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Fabric Director Quick Install Guide

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EMI Statement, United States of America (Class A)

“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 and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.”

EMI Statement, Canada (Class A)

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

EMI Statement, Europe and Australia (Class A)

“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 adequate measures.”

EMI Statement, Japan (Class A)

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。

“This is a Class A product based on the standard of the Voluntary Control Council For Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.”

Lithium Battery - Replacement and Disposal

CAUTION!

Danger of explosion if the lithium battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Laser Caution for I/O Cards (CDRH-US)

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Complies with 21 CFR Chapter 1, Subchapter J, Part 1040.10.

IEC 60825-1: 1993, A1: 1997, A2: 2001; IEC 60825-2: 2000

Replacement Laser Transceiver Modules

For continued compliance with the above laser safety Standards, only approved Class 1 modules from our approved vendors should be installed in the product. Contact Xsigo Customer Support (see Technical Support Contact Information) for approved-vendor contact information.

Power Cord Set Requirements – General

The requirements listed below are applicable to all countries:

The length of the power cord set must be at least 6.00 feet (1.8 m) and a maximum of 9.75 feet (3.0 m).

All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.

The power cord set must have a minimum current capacity of 13A and a nominal voltage rating of 125 or 250 V ac~, as required by each country's power system.

The appliance coupler on the power cord must meet the mechanical configuration of an EN 60320 / IEC 60320 Standard Sheet C20 connector, which is the connector on the Fabric Director. The C20 connector supports a C19 plug as the mating part on the power cord that connects to the Fabric Director.

Power Cord Set Requirements – Specifics By Country

United States (UL), Canada (CSA)

The flexible power cord set must be UL Listed and CSA Certified, minimum Type SVT or equivalent, minimum No. 18 AWG, with 3-conductors that includes a ground conductor. The wall plug must be a three-pin grounding type, such as a NEMA Type 5-15P (rated 15A, 120V) or Type 6-15P (rated 15A, 250V).

Europe (Austria (OVE), Belgium (CEBEC), Denmark (DEMKO), Finland (SETI), France (UTE), Germany (VDE), Italy (IMQ), Netherlands (KEMA), Norway (NEMKO), Sweden (SEMKO), Switzerland (SEV), U.K. (BSI/ASTA)

The flexible power cord set must be <HAR> Type H03VV-F, 3-conductor, minimum 0.75mm^2 conductor size. Power cord set fittings, particularly the wall plug, must bear the certification mark of the agency responsible for evaluation in the country where it is being used, with examples listed above.

Australia (DFT/SAA)

Cord is as described under “Japan (PSE)” immediately below. Pins in the power plug must be with the sheathed, insulated type, in accordance with AS/NZS 3112:2000.

Japan (PSE)

The appliance coupler, flexible cord, and wall plug must bear a “PSE” Mark in accordance with the Japanese Denan Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 0.75 mm^2 conductor size. The wall plug must be a grounding type with a Japanese Industrial Standard C8303 (15A, 125V) configuration.

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Preface

Purpose

This guide describes how to install Oracle's VP780 or Fabric DirectorVP560 Fabric Director in an equipment rack. This document assumes a standard installation procedure.

Audience

This guide is intended for data center network administrators, equipment installation professionals and other personnel required to unpack and install network equipment.

Related Documentation

This document is one part of the Xsigo Systems documentation set. Table 1 shows the other documents in the Fabric Director documentation set.

Table 1 Related Documentation for the Xsigo Systems Fabric Director

Document	Part Number	Revision Level and Date
Farbic Manager User Guide	650-30005-02	Rev A 10/2012
Fabric Director Quick Install Guide	650-20022-04	Rev A 10/2012
Fabric Director Hardware and Drivers Installation Guide	650-30008-03	Rev A 10/2012
XgOS Command-Line Interface User Guide	650-30007-03	Rev A 10/2012
Fabric Performance Manager User Guide	650-20082-02	Rev A 10/2012
XgOS Software Upgrade Guide	650-20028-06	Rev A 10/2012
XgOS Remote Booting Guide	650-20029-08	Rev A 10/2012
XgOS vNIC Switching Configuration Guide	650-20052-02	Rev A 10/2012
Installing Host Drivers on Windows 2008 Servers	650-20081-02	Rev A 10/2012
Hyper-V Setup Guide	650-20040-02	Rev A 10/2012
SAN Install for Windows 2008 Servers	650-20078-03	Rev A 10/2012

Release notes are also available with each major hardware or software release.

Revision History

Table 2 shows the revision history for this document.

Table 2 Revision History

Document Title	Document Number	Revision Level and Date
Fabric Director Quick Installation Guide	650-20022-04	Rev A 10/2010
Fabric Director Quick Installation Guide	650-20022-03	Rev A 05/2010
I/O Director Hardware Quick Installation Guide	650-20022-02	Rev A 11/2008
I/O Director Hardware Quick Installation Guide	650-20022-01	Rev A 10/2008

Technical Support Contact Information

Xsigo Customer Support Services is willing to help solve any reported issues 24 hours a day, 7 days a week, 365 days a year. The Xsigo Technical Assistance Center (TAC) is open 9:00 a.m. to 6:00 p.m. PST Monday through Friday. If you need assistance, you can contact the Xsigo Technical Assistance Center (TAC) in any of the following ways:

- Email

  You can send an email to Xsigo at *support@xsigo.com* and we will respond within 24 hours (Monday through Friday).

- Web Access

  You can create a Service Request through the Support Web interface (http://www.xsigo.com/support) and we will respond within 24 hours (Monday through Friday). If you do not have a log-in we will be more than happy to provide you with access to create, view, update and close Service Requests. You can also open RMA cases through the Web.

- Phone Contact

  In the event that you are in need of a faster response for any reason, Xsigo provides response to all phone calls in a maximum of 30 minutes (24 hours a day, 7 days a week, 365 days a year).

  — You can reach us through the Xsigo switchboard by dialing +1 408-329-5600 and selecting option “2”

  — You can reach us through a direct line, by dialing +1 408-736-3013 (24 hours a day, 7 days a week).

  — For our US customers, you can call us through our toll-free number by dialing 866-974-4647

Contents

Overview 1

This document describes the physical installation of Oracle's Fabric Director in a 4-post equipment rack. This document contains rack installation information only. If you need additional information, for example, information about cabling or running the Xsigo First Boot script to initially configure the Fabric Director, see the *Fabric Director Hardware and Drivers Installation Guide*.

Fabric Director is a service-oriented platform that interconnects data-center resources based on application demands. The Fabric Director is a product family consisting of Oracle's VP560 and Oracle's VP780.

This document contains the following:

- Chapter 2, "Site Preparation," on page 3
- Chapter 3, "Unpacking the Fabric Director," on page 7
- Chapter 4, "Installing the Fabric Director,"on page 11

Hardware Overview

Xsigo System's Fabric Director is a product family that consists of two models—the VP780 and the VP560.

You will find it helpful to identify and resolve any installation or cabling issues before beginning the installation and cabling procedures in this documentation.

For safety, regulatory, and compliance information, see Appendix B: Safety and Regulatory Notices on page 51.

VP780 Fabric Director

The VP780 is an enterprise-class, 4 rack-unit Oracle Fabric Director which provides server connectivity to network and storage resources. The VP780 supports 1 GE and 10 GE modules for network connectivity, and Fibre Channel modules for SAN connectivity. The VP780 supports any mixture of up to 15 I/O modules for network and SAN connectivity. Server connectivity is supported through a 24-port InfiniBand Fabric Board that autonegotiates to either Single Data Rate (SDR) at 10 Gbps or Double Data Rate (DDR) at 20 Gbps based on the speeds supported in your network.

VP560 Fabric Director

The VP560 is a enterprise-class, 2 rack-unit Oracle Fabric Director which provides server connectivity to network and storage resources. The VP560 supports up to 4 of the same 1 GE, 10 GE, and Fibre Channel modules as Xsigo's VP780 flagship product, and server connectivity is supported through the same 24-port InfiniBand fabric, which is capable of either 10 Gbps or 20 Gbps.

Because the VP560 is half the size of the VP780, the VP560's smaller form factor allows for higher rack density by consuming fewer rack units when compared to the VP780.

Site Preparation 3

This chapter documents ensuring that enough rack space is available for Oracle's VP560 and VP780 Fabric Director. Because the VP780 is a 4 rack-unit high system and the VP560 is a 2 rack-unit high system, some slight differences exist in the rack space requirements. For an overview of the VP560 and VP780, see Chapter 1, "Overview."

For rack space and site requirements, go to the appropriate section:

Verifying Available Rack Space for a VP780

Verify that your installation site meets the following criteria for a VP780:

- Power: 100-127 / 200-240 VAC
  12 A at 100 volts or 7.68 A at 180 volts
  47 - 63 Hz
  1220 W (maximum) with chassis fully loaded

Note

Each power supply should be connected to a separate 15-20 A AC branch circuit. Do not exceed the maximum power cord length of 15 feet (4.57 m).

- Environmental: Operating Temperature 0-40^{o}C
  Maximum Recommended Operating Temperature (Ambient) 40^{o}C
  Relative Humidity (non-condensing) 10-80% at 40^{o}C
  Operating Altitude 2000m (maximum)
- Cooling: The front and back of the chassis must be free of any obstruction to the airflow (front-to-back)

Caution

Air vents must not be blocked and must have free access to the room ambient air for cooling. Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Caution

Luftbelüftungsschlitze müssen nicht gehemmt werden und müssen freien zugriff auf die zimmer umgebungsluft für das abkühlen haben von. Installation der ausrüstungen in einem ständer sollte solcher sein, dass der betrag des luftstroms erforderlich für sicheren betrieb der ausrüstungen nicht beeinträchtigt ist.

Caution

Les prises d'air ne doivent pas être bloquées et doivent avoir l'accès libre à la pièce l'air ambiant pour le refroidissement. L'installation de l'équipement dans une étagère devrait tel être que la quantité de flux d'air exigé pour l'opération sûre de l'équipement n'est pas compromise.

- System Noise: 72 decibels (dB) with all fans operating at full speed
- Rack Type: 4-post EIA rack
- Client Servers: InfiniBand interface required

Select a location in the rack in which to install the Fabric Director. The location must accept a chassis with the following dimensions, as shown in Figure 1:

- Height: 7 inches (17.8cm)
- Width: 17-13/16 inches (45.4cm)
- Depth: 28-1/4 inches (71.8cm)

Note

The Fabric Director has cable-management brackets that can be mounted on the chassis as an option. It is your choice whether or not install the cable-management brackets. If installed, the cable-management brackets add approximately 5-1/4 inches (13.2cm) of depth out of the back of the chassis.

- Service Clearance: 18 inches (45.7cm) (front and rear)

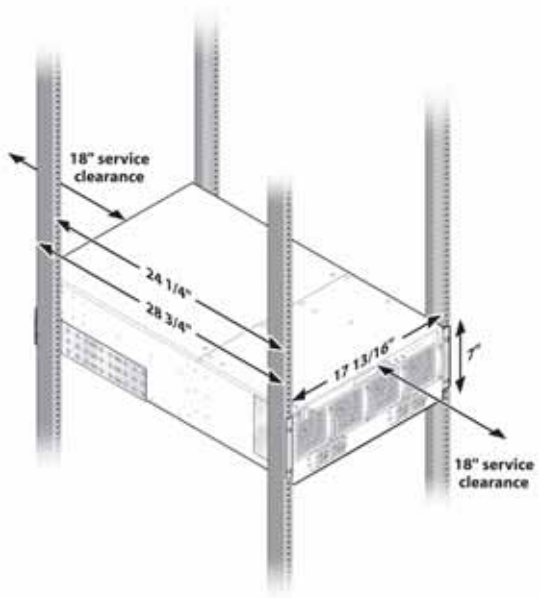

Figure 1 Verifying VP780 Rack Space

When you are sure that enough rack space exists, proceed to the next chapter.

Verifying Available Rack Space for a VP560

Verify that your installation site meets the following criteria for the VP560:

- Power: 100-127 / 200-240 VAC
  8.5 A at 100 volts or 4 A at 180 volts
  50 - 60 Hz
  750 W (maximum) with chassis fully loaded

  Each power supply should be connected to a separate 15-20 A AC branch circuit. Do not exceed the maximum power cord length of 15 feet (4.57 m).

For the VP560 only, input power cords are used as the main AC power disconnect. As a result, the facility power socket outlet shall be installed near the equipment and shall be easily accessible.

Für den VP560 nur, gibt netzkabel sind benutzt ein, während der main wechselstrom abschaltet. Demzufolge wird der einrichtungskraftsteckdosenauslauf nahe an den ausrüstungen installiert werden und wird leicht zugänglich sein

Pour le VP560 seulement, cordons d'alimentation d'entrée sont utilisés comme l'alimentation principale débranche. Par conséquent, la sortie de prise d'alimentation de facilité sera près installée de l'équipement et sera facilement accessible.

- Environmental: Operating Temperature 0-40^{o}C
  Maximum Recommended Operating Temperature (Ambient) 40^{o}C
  Relative Humidity (non-condensing) 10-80% at 40^{o}C
  Operating Altitude 2000m (maximum)

Air vents must not be blocked and must have free access to the room ambient air for cooling. Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Luftbelüftungsschlitze müssen nicht gehemmt werden und müssen freien zugriff auf die zimmer umgebungsluft für das abkühlen haben von. Installation der ausrüstungen in einem ständer sollte solcher sein, dass der betrag des luftstroms erforderlich für sicheren betrieb der ausrüstungen nicht beeinträchtigt ist.

Les prises d'air ne doivent pas être bloquées et doivent avoir l'accès libre à la pièce l'air ambiant pour le refroidissement. L'installation de l'équipement dans une étagère devrait tel être que la quantité de flux d'air exigé pour l'opération sûre de l'équipement n'est pas compromise.

- Cooling: The front and back of the chassis must be free of any obstruction to the airflow (front-to-back)
- Rack Type: 4-post EIA rack
- Client Servers: InfiniBand interface required

Select a location in the rack in which to install the Fabric Director. The location must accept a chassis with the following dimensions, as shown in Figure 2:

- Height: 3 1/2 inches (8.9 cm)
- Weight: 45 lbs. (20.5 Kg) in shipping configuration (no I/O Modules installed)
  53 lbs. with I/O modules installed (the fully loaded weight might differ depending on the number and type of modules installed.)
- Width: 17-13/16 inches (45.4 cm)
- Depth: 28-1/4 inches (71.8 cm)

Note

Oracle's Fabric Director has cable-management brackets that can be mounted on the chassis as an option. It is your choice whether or not install the cable-management brackets. If installed, the cable-management brackets add approximately 6 inches (15.24 cm) of depth out of the back of the chassis.

- Service Clearance: 18 inches (45.7 cm) (front and rear)

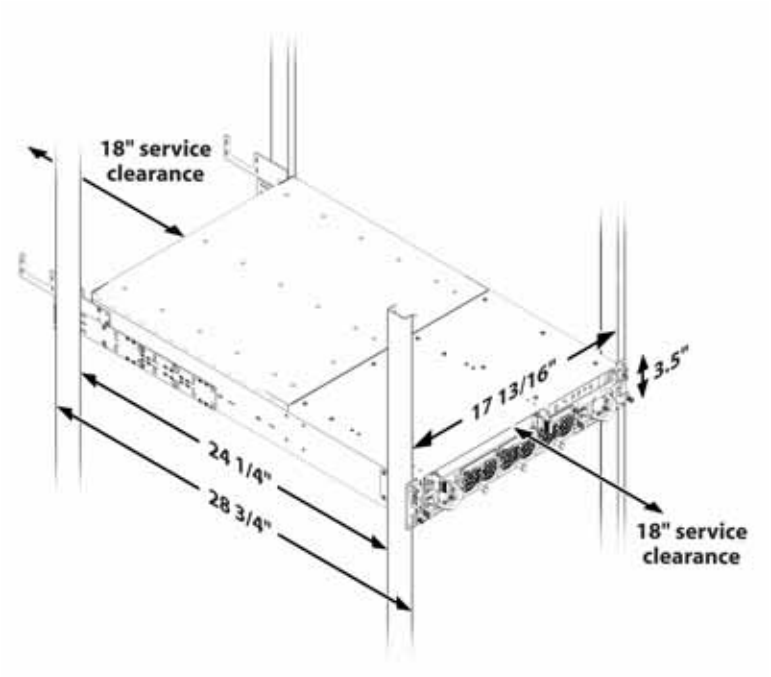

Figure 2 Verifying VP560 Rack Space

When you are sure that enough rack space exists, proceed to the next chapter.

Unpacking the Fabric Director 7

This section documents unpacking the different models of Oracle's Fabric Director and verifying the contents of the shipping container. The two models of Fabric Director—Oracle's VP780 and Oracle's VP560—contain much of the same hardware and system elements, but there are some slight differences depending on which model you ordered.

Before unpacking the Fabric Director, perform a visual inspection of the shipping container. If a shipping container shows any signs of damage, contact the shipping agent immediately. If the shipping container is not damaged, you can unpack the Fabric Director. See the appropriate section for your Fabric Director:

- Unpacking the VP780 and Verifying Contents
- Unpacking the VP560 and Verifying Contents

Unpacking the VP780 and Verifying Contents

Oracle's VP780 is a 4 rack-unit Fabric Director with capacity for 15 I/O Modules and 24 server connections.

Warning

The VP780 chassis weighs 100 - 130 pounds (45.36 - 58.97 kilograms) depending on its configuration. Removing the chassis from the shipping container and installing it in an equipment rack requires a minimum of two people. Attempting to unpack and install this system alone could result in equipment damage or personal injury.

Warning

Der Fabric Director chassis wiegt 100 - 130 pfund (45 - 59 kilogram) hängend von seiner konfiguration ab. Entfernen des chassis vom lieferungsbehälter und installierend es in einem geräteständer erfordert mindestens zwei leute. Versuchen auszupacken und dieses system zu installieren, könnte allein in geräteschaden oder persönlicher verletzung resultieren.

Warning

Le châssis de Fabric Director pèse 100 - 130 livres (45 - 59 kilogrammes) dépend de sa configuration. Enlever le châssis du récipient d'expédition et l'installant dans une étagère d'équipement exige au moins deux gens. Tenter de déballer et installer ce système pourrait avoir pour résultat seul des dommages d'équipement ou la blessure personnelle.

To unpack the system, you will need the following tools:

- #2 Phillips (cross-head) screwdriver
- Box cutter

Note

Because the number and types of I/O modules are determined by the customer, I/O modules are shipped in separate boxes.

Follow this procedure for unpacking your Fabric Director:

Step 1 Locate the shipping list and verify that the following containers are present:

- System shipping container
- I/O module box (1 to 15)
- HCA box
- Options box
- Rail Kit box

Step 2 Open the containers and verify their contents against the illustration in Figure 1 on page 8.

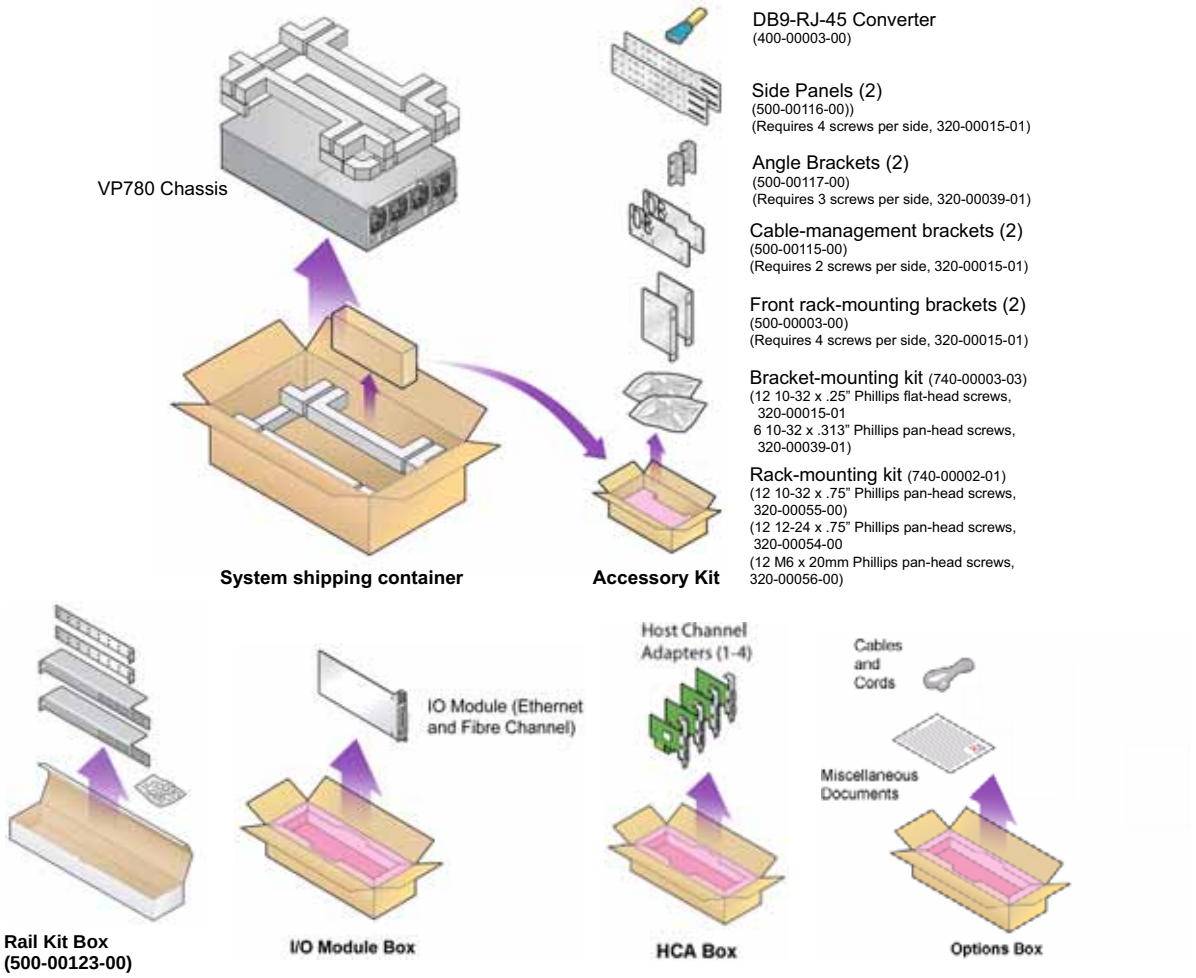

Figure 1 Unpacking Shipping Containers and Examining Contents

Step 3 Unpack the Fabric Director chassis and place it on a flat, stable surface capable of supporting up to 170 pounds (77.11kg).

