now be enabled.

4. Enable the ports using one of the following methods:

   • Reboot or power cycle the switch.

   When the switch is rebooted, the newly licensed ports come up as enabled.

   • Use the Advanced Management tool.

   Refer to *Accessing Web Tools for advanced management* on page 55 for information on launching Web Tools.

   • Use the command line interface.

   Refer to the Fabric OS Administrator's Guide for information on using the command line interface.

Managing devices

The **Devices** view displays the following information:

• Whether the device is an HBA, an HBA plus storage, or a storage-only device
• Device alias name, if one exists
• Vendor name
• Device name
• WWN of the device port
• Switch and port to which the device is connected

1. Click **View** under **Devices** in the **Tasks** panel to display a table of information for all of the connected devices (*FIGURE 37* on page 44).

   The entries in the table are based on the device WWNs, so a single physical device can have more than one entry in the table. The device information can be viewed, copied, or exported.

   FIGURE 37 Devices view
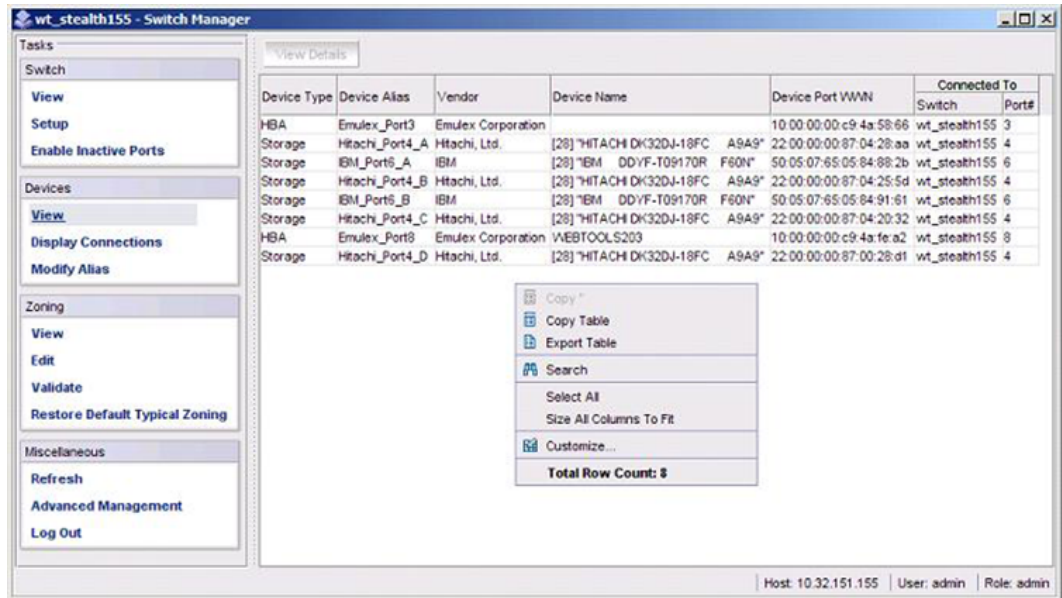
The table can be sorted by device type, port number, or vendor. You can refine sorting by using the **Ctrl** key while selecting column headers. For example, if you press **Ctrl** and select **Device Type**, the **Port#** column shows port numbers associated with the device types (*FIGURE 38* on page 45).

FIGURE 38 Device table sorting example
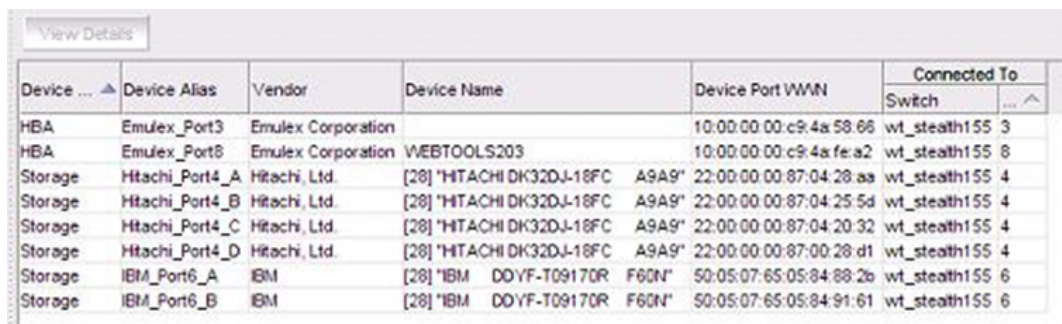
2. Select a row in the table to display additional information about the device.
3. Click **View Details**. *FIGURE 39* on page 45 shows an example of a **Device Details** dialog box.

