

Installing the ERX System

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This chapter provides procedures for installing the ERX-1400 series and the ERX-700 series either as freestanding devices or in a distribution rack.

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Before You Begin

Before you begin unpacking the system, be sure you have the following items:

- A No. 2 Phillips screwdriver
- A utility knife

Unpacking the ERX-1400 Series

The ERX-1400 series come boxed, bolted, and strapped to a skid. See Figure 2-1.

For your convenience, we recommend that you unpack the ERX system in the location where you want to install it.

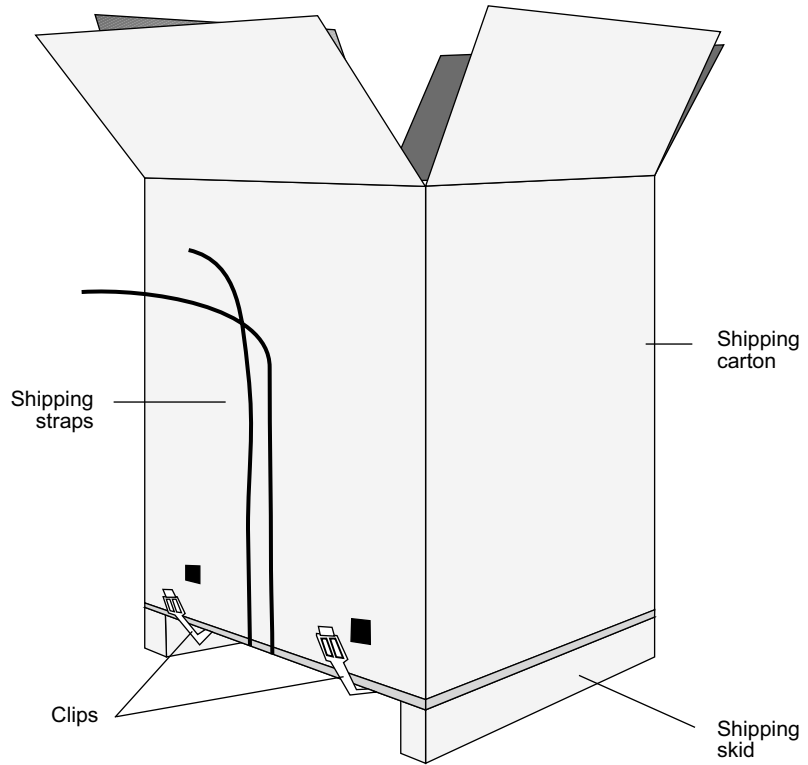


Figure 2-1 Packaged ERX-1400 series

To unpack the ERX-1400 series:

- 1 Cut the two straps that secure the carton to the skid. See Figure 2-1.
- 2 Open the carton from the top.
- 3 Remove the box of accessories that sits on top of the router.
- 4 Unlock the four plastic clips that hold the box to the skid by squeezing them in their center and pulling out. See Figure 2-1.
- 5 Lift the carton off the router. See Figure 2-2.

