

Troubleshooting Software Installation

- Recovering from a Failed Software Upgrade on an EX-series Switch on page 1
- Rebooting from the Non-Active Partition on page 2

Recovering from a Failed Software Upgrade on an EX-series Switch

Problem If the JUNOS software loads but the CLI is not working for any reason, or if the switch has no software installed, you can use this recovery installation procedure to install the JUNOS software.

Solution If there is already a JUNOS image on the system, you can either install the new JUNOS package in a separate partition and both JUNOS images will remain on the system, or you can wipe the disk clean before the new installation proceeds.

To perform a recovery installation:

1. Power on the switch. The loader script starts.
2. After the message `Loading /boot/defaults/loader.conf` displays, you are prompted with:

Hit [Enter] to boot immediately, or space bar for command prompt.

Press the space bar to enter the manual loader. The `loader>` prompt displays.

3. Enter the following command:

```
loader> install [- --format] [- --external] source
```

Where:

- **format**—Use this option to wipe the installation media (internal disk or USB drive) before installing the software package. If you do not include this option, the system installs the new JUNOS software package in a different partition from that of the most recently installed JUNOS software package.
- **external**—Use this option to install the software package onto an external media.
- *source*—Represents the name and location of the JUNOS software package either on a server on the network or as a file on an external USB drive:
 - Network address of the server and the path on the server; for example, `tftp://192.17.1.28/junos/jinstall-ex-4200-9.4R1.5-domestic-signed.tgz`
 - The JUNOS package on a USB device is commonly stored in the root drive as the only file; for example, `file:///jinstall-ex-4200-9.4R1.5-domestic-signed.tgz`

The installation proceeds as normal and ends with a login prompt.

Rebooting from the Non-Active Partition

Problem An EX-series switch ships with the JUNOS software loaded on the system disk in partition 1. The first time you upgrade, the new software package is installed in partition 2. When you finish the installation and reboot, partition 2 becomes the active partition. Similarly, subsequent software packages are installed in the non-active partition which becomes the active partition when you reboot at the end of the installation process.

If you performed an upgrade and rebooted, the system resets the active partition. You can use this procedure to manually boot from the non-active partition.



NOTE: If you have completed the installation of the software image but have not yet rebooted, you can issue a `request system software rollback` to return to the original software installation package.

Solution To reboot from the non-active partition, use the following command:

```
user@switch> request system reboot partition alternate
```



NOTE: If you cannot access the CLI, you can reboot from the non-active partition using the following procedure from the loader script prompt:

1. Unload and clear the interrupted boot from the active partition:

```
loader> unload
loader> unset vfs.root.mountfrom
```

2. Select the new (inactive) partition to boot from:

```
loader> set currdev=diskmediaspartition:
```

Where *media* is either 0 (internal) or 1 (external) and *partition* indicates the partition number, either 1 or 2.

You must include the colon (:) at the end of this command.

3. Boot JUNOS from the inactive partition:

```
loader> boot
```

- Related Topics**
- Installing Software on an EX-series Switch with a Single Routing Engine (CLI Procedure)
 - Installing Software on EX-series Switches (J-Web Procedure)
 - Understanding Software Installation on EX-series Switches