   **FIGURE 39** Detailed Device dialog box
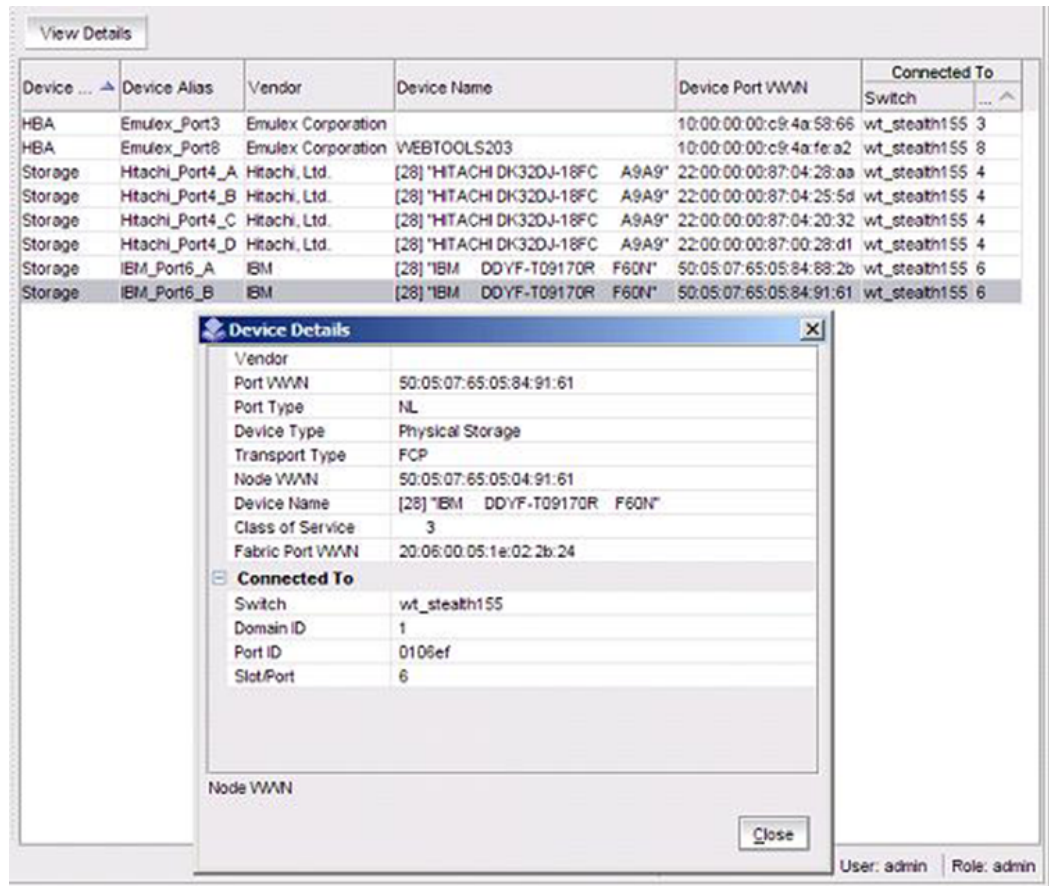
Device connections

Click **Display Connections** under **Devices** in the **Tasks** panel.

EZSwitchSetup Switch Manager displays a graphical representation of the switch and the devices that are connected to each port, as shown in *FIGURE 40* on page 46. This is a real-time display; the connections are updated automatically as you connect and disconnect HBAs and storage.

If Typical Zoning is set on the switch, Switch Manager validates the connections and displays whether the connections are valid or invalid. Switch Manager also shows what currently unoccupied ports are available for host and storage connections.

FIGURE 40 Display Connections window
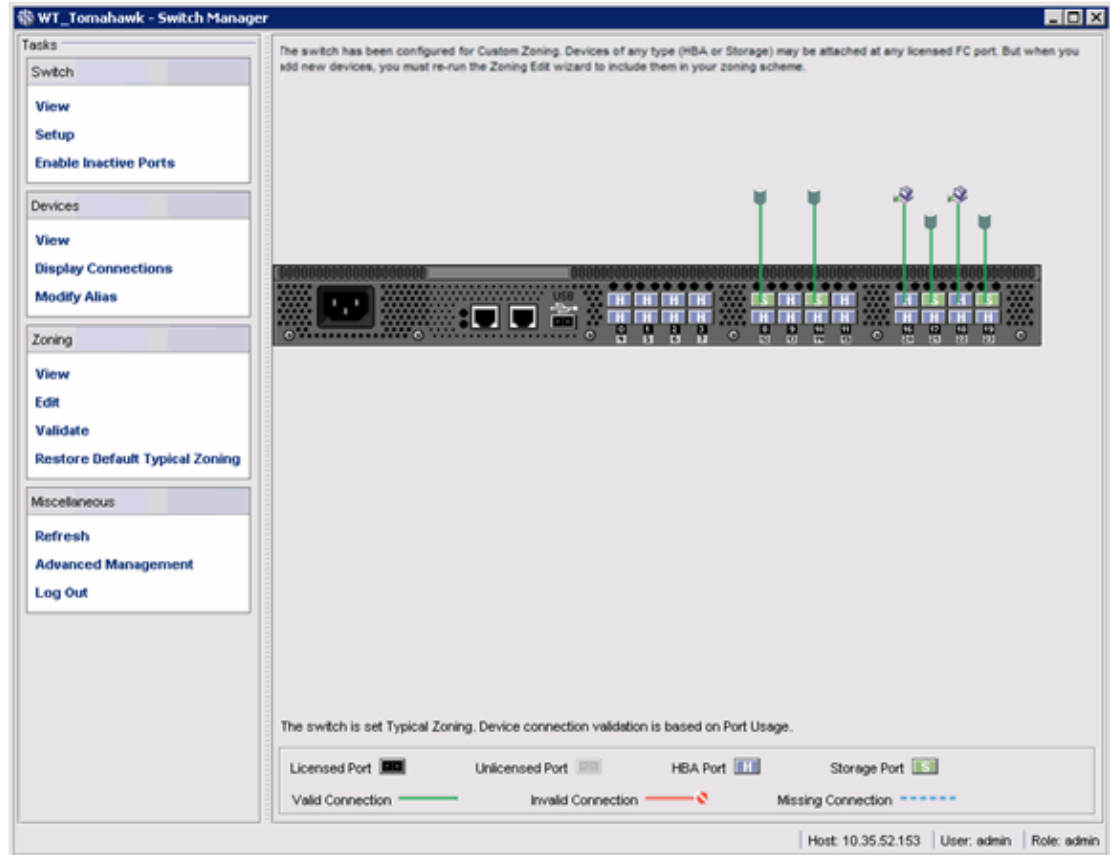
Assigning and renaming device aliases

