Netfinity Rack Power Distribution Unit Installation Instructions

For more information about this option, refer to the *IBM Netfinity Rack Configurator* program and the *IBM Netfinity Rack Planning and Installation Guide*.

Before you begin, read through these instructions to familiarize yourself with the installation procedure.

This option consists of:

- One power distribution unit (PDU)
- Two mounting brackets (for vertical mounting)
- Four cage nuts
- Eight locking nuts
- Eight screws
- *IBM Netfinity Rack Power Distribution Unit Installation Instructions* (this booklet)

You need a screwdriver and a 10 mm open-end wrench to install the power distribution unit.

**Note:** The illustrations in this booklet might look slightly different from your hardware.

If you are installing the PDU vertically in the side of the rack, go to “Vertical Installation” on page 2.

If you are installing the PDU horizontally in the rack, go to “Horizontal Installation” on page 4. Two people might be required to install the PDU horizontally.

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Vertical Installation

The PDU can be mounted vertically in the left side or the right side of the rack. These instructions show a right-side installation.

In a vertical installation, mount the PDU so the eight power outlets face the rear of the rack. Follow these instructions to install the PDU vertically in the rack.

1. Using four screws and four nuts, install the two PDU mounting brackets on the PDU as shown below.

   **Note:** In a vertical installation, the PDU must be installed with the circuit breaker toward the top. The figure shows the brackets mounted for a right-side installation.

   ![Diagram of PDU mounting brackets]

   The bottom two side braces on both sides of the rack are installed with a vertical clearance (distance) of 51.3 cm (20.2 in.) to accommodate the PDU installation. If the braces do not have this clearance, proceed with step 2. If the braces have this clearance, go to step 3 on page 3.

2. Adjust the rack side braces for a vertical clearance (distance) of 51.3 cm (20.2 in.).
   a. Compress the plastic clip at the front end of the side brace and remove the clip. Save the clip.
   b. Lift the side brace up to disengage it from the vertical mounting rails.
   c. Slide the side brace toward the rear of the rack and out of the front vertical mounting rail.
d. Slide the side brace toward the front of the rack and remove it from the rear vertical mounting rail.

e. Move the side brace so you have a vertical clearance (distance) of 51.3 cm (20.2 in.) between the two braces.

f. Insert the rear of the side brace into the holes in the rear vertical mounting rail.

g. Insert the front of the side brace into the holes in the front vertical mounting rail.

h. Make sure the ends of the side brace are installed at the same level in both vertical mounting rails.

i. Push the side brace down to latch the ends of the side brace into the vertical mounting rails.

j. Insert the small plastic clip into the front end of the side brace until it snaps in place.

k. Check that you have a vertical clearance (distance) of 51.3 cm (20.2 in.) between the two braces.

3. Install the PDU.

a. Position the PDU in the center between the front and rear corner posts.

b. Insert a screw through the PDU mounting bracket and the rack side brace. The screw head must be on the inside of the rack.

c. Thread a nut on the screw.

d. Repeat steps 3b and 3c for the remaining three screws and nuts.

e. Tighten the screws.

The PDU installation is complete. You can now plug your server power cables into the PDU and plug the PDU power cable into your power source.
Horizontal Installation

The PDU can be mounted horizontally in the front or the rear of the rack. Follow these instructions to install the PDU horizontally in the rack.

1. Decide at what U level you want to install the PDU. Make sure the PDU is contained within one U space.

   **Note:** All vertical rack measurements are given in rack units (U). One U is equal to 4.45 cm (1.75 in.). The U levels are marked on labels on one front mounting rail and one rear mounting rail.

2. Install two cage nuts on each mounting rail at the locations shown below.

   The nuts go toward the inside of the rack. Make sure you install the cage nuts at the same level on the two mounting rails.

   ![Install cage nuts in these holes.]

   a. Hook one side of the cage-nut clip into the rack-mounting-rail square hold.
   b. Hold the cage nut in place and compress the cage-nut clip with a flat screwdriver blade.
   c. With the cage-nut clip compressed, push the cage nut-clip into the square hole.
   d. Release the screwdriver pressure on the clip. The cage nut is now locked in the square hole.

3. Hold the PDU against the cage nuts installed in step 2.

4. Thread a screw through the hole in the PDU mounting flange and into a cage nut.

   ![Thread a screw through the hole in the PDU mounting flange and into a cage nut.]

5. Repeat step 4 for the remaining three screws.

6. Tighten the four screws.

The PDU installation is complete. You can now plug your server power cables into the PDU and plug the PDU power cable into your power source.
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Printed in the U.S.A.

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