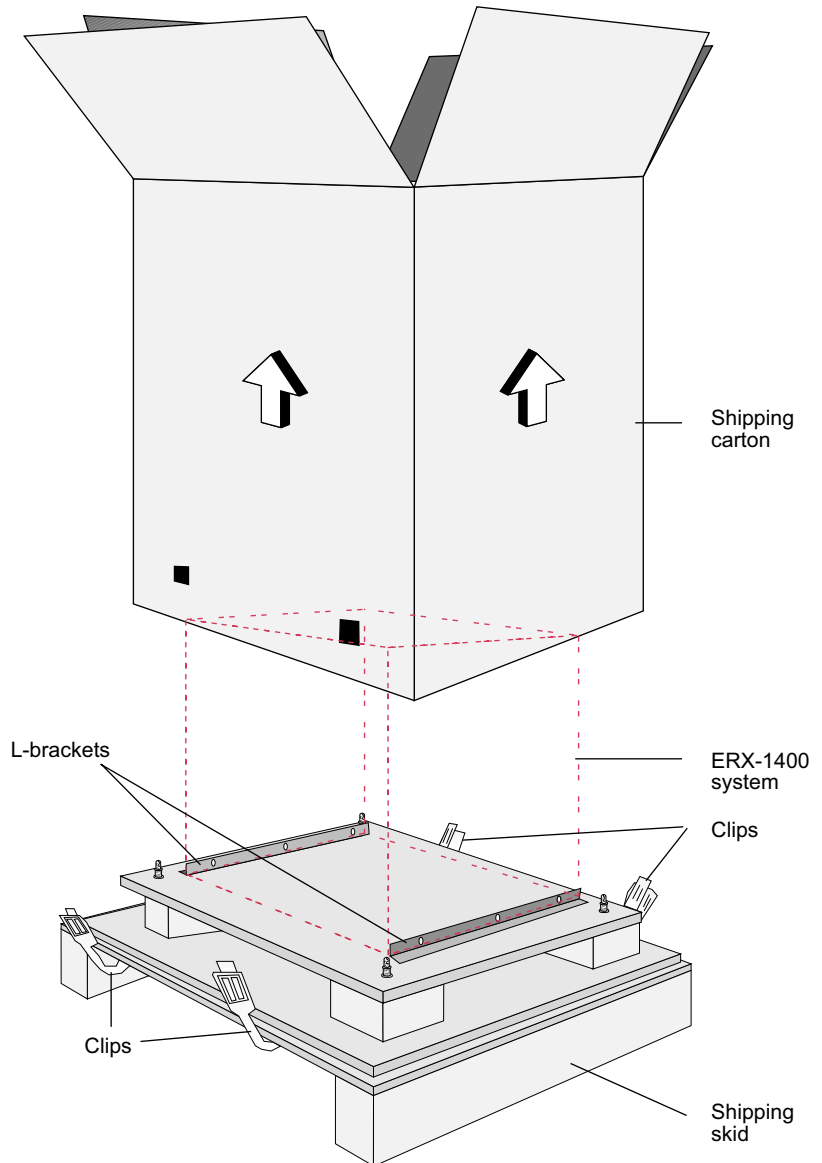


Figure 2-2 Lifting the carton off an ERX-1400 series

- 6 Use a Phillips screwdriver to remove the three screws (10-32 x 3/8 in) that attach each of the two L-brackets to the router.
- 7 To move the router more easily from the skid, unscrew one of the L-brackets from the skid by removing the three screws that attach it to the skid. See Figure 2-3.

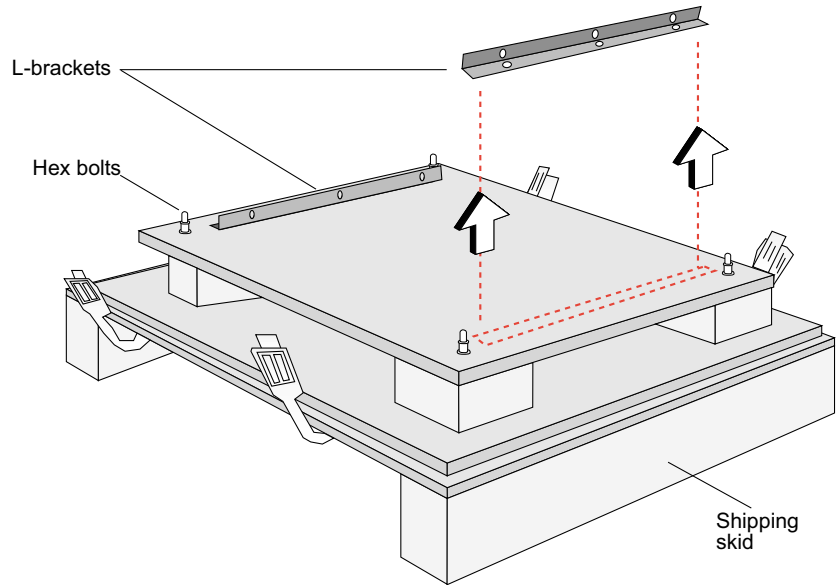


Figure 2-3 Removing an L-bracket

- 8 Depending on where you want to position the system, proceed to *Freestanding Installation* or *Rack-Mounted Installation*, later in this chapter.

Unpacking the ERX-700 Series

The ERX-700 series come boxed but not attached to a skid.

For your convenience, we recommend that you unpack the ERX system in the location where you want to install it.

To unpack the ERX-700 series:

- 1 Open the carton from the top.
- 2 Remove the box of accessories that sits on top of the system.
- 3 Before you remove the unit from its carton, proceed to *Freestanding Installation* or *Rack-Mounted Installation*, later in this chapter.

Freestanding Installation

This section provides instructions for installing the system on a table top or in any other freestanding mode. See *Appendix D, Preparing Your Site*, for information about site requirements.