Every device has a device name and an alias. Aliases make it easier to reference the devices. Aliases are displayed in the zone access map on the **Zoning** page. You can assign or rename the alias using the following procedure.

1. Select **Modify Alias** under **Devices** in the **Tasks** panel.

    The **Define Device Aliases** wizard is displayed. The first time the **Define Device Aliases** wizard is started, the **New Alias** column is populated with default aliases. You can click **OK** to accept the default aliases, or click **Cancel** if you do not want to assign aliases.
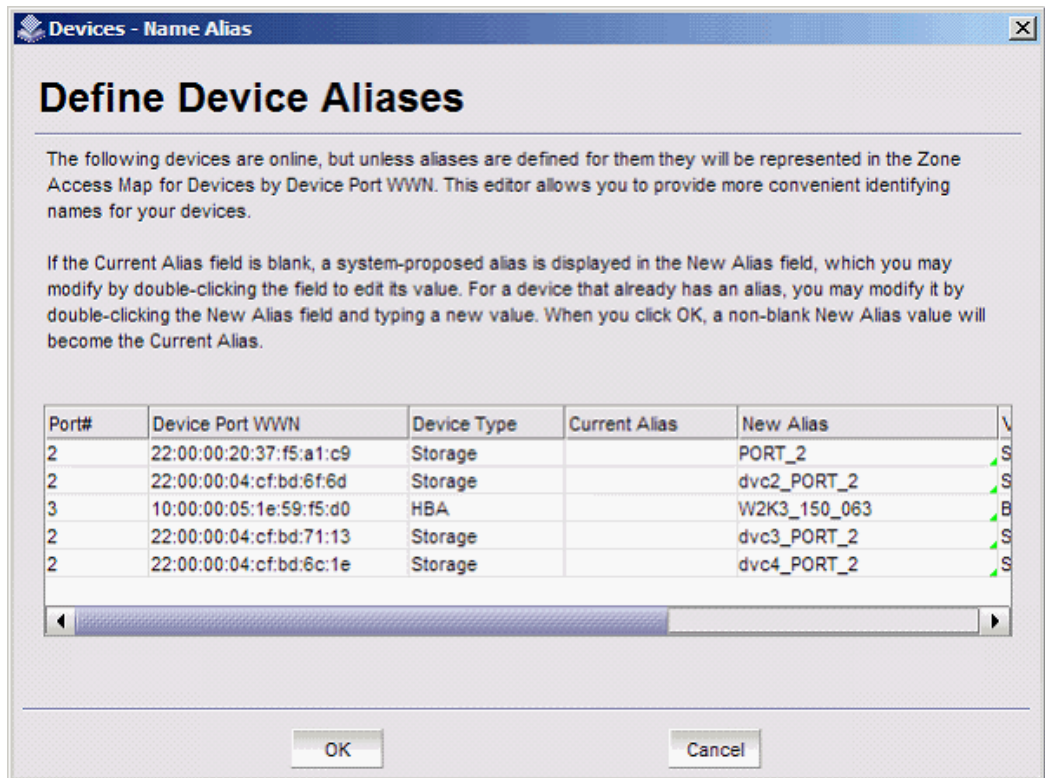
    NOTE
    If an alias is not assigned, the device is identified by WWN only.

    A good alias makes it much easier to identify devices.

    If you want to edit the alias, go on to step 2.

   **FIGURE 41** Define Device Aliases wizard window

2. Double-click a field in the **New Alias** column and edit the alias.

3. Click **OK** when you are done.

A "Zone commit succeeded" message is displayed. This message confirms that the device alias changes have been saved to the zoning database. The **Define Device Aliases** wizard also prompts you to delete the aliases of any offline devices.

The next time you select **Modify Alias**, the **Current Alias** column is populated with the **New Alias** names (*FIGURE 42* on page 48).