Step 4 When the contents have been verified, proceed to the next section.

Unpacking the VP560 and Verifying Contents

Oracle's VP560 is a 2 rack-unit Fabric Director with capacity for 4 I/O modules and 24 server connections.

Warning

The VP780 chassis weighs 45 - 53 pounds (20 - 24 kilograms) depending on its configuration. Removing the chassis from the shipping container and installing it in an equipment rack requires a minimum of two people. Attempting to unpack and install this system alone could result in equipment damage or personal injury.

Warning

Der Fabric Director chassis wiegt 45 - 53 pfund (20 - 24 kilogram) hängend von seiner configuration ab. Entfernen des chassis vom lieferungsbehälter und installierend es in einem geräteständer erfordert mindestens zwei leute. Versuchen auszupacken und dieses system zu installieren, könnte allein in geräteschaden oder persönlicher verletzung resultieren.

Warning

Le châssis de Fabric Director pèse 45 - 53 livres (20 - 24 kilogrammes) dépend de sa configuration. Enlever le châssis du récipient d'expédition et l'installant dans une étagère d'équipement exige au moins deux gens. Tenter de déballer et installer ce système pourrait avoir pour résultat seul des dommages d'équipement ou la blessure personnelle.

To unpack the system, you will need the following tools:

- #2 Phillips (cross-head) screwdriver
- Box cutter

Note

Because the number and types of I/O modules are determined by the customer, I/O modules are shipped in separate boxes.

Follow this procedure for unpacking your Fabric Director:

Step 1 Locate the shipping list and verify that the following containers are present:

- System shipping container
- I/O module box (1 to 15)
- HCA box
- Options box
- Accessory Kit
- System information packet

Step 2 Open the containers and verify their contents against the illustration in Figure 2.

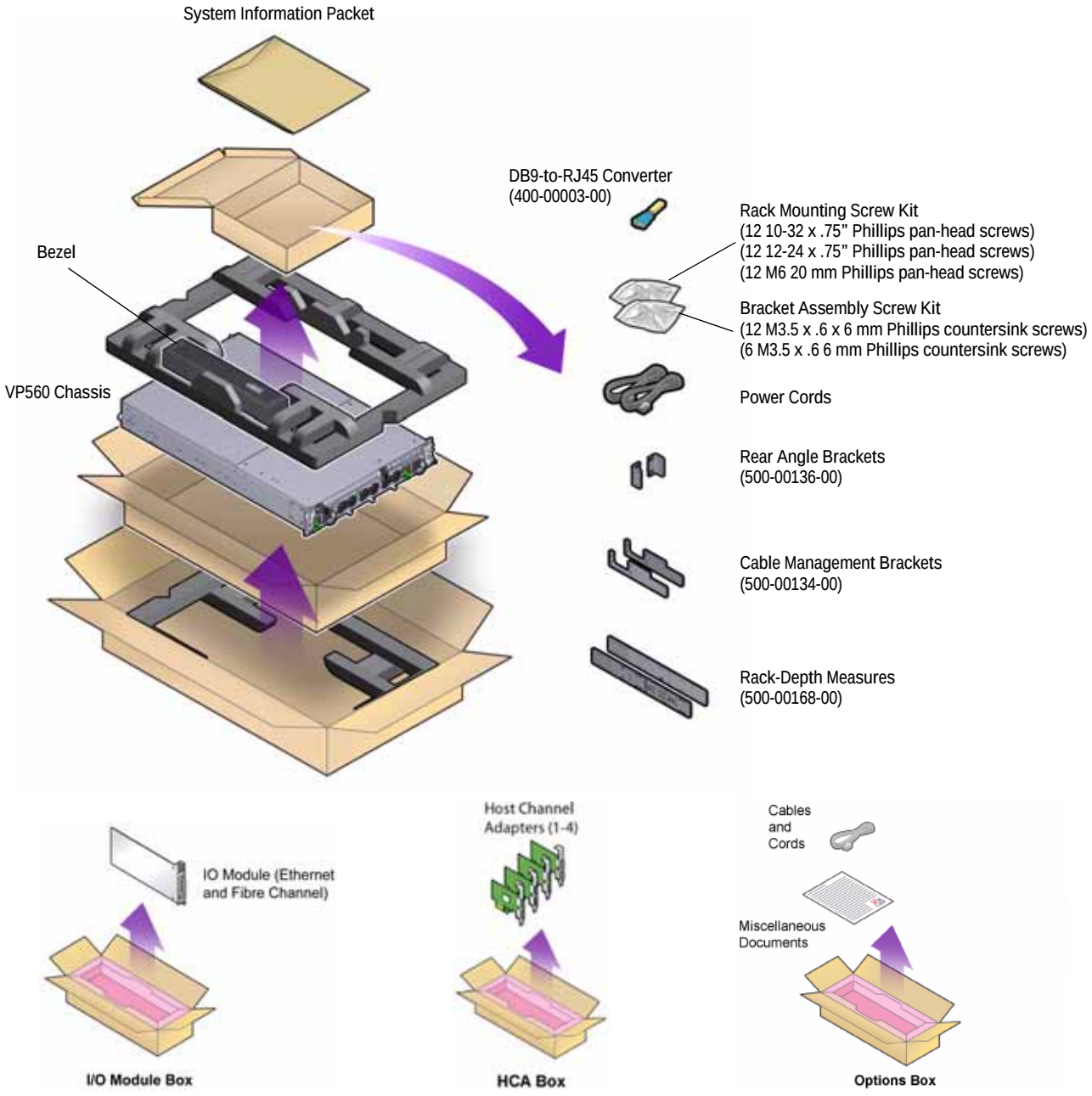

Figure 2 Unpacking Shipping Containers and Examining Contents

Step 3 Unpack Oracle's Fabric Director chassis and place it on a flat, stable surface capable of supporting up to 55 pounds (25 kilograms).

Installing the Fabric Director 11

This chapter documents how to install Oracle's VP780 and Oracle's VP560 Fabric Director in a 4-post equipment rack.

The procedures in this section document installing Oracle's Fabric Director by using the mounting hardware that comes with the Fabric Director..

To install the Fabric Director, go to the appropriate section:

- Installing a VP780 in a 4-Post Rack
- Installing the VP560 in a 4-Post Rack on page 23

Installing a VP780 in a 4-Post Rack

Follow the procedures in this section to install the VP780 in a 4-post install rack.

Required Equipment

For this procedure, you will need the following equipment:

- #2 Phillips (cross-head) screwdriver
- Marker or tape
- Screws for Fabric Director bracket mounting. The screws come in a large bag (740-00003-03). The large bag contains two smaller bags of screws for mounting brackets and side rails to the Fabric Director:
  - Twenty (20) 10-32 x .25" Phillips flat-head screws (320-00015-01)
  - Six (6) 10-32 x .313" Phillips pan-head screws (320-00039-01)
- Screws for Fabric Director rack install. The screws come in a large bag (740-00002-01) that contains 3 smaller bags for different types of common equipment racks:
  - Twelve (12) 10-32 x .75" Phillips pan-head screws (bag number 320-00055-00)
  - Twelve (12) 12-24 x .75" Phillips pan-head screws (bag number 320-00054-00)
  - Twelve (12) M6 x 20 mm Phillips pan-head screws (bag number 320-00056-00)


Note

You do not need all 3 bags of screws. The different bags of screws are supplied to allow successful installation in a wide variety of common equipment racks. You will use only the bag of screws that is appropriate for type of rack in which you are installing the Fabric Director.

- Rack mount rails, which are contained in a separate box within the Fabric Director shipping container, consist of four individual pieces (two pieces per rail):
  - Two slotted pieces that are folded to create a horizontal surface on which the Fabric Director can slide. One end of this piece also contains and angled surface that provides an attachment point to the rack.
  - Two pieces with threaded standoffs. One end of this piece also contains and angled surface that provides an attachment point to the rack.

- Rack mount rail screws, contained in two separate bag in the rack mount rails box. In one bag, you will find the following screws:
  - — short screws (10-32 x .25” Phillips pan-head screws), which assemble the two pieces of each rack mount rail.
  - — long screws (10-32 x .625” or 12-24 x .625” Phillips pan-head screws), which attach the assembled rack mount rails to a standard equipment rack.

  In a separate bag, you will find additional long screws (M6 x 20 mm Phillips pan-head), which attach the assembled rack mount rails to a metric equipment rack.

  You will use only one type of screw—either M6 screws for a metric rack, or the 10-32 or 12-24 screws for a standard rack.

Pre-Installation Considerations for a VP780

Be aware of the following considerations before beginning the installation procedure.

- Cable-management brackets can be installed on the Fabric Director as an option. If you install the cable-management brackets, be aware that they might contact the rack posts when you slide the chassis into the rack. If the cable-management brackets are installed, make sure that someone is available to gently push the cable-management brackets inward just enough to allow clearance for the Fabric Director to continue sliding into the equipment rack.
- Also, make sure to install the Fabric Director without the I/O modules in the chassis. By installing the chassis without the I/O modules, the Fabric Director is lighter and easier to install.
- Some steps in this procedure require you to install or assemble components from the inside of the rack. This requirement occurs to allow for situations where no side access to the Fabric Director is available.

The Fabric Director installation procedure follows these basic guidelines:

1. Assemble the rack mount rails.
2. Install the rack mount rails in the equipment rack.
3. Install the chassis.
4. Remove the rack mount rails (optional).


Note

The rack mount rails are intended as an installation tool to assist in inserting the chassis into the equipment rack. It is not mandatory to leave the rails installed after the Fabric Director is installed and secured to the equipment rack. It is your choice whether or not to remove the rack mount rails. Be aware that the rack mount rails are 1U high, so you must have at least 1 rack unit of open space below the Fabric Director. If you choose to leave the rails installed, be aware that the rack will have one less rack unit of vertical space.

Installation Procedure for a VP780

This section documents how to install the Fabric Director in a four-post equipment rack.

The procedure in this section assumes one bracket configuration for illustrating the installation procedure. However, the chassis mounting brackets (500-00003-00) and side rails (500-00116-00) can be installed in numerous positions to accommodate the depth of rack into which the Fabric Director will be installed. For detailed information about supported rack depths and how to install the rack mounting brackets, see Appendix A: Bracket Positions for Rack Sizes.

Warning

A minimum of two people are required to perform this installation safely.

Warning

Mindestens zwei leute werden erfordert, diese installation sicher durchzuführen.

Warning

Au moins deux gens sont exigés exécuter cette installation sans accident.

To install the Fabric Director, follow this procedure:

Step 1 Select the location in the rack where the Fabric Director will be installed.

Step 2 Make sure that at least one rack unit of space exists below the location where the Fabric Director will be installed.

Step 3 Choose the correct mounting screws for your rack. The Fabric Director is shipped with three complete sets of mounting screws (10-32, 12-24 and M6), which support a wide variety of common equipment racks.

Step 4 Mark each of the rack posts at the locations that will correspond to the bottom of the Fabric Director when it is installed. Verify that all four marks are level. This mark also indicates the top of the rail kit.

Step 5 Align the side panels with screw holes at the I/O-module end of the chassis, and insert 4 flat-head screws through the side panels into the screw holes in the chassis.

Step 6 Align the mounting brackets with the screw holes in the fan-unit end of the chassis, and insert 4 flat-head screws through each mounting bracket into the screw holes in the chassis.

Step 7 Using the flat-head screws, attach the side panels (4 screws per side panel) and mounting brackets (4 screws per bracket) to the Fabric Director. Figure 1 on page 14 shows installing these components.

Use four (4) 10-32 x .25” Phillips flat-head screws per bracket (320-00015-01)

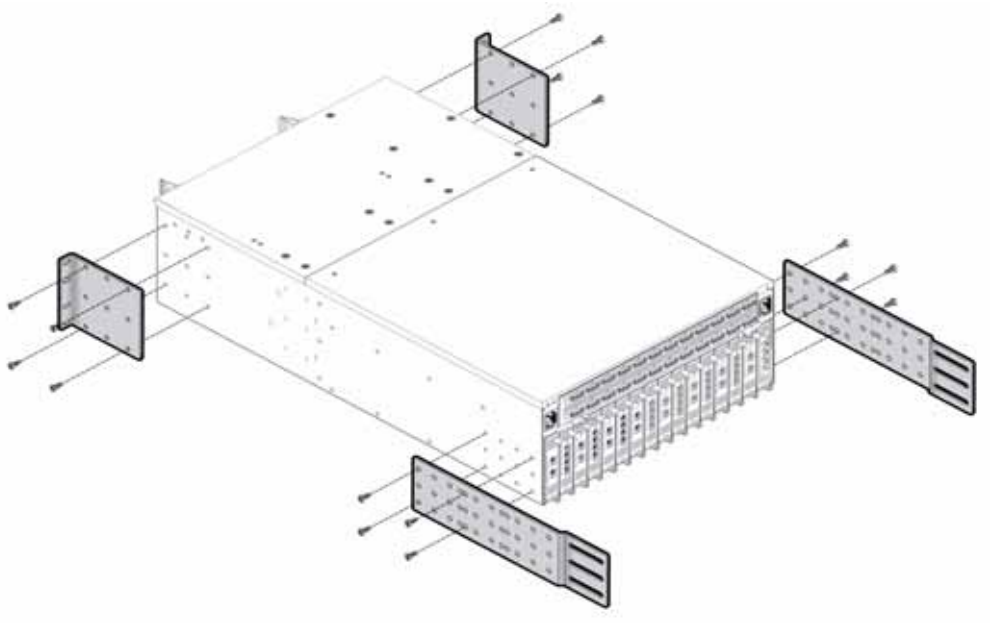

Figure 1 Installing the Mounting Brackets and Side Panels

Step 8 As an option, you can install the cable-management brackets now. They can be installed above the side panels on the I/O-module end of the chassis. The cable-management brackets require two (2) 10-32 x .25” screws per bracket.

Note

If you choose to install the cable-management brackets, you must do so now. You cannot install the cable-management brackets later because when the chassis is installed in the rack, you will have no side access to the Fabric Director.

Step 9 Align the rack mount rails with the slotted piece inside the piece with the standoffs. Leave some overlap between the ends of each piece.

Step 10 From the bags of screws that came with the rack mount rails, insert the 10-32 x .25” pan-head screws (4 per rail) through the slotted rail piece into the piece with the threaded standoff. Do not completely tighten the screws. You want to leave some slack in the rails so that they can slide lengthwise to accommodate the depth of the rack. Figure 2 on page 15 shows assembling the rack mount rails.

Use short pan-head screws (10-32 x .25”) from the rail kit box (500-00123-00)

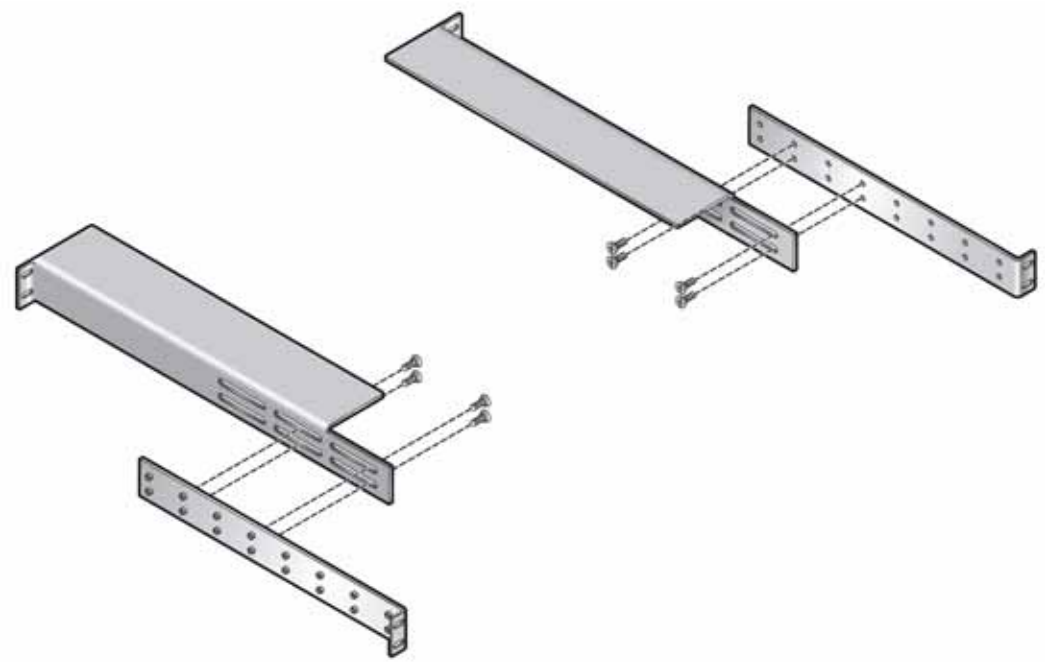

Figure 2 Assembling the Rack Mount Rails

Step 11 Repeat Step 9 and Step 10 to assemble the second rack mount rail.

Step 12 When both rails are assembled, use the 10-24, 10-32, or M6 pan-head screws from the rack mount rail box to install rails into the rack as shown in Figure 3 on page 16. Because you did not completely tighten the screws when you assembled the rails, you should be able to slide the rails lengthwise to accommodate the depth of the rack.

Use four (4) long screws from the rail kit box (500-00123-00) to attach each mounting rail to the rack. Use the appropriate screw for your type of rack:

- **10-32 x .75” Phillips pan-head screws (320-00055-00)**
- **12-24 x .75” Phillips pan-head screws (320-00054-00)**
- **M6 x 20 mm Phillips pan-head screws (320-00056-00)**

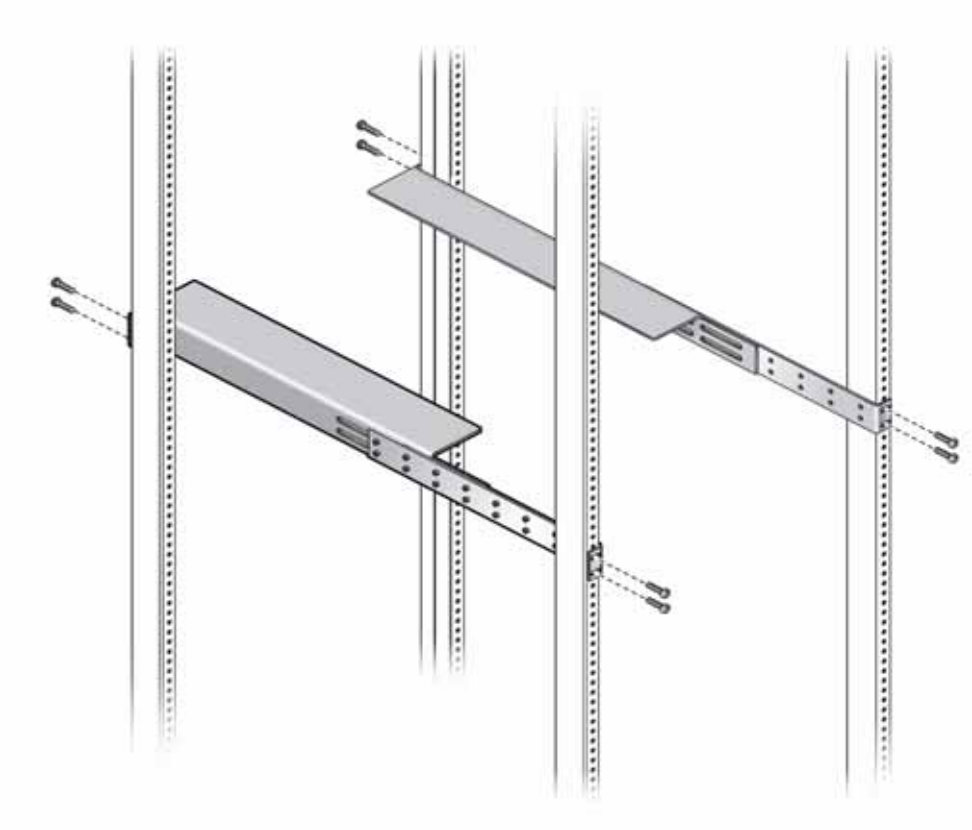

Figure 3 Installing Assembled Rack Mount Rails into Equipment Rack

Step 13 When the rails are attached to the rack posts, tighten all screws that connect the pieces of the rail, as well as the screws that attach each assembled rail to the rack.

Caution

All screws that assemble the rails and attach the rails to the rack **must** be tightened before resting the chassis on the rails.

Caution

Alle schrauben, die montieren die schienen und die schienen zum ständer befestigt, müssen festgezogen werden, bevor das chassis auf den schienen ruhend.

Caution

Toutes les vis qui s'assemblent les barres et attache les barres à l'étagère doivent être resserrées avant de reposer le châssis sur les barres.

Step 14 Load the chassis into the rack so that the I/O-module side is supported on the horizontal surface of the rails. See Figure 3 on page 16 for the horizontal surface of the rails.

