digital™

DIGITAL GIGAswitch/Ethernet System
Installing Backplane Modules

Introduction

This document describes how to add or replace switch matrix and switch controller modules in the DIGITAL GIGAswitch/Ethernet system.

The backplane of the GIGAswitch/Ethernet system can contain up to seven switch matrix modules and up to two switch controller modules. Of these, six switch matrix modules and one switch controller module are required to operate the switch. A seventh switch matrix module and a second switch controller module are optional, and provide fault tolerance if one of the primary switch matrix modules or the primary switch controller module should fail.

NOTE

Redundant installations of the backplane modules for fault tolerance require the proper version of firmware. Check the release notes, or contact your DIGITAL representative or distributor, to determine if your system can support a seventh switch matrix or second switch controller module.

Installation Procedure

Overview

This document describes the following processes:

- Making Sure That You Have Enough Power Available

- Removing the Back Panel

- Intalling the Module

- Replacing the Back Panel

- What to Do Next

Making Sure That You Have Enough Power Available

Each power supply in the GIGAswitch/Ethernet system powers approximately three media cards. It takes two power supplies to power a full chassis. Using three power supplies ensures that the system has fault-tolerant, load-sharing power capabilities.   The precise value for backplane elements is listed below:

Power Values for System Devices

Device	Power Added/Used
Power supply	+400 W
Backplane elements	**-50 W**
20-port 10/100 module	-70 W
Switch control processor module	-10 W
2-port gigabit module	-35 W
4-port gigabit module	-55 W
10-port 100BASE-FX module	-50 W

Select **Power System** from the left side of the web agent menu to determine how much power is currently available in your system.

Removing the Back Panel

WARNING

To avoid risk of electric shock, you must power off the switch before beginning this procedure.

VORSICHT

Um einen eventuellen elektrischen Schock zu vermeiden, sollten Sie das System ausschalten, bevor Sie mit diesem Verfahren beginnen.

DANGER

Pour éviter les chocs électriques, mettez le système hors tension avant le début de l'opération.

AVISO

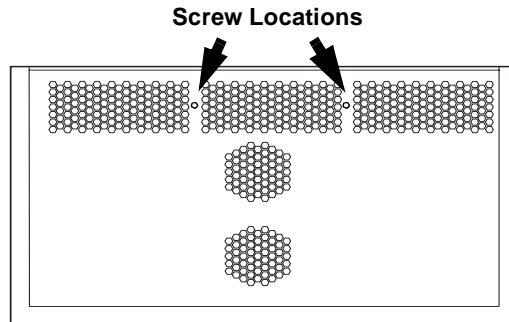Para evitar el riesgo de descargas eléctricas, debe desconectar el sistema antes de iniciar este procedimiento.


To remove the panel from the back of the switch:

Step	Action
1	Power off the switch.
2	Using a Phillips-head screwdriver, remove the two retaining screws from the back panel of the switch.

Screw Locations

Step	Action
3	Using a plastic tie wrap (as shown below), gently pull the panel away from the chassis.
	Pull the panel carefully; it has a slight spring action when removed that may cause it to eject suddenly.
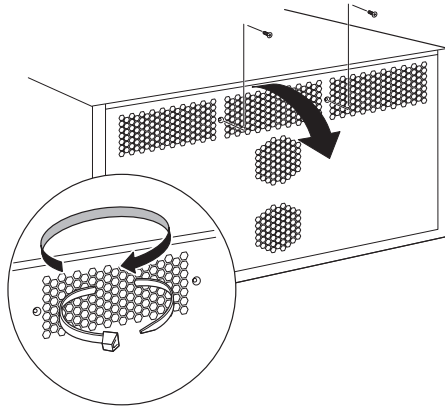
Note: Using a tie wrap (instead of a solid object like a screwdriver) prevents damage to the back panel.

Intalling the Module

CAUTION

Static electricity can damage modules and electronic components. DIGITAL recommends using a grounded antistatic wrist strap and a grounded work surface when handling any modules.

ACHTUNG

Module und elektronische Komponenten können durch elektrostatische Entladungen beschädigt werden. Benutzen Sie immer eine antistatische Gelenkmanschette und eine geerdete Arbeitsunterlage, wenn Sie am offenen Gerät arbeiten.

ATTENTION

Les charges excessives d'électricité statique peuvent endommager les modules et les composants électroniques. DIGITAL conseille l'utilisation d'un bracelet de masse et d'un plan de travail mis à la terre lors de la manipulation des modules.

PRECAUCION

La electricidad estática puede dañar los componentes electrónicos y los módulos. DIGITAL recomienda que se utilicen cintas de pasadores y superficies de trabajo conectadas a tierra al trabajar con cualquier módulo.

To install a switch matrix or switch controller module into the backplane:

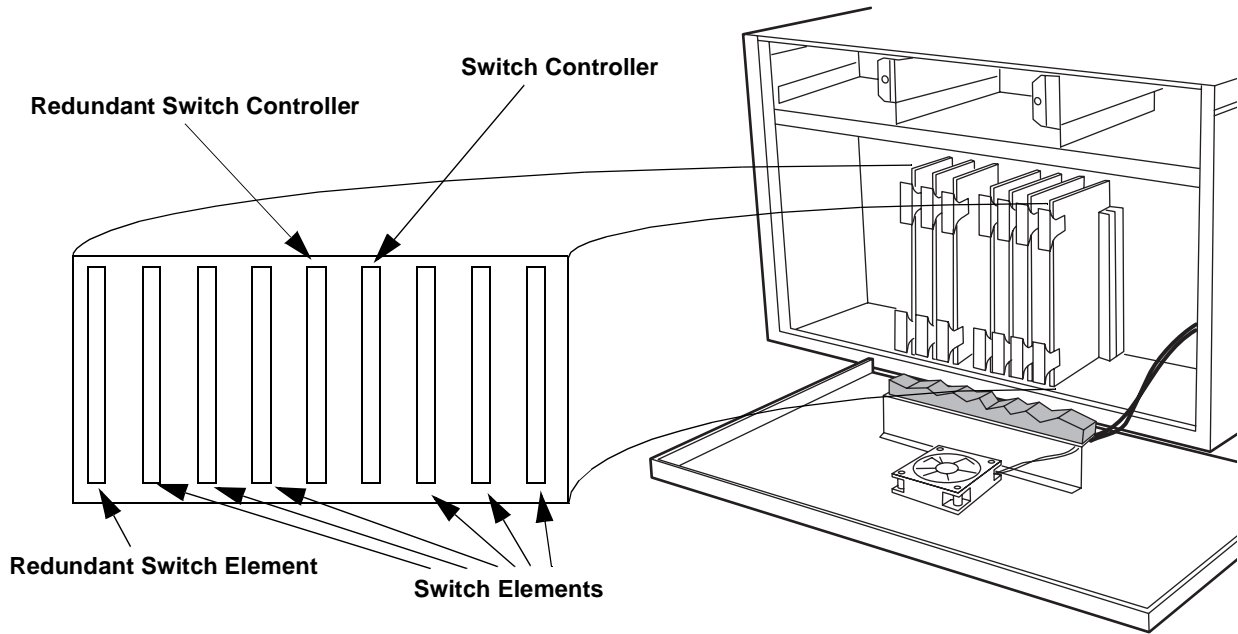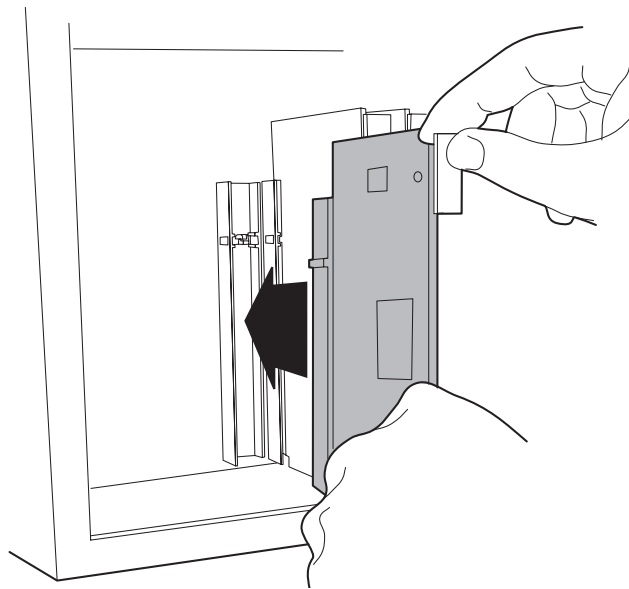| Step	Action
1	Carefully remove the module from its box, leaving the module in its antistatic wrapping.
2	After taking appropriate antistatic precautions, carefully remove the module from the antistatic wrap. (Refer to the *DIGITAL GIGAswitch/Ethernet System Installation and Operation Guide* for information about proper antistatic precautions.)

Step	Action
3	Using the figure below, determine the correct slot for installing the new module:

Switch Controller

Redundant Switch Controller

Redundant Switch Element

Switch Elements

Step	Action
4	Insert the module into the selected slot. The slots are keyed to ensure proper insertion.

Replacing the Back Panel

To replace the back panel:

Step	Action
1	Insert the panel in the back of the switch. You will feel slight resistance as you push the panel into place. Place your hands as shown below to ensure proper insertion:
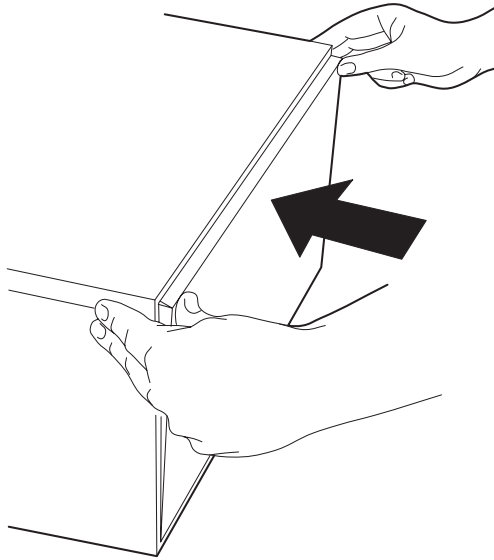
2	Re-insert and tighten the back panel screws.

What to Do Next

When you are done with installation, power up the switch. As the system powers on, the internal diagnostics run. When the diagnostics have completed running successfully, the 8-character LED display on the front panel should read: `Digital GIGAswitch/Ethernet Agent v1.x.x.` Contact your DIGITAL service representative if your system indicates a failure.

For More Information

Refer to the *DIGITAL GIGAswitch/Ethernet System Installation and Operation Guide* for safety, product specification, and regulatory compliance information. The guide is available in online format on the DIGITAL GIGAswitch/Ethernet System Information Library CD. This information is also available on the DIGITAL Network Products Home Page on the World Wide Web at:

North America:	http://www.networks.digital.com
Europe:	http://www.networks.europe.digital.com
Asia Pacific:	http://www.networks.digital.com.au

Follow the Technical Information link find out about the latest firmware, manuals, and more for the GIGAswitch/Ethernet system.