FIGURE 42 Device aliases moved under Current Aliases column
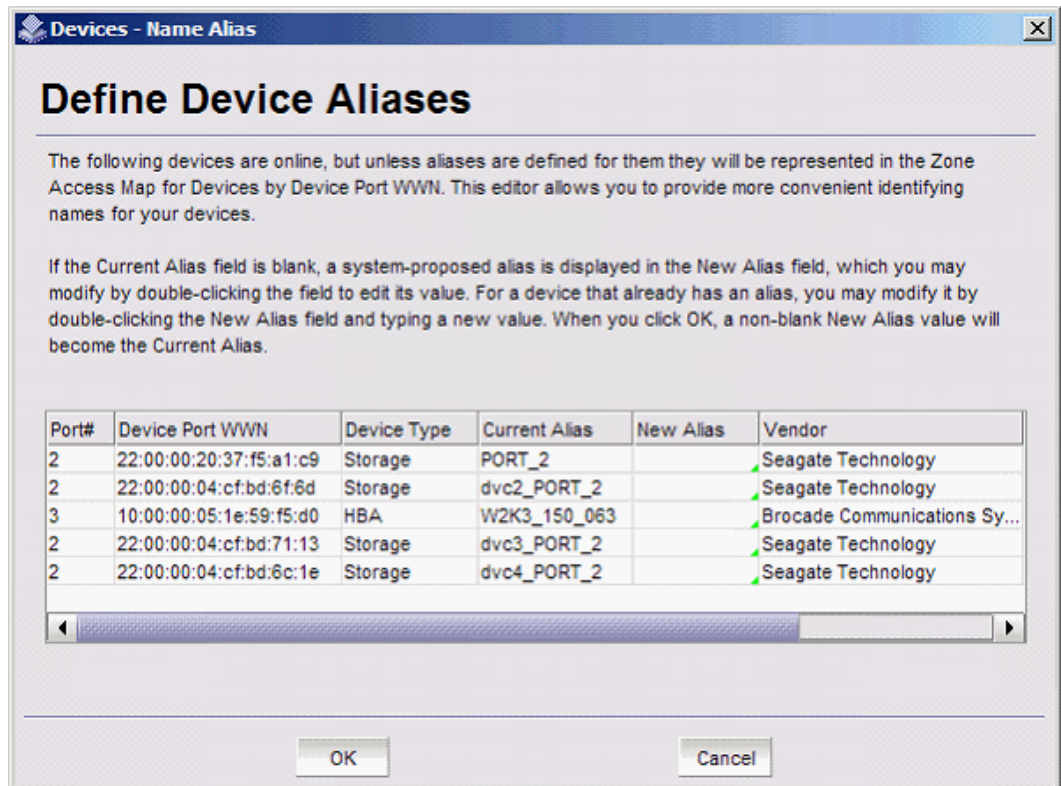
After you have defined the device aliases, the aliases are displayed in the **Device Alias** column when you select **View** under **Devices** in the **Tasks** panel (as in *FIGURE 37* on page 44). The device aliases are also displayed in the **Zone Access Map for Devices** when you select **View** under **Zoning** in the **Tasks** panel (*FIGURE 43* on page 49).

FIGURE 43 Device alias in Zone Access Map for Devices
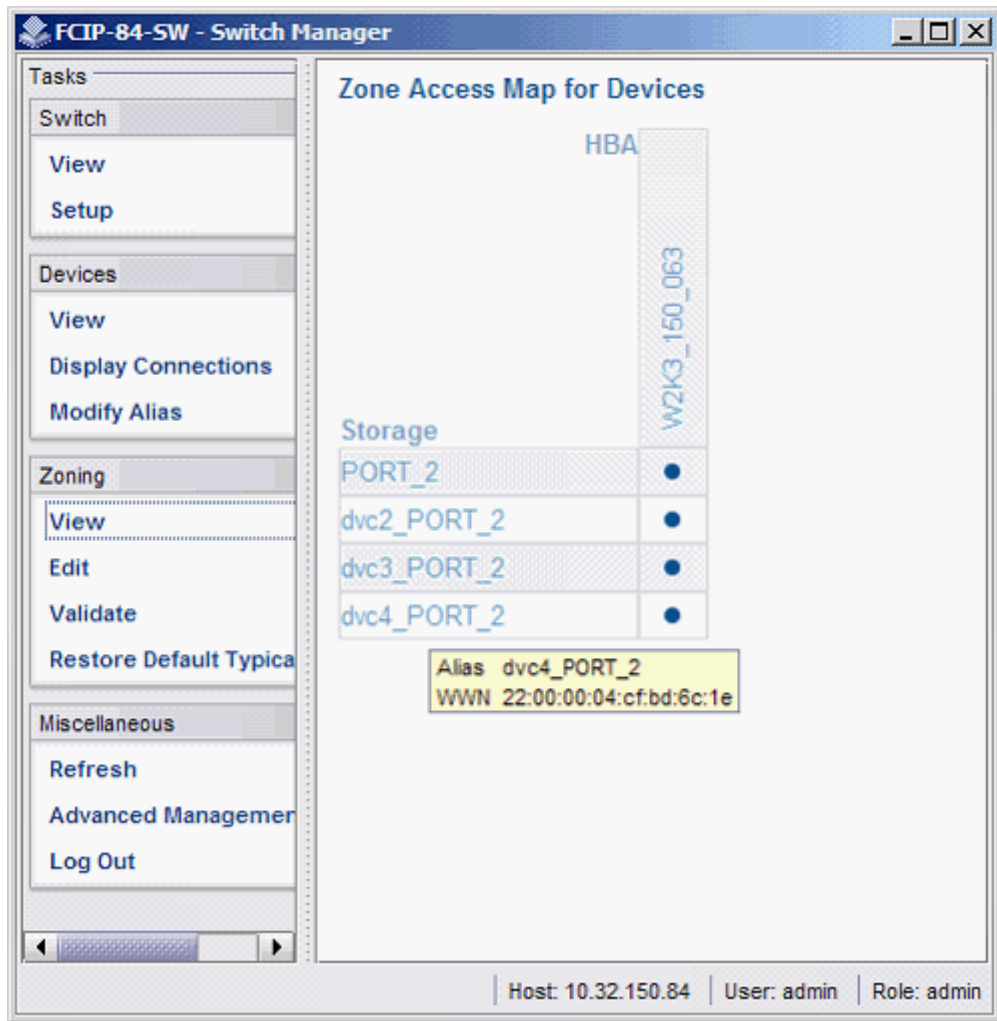
Zoning management