Step 15 Begin sliding the chassis into the rack on the horizontal surface created by the rails. Figure 4 shows inserting the chassis into the rack.

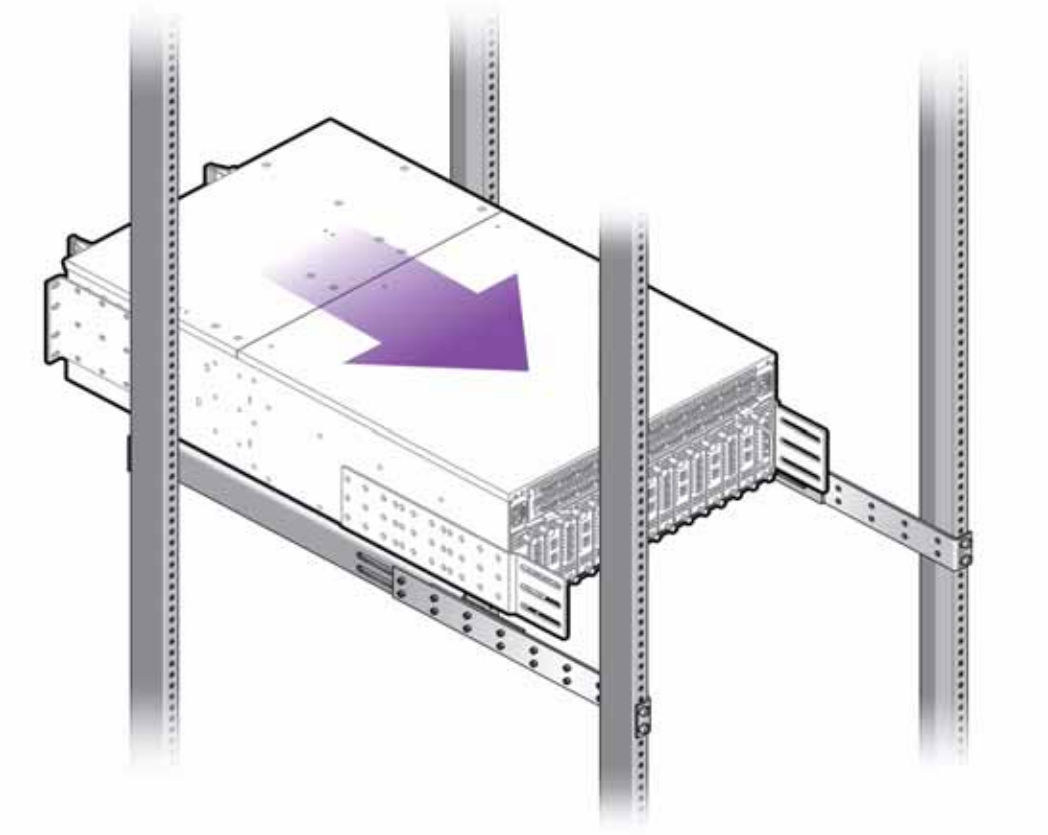

Figure 4 Inserting the Fabric Director into the Equipment Rack

Note

Figure 4 shows installing the Fabric Director from the rear of the rack. Whether you install back-to-front, as shown, or front-to-back is irrelevant as long as the chassis is inserted so that it is supported on the horizontal surface of the rails. The horizontal surface is required to support the Fabric Director as it slides into the rack.

Step 16 Continue to slide the Fabric Director into the rack until the mounting brackets contact the vertical rack post. The chassis is completely inserted into the rack when the mounting brackets lie flush against the vertical rack post.

Note

If you have installed the cable-management brackets, they might contact the rack posts as you are sliding the chassis into the rack. If cable guide hooks are installed on the Fabric Director and you encounter resistance when sliding the chassis into the rack, someone should apply gentle inward pressure to each cable-management bracket simultaneously until you have enough clearance to slide the guide hooks past the posts.

Step 17 When the chassis can no longer slide into the rack, insert the pan-head screws through the mounting brackets on the fan unit side of the chassis, and tighten them to secure the chassis to the rack posts. In this example, the rear mounting brackets will secure the chassis to the rear rack posts.

Step 18 Align the angle bracket with the screw holes on the outside of the side panels. Make sure the screw holes in the angle brackets lie flush against the slotted edge of the side panels. The slotted edge of the angle bracket will attach to the rack post.

Step 19 From inside the side panels, insert the pan-head screws (10-32, 10-24, or M6) through the slots in the side panel and into the angle bracket's screw holes. Each angle bracket requires 3 screws. Figure 5 shows aligning the angle brackets and inserting the screws. When the angle brackets are correctly installed, the slotted surface will lie flush against the rack posts.

Use six (6) 10-32 x .375" pan-head screws (320-00039-01)

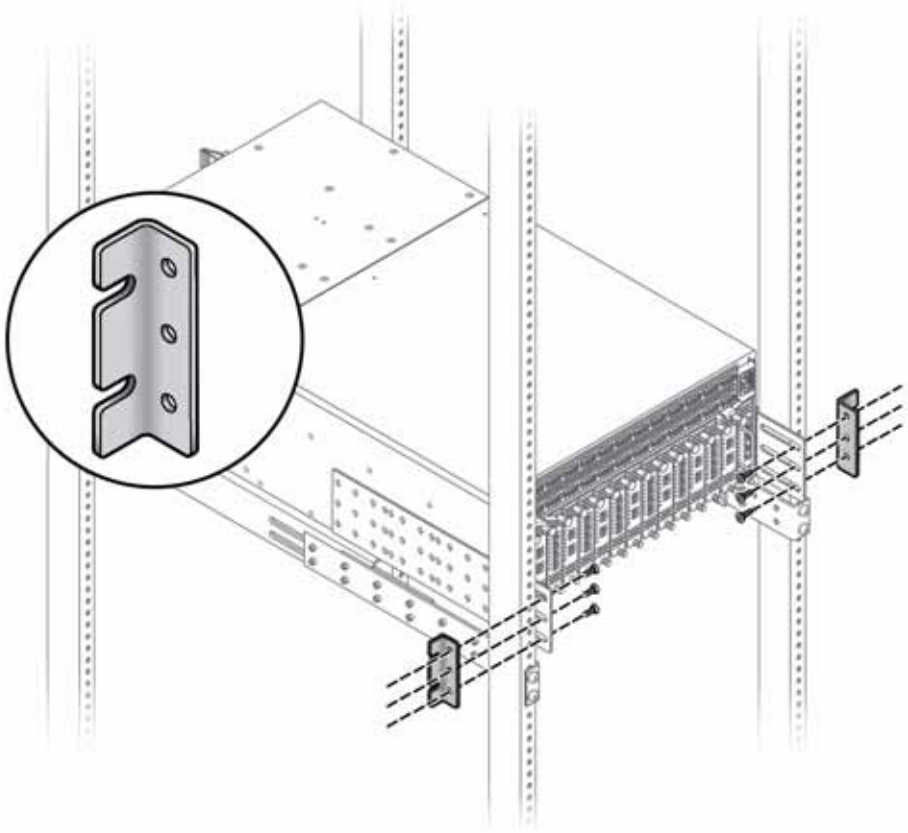

Figure 5 Attaching Angle Brackets to Side Panels

Step 20 When the angle brackets are installed on the side panel, insert the pan-head screws (10-32, 12-24, or M6) through the slotted edge of the angle bracket, into the chassis and tighten the screws to attach the chassis to the rack. Each point of attachment to the rack requires two screws. Figure 6 shows attaching the chassis to the rack.

Use six (6) pan-head screws per side. Use the appropriate screw for your rack type:
- **10-32 x .75” Phillips pan-head screws (320-00055-00)**
- **12-24 x .75” Phillips pan-head screws (320-00054-00)**
- **M6 x 20 mm Phillips pan-head screws (320-00056-00)**

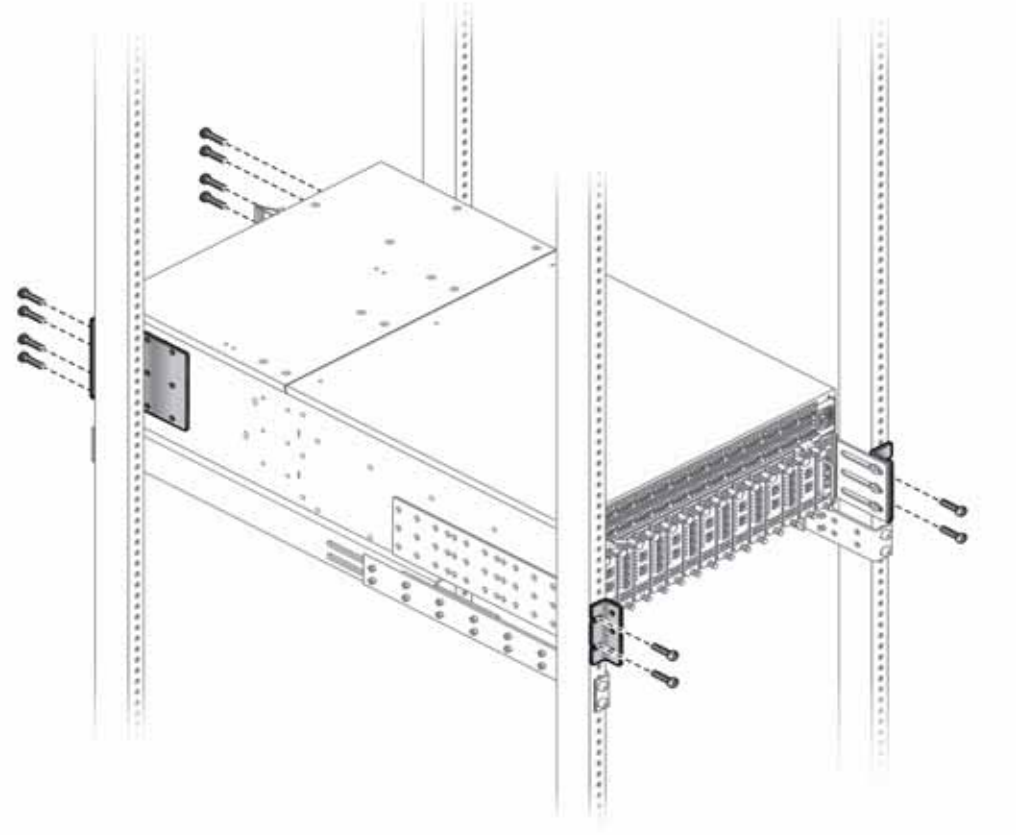

Figure 6 Attaching the Chassis to the Rack Posts

Caution

When the chassis is completely installed, check all screws to make sure they are tight. If any screws are loose, make sure to tighten them. All screws must be tightened before removing the rail kit.

Caution

Wenn das chassis vollständig installiert ist, prüfen sie alle schrauben sich zu vergewissern, dass sie dicht sind. Wenn irgendeine schrauben locker sind, vergewissern sie sich, sie festzuziehen. Alle schrauben müssen festgezogen werden, bevor den bahnsatz entfernend.

Caution

Quand le châssis est complètement installé, vérifie toutes les vis pour s'assurer qu'ils sont tendus. Si n'importe quelles vis sont détachées, s'assurer les resserrer. Toutes les vis doivent être resserrées avant d'enlever la trousse ferroviaire.

Step 21 When all screws are tightened, and the chassis is installed and secured to the rack, you can remove the rail kit as shown in Figure 7.

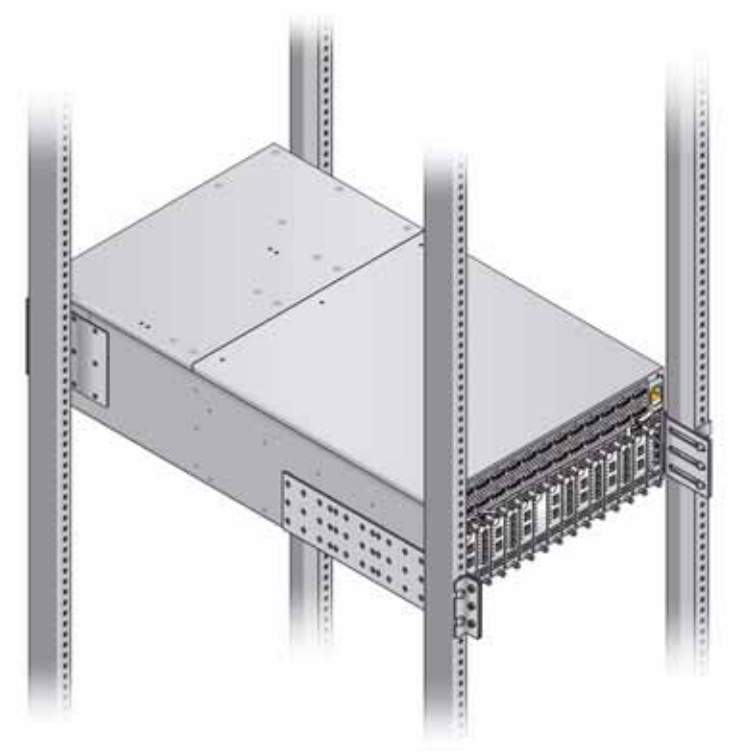

Figure 7 Installed Fabric Director

Note

It is not mandatory to remove the rail kit, but if you do, an extra 1U of vertical rack space becomes available.

Step 22 Install I/O modules as documented in Installing an I/O Module on page 32.

At this point, the VP780 Fabric Director is installed in the rack. If you want to cable the Fabric Director and connect it to other network, storage, and host server resources, see the *Fabric Director Hardware and Host Drivers Installation Guide*.

Step 23 If you want to install the bezel to provide a protective faceplate for the Fabric Director, locate the slots on the inside of the bezel. These slots will receive mounting pins on the mounting brackets. See Figure 8.

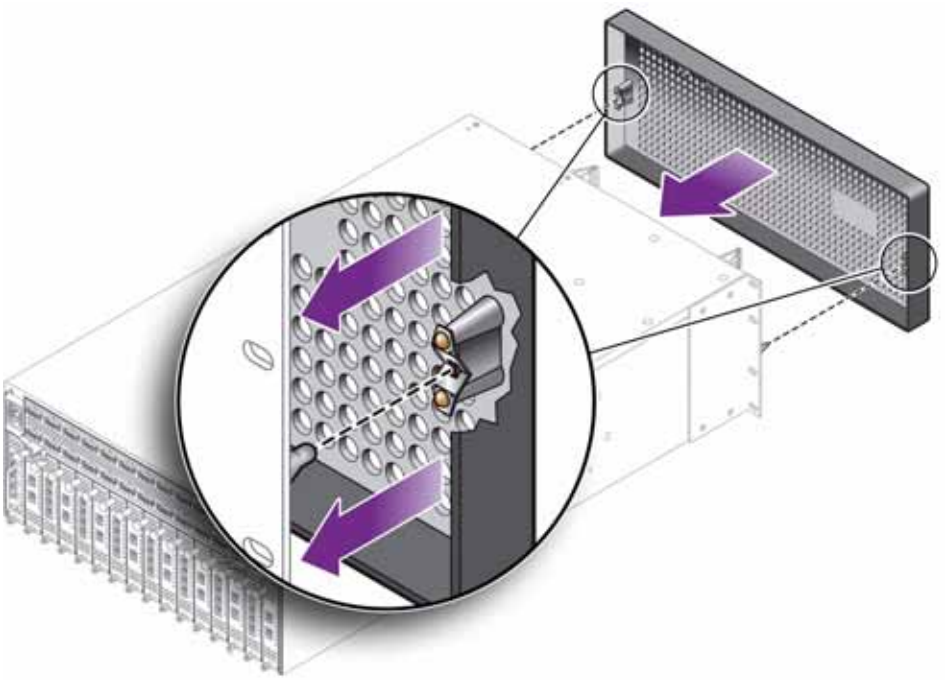

Figure 8 Bezel Mounting Pins and Slots

Step 24 Orient the bezel so that the Xsigo name and logo are on the left of the bezel when you look at it.

Step 25 Holding the bezel level, align the slots on the inside of the bezel with the mounting pins on the front mounting brackets, and gently push the bezel to seat it on the front of the chassis. Figure 9 on page 22 shows seating the bezel on the front of a VP780.

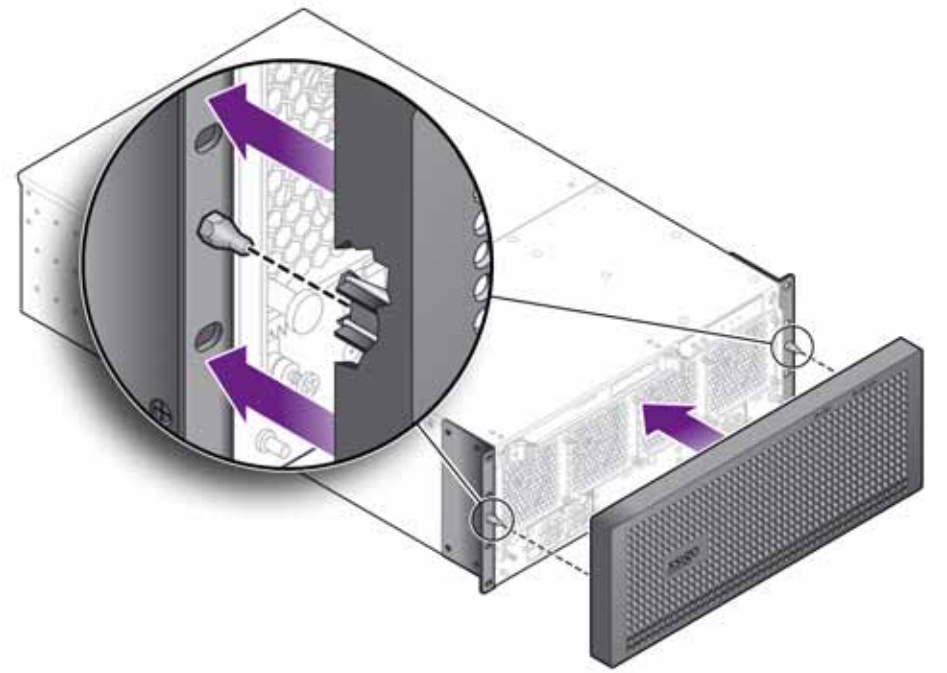

Figure 9 Seating the Bezel on the Mounting Pins

Installing the VP560 in a 4-Post Rack

This section documents how to install the VP560 in a four-post equipment rack.

Locking I/O Modules

The VP560's I/O Modules have a locking mechanism to secure the modules into the chassis. The locking mechanism (a quarter-turn Pawl) is embedded in the I/O Module handle, which has a slotted head. By using a screwdriver, you can turn the I/O module handle in a 90-degree arc, either counterclockwise to unlock the I/O module or clockwise to lock it.

By default, the VP560 is shipped with module blanks instead of the actual I/O Modules. I/O module blanks also have the locking mechanism. Be aware that when you initially install the VP560, the I/O module blanks will need to be unlocked and removed before installing I/O Modules.

Required Equipment for a VP560

For this procedure you will need:

- #2 Phillips (cross-head) screwdriver
- Marker or tape
- Ruler or measuring tape.
- Screws for Fabric Director bracket mounting. The screws come in a large bag (740-00010-01). The large bag contains two smaller bags of screws for mounting brackets and side rails to the Fabric Director:
  - Twelve (12) M3.5 x .6 x 6 mm Phillips countersink screws (320-00093-00) for attaching the rack-depth measures and optional cable management brackets
  - Six (6) M3.5 x .6 x 6 mm Phillips pan-head screws (320-00113-00) for attaching the rear angle brackets to the rack-depth measures
- Screws for Fabric Director rack install. The screws come in a large bag (740-00002-01) that contains 3 smaller bags for different types of common equipment racks:
  - Twelve (12) 10-32 x .75" Phillips pan-head screws (bag number 320-00055-00)
  - Twelve (12) 12-24 x .75" Phillips pan-head screws (bag number 320-00054-00)
  - Twelve (12) M6 x 20 mm Phillips pan-head screws (bag number 320-00056-00)


Note

You do not need all 3 bags of screws. The different bags of screws are supplied to allow successful installation in a wide variety of common equipment racks. You will use only the bag of screws that is appropriate for type of rack in which you are installing the Fabric Director.

Also, the rack-mounting screw bags contain 12 screws, but the VP560 uses only 8, so you will have extra rack-mounting screws. Xsigo suggests that you keep the extra screws.

- Xsigo rack mounting hardware:
  - Rack-depth measures
  - Rear angle brackets

Pre-Installation Considerations for a VP560

Be aware of the following considerations before beginning the installation procedure.

- Cable-management brackets can be installed on the Fabric Director as an option. If you install the cable-management brackets, be aware that they might contact the rack posts when you slide the chassis into the rack. If the cable-management brackets are installed, make sure that someone is available to gently push the cable-management brackets inward just enough to allow clearance for the Fabric Director to continue sliding into the equipment rack.
- Make sure to install the Fabric Director without the I/O modules in the chassis. By installing the chassis without the I/O modules, the Fabric Director is lighter and easier to install.
- While installing the Fabric Director, you will attach the rear of the chassis to the equipment rack before you attach the front end. Make sure to support the Fabric Director and keep it level while until both ends are attached to the equipment rack. If the system is not kept level while one end is attached and the other is not, you can put unnecessary stress on the mounting hardware that is already attached to the rack.

Installation Procedure for a VP560

When the VP560 is shipped from the factory, it contains all hardware except I/O modules. I/O module blanks are shipped in a separate box, and should be installed only after the unit is installed in the equipment rack. By installing the I/O Modules after the Fabric Director is rack mounted, the Fabric Director is lighter and easier to lift into position in the rack.