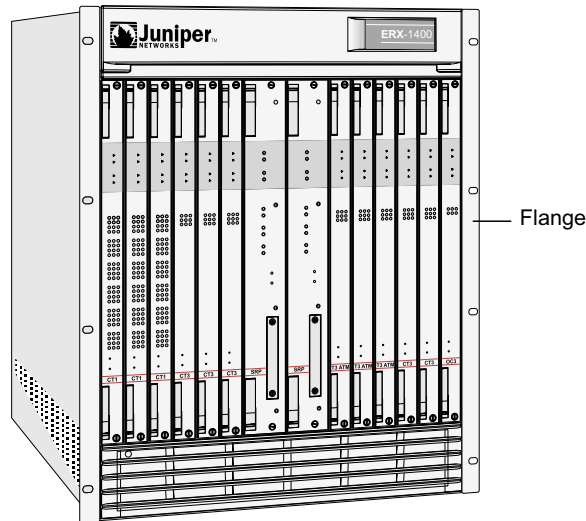


Figure 2-4 ERX-1400 series front view



Warning: Two people are required to lift an ERX system. The system is extremely heavy.

To install the system as a freestanding device:

- 1 One person should stand on the left side of the system, and the other should stand on the right side.
- 2 Grasp the lower back of the unit with one hand and the front flange (see Figure 2-4) with the other.
- 3 Bend your knees and carefully lift the unit into position.
- 4 Carry the system to the location where it will operate.



Caution: Leave enough space around the system for adequate ventilation. See *Appendix A, System Specifications*, for details.

- 5 Position the router with easy access to the connections that it needs for power, local communications, and remote communications.



Note: Connectors are located on the I/O modules and the power input module. See Figure 2-5. You install these modules from the rear of the router. See *Chapter 4, Cabling the ERX System*, for cabling installation procedures.

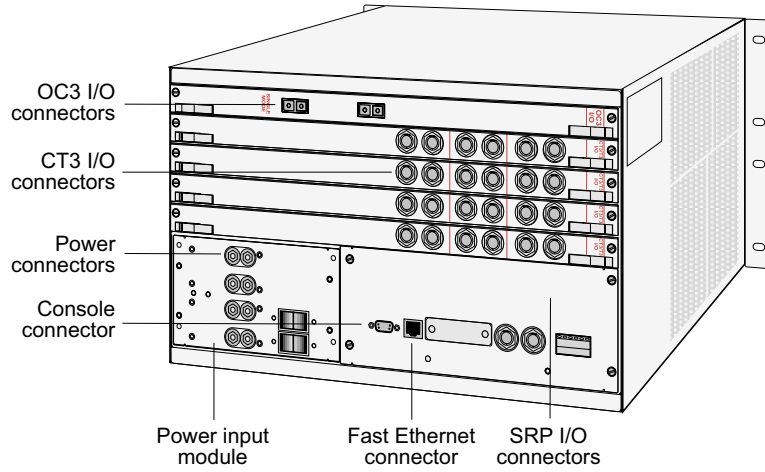


Figure 2-5 ERX-700 series rear view

Rack-Mounted Installation

We recommend that you use a standard EIA distribution rack. Refer to *Rack Requirements in Appendix D, Preparing Your Site*, for detailed rack information. Before installing the systems in the rack, consider the following guidelines:

- You can install up to three ERX-1400 series systems in a single 84-inch rack.

Installing multiple systems in a single rack allows you to maximize your available space. An ERX-1400 series system has a plenum that allows air to circulate between systems.

- You can install an ERX-1400 series system and an ERX-700 series system together in the same rack.

If you install an ERX-700 series system above an ERX-1400 series system in the same rack, you must install a plenum between the ERX-700 series system and the ERX-1400 series system so that the air can circulate between the systems. See Figure 2-6. This plenum is available from Juniper Networks.

If you install an ERX-1400 series system above an ERX-700 series system, there is no need to install a plenum between the units because the ERX-1400 series system has one at its base.

Safety Guidelines

Observe the following safety guidelines when mounting the system in a rack.



Rack Installation Warning: Install equipment in the rack from the bottom upward. This will maintain the stability of the rack and reduce the chance of the rack's tipping over.



Heavy Equipment Warning: Three people are required to install the ERX system in a rack: two to lift the system into position and one to screw it to the rack. The system is extremely heavy.



Branch Circuit Warning: Evaluate the overall loading of the branch circuit before you install any equipment into a rack.