Zoning enables you to partition your fabric into logical groups of devices that can access each other. For example, you can partition your fabric into two zones, *winzone* and *unixzone*, so that your Windows servers and storage do not interact with your UNIX servers and storage.

Zones can be configured dynamically. They can vary in size, depending on the number of fabric-connected devices, and devices can belong to more than one zone. Because zone members can access only other members of the same zone, a device not included in a zone is not available to members of that zone.

Zone members may be specified by fabric location (domain, port index) only, or by device name (node name or port WWN). Zones with members that are specified by fabric location are port-based, and zones with members that are directly specified by device WWN are device-based. In port-based zoning, all devices that are connected to ports that are in the same zone can communicate with each other, and a device can join a zone simply by being connected to a member port. In device-based zoning, devices are explicitly specified as members of the same zone. These devices can communicate with each other regardless of where they are located in the fabric.

EZSwitchSetup creates zones for you automatically, based on your configuration choices during setup in the EZSwitchSetup switch configuration wizard.

- **If you choose Typical Zoning,** a port-based zoning scheme is created. This zoning scheme creates a two-member zone for every possible pairing of H and S ports connected on the **Configure Ports and Connect Devices** window. This ensures that any host device connected to an H port is able to communicate with any storage device connected to an S port. This remains true even if you move a device, assuming you connect the device to the correct type of port (H or S).
- **If you choose Custom Zoning**, you create a device accessibility matrix during setup. The device accessibility matrix creates a device-based zoning scheme. By default, every connected host device can communicate with every connected storage device, as in **Typical Zoning**. You can use the device accessibility matrix to selectively disallow communications between certain devices, creating a device-partitioning scheme that is enforced by zoning. Because **Custom Zoning** is device-based, you may freely move your devices to different ports without affecting accessibility relationships. If you add or permanently remove devices, you should reconfigure the accessibility matrix.
- If you choose **Advanced Zoning**, you are given direct access to the zoning database through Web Tools, and you can create a zoning scheme of your own. EZSwitchSetup Switch Manager can validate and display accessibility relationships based on your scheme, and it can replace your scheme with Typical Zoning or Custom Zoning. If you want to edit your scheme, you must return to the EZSwitchSetup switch configuration wizard and select **Advanced Management** to start Web Tools. For specific information about using Web Tools for zoning, refer to the Web Tools Administrator's Guide.

Viewing the Zone Access Map for Devices

Click **View** under **Zoning** in the **Tasks** panel to view the **Zone Access Map for Devices**. If you have no devices or if you have only one device, the matrix map does not display.

The HBA and storage device names displayed in the matrix are the aliases of the devices (refer to *Assigning and renaming device aliases* on page 47 for additional information). If no aliases are assigned, devices are identified by WWN. When aliases are assigned, you can refer to the WWN by pausing the pointer over the alias in the matrix.

FIGURE 44 Zone Access Map for Devices
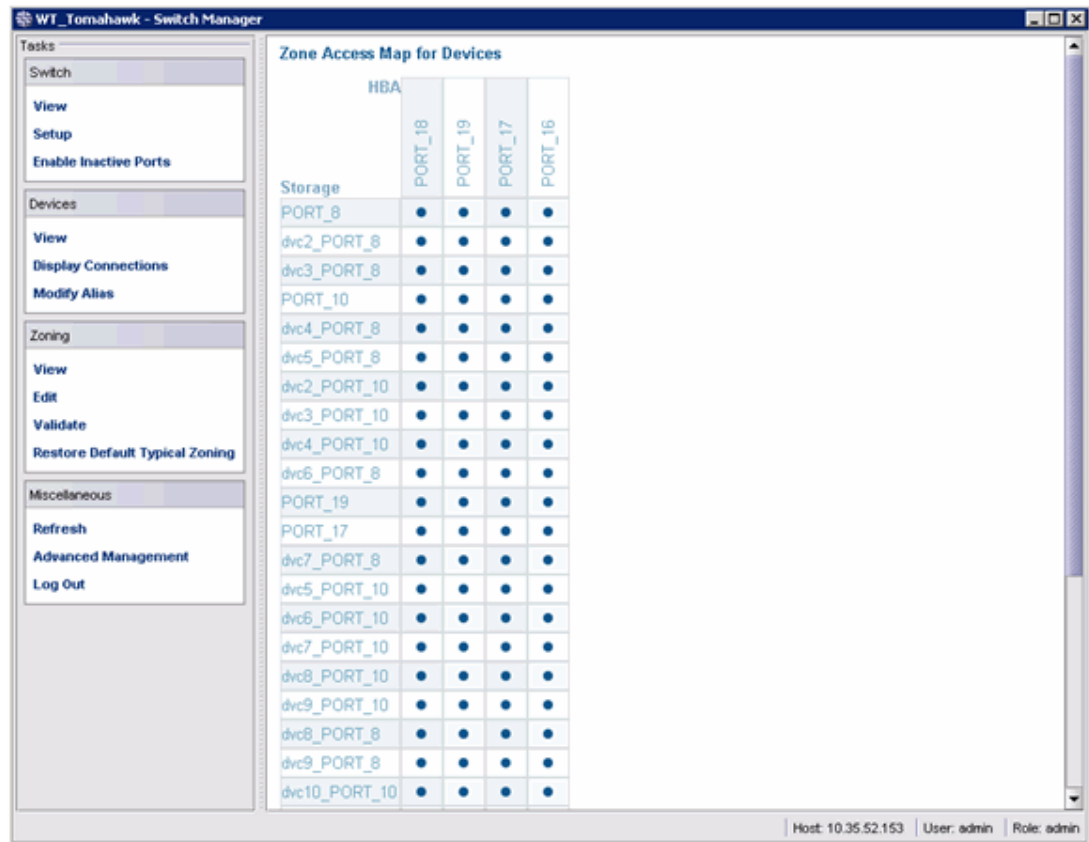
Some HBAs and storage devices can be configured with dual initiator and target capability. Such devices are displayed as both HBA and storage devices in the matrix.