The installation procedure has the following main phases, which are documented in this section:

- Determining the rack location for the VP560
- Attaching the mounting hardware
- Rack Mounting the VP560

The installation procedure finishes with the following phases, which are documented in other sections of this chapter:

- Installing the I/O Modules
- Connecting the VP560 to other equipment and AC power.

The VP560 weighs approximately 55 pounds (25 Kg). As a result, two people will be required to install the VP560. This installation assumes two people for installing the VP560.

Der VP560 wiegt ungefähr 55 pfund (25 Kg). Demzufolge werden zwei leute erfordert werden, der VP560 zu installieren. Diese installation nimmt zwei leute dem zum installieren von des VP560 an.

Le VP560 pèse approximativement 55 livres (25 Kg). Par conséquent, deux gens seront exigés installer le VP560. Cette installation suppose deux gens pour installer le VP560.

To install the Fabric Director, follow this procedure:

Step 1 Select the location in the rack where the Fabric Director will be installed.

Step 2 Measure the depth of the rack (if not already known). You will use the rack depth you measure to determine where to install the rack-depth measures on the Fabric Director.

Step 3 Mark the exterior face of each of the rack posts at the locations where the Fabric Director will be installed. These marks are where the VP560's mounting brackets will be installed. The marks must be on the exterior faces of the rack posts.

Step 4 Verify that all four marks (two on the exterior of the front rack posts, and two on the exterior of the rear rack posts) are level.

Step 5 Get eight mounting screws for the Fabric Director's mounting brackets, which are the M3.5 Phillips countersink screws (320-00093-00).

Step 6 Align the rack-depth measures for the appropriate rack depth with the screw holes at the I/O-module end of the chassis (the rear). The rack-depth measures show the mounting points for different rack depths, and since you measured the rack depth in Step 2, you will know which set of screw holes to use on the rack-depth measures.

Step 7 When the side panel screw holes are aligned with the screw holes in the Fabric Director chassis, attach the rack-depth measures (4 screws per side panel) to the Fabric Director. Figure 10 on page 26 shows installing these components.


Note

Figure 10 on page 26 shows installing the rack-depth measures for one depth. Your rack depth might differ, so the rack-depth measures might need to slide forward or backward depending on the depth of your rack.

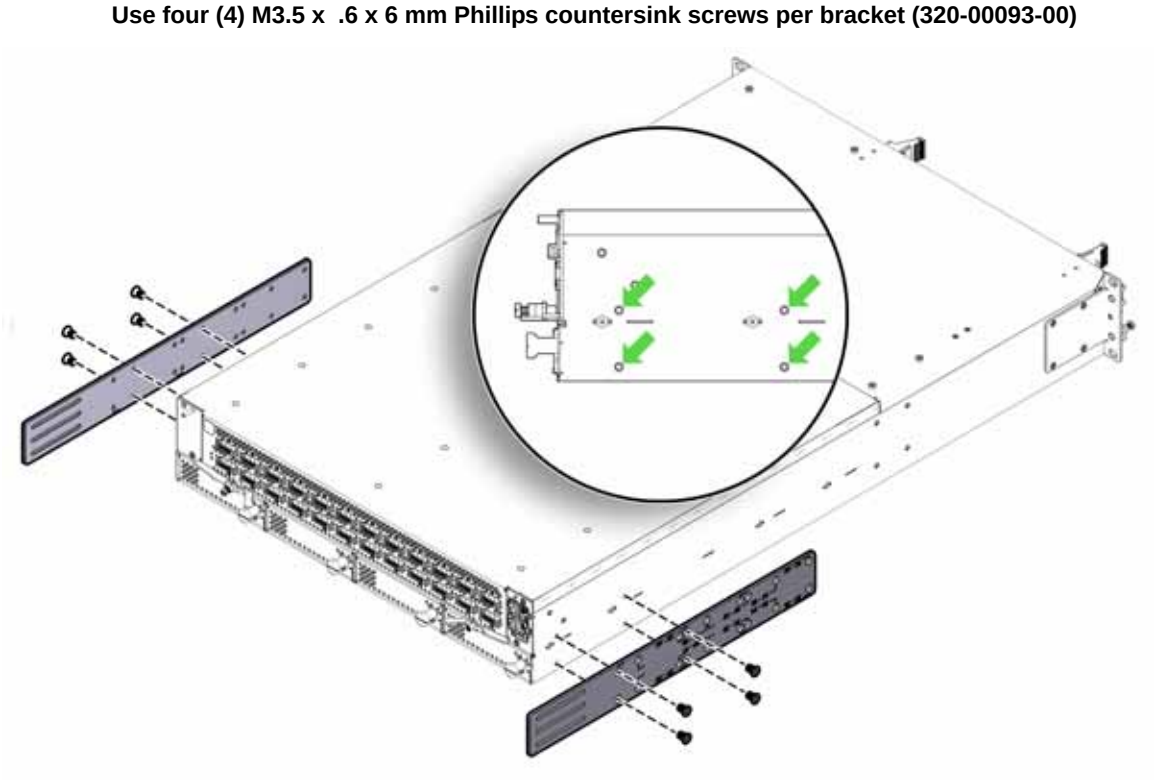

Figure 10 Installing the Rack Depth Measures

Step 8 As an option, you can install the cable-management brackets now as shown in Figure 11 on page 27. They can be installed above the rack-depth measures on the I/O-module end of the chassis. The cable-management brackets require two (2) M3.5 countersink screws per bracket.

Note

If you choose to install the cable-management brackets, you must do so now. You cannot install the cable-management brackets later because when the chassis is installed in the rack, you will have no side access to the mounting points for the cable managment brackets.

Use two (2) M3.5 x .6 x 6 mm Phillips countersink screws per bracket (320-00093-00)

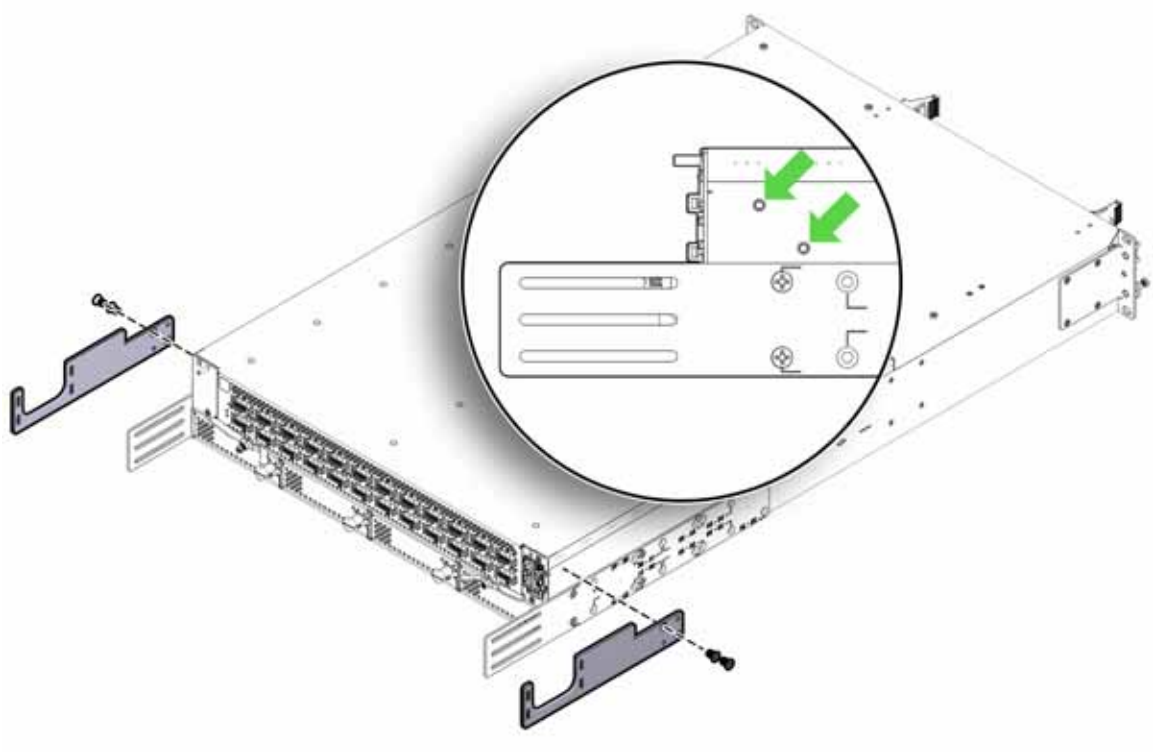

Figure 11 Installing the Optional Cable Management Brackets

Step 9 Choose the correct rack-mounting screws for your rack. The Fabric Director is shipped with three complete sets of rack-mounting screws (10-32, 12-24 and M6), which support a wide variety of common equipment racks.

Step 10 Find the rear angle brackets (500-00136-01) and use the correct rack-mounting screw to attach the angle brackets to the exterior face of the rear rack posts. The rear angle brackets must be mounted on the exterior facing side of the rear posts. See Figure 12 on page 28.

Note

If you marked the rack posts as documented in Step 3 on page 25, you should know where the rear angle brackets need to be attached to the rack. Before attaching the brackets, make sure that the marks you made on the front and rear rack posts are level.

Use two (2) pan-head screws per bracket. Use the appropriate screw for your rack type:
- **10-32 x .75” Phillips pan-head screws (320-00055-00)**
- **12-24 x .75” Phillips pan-head screws (320-00054-00)**
- **M6 x 20 mm Phillips pan-head screws (320-00056-00)**

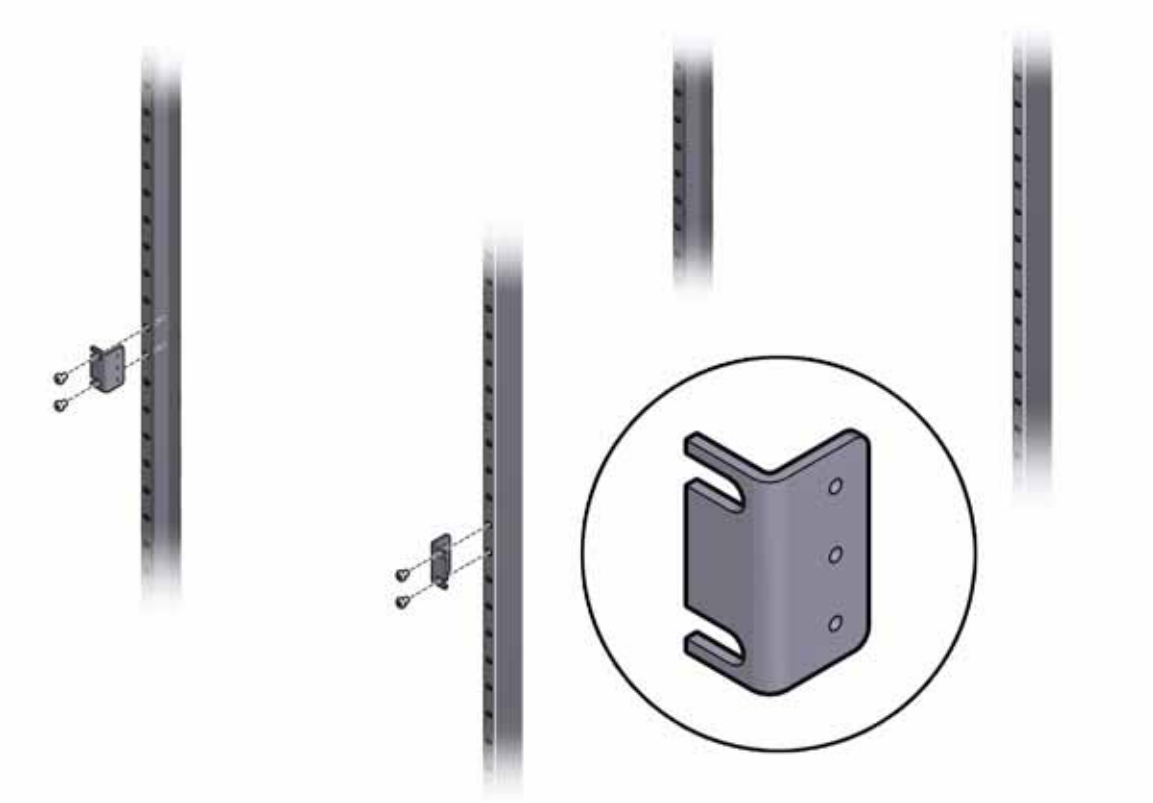

Figure 12 Attaching Rear Angle Brackets to the Equipment Rack

Step 11 Orient the Fabric Director so that the rack-depth measures are pointing towards the opposite end of the equipment rack shown in Figure 12.

Step 12 While supporting the Fabric Director, hold it level and slide it into the rack. You can use the marks you made in Step 3 on page 25 to make sure you are sliding the VP560 into the correct location. Slide the Fabric Director into the rack until the front mounting brackets make contact with the front rack posts.

Note

If you have installed the cable management brackets, when you slide the Fabric Director into the equipment rack, you might find that the cable brackets or rack-depth measures contact the vertical rack posts. If this situation occurs, have one of the installers apply gentle inward pressure to pinch the cable management bracket inward until they clear the vertical rack posts.

Step 13 Align the slots in the rack-depth rails with the screw holes in the rear angle brackets, and insert the 6 M3.5 x .6 x 6 mm Phillips pan-head screws (320-00113-00) through the slots in the rack-depth rails and tighten them into the screw holes in the rear angle brackets. See Figure 13.

Use 3 M3.5 x .6 x 6 mm Phillips pan-head screws per bracket (320-00113-00)

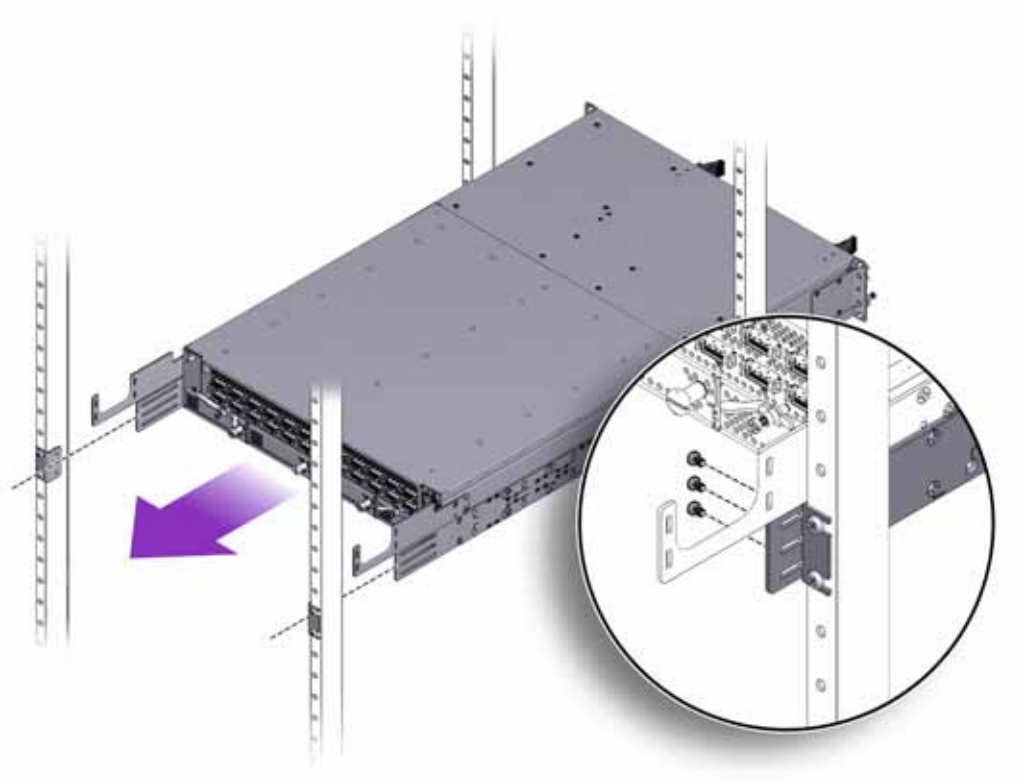

Figure 13 Attaching the Rack Depth Measures to the Angle Brackets

Tip

You might find it helpful to tighten the screws to finger tightness or just less. By doing so, you allow the Fabric Director to slide forward and backward in the rack-depth rail's slots, and as a result, you can make minor adjustments to the Fabric Director's depth in the rack (if needed).

Step 14 Keeping the Fabric Director level, insert the appropriate rack mounting screws (10-32, 12-24 or M6) into the mounting brackets on the front of the Fabric Director (the fan unit end). See Figure 14.

Use two (2) pan-head screws per bracket. Use the appropriate screw for your rack type:
- **10-32 x .75” Phillips pan-head screws (320-00055-00)**
- **12-24 x .75” Phillips pan-head screws (320-00054-00)**
- **M6 x 20 mm Phillips pan-head screws (320-00056-00)**

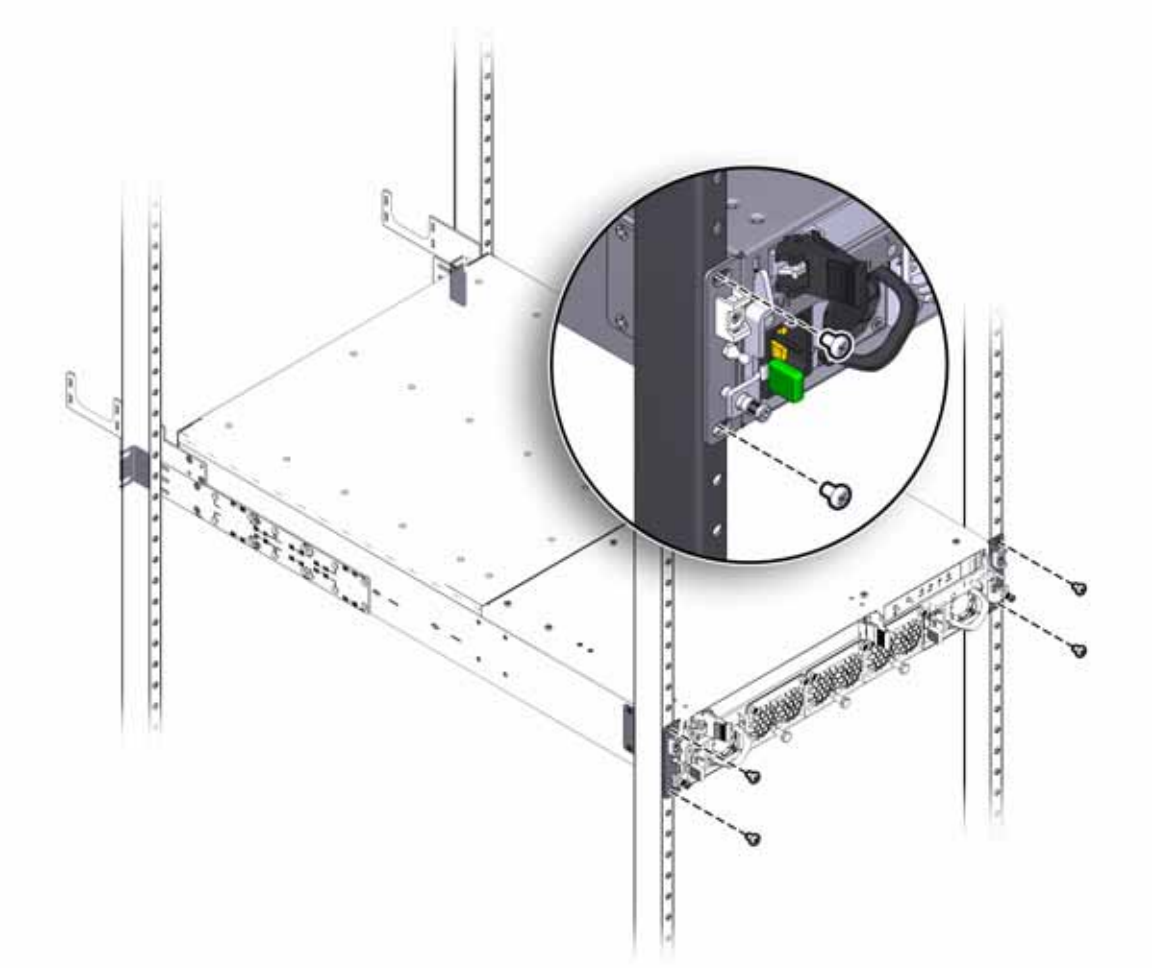

Figure 14 Securing the Front Mounting Brackets to the Equipment Rack

Caution

Make sure that all screws are tight before proceeding.

Caution

Vergewissern sie sich, dass alle schrauben dicht sind, bevor fortfahrend.

Caution

S'assurer que toutes les vis sont tendues avant de procéder.

Step 15 Install the I/O modules as documented in Installing an I/O Module.

At this point, the VP560 Fabric Director is installed in the rack. If you want to cable the Fabric Director and connect it to other network, storage, and host server resources, see the *Fabric Director Hardware and Host Drivers Installation Guide*.

Step 16 As an option, you can install the optional bezel on the front of the Fabric Director. The bezel mounting hardware and procedure for the VP560 is the same as for the VP780. If you want to install the bezel, see Step 23 on page 21 through Step 25 on page 21.

Installing an I/O Module

This section documents how to install the Fabric Director's I/O modules. See the appropriate section:

- Installing I/O Modules in a VP780
- Installing I/O Modules in a VP560

Installing I/O Modules in a VP780

The procedure in this section shows the installing an I/O Module in a VP780, but the same procedure applies to the VP560.

To perform this installation, you will need the following tools:

- A #2 Phillips (cross-head) screwdriver
- ESD wrist strap

Caution

The I/O modules must be installed by a trained service technician.
Also, you must observe proper ESD procedures when handling the I/O modules.

