

Mid-Mount Rack Kit (Switch)

Installation Procedure

Supporting Brocade 200E, 300, 4100, 4900, 5000, 5100, 5300, 7500-series, 7600, 7800, 8000, and AP7420



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Document History

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Mid-Mount Rack Kit (Switch) Installation Procedure	53-1001273-01	Added support for the Brocade 8000 Switch	March 2009
Mid-Mount Rack Kit (Switch) Installation Procedure	53-1001273-02	Added support for the Brocade 7800 Switch	July 2009

Contents

This document provides instructions to install a 1U, 1.5U, or 2U switch (or SAN Router) in a telecommunications (Telco) cabinet using the Mid-Mount Kit. The document is organized as follows.

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Introduction

The supported switches are listed in Table 1.

TABLE 1 Supported switches

Switch height	Switch model	
1U	Brocade 200E	
	Brocade 300	
	Brocade 4100	
	Brocade 5000	
	Brocade 5100	
	Brocade 7500 series	
	Brocade 7600	
	Brocade 7800	
	Brocade 8000	
2U	Brocade 4900	
	Brocade 5300	
	Brocade AP7420	

Installation requirements

Allow 15 to 30 minutes to complete this procedure. Note the following requirements to ensure correct installation and operation:

Verify that the additional weight of the switch does not exceed the cabinet's weight limits.

- Ensure that an electrical branch circuit with the following characteristics is available:
 - Required voltage and frequency as indicated in the hardware reference manual. (200-230 VAC is always preferred)
 - Protection by a circuit breaker in accordance with local electrical codes.
 - Supply circuit, line fusing, and wire size that conform to the electrical rating on the switch nameplate.
 - Grounded outlet compatible with the power cord and installed by a licensed electrician.
- Ensure that all equipment installed in the cabinet is grounded through a reliable branch circuit connection. Do not rely on a secondary connection to a branch circuit, such as a power strip.
- Ensure that the cabinet is mechanically secured to ensure stability.
- Ensure that the air temperature at the fan inlet is less than 104° Fahrenheit (40° Celsius) during switch operation.
- Ensure that the airflow available at the air vents meets the minimum requirements for the switch.

ATTENTION

Install the switch with the fan side facing the air-intake aisle. The chassis air intake is on the fan side and exhaust is on the port side.

Tool requirements and parts list

The following items are required to install a switch using the mid-mount rack kit:

- Clamps or other means of temporarily supporting the switch in the cabinet.
- Phillips #2 screwdriver with torque capability.
- 1/4 in. slotted-blade screwdriver with torque capability.

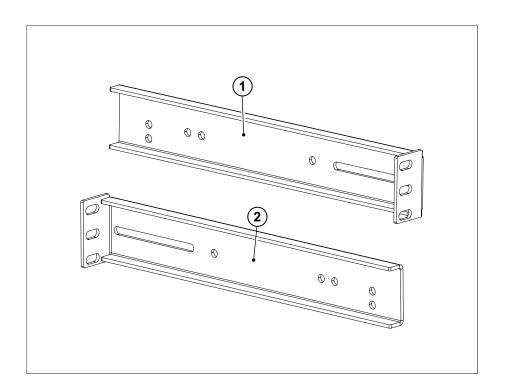
ATTENTION

Use the screws specified for use with the switch. Longer screws can damage the switch.

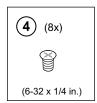
Ensure that the items listed in Table 2 and illustrated in Figure 1 are included in the kit.

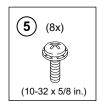
TABLE 2 Parts list

Item	Description	Quantity
1	Bracket, front right	1
2	Bracket, front left	1
3	Screw, 8-32 x 5/16 in., panhead Phillips (torque to 15 inlbs, 17 cm-kgs)	12
4	Screw, 6-32 x 1/4 in., flathead Phillips (torque to 9 inlbs, 10 cm-kgs)	8
5	Screw, 10-32 x 5/8 in., panhead Phillips (torque to 25 inlbs, 29 cm-kgs)	8
6	Retainer nut, 10-32	8











- 1 Bracket, front right Bracket, back left
- 2 Bracket, front left Bracket, back right
- 3 Screw, 8-32 x 5/16 in., panhead Phillips
- 4 Screw, 6-32 x 1/4 in., flathead Phillips
- 5 Screw, 10-32 x 5/8 in., panhead Phillips
- 6 Retainer nut, 10-32

FIGURE 1 Items in Mid Mount Rack Kit

Installation procedure

ATTENTION

The switch must be turned off and disconnected from the fabric during this procedure.

NOTE

Although this document describes how to install a 1U, 1.5U, and 2U switch, the illustrations show a 2U switch as a typical installation.

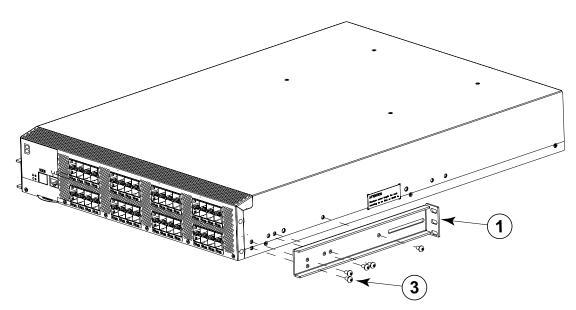
Complete these tasks to install the switch in a cabinet:

- "Attaching front brackets to switch"
- "Attaching front rails to a cabinet"
- "Attaching rear brackets to a cabinet"
- "Attaching rear bracket to switch"

Attaching front brackets to switch

Complete the following steps to attach the front brackets to the switch.