## Editing the zoning configuration

You can customize which HBAs can access which storage devices by clicking **Edit** under **Zoning** in the **Tasks** panel. This starts a wizard that creates a new **Custom Zoning** scheme based on your device accessibility choices.

If you make any zoning changes to the default **Typical Zoning** configuration, you create a **Custom Zoning** configuration to replace it. You can later restore the **Typical Zoning** configuration by clicking **Restore Default Typical Zoning** in the **Tasks** panel.

1. Click **Edit** under **Zoning** in the **Tasks** panel.

   A wizard launches, briefly displaying the **Zone Access Map for Devices**.

   A **Review Device Connections** dialog box displays device connections over the **Zone Access Map for Devices**. Make sure all connected devices are present and recognized by the switch.

2. Click **Next**.

   The **Define Device Aliases** window is displayed.

3. Add or modify aliases in the **New Alias** column.

4. Click **Next**.

   The **Edit HBA/Storage Accessibility Matrix window is displayed.**

If no devices are connected to the switch, or if only storage devices or only HBAs are connected, then the Switch Manager displays a message and the **Edit HBA/Storage Accessibility Matrix** window does not appear.

**FIGURE 45** Edit HBA/Storage Accessibility Matrix window
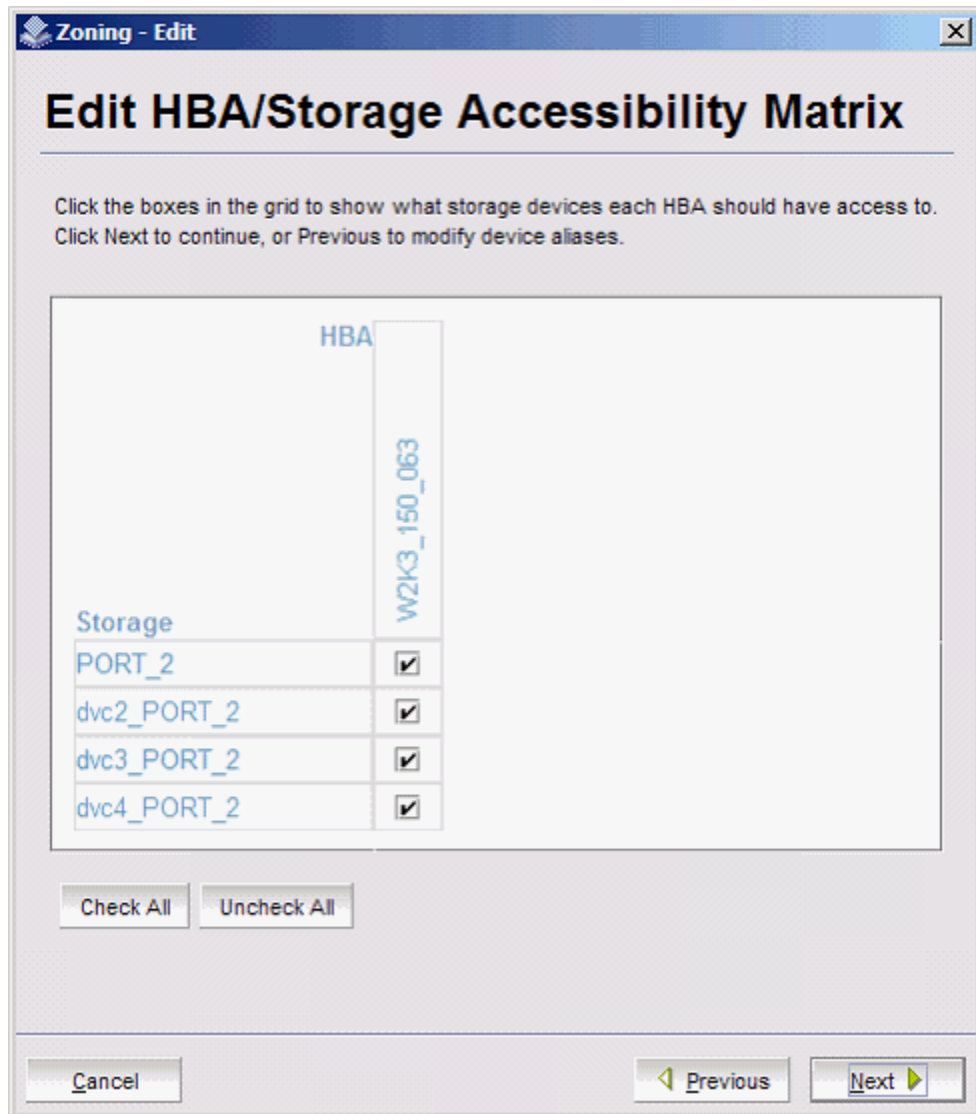
5. Clear the check boxes selectively until you have defined the access groups and accessibility relationships you want in your zoning scheme.