Caution

Die I/O moduln müssen von einem ausgebildeten mechniker installiert werden.
Auch müssen sie passende ESD verfahren beim behandeln die I/O moduln beobachten.

Caution

Les modules d'I/O doivent être installés par un technicien d'entretien entraîné.
Aussi, vous devez observer les procédures correctes d'ESD en contrôlant les modules d'I/O.

With the exception of the Management module, which must be installed in Slot 16 of the chassis, the I/O modules may be installed in any of the remaining 15 slots. All I/O modules may be installed or removed while the system is running.

Caution

When tightening screws, make sure to tighten them to lightly snug. Do not overtighten screws or they can break.

Caution

Beim festziehen schrauben, vergewissern sie sich, sie zu leicht fest festzuziehen. Macht overtighten schrauben nicht oder sie können brechen.

Caution

En resserrant des vis, s'assurer les resserrer à légèrement serré. Trop ne pas serrer des vis ou ils peuvent casser.

To install I/O modules, follow this procedure:

Step 1 Using a screwdriver, remove the I/O Module blank. Then, retrieve an I/O module.

Step 2 Install the I/O modules as shown in the following illustration (1). Ensure that the module's component side is facing towards the right edge of the chassis. Also, ensure that the module's top and bottom edges are correctly aligned with the upper and lower tracks at the left edge of each module slot. See Figure 15.

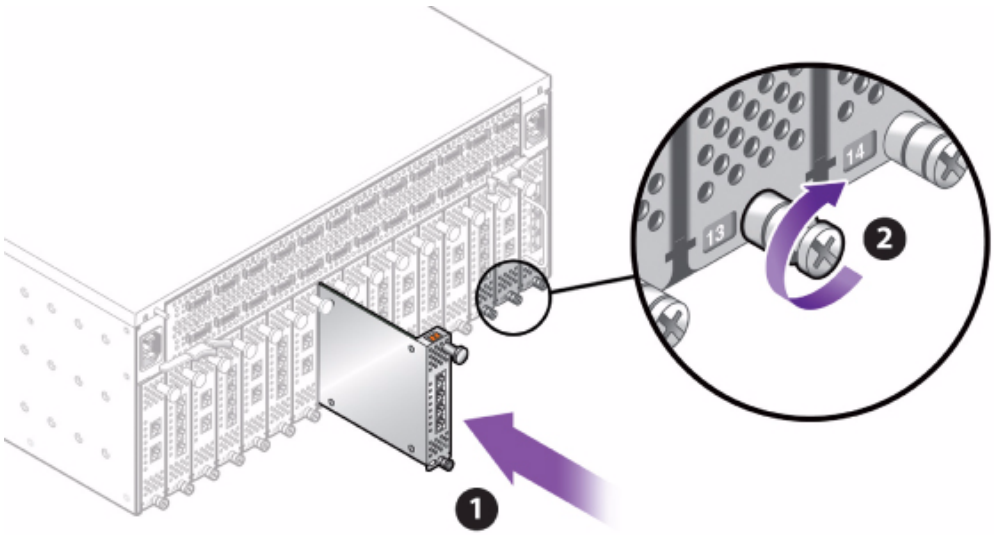

Figure 15 Installing an Oracle VP780 I/O Module

Step 3 Secure the module in the slot by tightening the securing screw (2), located at the bottom edge of the module's rear panel.

Step 4 Repeat this procedure as needed to install all I/O modules.

Installing I/O Modules in a VP560

The VP560 I/O Modules contain a locking mechanism (a quarter-turn Pawl) that is built-in to the module's handle. The lock is used to secure the module in place while it is inserted in the chassis, and has been designed with enough resistance that it cannot be unlocked or completely locked with your fingers. As a result, the module's handle is slotted to accept a screwdriver, which you will need to use to generate enough torque to lock or unlock the module.

By default, the VP560 is shipped with module blanks instead of the actual I/O Modules. I/O module blanks also have the locking mechanism. When you are initially installing I/O Modules, make sure to use the lock and unlocked positions appropriately—for example, make sure that you lock the modules when you are done installing them.

Xsigo recommends that you keep all module blanks.

Caution

When using the screwdriver to lock or unlock an I/O Module, make sure not to dull or mar the slot in the I/O Module’s handle.

Also, if you apply excessive force, it might be possible to over-rotate the handle, which will skew the I/O module’s open and closed positions. When using the screwdriver to lock or unlock an I/O Module, make sure to apply only enough force to the locking mechanism, and rotate the handle only enough to unlock or lock the module.

Caution

Beim benutzen des schraubenziehers zu verschließen oder einen I/O modul aufzuschließen, vergewissert sich nicht abzustumpfen oder den steckplatz im griff des I/O moduln zu beschädigen.

Auch wenn sie übermäßige kraft verwenden, dürfte es möglich zu über-dreht den griff sein, der die offenen und geschlossenen positionen des I/O moduln verzerren wird. Beim benutzen des schraubenziehers zu verschließen oder einen I/O modul aufzuschließen, vergewissert sich, nur genug kraft zum verschließenden mechanismus zu verwenden, und dreht den griff nur genug aufzuschließen oder den modul zu verschließen.

Caution

En utilisant le tournevis pour verrouiller ou ouvrir un I/O module, ne pas s'assurer atténuer ou gâcher l'entaille dans la poignée de module I/O.

Aussi, si vous appliquez la force excessive, ce pourrait être possible à sur-tourne la poignée, qui déformera le module d'I/O positions ouverts et fermés. En utilisant le tournevis pour verrouiller ou ouvrir un module I/O, s'assurer s'appliquer seulement assez de force au mécanisme de verrouillage, et tourner la poignée seulement assez pour ouvrir ou verrouiller le module.

The I/O module lock operates in a 90-degree arc, and the slot indicates the position of the module’s lock. Table 1 shows the positions for the locking I/O Modules.

Table 1 I/O Module Lock Positions

Position	Slot on Handle	Comments
Closed/ Locked	Vertical (90 degree angle)	When the module lock is closed, the module cannot be removed or inserted. In this position, the module is held in place by a metal tab that contacts the Fabric Director's frame and prohibits moving the module around in its slot. This position is for runtime operation of any I/O module in the VP560. If you must unlock the module, you can do so by using a screwdriver to turn the module handle 90 degrees clockwise until the slot in the handle is horizontal.
Open/ Unlocked	Horizontal (at a 0 degree angle)	When the module lock is open, the module can be removed and inserted. In this position, the module is held in its slot by only the module socket connecting to Oracle's Fabric Director's midplane. This position is not supported for runtime operating of any I/O module in the VP560. Modules should be unlocked only temporarily, for example during a module swap, then locked into place for runtime operation. Lock the module in place by turning the knob 90 degrees counterclockwise, so that the slot in the handle is vertical.

To install the I/O modules, follow this procedure:

Step 1 When handling I/O modules, make sure that you are using ESD safety precautions, such as a grounding strap that is properly attached to an earth ground source.

Step 2 Using a slotted screwdriver, unlock the I/O module blank by turning it 90 degrees clockwise (1) as shown in Figure 16 on page 36.

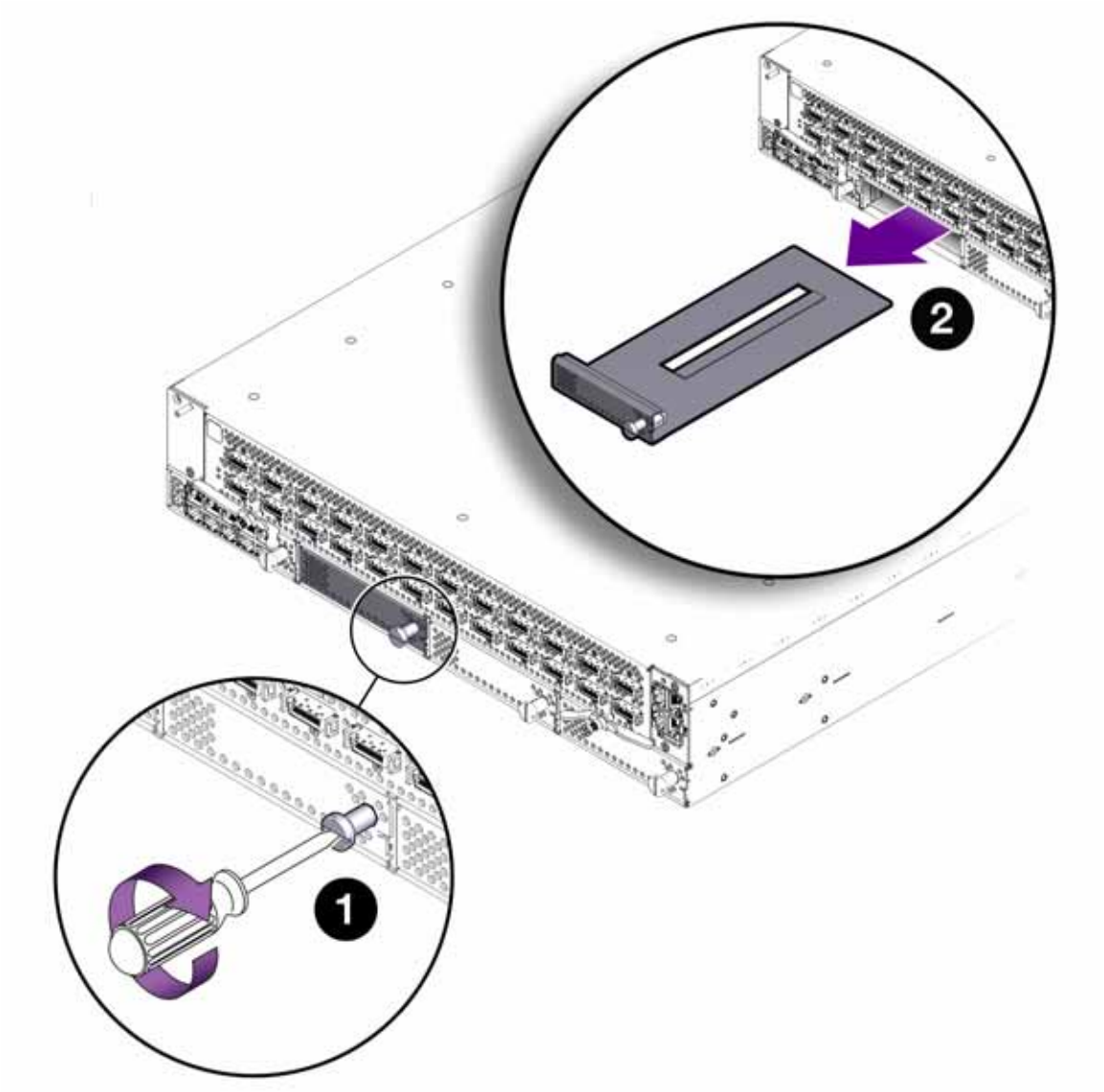

Figure 16 Removing an I/O Module Blank

Step 3 Grasp the module handle and remove the I/O module blank (2).

Step 4 Get the I/O module you will be installing, and make sure that the I/O module is in the unlocked position. Modules can be inserted into the VP560 only if they are in the unlocked position.

Step 5 Gently insert the I/O module (1) as shown in Figure 17 on page 37. Ensure that the I/O module is oriented so that the sheet metal side is facing down and the module's faceplate is facing you. Also, ensure that the module is aligned with the slot before sliding it into the chassis.

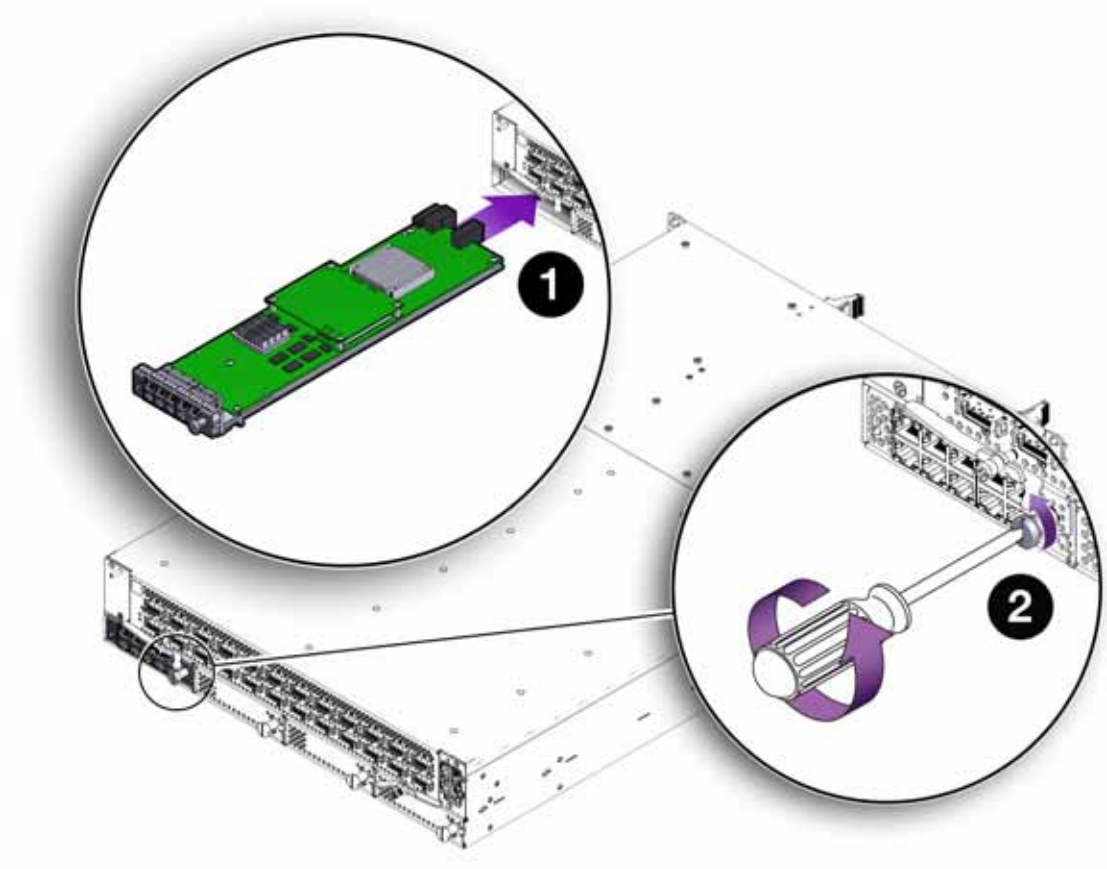

Figure 17 Inserting a VP560 I/O Module

When the I/O Module is almost completely inserted, you will feel some resistance, which is the I/O Module's connector meeting its midplane socket. Continue to apply gentle pressure until the connector is seated in the socket.

Step 6 When the module is completely inserted, it should lie flush with the face of the Oracle VP560.

Step 7 Using a slotted screwdriver, lock the I/O Module into the chassis (2) by turning the lock 90 degrees counterclockwise.

Step 8 Repeat this procedure as needed to remove all the I/O module blanks and install all the I/O modules.

This appendix contains a series of illustrations that show you where to install Oracle's Fabric Director's mounting brackets for specific rack sizes. In the following illustrations, an empty circle shows a screw hole or mount point that is not used, and a solid circle indicates a screw hole or mount point in which you will need a screw. The solid circle indicates a screw is inserted in that screw hole.

Nominal and Offset

These installation instructions use the terms nominal and offset:

- nominal means that a bracket is set so that it is flush with the chassis
- offset means that the bracket stands out from the chassis (is not flush). In these illustrations, offset is determined by counting the columns of mounting bracket screw holes that stand off from the chassis.

Figure 1 shows an example of nominal and offset mount.

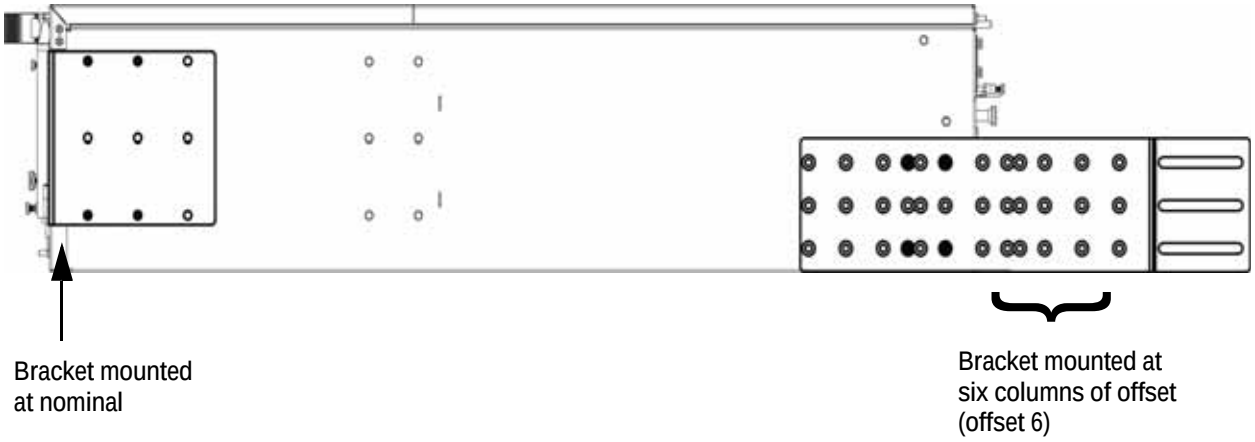

Figure 1 Example of Nominal and Offset Mount

Required Equipment

For installing mounting brackets on the Fabric Director chassis, you will need the following equipment:

- a #2 Phillips-head screwdriver
- 10-32 x .25" Phillips flat-head screws from bag 320-00015-00. You will use 4 screws per bracket for a total of 16.
- two rear mounting brackets (500-00003-00)
- two front side rails (500-00116-00)

Mounting Bracket Positions for Rack Depths

Oracle's Fabric Director can be installed in equipment racks of multiple depths. You can use this document as a way to determine where to install mounting brackets on the chassis. To use this document:

1. First, measure the depth of the rack
2. Then, compare that depth to the illustrations in the following sections. The measurements do not have to match exactly, but should be close without exceeding the documented rack depth. The slotted ends of the long side rails bracket will allow for some variance in rack depth.

See the appropriate section for your rack size:

In the following sections, an empty circle in an illustration shows a screw hole or mount point that is not used, and a solid circle indicates a screw hole or mount point that requires a screw.

Rack Depth 28.5 - 30

Figure 2 shows the bracket positions and screw installation points for the respective rack depth.

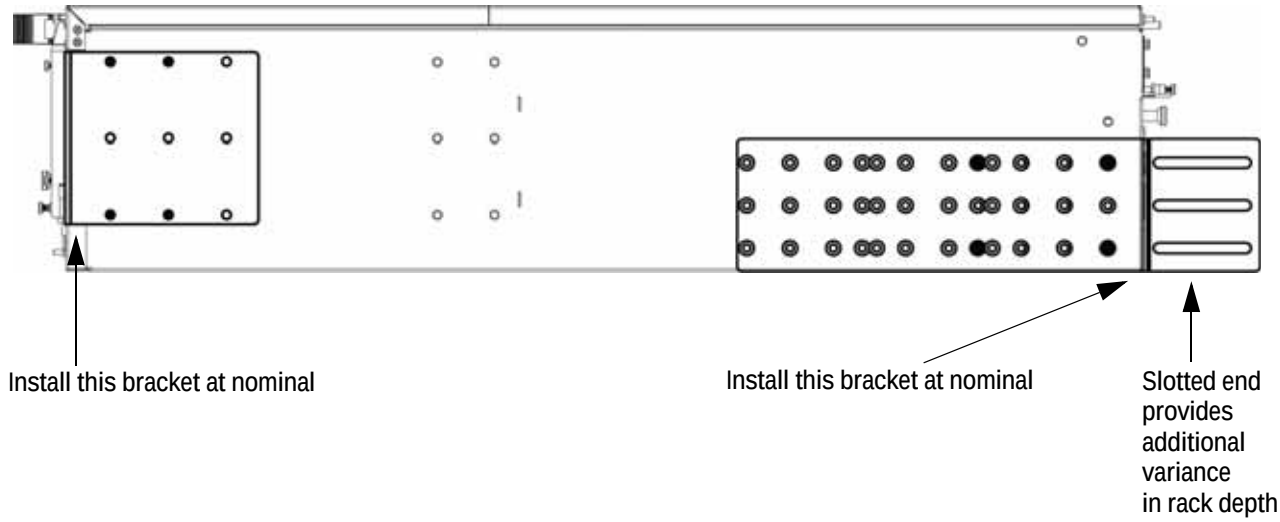

Figure 2 Bracket Mounting for 28.5” to 30” Rack

Rack Depth 29.5 - 31.25

Figure 3 shows the bracket positions and screw installation points for the respective rack depth.

