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4401 Great America Parkway Santa Clara, CA 95054

# Installing the Passport 8010 Chassis



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### **USA Requirements Only**

#### Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

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

### **European Requirements Only**

#### EN 55 022 Statement

This is to certify that the Nortel Networks Passport 8010 Chassis is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN 55 022 Class A (CISPR 22).

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

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

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

#### **EC Declaration of Conformity**

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

### Japan/Nippon Requirements Only

Voluntary Control Council for Interference (VCCI) Statement

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

### **Taiwan Requirements**

Bureau of Standards, Metrology and Inspection (BSMI) Statement

### 警告使用者:

這是甲類的資訊產品,在居住的環境中使用時,可能會造成射

頻干擾 在這種情況下,使用者會被要求採取某些適當的對策.

### **Canada Requirements Only**

#### **Canadian Department of Communications Radio Interference Regulations**

This digital apparatus (Passport 8010 Chassis) does not exceed the Class A limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

#### Règlement sur le brouillage radioélectrique du ministère des Communications

Cet appareil numérique (Passport 8010 Chassis) respecte les limites de bruits radioélectriques visant les appareils numériques de classe A prescrites dans le Règlement sur le brouillage radioélectrique du ministère des Communications du Canada.

# About this Guide

This guide provides information about installing and using the Passport<sup>™</sup> 8010 Chassis. It includes the following information:

- Requirements for the operating environment of the chassis
- Instructions for attaching rack-mounting brackets
- Instructions for installing the chassis
- Instructions for installing one or more power supplies in the chassis
- Instructions for installing cable guides
- Instructions for installing a module in the chassis
- Specifications for the chassis

For information about available switch modules for this chassis, consult your Nortel Networks<sup>™</sup> Reseller. For detailed information about setting up your network and using Nortel Networks switches, refer to the documentation for the switch modules you install in the chassis.

# **Before You Begin**

The physical requirements for installing the Passport 8010 Chassis in an equipment rack are:

- Adequate room (13.1 spaces) is provided in an EIA or IEC standard 19-inch (48.2-centimeter) equipment rack that is:
  - Bolted to the floor
  - Braced if necessary
  - Grounded
- Side rail dimensions are similar to this illustration. Typical racks with these dimensions are the Chatsworth Products, Inc. (CPI) rack and the B-Line rack.



- At least 6 inches (15.2 cm) exists between adjacent equipment racks to allow airflow and cooling.
- Adequate front and side clearance exists for cables. One module may have up to 48 ports. Allow enough space at the left of the chassis for cables and cable management hardware.

For table or shelf installation, make sure the surface will support at least 225 pounds (101 kilograms).

Make sure the area where you will install and use the Passport 8010 Chassis meets these environmental requirements:

- Ambient temperature between  $5^{\circ}$  and  $40^{\circ}$  C ( $41^{\circ}$  and  $104^{\circ}$  F)
- Relative humidity between 5% and 85% noncondensing
- No nearby heat sources such as hot air vents or direct sunlight
- No nearby sources of severe electromagnetic noise
- No excessive dust
- Adequate power source within six feet; one 15-Amp circuit required for each power supply

# Unpacking



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- 1 = Passport 8010 Chassis
- 2 = Power Supply (one or more—ordered separately)
- 3 = Documentation
- 4 = Power cord (optional)
- 5 = DB-25 to DB-9 adapter for use with comm port cable
- 6 = Comm port cable for Passport 8132TX module, purchased separately
- 7 = Rack mounting brackets
- 8 = Screws for brackets and equipment rack
- 9 = Cable guides

For detailed information about the comm port cable for the Passport 8132TX Switch Module, refer to the documentation that was shipped with that module.

To purchase a replacement shipping carton assembly for the Passport 8010 Chassis, contact the manufacturer (Tharco) at 1-800-772-2332.

# **Attaching the Rack-Mounting Brackets**

### Required tool: Phillips screwdriver



**Note:** Each bracket fits only one side of the chassis. If the mounting holes do not line up between a bracket and the chassis, try that bracket against the other side of the chassis.



1. Hold each rack-mounting bracket against one side of the chassis. Make sure the attachment holes in the bracket match the holes in the chassis.



2. Insert the supplied flat-head screws to fasten each bracket to the chassis.

# Installing the Chassis in a Rack

Required tool: Phillips screwdriver



1. Slide the chassis into the rack.



2. Insert and tighten the rack-mounting screws.

To complete the installation process, refer to "Installing the Power Supply."

