

IBM 49Y4294

IBM Flex System EN2092 1GB Ethernet Scalable Switch (49Y4294) User Manual

Model: 49Y4294 | Brand: IBM

1. PRODUCT OVERVIEW

The IBM Flex System EN2092 1 Gb Ethernet scalable switch is designed to provide comprehensive Layer 2 and Layer 3 switching and routing capabilities. It integrates seamlessly within an IBM Flex System Enterprise Chassis, offering both 1 Gb and 10 Gb uplink options. This switch is engineered for simplified deployment and growth through its scalable architecture.

Key features include:

- Simplified deployment and growth via a scalable architecture.
- Tight integration and management through the IBM Flex System Manager.
- Streamlined network management using port profiles, topology views, and virtualization management.



Figure 1: Front view of the IBM Flex System EN2092 1GB Ethernet Scalable Switch. This image displays the compact form factor and port layout of the switch, designed for integration into a Flex System Enterprise Chassis.

2. SETUP AND INSTALLATION

This section outlines the general steps for installing and initially configuring your IBM Flex System EN2092 switch. For detailed chassis-specific installation, refer to your IBM Flex System Enterprise Chassis documentation.

2.1 Unpacking and Inspection

1. Carefully unpack the switch from its packaging.
2. Inspect the switch for any signs of physical damage. If damage is found, contact your supplier immediately.
3. Verify that all components listed in the packing slip are present.

2.2 Chassis Installation

1. Ensure the IBM Flex System Enterprise Chassis is powered off and disconnected from the power source before installation.
2. Locate an available I/O module bay in the chassis.
3. Align the switch with the bay and slide it in until it clicks into place. Ensure it is fully seated.
4. Secure the switch using any provided retention mechanisms or screws.

2.3 Initial Connectivity

1. Connect the necessary network cables (Ethernet, fiber) to the appropriate ports on the switch.
2. Connect the chassis to its power source and power it on.
3. Observe the indicator LEDs on the switch to confirm proper power-on and link status.

3. OPERATING INSTRUCTIONS

The IBM Flex System EN2092 switch operates as an integral part of the IBM Flex System environment. Management and configuration are primarily performed through the IBM Flex System Manager.

3.1 Accessing the Flex System Manager

1. Ensure your management workstation has network connectivity to the IBM Flex System Manager.
2. Open a web browser and navigate to the IP address or hostname of your Flex System Manager.
3. Log in using your administrator credentials.

3.2 Switch Configuration

- Within the Flex System Manager interface, locate the installed EN2092 switch.
- Utilize the management tools to configure VLANs, port settings, routing protocols, and other network parameters.
- Implement port profiles and virtualization management features as required for your network architecture.
- Monitor switch status, port activity, and network performance through the manager's dashboard.

For detailed configuration procedures, refer to the IBM Flex System Manager documentation and the specific firmware guide for the EN2092 switch.

4. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your IBM Flex System EN2092 switch.

4.1 Firmware Updates

- Periodically check the IBM support website for new firmware releases for the EN2092 switch.
- Follow the instructions provided with the firmware update package carefully. Firmware updates often require a system reboot and can temporarily disrupt network services.

4.2 Physical Inspection and Cleaning

- With the chassis powered off and disconnected, periodically inspect the switch for dust accumulation, especially around ventilation areas.
- Use compressed air to gently clean dust from vents and ports. Do not use liquid cleaners directly on the switch.
- Ensure all cable connections are secure and free from damage.

4.3 Configuration Backup

- Regularly back up your switch configuration settings using the IBM Flex System Manager. This is crucial for quick recovery in case of configuration errors or hardware replacement.

5. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your EN2092 switch.

5.1 No Power / Status LEDs Off

- **Check Chassis Power:** Ensure the IBM Flex System Enterprise Chassis is powered on and receiving power.
- **Reseat Switch:** Power off the chassis, then carefully remove and re-insert the EN2092 switch into its bay to ensure it is fully seated.
- **Inspect Chassis:** Verify that the chassis itself is functioning correctly.

5.2 No Link on a Port

- **Check Cable:** Ensure the Ethernet or fiber cable is securely connected at both ends and is not damaged. Try a different cable.
- **Verify Connected Device:** Confirm that the device connected to the switch port is powered on and functioning correctly.
- **Port Configuration:** Check the port configuration in the IBM Flex System Manager to ensure it is enabled and correctly configured (e.g., speed, duplex, VLAN).
- **Try Another Port:** Test the connection using a different port on the switch.

5.3 Network Connectivity Issues

- **IP Configuration:** Verify IP addresses, subnet masks, and gateway settings on connected devices and the switch.
- **VLAN Configuration:** Ensure devices are assigned to the correct VLANs and that VLAN tagging is properly configured.
- **Routing Issues:** If Layer 3 routing is configured, check routing tables and protocols within the Flex System Manager.
- **Firmware:** Ensure the switch is running the latest stable firmware version.

6. TECHNICAL SPECIFICATIONS

Feature	Detail
Brand	IBM
Model Number	49Y4294
Product Dimensions (LxWxH)	10 x 6 x 8 inches
Item Weight	8 pounds
Connectivity Protocol	Ethernet
Voltage	240 Volts
International Protection Rating	IP65
Date First Available	August 8, 2012
UPC	132017838342, 883436161985

7. WARRANTY AND SUPPORT

IBM products typically come with a standard limited warranty. For specific warranty terms and conditions applicable to your IBM Flex System EN2092 switch, please refer to the warranty documentation included with your purchase or visit the official IBM support website.

7.1 Technical Support

For technical assistance, troubleshooting beyond this manual, or to report a product issue, please contact IBM Support. Have your product model number (49Y4294) and serial number ready when contacting support.

- **IBM Support Website:** www.ibm.com/support
- **Contact Information:** Refer to the IBM support website for regional contact numbers and online support options.