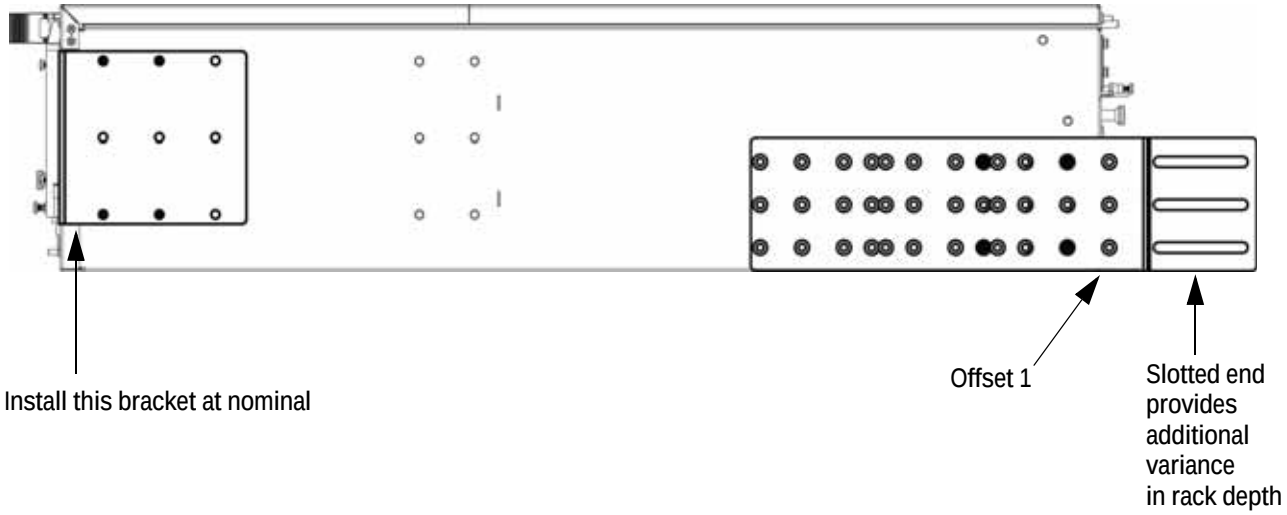

Figure 3 Bracket Mounting for 29.5” to 31.25” Rack

Rack Depth 30 - 31.5

Figure 4 shows the bracket positions and screw installation points for the respective rack depth.

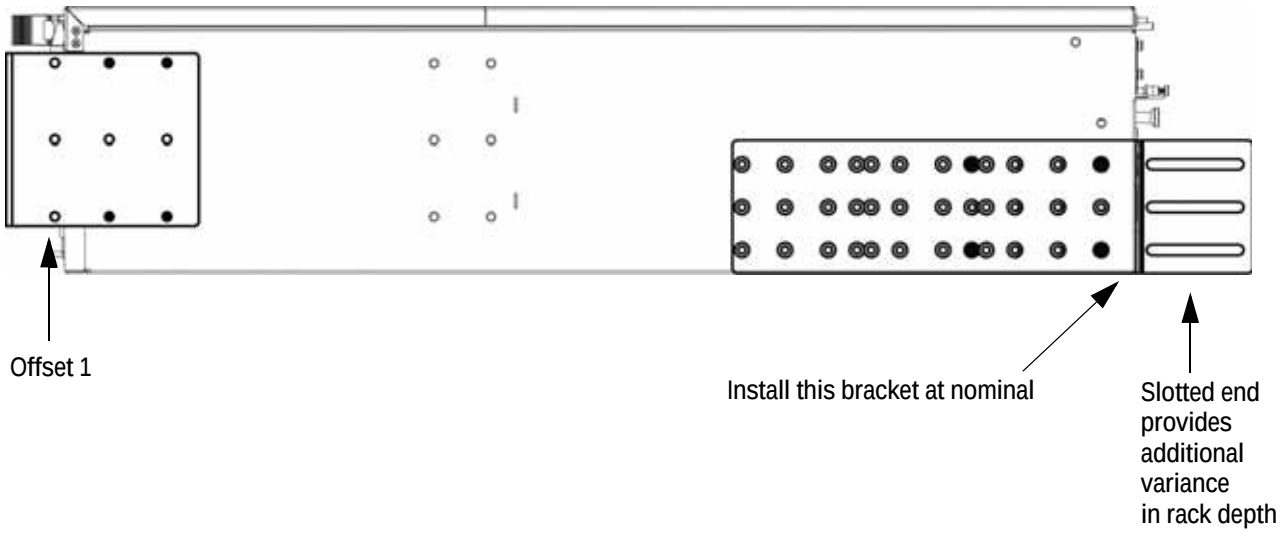

Figure 4 Bracket Mounting for 30” to 31.5” Rack

Rack Depth 30.5 - 32

Figure 5 shows the bracket positions and screw installation points for the respective rack depth.

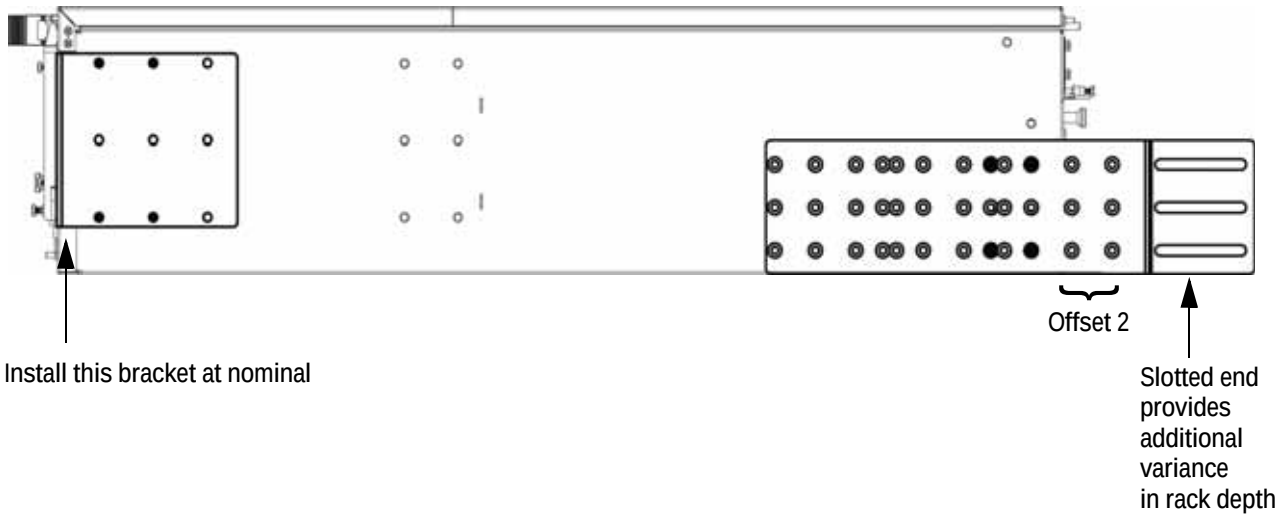

Figure 5 Bracket Mounting for 30.5” to 32” Rack

Rack Depth 31 - 32.5

Figure 6 shows the bracket positions and screw installation points for the respective rack depth.

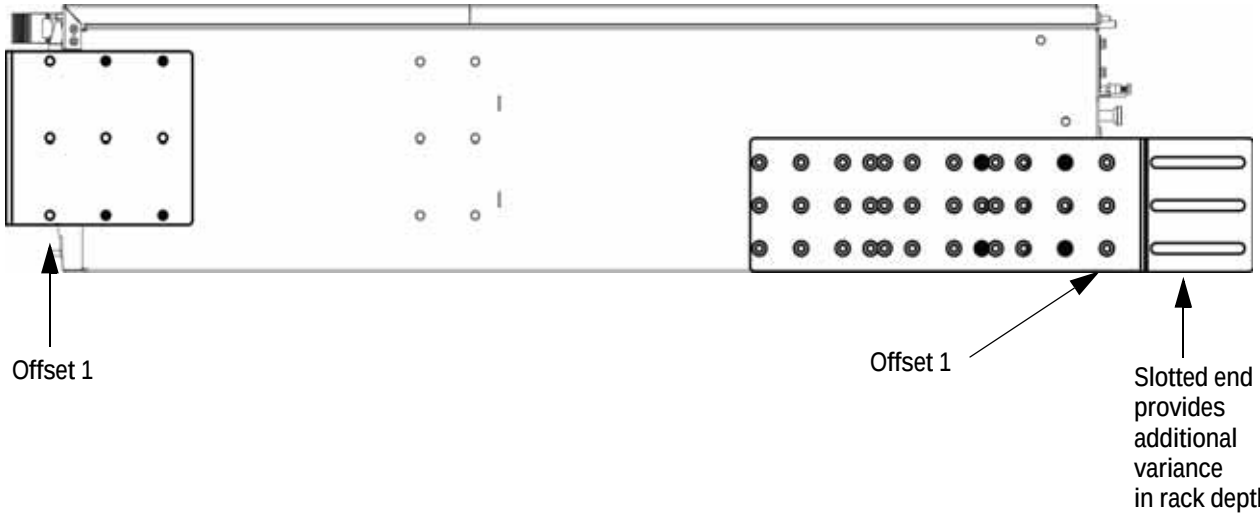

Figure 6 Bracket Mounting for 31” to 32.5” Rack

Rack Depth 31.5 - 33

Figure 7 shows the bracket positions and screw installation points for respective rack depth.

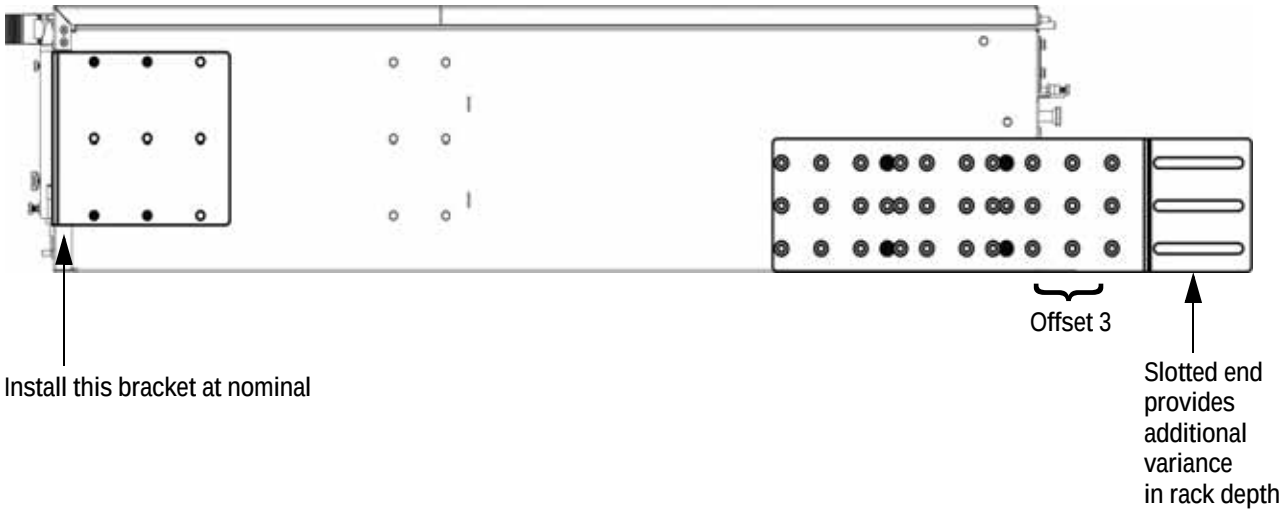

Figure 7 Bracket Mounting for 31.5” to 33” Rack

Rack Depth 32 - 34

Figure 8 shows the bracket positions and screw installation points for the respective rack depth.

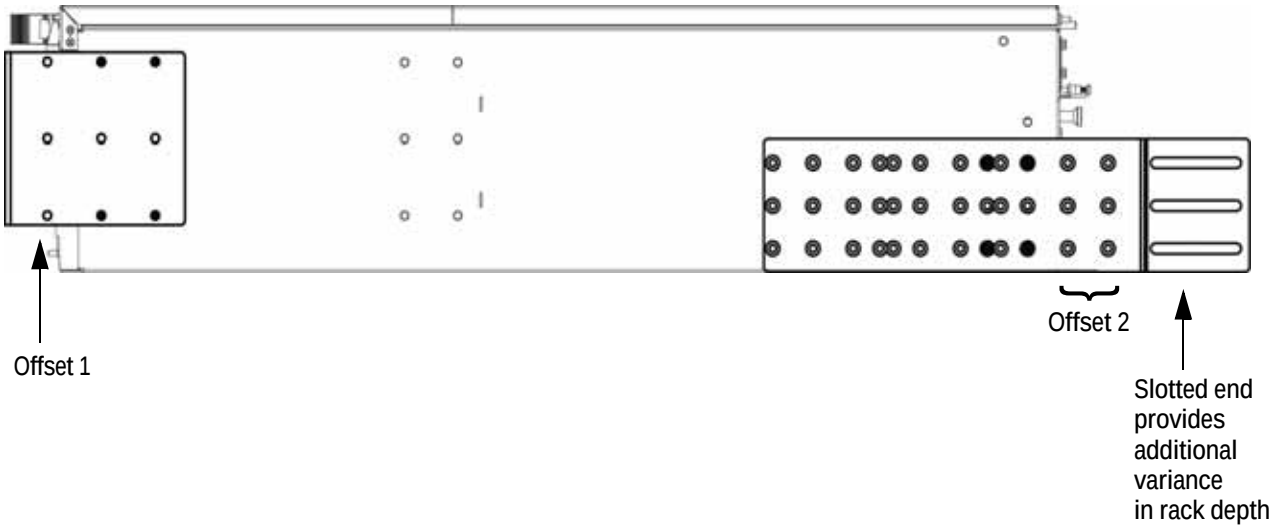

Figure 8 Bracket Mounting for 32” to 34” Rack

Rack Depth 32.5 - 34

Figure 9 shows the bracket positions and screw installation points for the respective rack depth.

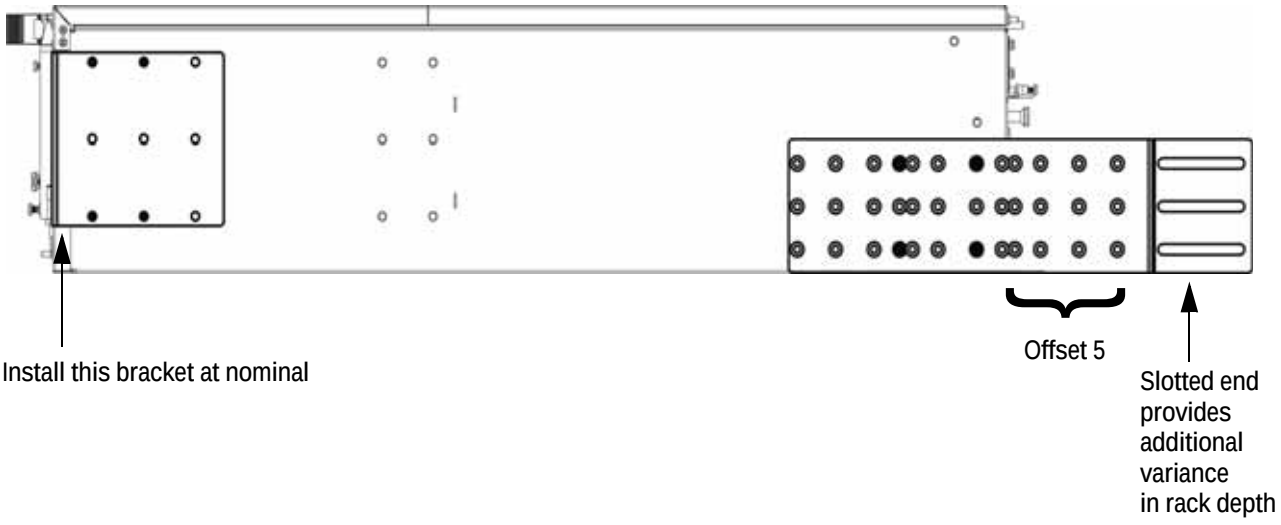

Figure 9 Bracket Mounting for 32.5” to 34” Rack

Rack Depth 33 - 34.5

Figure 9 shows the bracket positions and screw installation points for the respective rack depth.

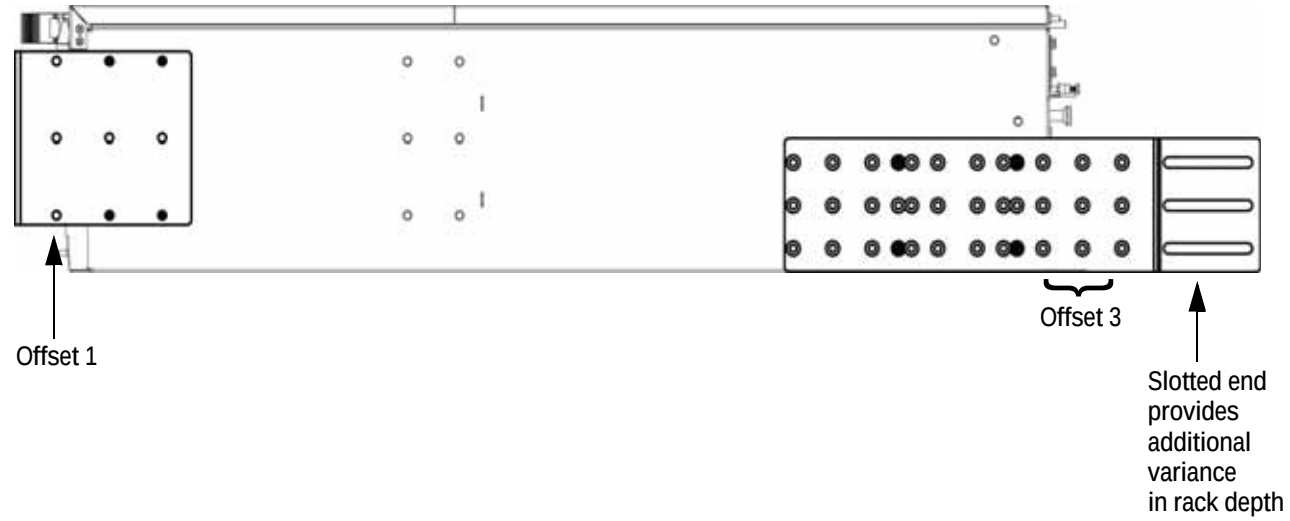

Figure 10 Bracket Mounting for 33” to 34.5” Rack

Rack Depth 33.5 - 35.5

Figure 11 shows the bracket positions and screw installation points for the respective rack depth.

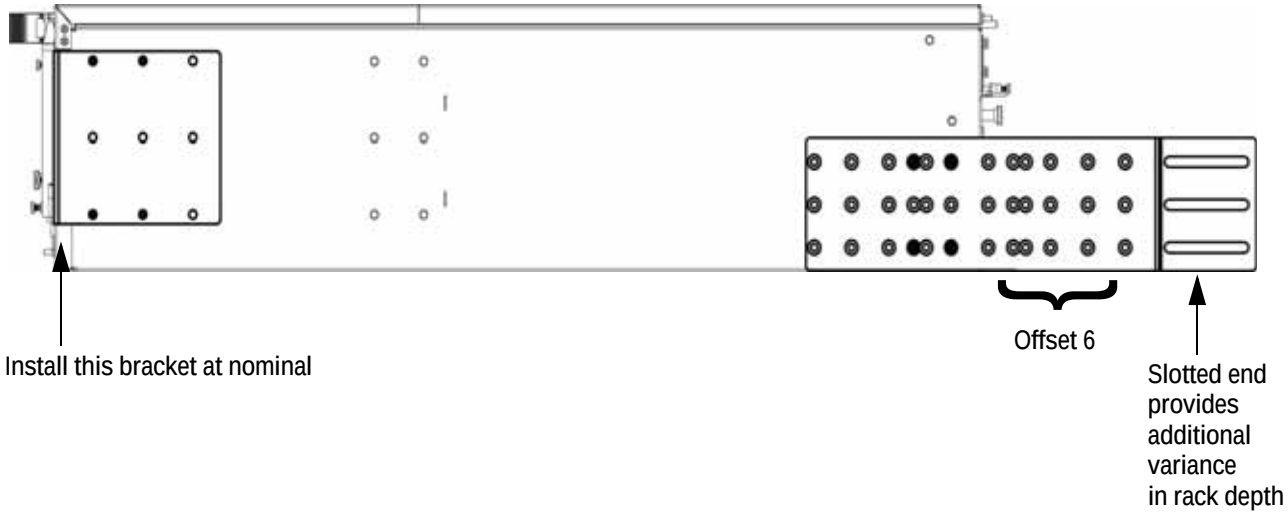

Figure 11 Bracket Mounting for 33.5” to 35.5” Rack

Rack Depth 34 - 35.5

Figure 9 shows the bracket positions and screw installation points for the respective rack depth.

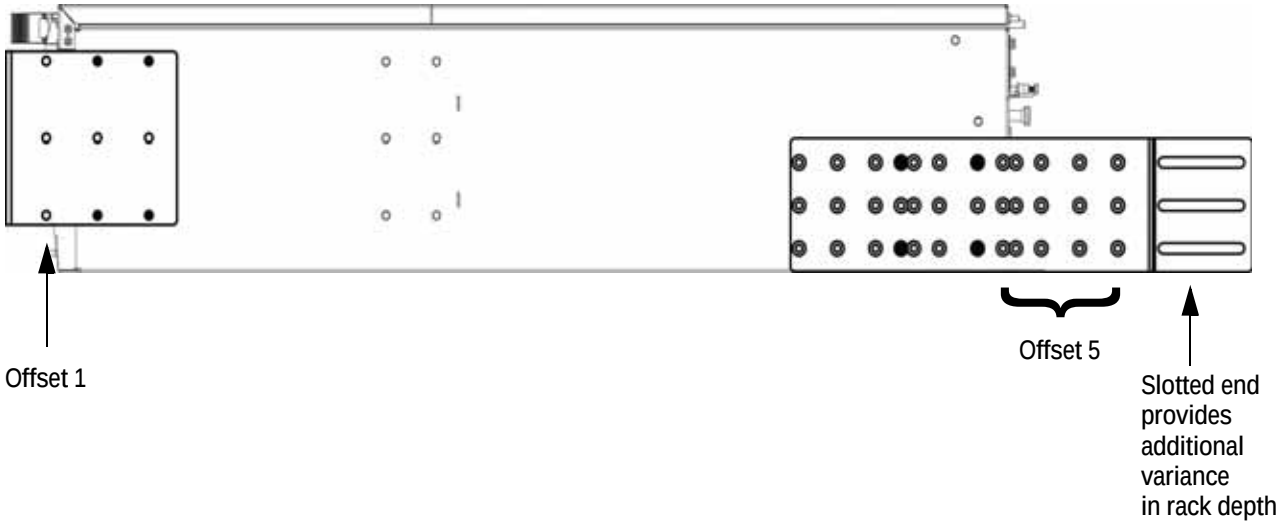

Figure 12 Bracket Mounting for 34” to 35.5” Rack

Rack Depth 34.5 - 36

Figure 13 shows the bracket positions and screw installation points for the respective rack depth.