6. When you are done making changes, click **Next** and the zoning **Summary and Confirmation** window is displayed. Use the **Print** button if you would like a printed record of the zoning scheme.

7. Click **Finish** to create the zoning scheme. Click **Cancel** if you do not want to create this zoning scheme, and prefer to leave a previous scheme in place.

If you click **Finish**, allow time for the new scheme to be created. The **Zone Access Map for Devices** is updated with any new aliases, and a **Zone commit succeeded** confirmation dialog box is displayed.

8. Dismiss the confirmation dialog box. The **Zone Access Map** is updated to show the new accessibility relationships.

FIGURE 46 Zoning summary information
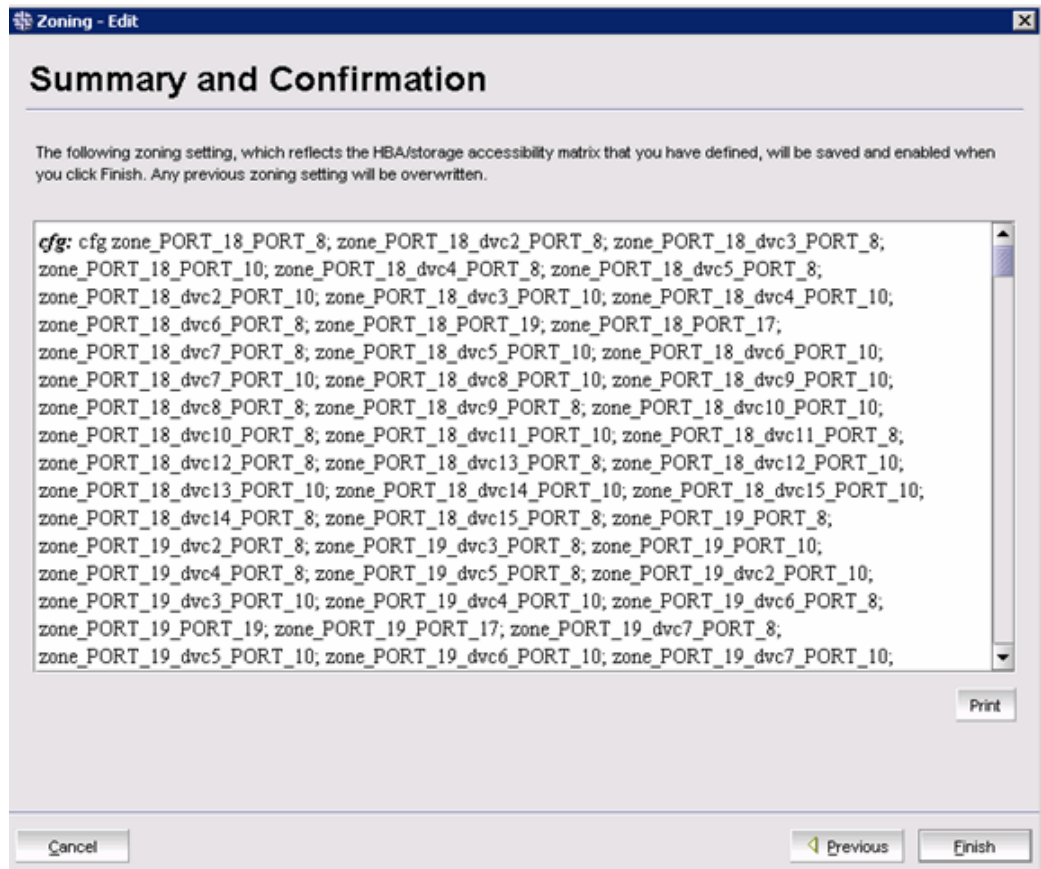
Validating zoning configuration

You can validate the current zoning configuration against the following rules:

- Every HBA has access to at least one storage device.
- Every storage device is accessible by at least one HBA.
- No offline devices exist in the zoning configuration.

If offline devices are in the current zoning setup, you are prompted to delete those devices from the zoning database.

1. Click **Validate** under **Zoning** in the **Tasks** panel.

   The **Validate Zoning** wizard launches.

2. Follow the instructions in the wizard.

3. Note any devices that are not zoned properly and, after exiting the wizard, click **Edit** to update the zone configuration.