- 1. Position the right front bracket (Item 1) with the flat side against the right side of the switch (Figure 2).
- 2. Insert two 8-32 x 5/16 in. screws (Item 3) into one of the pairs of vertically aligned holes in the bracket and then into the pair of holes on the side of the switch. To install the switch in a recessed position in the cabinet, use the bracket holes that are set back from the end of the bracket.
- 3. Insert each $8-32 \times 5/16$ in. screw (Item 3) through the holes in the bracket and into the corresponding hole in the switch.
- 4. Tighten all 8-32 x 5/16 in. screws to a torque of 15 in.-lbs (17 cm-kgs).
- 5. Repeat step 1 through step 4 to attach the left front bracket (Item 2) to the left side of the switch.



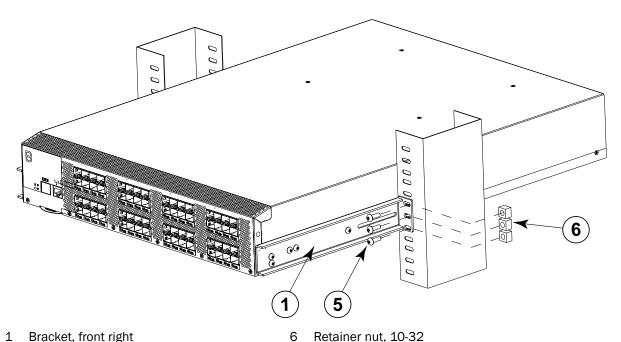
- 1 Bracket, front right
- 3 Screw, 8-32 x 5/16 in., panhead Phillips

FIGURE 2 Attaching the front bracket

Attaching front rails to a cabinet

Complete the following steps to install the switch in the cabinet.

- 1. Position the switch in the cabinet (Figure 3), providing temporary support under the switch until the rail kit is secured to the cabinet.
- 2. Attach the right front bracket (Item 1) to the right front rack rail using three 10-32 x 5/8 in. screws (Item 5) and three retainer nuts (Item 6).
- 3. Repeat step 2 to attach the left front bracket (Item 2) to the left front rack rail.
- 4. Tighten all 10-32 x 5/8 in. screws (Item 5) to a torque of 25 in.-lbs (29 cm-kgs).



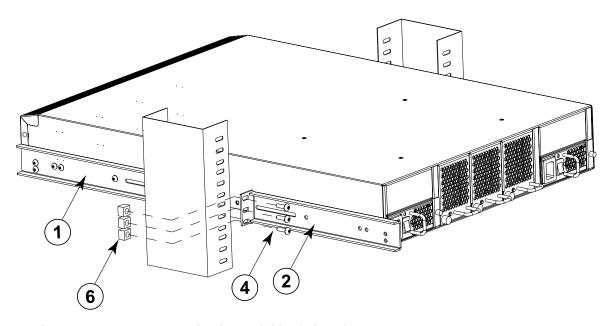
- 1 Bracket, front right
- Screw, 10-32 x 5/8 in., panhead Phillips

FIGURE 3 Attaching front rails to a cabinet

Attaching rear brackets to a cabinet

Complete the following steps to attach the rear brackets to the cabinet.

- 1. Position the right rear bracket (Item 2) in the right rear of the switch (Figure 4).
- 2. Attach the brackets using three 6-32 x 1/4 in. screws (Item 4) and retainer nuts (Item 6).
- Adjust the brackets to cabinet depth and tighten the Item 6 screws to a torque of 9 in.-lbs (10 cm-kgs).
- Repeat step 1 through step 3 to attach the left rear bracket (Item 1).



- 1 Bracket, front right
- 4 Screw, 6-32 x 1/4 in., flathead Phillips
- 2 Bracket, rear right
- 6 Retainer nut, 10-32

FIGURE 4 Attaching the rear brackets to a cabinet

Attaching rear bracket to switch

Complete the following steps to attach the rear brackets to the switch.

- 1. Align the right rear bracket (Item 2) to the right rear of the switch and using two 10-32 x 5/8 in. screws (Item 5) attach the bracket to the switch (Figure 5).
- 2. Repeat step 1 to attach the left rear bracket (Item 1) to the left rear of the switch.
- 3. Tighten the 10-32 x 5/8 in. screws (Item 5) to a torque of 25 in.-lbs (29 cm-kgs).

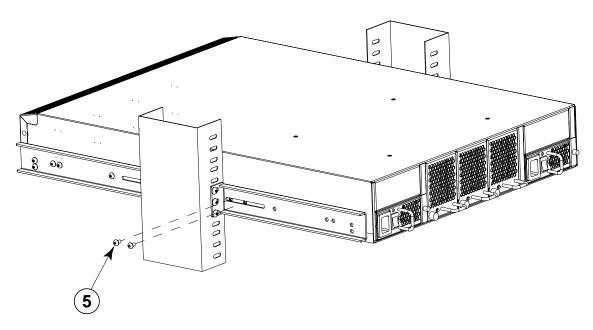
ATTENTION

Connect the power cords to a grounded outlet only. Ensure that any power cord is routed so that it is not exposed to stress. Leave a minimum service loop of 6 in. in the power cord(s) at the connection to switch. This allows enough freedom of movement to plug and unplug the power cord(s).

4. Provide power to the switch by connecting the power cord(s) to the power connectors on the switch and a power outlet. Some switches require you to flip a power switch to be powered on.

NOTE

Do not connect the switch to the network until the IP address is correctly set. Refer to the appropriate hardware reference manual for information on setting the IP address for the switch.



5 Screw, 10-32 x 5/8 in., panhead Phillips

FIGURE 5 Attach the rear bracket to the switch