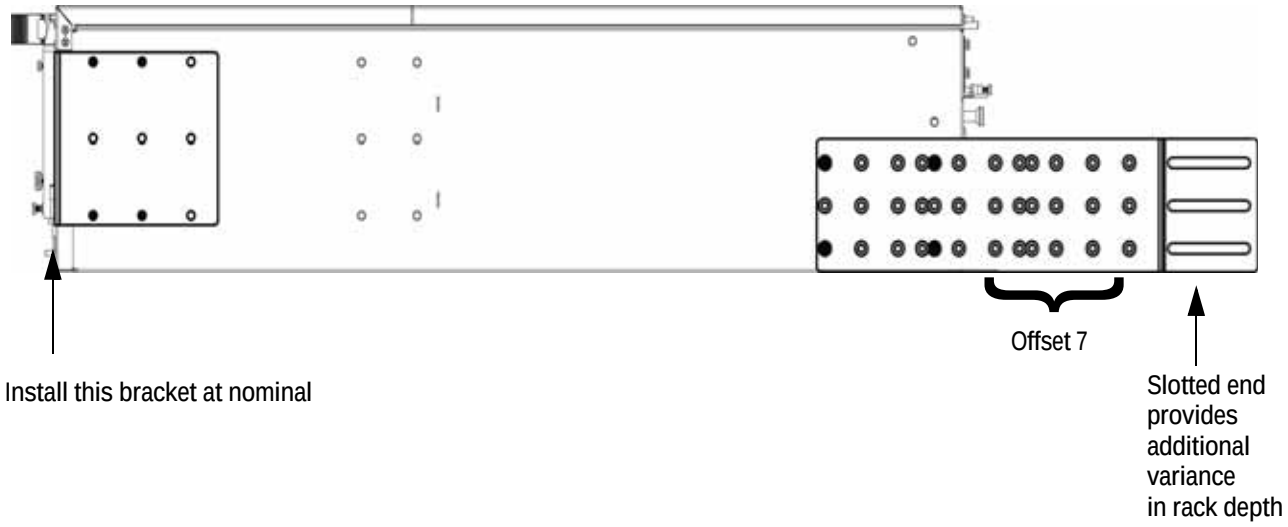

Figure 13 Bracket Mounting for 34.5” to 36” Rack

Rack Depth 35 - 37

Figure 14 shows the bracket positions and screw installation points for the respective rack depth.

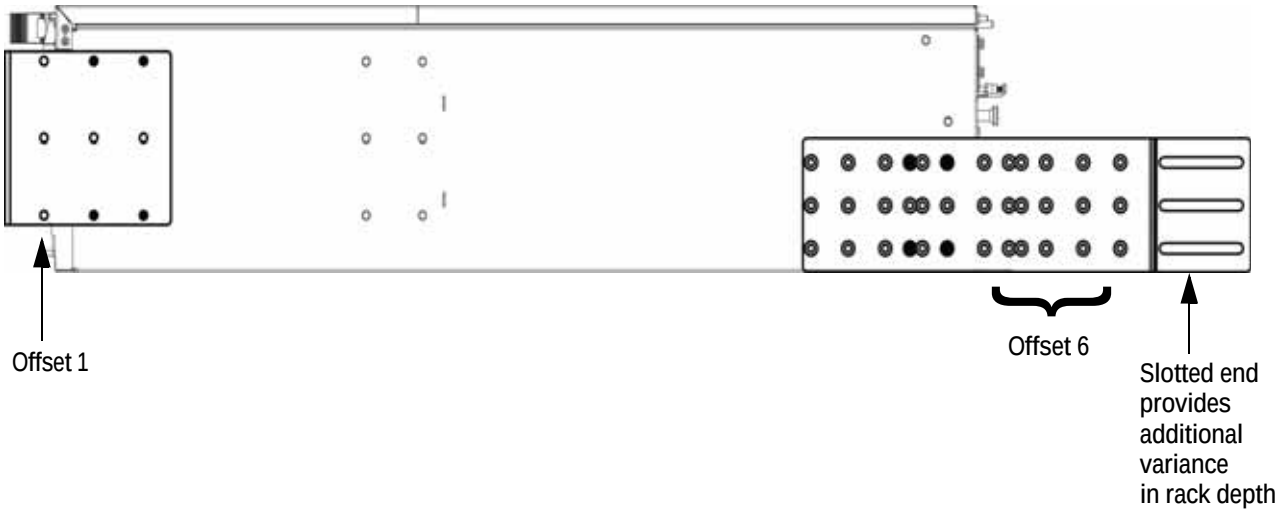

Figure 14 Bracket Mounting for 35” to 37” Rack

Rack Depth 35.5 - 37

Figure 14 shows the bracket positions and screw installation points for the respective rack depth.

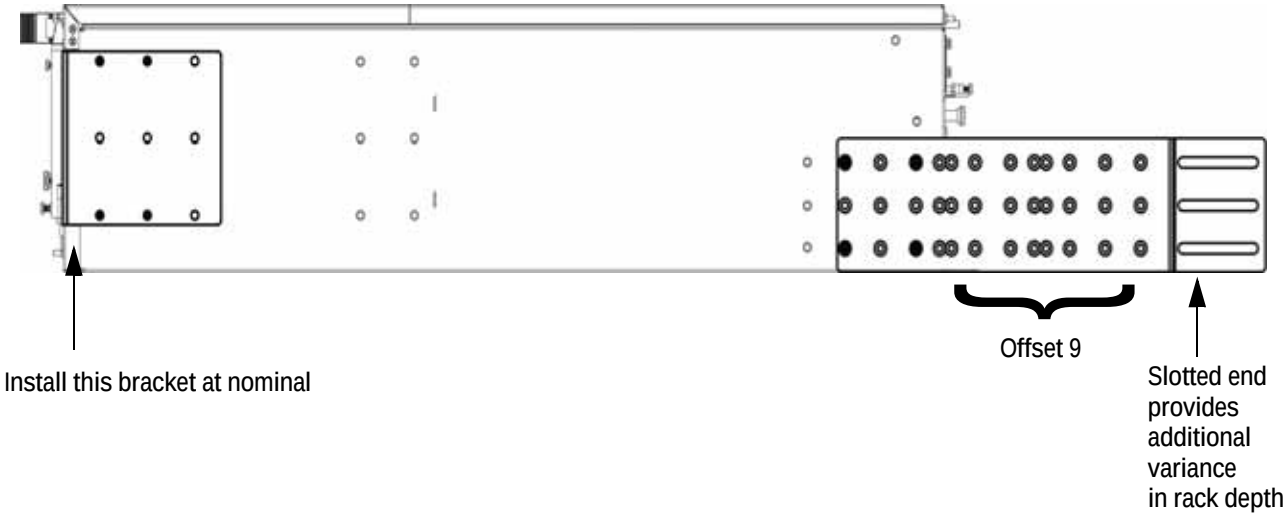

Figure 15 Bracket Mounting for 35.5” to 37” Rack

Rack Depth 36 - 37.5

Figure 16 shows the bracket positions and screw installation points for the respective rack depth.

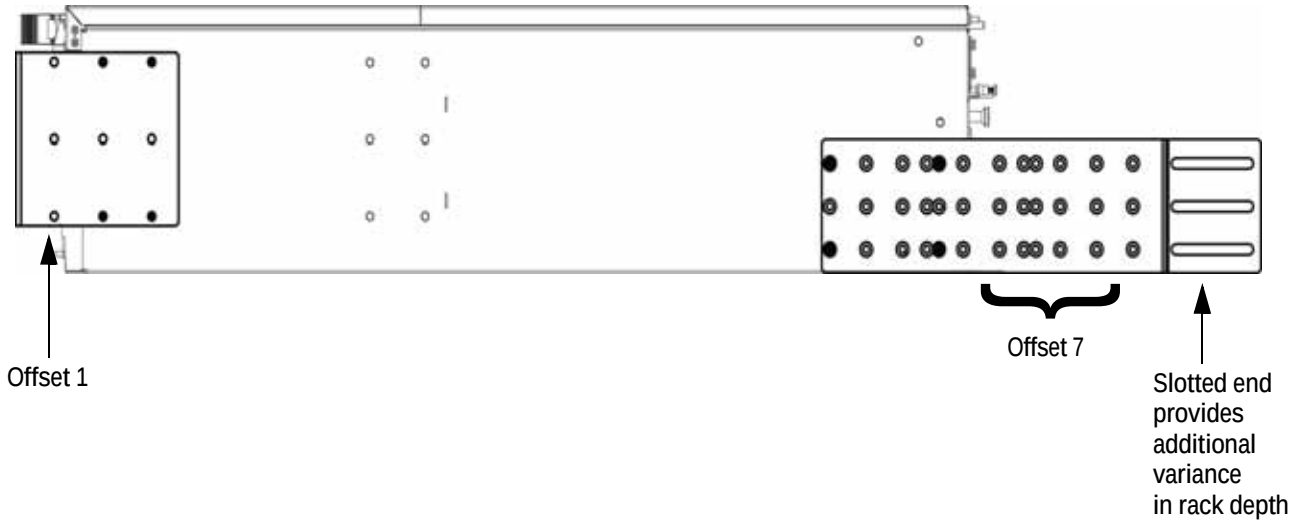

Figure 16 Bracket Mounting for 36” to 37.5” Rack

Rack Depth 36.5 - 38.5

Figure 16 shows the bracket positions and screw installation points the respective rack depth.

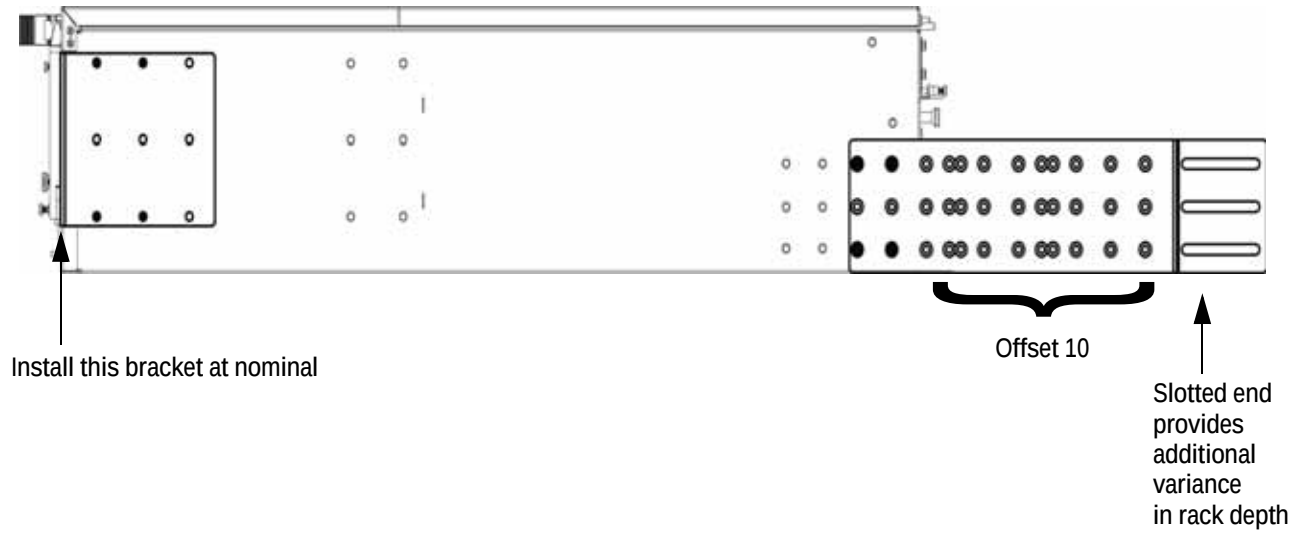

Figure 17 Bracket Mounting for 36.5” to 38.5” Rack

Rack Depth 37 - 38.5

Figure 16 shows the bracket positions and screw installation points for the respective rack depth.

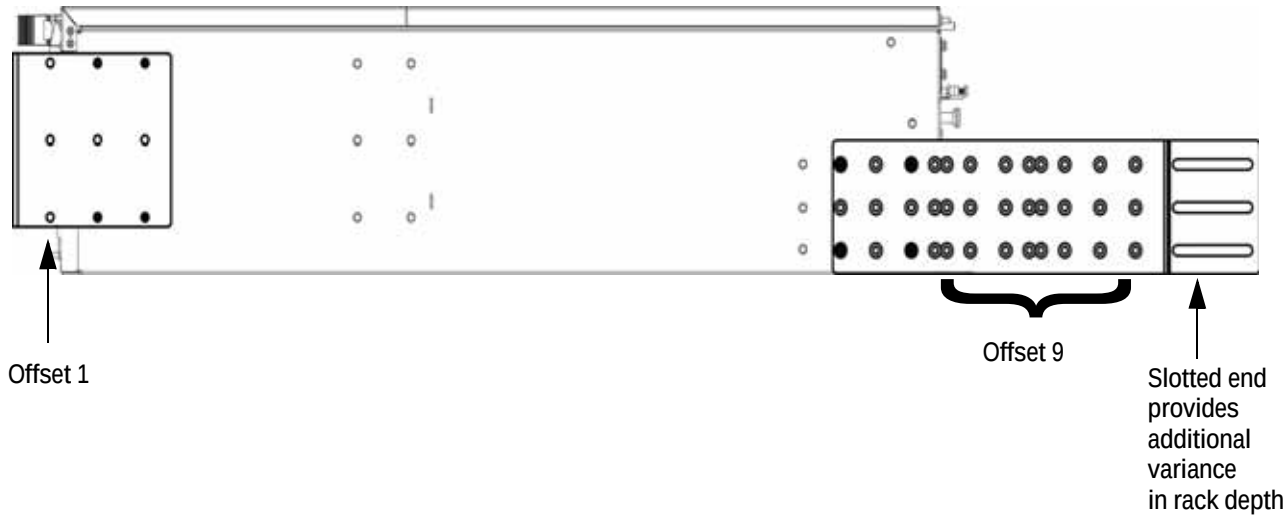

Figure 18 Bracket Mounting for 37” to 38.5” Rack

Rack Depth 38 - 40

Figure 16 shows the bracket positions and screw installation points for the respective rack depth.

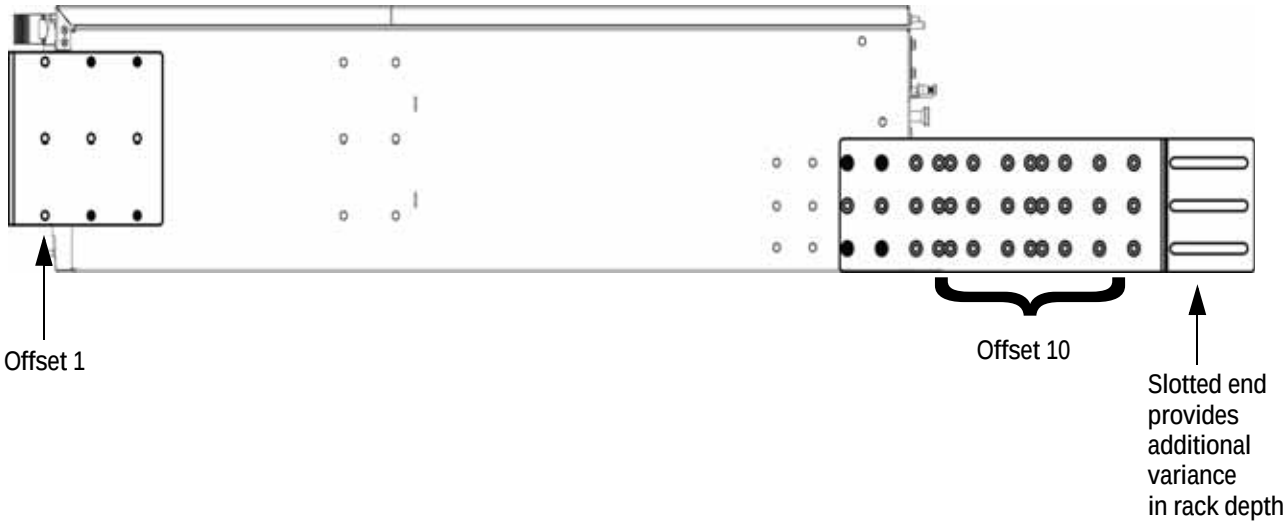

Figure 19 Bracket Mounting for 38” to 40” Rack

Appendix B: Safety and Regulatory Notices 51

This appendix contains the Safety and Regulatory Compliance statements for Oracle's VP780 and VP560 Fabric Director. Translations of this text are presented in mulitple languages in different sections of this document. See the following sections:

Safety and Compliance – English

This section documents the safety and regulatory compliance statements for Oracle's Fabric Director. This text is presented in additional languages in other sections of this document.

EMI Statement, United States of America (Class A)

"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 and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."

EMI Statement, Canada (Class A)

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

EMI Statement, Europe and Australia (Class A)

"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 adequate measures."

EMI Statement, Japan (Class A)

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。

"This is a Class A product based on the standard of the Voluntary Control Council For Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions."

Chassis Weight

- The VP780 Fabric Director chassis weighs 100 - 130 pounds (45 - 59 kilograms) depending on its configuration. Removing the chassis from the shipping container and installing it in an equipment rack requires a minimum of two people. Attempting to unpack and install this system alone could result in equipment damage or personal injury.
- The VP560 Fabric Director weighs approximately 55 pounds (25 Kg). As a result, two people will be required to install the VP560.

Chassis and Hardware – Maintenance

- All of Oracle's Fabric Director chassis components must be installed or removed by a qualified service technician. For customer training and service information, contact Xsigo Customer Support as documented in Technical Support Contact Information.
- When installing or replacing hardware, be careful when you are tightening screws. Make sure to tighten them to lightly snug. Do not overtighten screws, or you can strip or break them.
- When removing or installing the Fabric Board, make sure to pivot the Fabric Board handles in a horizontal plane. Do not apply upward or downward pressure on the Fabric Board's handles when you are removing the Fabric Board.
- For VP560 only, do not attempt to remove or replace the Management Module. If your VP560 Management module requires service, contact Xsigo Systems Customer Support for information about completing the service.
- For installing the SCP, when closing the SCP handles to seat the SCP, if the SCP handles do not easily arc towards each other, do not force them closed or you risk incorrectly seating the SCP. If the handles do not arc easily, gently push the handles outward to the open position, check that the SCP's screws are not interfering with the handles arching motion, then attempt to push the handles to the "closed" position again.

Chassis Cover – Electric Shock Hazard

To prevent electric shock, do not remove the cover. No user-serviceable parts inside. This unit contains hazardous electrical voltages and should only be opened by a trained and qualified technician.

Facility Ventilation – Air Vent Blockage

Air vents must not be blocked and must have free access to the room ambient air for cooling. Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Lithium Battery - Replacement and Disposal

CAUTION! Danger of explosion if the lithium battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Laser Caution for I/O Cards (CDRH-US)

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

Complies with 21 CFR Chapter 1, Subchapter J, Part 1040.10.

IEC 60825-1: 1993, A1: 1997, A2: 2001; IEC 60825-2: 2000

Replacement Laser Transceiver Modules

For continued compliance with the above laser safety Standards, only approved Class 1 modules from our approved vendors should be installed in the product. Contact Xsigo Customer Support (+1-408-736-3013) for approved-vendor contact information.

Power Cord Set Requirements – General

The requirements listed below are applicable to all countries:

The length of the power cord set must be at least 6.00 feet (1.8 m) and a maximum of 9.75 feet (3.0 m).

All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country where the power cord set will be used.

The power cord set must have a minimum current capacity of 13A and a nominal voltage rating of 125 or 250 V AC, as required by each country's power system.

The appliance coupler on the power cord must meet the mechanical configuration of an EN 60320 / IEC 60320 Standard Sheet C20 connector, which is the connector on the Fabric Director. The C20 connector supports a C19 plug as the mating part on the power cord that connects to the Fabric Director.

Power Cord — Multiple Cords

Warning! This product may have multiple AC power cords installed. To de-energize this equipment, disconnect all power cords from the device.

AC Power Requirements – Power Source and Circuits

- For a VP780 installation, verify that your AC power source, as well as any equipment installed between the power source and the Fabric Director (such as surge suppressors, plug bars, and so on) meet these requirements:
  - 100 - 127 / 200 - 240 V AC
  - 12 - 7.68 A
  - 47 - 63 Hz
  - 1220 W (maximum)
- For a VP560 installation, Verify that your AC power source, as well as any equipment installed between the power source and the Fabric Director (such as surge suppressors, plug bars, and so on) meet these requirements:
  - 100 - 127 / 200 - 240 V AC
  - 4 - 8.5 A
  - 50 - 60 Hz
  - 750 W (maximum)

VP560 Power Cord — Main AC Power Disconnect

For the VP560 only, input power cords are used as the main AC power disconnect. As a result, the facility power socket outlet shall be installed near the equipment and shall be easily accessible.

Power Cord Set Requirements – Specifics By Country

United States (UL), Canada (CSA)

The flexible power cord set must be UL Listed and CSA Certified, minimum Type SVT or equivalent, minimum No. 18 AWG, with 3-conductors that includes a ground conductor. The wall plug must be a three-pin grounding type, such as a NEMA Type 5-15P (rated 15A, 120V) or Type 6-15P (rated 15A, 250V).