Ground (Earth) Warning: Connect the ERX system or rack to ground (earth), and ensure that a reliable grounding path is maintained in the rack.



Lightning Activity Warning: Do not work on the system or connect or disconnect cables during lightning activity.



DC Power Disconnection Warning: Before powering on the ERX system, remove power from the DC circuit by deactivating the circuit breaker on the panel board that services the DC circuit.



Servicing Unit Warning: Before servicing the ERX system, turn off the power.



Jewelry Removal Warning: Remove jewelry (including rings, necklaces, and watches) before working on equipment that is connected to power lines. Metal objects heat up when connected to power and ground and can cause serious burns or become welded to the terminals.



Metal Objects Warning: Do not insert any metal object, such as a screwdriver, into an open slot or the backplane. Doing so may cause electric shock and serious burns.

Installation

To complete the installation of the system in a rack, you need:

- A Phillips screwdriver
- Eight 10-32 x 3/8 Phillips screws (provided with the system) for each system to be installed



Warning: Three people are required to install the ERX system in a rack: two to lift the system into position and one to screw it to the rack. The system is extremely heavy.

To install the system in the rack:

- 1 On the rack, identify and mark the holes that you want to use for mounting the system.
- 2 One person should stand on the left side of the system, and another should stand on the right side.
- 3 Grasp the lower back of the unit with one hand and the lower front of the unit (see Figure 2-4) with the other hand.
- 4 Bend your knees and carefully lift the unit into position in the rack.
- 5 With the help of the third person, align the holes in the system's flanges with the holes in the rack, and hold the system in position.
- 6 Starting at the bottom, the third person should screw the flange on each side of the system into the four holes on each side of the rack.
- 7 Connect the necessary cables (see *Chapter 4, Cabling the ERX System*, for instructions on installing the cables).

Figure 2-6 illustrates a distribution rack with one ERX-1410 system and two ERX-700 systems installed.

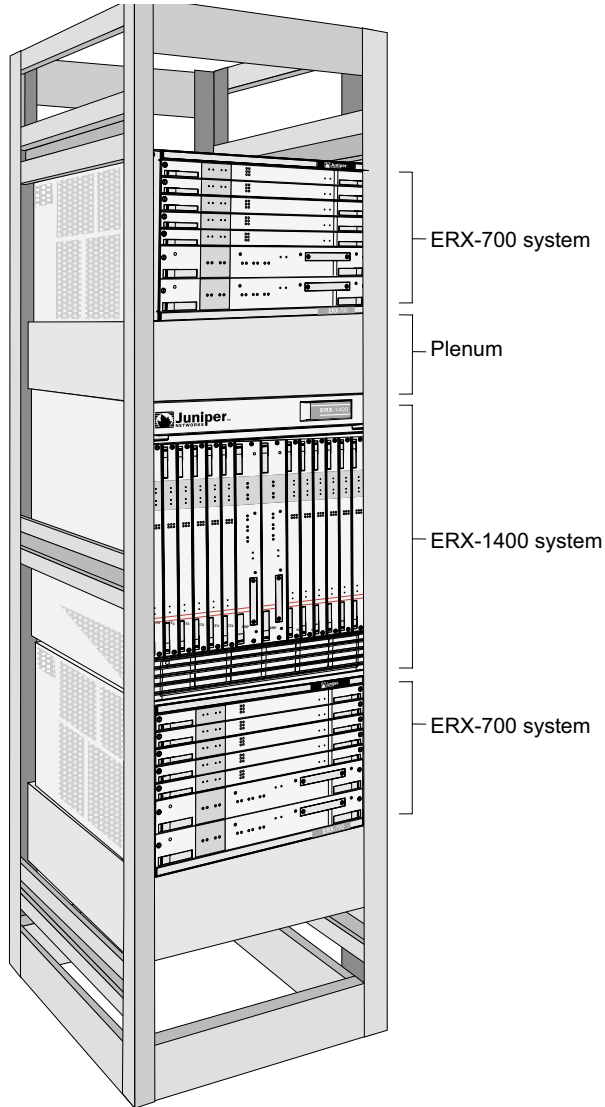


Figure 2-6 Rack with ERX-700 systems and an ERX-1410 system

The Next Step

After you finish installing the system:

- If the system was delivered with the modules already installed, go to *Chapter 4, Cabling the ERX System*, for instructions on connecting cables.
- If you need to install any modules, go to *Chapter 3, Installing ERX Modules*.