# Installing the Power Supply

### Required tool: Phillips screwdriver



1. If necessary, remove the filler panel from a power supply bay.



2. Push the supply firmly into the bay.

**Note:** If you are installing a power supply in a new chassis, be sure to remove the bag of dessicant from the middle power supply bay.



3. Align and tighten the retaining screws.



4. Connect the power cord to the power supply and to an AC power outlet that is on a circuit with no other equipment connected to it.

Connect each power supply in the chassis to a separate AC circuit.



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- 5. Turn on the power switch.
  - Note: In a newly installed chassis that requires two power supplies (nonredundant configuration), you must turn on both units within 2 seconds of each other. If you wait longer to turn on the second power supply, both power supplies will turn off. To correct this condition, turn off both power supplies, wait at least 30 seconds, and turn both power supplies on again within 2 seconds.

# **Operational Notes for the Power Supply**

A Passport 8010 Chassis with up to five installed modules can operate with one installed power supply. For a redundant power configuration, install two power supplies.

A Passport 8010 Chassis with more than five installed modules requires a minimum of two power supplies for a nonredundant configuration. A redundant configuration for such a chassis requires three power supplies.

In a chassis with a nonredundant power supply configuration, if one power supply fails, the system loses power and network connectivity.

In a chassis with two installed power supplies, you can add a third power supply without powering down the chassis.

When you first install a Passport 8000 Series chassis that requires two power supplies (nonredundant configuration), you must turn on both power supply units within 2 seconds of each other. If you wait longer to turn on the second power supply, both power supplies will turn off. To correct this condition, turn off both power supplies, wait at least 30 seconds, and turn both power supplies on again within 2 seconds.

# Attaching a Cable Guide

Attach the cable guides to the left side of the chassis so the bundled cables will not obstruct airflow to the right side of the chassis.



1. Loosen, but do not remove, the rack-mounting screws needed to install one cable guide.



2. Slide the guide onto the loosened screws.



3. Tighten the screws to secure the guide to the chassis.

# Installing a Module

For details about the operation of modules, refer to the documentation that was shipped with each module.

Required tool: Phillips screwdriver





- 1. Remove a filler panel from a module slot.
- 2. Make sure the inserter/extractor levers are rotated away from the front of the module.



3. Align the module circuit board with the card guides in the chassis. Slide the module into a slot in the chassis until the module touches the backplane connectors.



4. Rotate the inserter/extractor levers to seat the backplane connectors.



5. Align and tighten the retaining screws.

# **Chassis Specifications**

# **Environmental Specifications**

Operating temperature:	$0^\circ$ to $40^\circ$ C (32° to 104° F)
Storage temperature:	–25° to 70° C (–13° to 158° F)
Operating humidity:	85% maximum relative humidity, noncondensing
Storage humidity:	95% maximum relative humidity, noncondensing
Operating altitude:	3,024 m (10,000 ft)
Physical Specifications	
Height:	22.9 in. (58.2 cm)
Width:	17.5 in. (44.5 cm)
Depth:	19.9 in. (50.5 cm)
Weight (Empty):	85 lb (39 kg)
Weight (Fully Loaded):	225 lb (101 kg)
Cooling System	
Fan Trays:	2 per chassis
Fans:	8 per fan tray
Thermal Sensors:	One per fan tray

#### **Electrical Specifications**

System Line Frequency	
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System with one power supply or two supplies in redundant configuration: Input Volt Amperes Rating: 1,236 VA maximum Input Power: 1,112 W maximum Input Voltage: 100-240 VAC Input current: 12 to 6 A per line cord Thermal rating: 3,792 BTU per hour maximum System with two power supplies (nonredundant) or three supplies in redundant configuration: Input Volt Amperes Rating: 2472 VA maximum Input Volt Amperes Rating: 2472 VA maximum Input Voltage: 100-240 VAC Input current: 12 to 6 A per line cord

47 to 63 Hz

#### **Electromagnetic Immunity**

RF Susceptibility:	IEC801-3, Level 2
Electrostatic discharge (ESO):	IEC801-2, Level 2/3
Electrical Fast Transitions (EFT/B):	IEC801-4, Level 1/2

#### **Electromagnetic Emissions**

Meets requirements of:
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(USA) FCC CFR 47 Part 15, Subpart B, Class A (Canada) ICES-003, Issue-2, Class A (Australia/New Zealand) AS/NZS 3548:1995, Class A (Japan) VCCI V-3/97.04, Class A (Taiwan) CNS 13438, Class A EN 55 022 (CISPR 22:1985), Class A CE Mark

Thermal rating: 7584 BTU per hour maximum

#### Safety Agency Approvals

UL Listed CUL Approved CB report and certificate NOM Approved