Europe (Austria (OVE), Belgium (CEBEC), Denmark (DEMKO), Finland (SETI), France (UTE), Germany (VDE), Italy (IMQ), Netherlands (KEMA), Norway (NEMKO), Sweden (SEMKO), Switzerland (SEV), U.K. (BSI/ASTA)

The flexible power cord set must be <HAR> Type H03VV-F, 3-conductor, minimum 0.75mm^2 conductor size. Power cord set fittings, particularly the wall plug, must bear the certification mark of the agency responsible for evaluation in the country where it is being used, with examples listed above.

Australia (DFT/SAA)

Cord is as described under “Japan (PSE)” immediately below. Pins in the power plug must be with the sheathed, insulated type, in accordance with AS/NZS 3112:2000.

Japan (PSE)

The appliance coupler, flexible cord, and wall plug must bear a “PSE” Mark in accordance with the Japanese Denan Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 0.75 mm^2 conductor size. The wall plug must be a grounding type with a Japanese Industrial Standard C8303 (15A, 125V) configuration.

Sicherheit und Erfüllung — Deutsch

Dieser Abschnitt dokumentieren die E/AE Direktor Sicherheit und Erfüllungsaussagen auf Deutsch. Übersetzungen dieses Textes sind in anderen Sprachen in anderen Abschnitten dieses Dokuments überreicht.

EMI Aussage, Vereinigte Staaten (Klasse A)

„Anmerkung: Diese ausrüstungen sind geprüft worden und sind gefunden worden, sich an die grenzen für eine Klasse Eine digitale vorrichtung entsprechend FCC Part 15 der FCC Rules. Diese grenzen werden entworfen, vernünftigen schutz gegen schädliche störung zu versorgen, als die ausrüstungen in einer gewerblichen umwelt bedient ist. Diese ausrüstungen erzeugen, gebräuche, und kann radiofrequenzenergie ausstrahlen und, wenn nicht installiert und benutzt gemäß dem anweisungshandbuch, darf verursachen, dass schädliche atörung per funkkommunikationen durchgibt. Betrieb dieser ausrüstungen in einem wohngebiet ist wahrscheinlich, schädliche störung zu verursachen, in der den verbraucher verpackt, wird erfordert werden, die störung an seiner eigenen ausgabe zu korrigieren“.

EMI Aussage, Kanada (Klasse A)

Diese Klasse A digitaler apparat sich an Kanadisch ICES-003 anhält.

Diese Klasse A digitaler apparat sich an Kanadisch NMB-003 anhält.

EMI Aussage, Europa und Australien (Klasse A)

„Warnung - Dies ist eine Klasse A produkt. In einer innenumwelt darf dieses produkt radiostörung verursachen, in der den verbraucher verpackt, darf erfordert werden, angemessene maßnahme zu nehmen“.

EMI Aussage, Japan (Klasse A)

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„Dies ist ein Klasse A Produkt auf dem standard von der freiwilligen steuerung rat für störung durch informationstechnologieausrüstungen (VCCI) basiert hat. Wenn diese ausrüstungen in einer innenumwelt benutzt ist, darf radiostörung entstehen. Wenn solche achwierigkeit stattfindet, darf der verbraucher erfordert werden, korrigierende handlungen zu nehmen“.

Chassisgewicht

- Der VP780 Fabric Director chassis wiegt 100 - 130 pfund (45 - 59 Kilogramm) hängend von seiner konfiguration ab. Entfernen des chassis vom lieferungsbehälter und installierend es in einem geräteständer erfordert mindestens zwei leute. Versuchen auszupacken und dieses system zu installieren, könnte allein in geräteschaden oder persönlicher verletzung resultieren.

- Der VP560 Fabric Director chassis wiegt ungefähr 55 pfund (25 Kg). Demzufolge werden zwei leute erfordert werden, der VP560 zu installieren.

Chassis und Hardware – Wartung

- Alles Fabric Director chassis teile müssen installiert werden oder müssen von einem qualifizierten techniker entfernt werden. Für kunden bildend und dienstinformationen, kontakt Xsigo Systems kundendienst aus als dokumentierten in Technical Support Contact Information.
- Beim installieren oder hardware zu ersetzen, seien sie vorsichtig, wenn sie schrauben festziehen. Vergewissern sie sich, sie zu leicht fest festzuziehen. Macht overtighten schrauben nicht, oder sie können abziehen oder können sie brechen.
- Beim entfernen oder den stoffausschuss zu installieren, vergewissern sie sich, die stoffausschussgriffe in einem horizontalen flugzeug zu drehen. Verwenden sie nicht aufwärts oder druck nach unten auf den griffen des stoffes susschusses, wenn sie den stoffausschuss entfernen.
- Für den VP560 nur, versucht zu entfernen oder nicht den leitungsmodul zu ersetzen. Wenn ihr VP560 leitung modul dienst erfordert, kontakt Xsigo Systems kundendienst für informationen über vollenden des dienstes.
- Dem zum installieren von des SCP beim schließen der SCP griffe, der SCP zu setzen, wenn die SCP griffe nicht leicht bogen nach einander machen, zwingt sie haben nicht geschlossen oder sie riskieren falsch setzend der SCP. Wenn die griffe nicht bogen leicht machen, sanft stoßen sie die griffe nach außen zur offenen position, prüfen sie, den die schrauben des SCP sich in die griffe nicht einmischen, die bewegung wölben, dann versuchen, die griffe zur „geschlossenen“ position wieder zu stoßen.

Chassisdecke – Elektroschockgefahr

Um elektroschock zu verhindern, entfernt die decke nicht. Kein vom benutzer haltbar partrs hinein. Diese einheit enthält gefährliche elektrische spannungen und hat nur wird geöffnet von einem ausgebildeten und qualifizierten techniker geschält.

Einrichtungsbelüftung – Luft Reagieren Sie Blockade Ab

Luftbelüftungsschlitze müssen nicht gehemmt werden und müssen freien zugriff auf die simmer umgebungsluft für das abkühlen haben von. Installation der ausrüstungen in einem ständer shoud ist solcher dass der betrag des luftablaufs hat erfordert für sicheren betrieb des quipment ist nicht beeinträchtigt.

Lithiumsbatterie - Ersetzung und Verfügung

ACHTUNG! Gefahr der explosion, wenn die lithiumsbatterie falsch ersetzt ist. rrsetzen sie nur mit dem gleichen oder gleichwertigen typ, der vom hersteller empfohlen wird. Verfügen sie über benutzte batterien gemäß den anweisungen des herstellers.

Laserachtung für I/O Karten (CDRH-US)

Gebrauch der steuerungen oder regelungen oder leistung von verfahren anders als die angegebenes darf hierin in gefährliche bestrahlung aussetzung resultieren.

Hält sich an 21 CFR Kapitel 1, Subchapter J, Teil 1040,10 an.

IEC 60825-1: 1993, A1: 1997, A2: 2001; IEC 60825-2: 2000

Ersetzung Laser Sende- und Empfangsgerät Moduln

Für hat erfüllung mit den oben lasersicherheitsstandards fortgesetzt, sollte nur genehmigter Klasse A modul von unseren genehmigten verkäufern im produkt installiert werden. Kontaktieren sie Xsigo Systems kundendienst (+1-408-736-3013) für haben genehmigt-verkäuferkontaktdetails.

Betreiben Sie Schnur Satz Bedingungen – General

Die bedingungen, die unter aufgeführt werden, sind zutreffend zu allen ländern:

Die länge des netzkabelssatzes muss wenigstens 6,00 Füße (1,8 m) und höchstens 9,75 Füße (3,0 m) sein.

Alle netzkabelsätze müssen von einer annehmbaren beglaubigten agentur genehmigt werden, die verantwortlich ist für abschätzung auf dem land, wo der netzkabelsatz benutzt werden wird.

Der netzkabelsatz muss eine mindest jetzige kapazität der 13A und einer nominellen spannungsbewertung von 125 oder 250 V AC, als erforderlich durch das kraftsystem jedes landes haben.

Die gerätkupplung auf dem netzkabel muss die mechanische konfiguration von einem EN 60320 treffen / IEC 60320 normale blätter C20 verbinder, der der verbinder auf dem Fabric Director ist. Der C20 verbinder unterstützt einen C19 stöpsel als das, das teils auf dem netzkabel verbindet, das zum Fabric Director verbindet.

Betreiben Sie Schnur — Mehrfache Schnüre

Warnung! Dieses produkt darf mehrfache wechselstromschnüre lassen installieren. Zu de diese ausrüstungen kräftigt, schaltet alle netzkabel von der vorrichtung ab.

Wechselstrom Bedingungen – Betreiben Sie Quelle und Kreisläufe

- Für eine VP780 installation beglaubigen sie dass ihre wechselstromquelle, sowie irgendeine ausrüstungen zwischen der stromquelle und dem Fabric Director (wie zum beispiel wogenentstörer, stöpselstäbe, und so weiter) installiert haben, trifft diese bedingungen:
  - 100 - 127 / 200 - 240 V AC
  - 12 - 7,68 A
  - 47 - 63 Hz
  - 1220 W (maximum)
- Für eine VP560 installation beglaubigen sie dass ihre wechselstromquelle, sowie irgendeine ausrüstungen zwischen der stromquelle und dem Fabric Director (wie zum beispiel wogenentstörer, stöpselstäbe, und so weiter) installiert haben, trifft diese bedingungen
  - 100 - 127 / 200 - 240 V AC
  - 4 - 8,5 A
  - 50 - 60 Hz
  - 750 W (maximum)

VP560 Netzkabel — Hauptwechselstrom Schalten Sie AC

Für den VP560 nur, gibt netzkabel sind benutzt ein, während der hauptwechselstrom abschaltet. Demzufolge wird der einrichtungskraftsteckdosenauslauf nahe an den ausrüstungen installiert werden und wird leicht zugänglich sein.

Betreiben Sie Schnur Satz Bedingungen – Einzelheiten Durch Land

Vereinigte Staaten (UL), Kanada (CSA)

Der flexible setzkabelsatz muss sein hat UL aufgeführt und CSA hat, mindesttyp SVT oder gegenwert, mindest Nr. 18 AWG, mit 3 bescheinigt-führer, die eine erde einschließen. Der wandstöpsel muss ein dreipoliger erdungstyp sein, wie zum Beispiel ein NEMA 5-15P (hat 15A, 120V eingeschätzt) oder Typ 6-15P (hat 15A, 250V) eingeschätzt.

Europa (Österreich (OVE), Belgien (CEBEC), Dänemark (DEMKO), Finnland (SETI), Frankreich (UTE), Deutschland (VDE), Italien (IMQ), Niederlande (KEMA), Norwegen (NEMKO), Schweden (SEMKO), die Schweiz (SEV), U. K. (BSI/ASTA)

Der flexible netzkabelsatz muss sein <HAR> tippen sie H03VV-F, 3-führer, mindest 0.75mm2 führer größe. Betreiben sie schnur feste anschlüsse, besonders den wandstöpsel, müssen tragen die bescheinigungsmarkierung der agentur, die verantwortlich ist für abschätzung auf dem land, wo es benutzt wird, mit beispielen, die oben aufgeführt werden.

Australien (DFT/SAA)

Schnur ist als beschrieben unter „Japan (PSE)“ sofort unten. Nadeln im kraftstöpsel müssen mit dem umgemantelten, isolierten typ, gemäß AS/NZS 3112:2000.

Japan (PSE)

Die gerätkupplung, flexible schnur, und wandstöpsel müssen einen „PSE“ mark gemäß den Japanern Denan Gesetz tragen. Die flexible schnur muss typ VCT oder VCTF, 3-führer sein, 0,75mm^2 führer größe. Der wandstöpsel muss ein erdungstyp mit einem Japanischen Industriell Standard C8303 (15A, 125V) konfiguration sein.

La Sécurité et la Conformité — Français

Cette section documente la sécurité de Fabric Director et les déclarations de conformité dans l'français. Les traductions de ce texte sont présentées dans les autres langues dans les autres sections de ce document.

La Déclaration d'EMI, Etats-Unis d'Amérique (Classe A)

« NOTE : Cet équipement a été essayé et a été trouvé pour se conformer aux limites pour une Classe A appareil numérique conformément à la partie 15 des Règles de FCC. Ces limites sont conçues pour fournir la protection raisonnable contre l'intervention nuisible quand l'équipement est fonctionné dans un environnement commercial. Cet équipement produit, les usages, et peut rayonner l'énergie de radiofréquence et, si pas installé et utilisé conformément au manuel d'utilisation, peut causer l'intervention nuisible pour transmettre par radio des communications. L'opération de cet équipement dans un secteur résidentiel va en toute probabilité causer l'intervention nuisible dans laquelle reconnaît l'utilisateur sera exigé corriger l'intervention à sa propre dépense ».

La Déclaration d'EMI, Canda (Classe A)

Cette Classe A appareil numérique se conforme aux ICES Canadiennes-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

La Déclaration d'EMI, Europe et Australie (Classe A)

« L'avertissement - Ceci est une Classe A produit. Dans un environnement domestique que ce produit peut causer l'intervention de radio dans laquelle reconnaît l'utilisateur pourrait être exigé prendre des mesures suffisantes ».

La Déclaration d'EMI, le Japon (Classe A)

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。

« Ceci est une Classe A produit fondé sur la norme du Conseil de Contrôle Volontaire Pour l'Intervention par l'Equipement d'Informatique (VCCI). Si cet équipement est utilisé dans un environnement domestique, un dérangement de radio peut se présenter. Quand tel ennui arrive, l'utilisateur pourrait être exigé prendre des actions correctives ».

Poids de Châssis

- Le VP780 Fabric Director châssis pèse 100 - 130 livres (45 - 59 kilogrammes) dépend de sa configuration. Enlever le châssis du récipient d'expédition et l'installant dans une étagère d'équipement exige au moins deux gens. Tenter de déballer et installer ce système pourrait avoir pour résultat seul des dommages d'équipement ou la blessure personnelle.
- Le VP560 Fabric Director châssis pèse approximativement 55 livres (25 Kg). Par conséquent, deux gens seront exigés installer le VP560.

Le châssis et le Matériel – l'Entretien

- Tous les composants de châssis de I/O Directeur doivent être installés ou doivent être enlevés par un technicien d'entretien qualifié. Pour l'entraînement de client et les informations de service, contacter Xsigo Systems le Soutien Clientèle comme documenté dans Technical Support Contact Information.
- En installant ou remplacer du matériel, faire attention quand vous resserrez des vis. S'assurer les resserrer à légèrement serré. Trop ne pas serrer des vis, ou vous pouvez dépouiller ou pouvez les casser.
- En enlevant ou installer le Fabric Board, assurer se pivoter les poignées de Fabric Board dans un avion horizontal. Ne pas appliquer de la pression ascendante ou descendante sur les poignées du Fabric Board quand vous enlevez le Fabric Board.
- Pour le VP560 seulement, ne pas tenter d'enlever ou remplacer le Module de Direction. Si votre VP560 module de Direction exige le service, les Xsigo Systems de contact Soutien Clientèle pour les informations de compléter le service.
- Pour installer le SCP, en fermant les poignées de SCP pour placer le SCP, si les poignées de SCP ne font pas facilement l'arc vers chacun autre, ne pas forcer les a fermés ou vous risquez inexactement plaçant le SCP. Si les poignées ne font pas l'arc facilement, doucement pousser les poignées en dehors à la position ouverte, vérifier que les vis de SCP n'interfèrent pas avec les poignées qui arquer le mouvement, alors tenter de pousser les poignées à la position « fermée » encore.

La Couverture de châssis – le Danger de Décharge Electrique

Pour empêcher la décharge électrique, ne pas enlever la couverture. Aucun partrs utilisateur-utilisable à l'intérieur. Cette unité contient des tensions électriques hasardeuses et écalé est seulement ouvert par un technicien entraîné et qualifié.

La Ventilation de facilité – l'Obstruction de Prise d'air

Les prises d'air ne doivent pas être bloquées et doivent avoir l'accès libre à la pièce l'air ambiant pour le refroidissement. L'installation de l'équipement dans un shoud d'étagère tel est que la quantité de flux d'air exigé pour l'opération sûre du quipment n'est pas compromise.

La Batterie au lithium - le Remplacement et la Disposition

PRUDENCE ! Le danger d'explosion si la batterie au lithium est inexactement remplacée. Remplacer seulement avec le même ou équivalent type recommandé par le fabricant. Liquider des piles utilisées selon les instructions du fabricant.

Prudence Laser pour Cartes I/O (CDRH-US)

L'usage de controles ou d'ajustements ou l'execution de procedures autrement que ces mai en ceci specifie a pour resultat l'exposition de rayonnement hasardeuse.

Conforme à 21 Chapitre 1 de CFR, Subchapter J, la Partie 1040,10.

IEC 60825-1: 1993, A1: 1997, A2: 2001; IEC 60825-2: 2000

Emetteur-récepteur Modules Laser de Rechange

Pour la conformité continuée avec l'au-dessus des normes de sécurité laser, seulement approuvée Classe 1 modules de nos vendeurs approuvés devraient être installés dans le produit. Contacter Xsigo Systems le Soutien Clientèle (+1-408-736-3013) pour les coordonnées d'approuvé-vendeur.

Conditions de Série de Cordon d'alimentation – Général

Les conditions énumérées au dessous de sont applicables à tous les pays :

La longueur de la série de cordon d'alimentation doit être au moins 6,00 pieds (1,8 m) et au maximum 9,75 pieds (3,0 m).

Toutes les séries de cordon d'alimentation doivent être approuvées par une agence accréditée acceptable responsable de l'évaluation dans le pays où la série de cordon d'alimentation sera utilisée.

La série de cordon d'alimentation doit avoir une capacité actuelle minimum de 13A et un classement de tension nominal de 125 ou 250 V courant alternatif, comme exigé par chaque système de pouvoir du pays.

L'attelage d'appareil sur le cordon d'alimentation doit rencontrer la configuration mécanique d'un EN 60320/CEI 60320 Feuille Standard C20 connecteur, qui est le connecteur sur le Fabric Director. Le C20 connecteur soutient un C19 bouchon comme la partie accouplant sur le cordon d'alimentation qui connecte au Fabric Director.

Le Cordon d'alimentation – Cordes Multiples

Avertissement ! Ce produit peut avoir les cordes d'alimentation multiples installées. A de-stimule cet équipement, débrancher tous les cordons d'alimentation de l'appareil.

Les Conditions d'alimentation – la Source d'alimentation et les Circuits

- Pour un VP780 installation, vérifier que votre source d'alimentation, de même que n'importe quel équipement a installé entre la source d'alimentation et le Fabric Director (comme bondit suppressors, les barres de bouchon, et ainsi de suite) rencontrer ces conditions :
  - 100 - 127 / 200 - 240 V AC
  - 12 - 7,68 A
  - 47 - 63 Hz
  - 1220 W (maximum)
- Pour un VP560 installation, vérifier que votre source d'alimentation, de même que n'importe quel équipement a installé entre la source d'alimentation et le Fabric Director (comme bondit suppressors, les barres de bouchon, et ainsi de suite) rencontrer ces conditions :
  - 100 - 127 / 200 - 240 V AC
  - 4 - 8,5 A
  - 50 - 60 Hz
  - 750 W (maximum)

VP560 Cordon d'alimentation — l'alimentation Principale Débranche

Pour le VP560 seulement, cordons d'alimentation d'entrée sont utilisés comme l'alimentation principale débranche. Par conséquent, la sortie de prise d'alimentation de facilité sera près installée de l'équipement et sera facilement accessible.

Conditions de Série de Cordon d'alimentation – les Détails Par le Pays

Etats-Unis (UL), Canada (CSA)

La série de cordon d'alimentation flexible doit être UL A Enuméré et CSA A Certifié, SVT de Type minimum ou l'équivalent, le minimum No 18 AWG, avec de 3 conducteurs qui inclut un conducteur de terre. Le bouchon de mur doit être un de trois épingles fonde le type, comme un Type de NEMA 5-15P (a évalué 15A, 120V) ou le Type 6-15P (a évalué 15A, 250V).

L'Europe (Autriche (OVE), Belgique (CEBEC), Danemark (DEMKO), Finlande (SETI), France (UTE), Allemagne (VDE), Italie (IMQ), Hollande (KEMA), Norvège (NEMKO), Suède (SEMKO), Suisse (SEV), U.K. (BSI/ASTA)

La série flexible de cordon d'alimentation doit être <HAR> Taper H03VV-F, de 3 conducteurs, minimum 0,75mm^2 taille de conducteur. Le cordon d'alimentation installations fixes, notamment le bouchon de mur, doivent porter la marque d'homologation de l'agence responsable de l'évaluation dans le pays où il est utilisé, avec les exemples énumérés au-dessus.

L'Australie (DFT/SAA)

La corde est comme décrit en dessous « le Japon (PSE) » tout de suite au dessous. Les épingles dans la prise de courant doivent être avec le sheathed, le type isolé, conformément à AS/NZS 3112:2000.

Le Japon (PSE)

L'attelage d'appareil, la corde flexible, et le bouchon de mur doit porter une Marque de « PSE » conformément aux Japonais Denan Loi. La corde flexible doit être VCT de Type ou VCTF, de 3 conducteurs, 0,75mm^2 taille de conducteur. Le bouchon de mur doit être un qui met à la terre avec une Norme d'Industriel Japonais C8303 (15A, 125V) la configuration.

La Couverture de châssis – le Danger de Décharge Electrique

Pour empêcher la décharge électrique, ne pas enlever la couverture. Aucun partrs utilisateur-utilisable à l'intérieur. Cette unité contient des tensions électriques hasardeuses et écalé est seulement ouvert par un technicien entraîné et qualifié.