Restoring Typical Zoning

If you have modified your zoning configuration and want to reset the configuration back to the default Typical Zoning configuration, use the following procedure.

1. Click **Restore Default Typical Zoning** under **Zoning** in the **Tasks** panel.
2. Click **Yes** in the confirmation window.

   When this task is complete, the matrix in the **Zone Access Map for Devices** page is automatically updated to reflect the changes.

Accessing Web Tools for advanced management

From the Switch Manager, you can launch Web Tools, which provides more extensive switch management functions for more experienced users. Refer to the *Web Tools Administrator's Guide* for information on the Web Tools interface.

To launch Web Tools, ensure that you have completed all Switch Manager tasks and then click **Advanced Management** under **Miscellaneous** in the **Tasks** panel. The Switch Manager session will be closes. Any editing in Switch Manager that has not been applied is lost.

After entering Web Tools, you must log in again to manage the switch.

You cannot return to EZSwitchSetup Switch Manager unless you close and re-open your browser window and relaunch EZSwitchSetup.

Making EZSwitchSetup your default switch manager

If you want to be sure that the EZSwitchSetup Switch Manager is launched as the default switch management program from your browser instead of Web Tools, complete the following steps.

1. Log in to the switch.
2. Enter the **configure** command and type **yes** or **y** to display Web Tools attributes, as shown in the following example.

   ```
   switch:admin> configure

   Not all options will be available on an enabled switch.
   To disable the switch, use the "switchDisable" command.

   Configure...

     System services (yes, y, no, n): [no]
     ssl attributes (yes, y, no, n): [no]
     rpcd attributes (yes, y, no, n): [no]
     webtools attributes (yes, y, no, n): [no] y
   ```

   Web Tools attributes are displayed.
3. Type **yes** or **y** for the Basic User Enabled attribute to make the EZSwitchSetup Switch Manager start by default from your browser rather than Web Tools, as in the following example.

   ```
         Basic User Enabled (yes, y, no, n): [yes] y
   ```

   If no or n is specified, Web Tools is launched. Note that no is the default value.

EZSwitchSetup Limitations

General limitations

TABLE 3 on page 56 lists general EZSwitchSetup Switch Manager limitations, which apply to all browsers and switch platforms.

TABLE 3   EZSwitchSetup Switch Manager limitations

Problem area	Details
HTTP timeout	Very often, you may see the following message when you try to retrieve data from a switch or send a request to the switch: **Failed to get switch response. Please verify the status of your last operation and try again if necessary.** This indicates that an HTTP request did not get a response. The request was sent to the switch, but the connection was down, probably caused by a temporary loss of the web server on the switch. Due to the nature of an HTTP connection, Switch Manager will report this error after a 90-second default timeout. In this case, verify the status of your last request, using Telnet to check related status, or click the **Refresh** button in the Switch Manager to retrieve related data. If your request did not get through to the switch, resubmit it. Executing a refresh from Switch Manager retrieves a copy of switch data at that moment; the data you entered can be lost if it had not already been committed to the switch.
Loss of connection	Occasionally, you may see the following message when you try to retrieve data from the switch or send a request to the switch: **Switch Status Checking** **The switch is not currently accessible.** The dialog box title may vary, because it indicates which module is having the problem. This is caused by the loss of an HTTP connection with the switch due to a variety of possible problems. Switch Manager automatically tries to regain the connection. While Switch Manager is trying to regain the connection, check if your Ethernet connection is functioning. If the problem is not with the Ethernet connection, wait for Switch Manager to recover the connection and display the following message: **You will have to resubmit your request after closing this message.** If the temporary switch connection loss is caused by a switch hot code load or other similar operation, the Switch Explorer you are currently running can be downloaded from a different firmware version than the new one. In this case, the following message displays: **Switch connection is restored. The firmware version you are running is not in sync with the version currently on switch. Close your browser and re-launch Web Tools.** You must close Switch Manager and relaunch it to reopen the connection.

Index

A

accessing Web Tools from EZSwitchSetup *55*
admin password, changing *43*

B

browsers
   limitations *56*
   refresh frequency, setting *9*
   supported *8*

C

changing switch information *43*
CIDR block *17*
closing sessions *37*
COM port is busy. setup computer *22*
configuring Internet Explorer *9*
connecting Fibre Channel cables *26*

D

Device Details dialog box *44*
device information, displaying *44*
displaying
   device information *44*
   port information *40*, *42*

E

Edit HBA/Storage Accessibility Matrix window *52*
enabling ports *43*
ending sessions *37*
EZSwitchSetup
   about *32*
   installing *12*
   launching *35*
EZSwitchSetup switch configuration wizard, launching *43*
EZSwitchSetup wizard launch *13*

F

Fan, Temperature, and Power Supply Legend *38*
fan status *37*
Fibre Channel cables, connecting *26*

H

hardware, supported *10*
HTTPS protocol *35*

I

inactivity timeout *37*
installing
   EZSwitchSetup *12*
IPv6 address *17*

J

JRE, minimum version requirements *8*

L

languages supported *11*
launching EZSwitchSetup *35*
LEDs *40*
limitations *56*
localization support *11*
logging in *36*
logging out *37*

M

monitoring the switch *37*

O

operating systems, supported *8*