

# Chapter 14

## Reinstall the Software

If any of the software becomes damaged, you might want to reinstall it. Also, you might want to periodically upgrade the router software as new features become available or as software problems are fixed. This chapter discusses the following topics related to reinstalling the JUNOS Internet software:

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### Prepare to Reinstall the JUNOS Software

Before you install the JUNOS software, you must do the following:

1. Copy the existing configuration in the file `/config/juniper.conf` from the router to another system or to removable media. You also might want to copy any backup configurations (the files named `/config/juniper.conf.n`, where *n* is a number from 0 through 9). To copy the files, use the file `copy` command.
2. Have available the removable medium that shipped with the router (also called a boot floppy). If you do not have a boot floppy, contact customer support.

### Reinstall the JUNOS Software

To reinstall the JUNOS software, follow these steps:

1. Insert the removable medium into the router.
2. Reboot the router, either by power-cycling it or by issuing the `request system reboot` command from the command-line interface (CLI).

3. When the router finishes booting, you are prompted for the terminal type:

These are the predefined terminal types available to sysinstall when running stand-alone. Please choose the closest match for your particular terminal.

- 1 ..... Standard ANSI terminal.
- 2 ..... VT100 or compatible terminal.
- 3 ..... FreeBSD system console (color).
- 4 ..... FreeBSD system console (monochrome).

Your choice: (1-4)

4. The router then copies the software from the removable medium onto your system, occasionally displaying status messages. Copying the software can take up to 10 minutes.
5. Remove the removable medium when prompted. The router then reboots from the primary boot device on which the software was just installed. When the reboot is complete, the router displays the login prompt.

## Reconfigure the JUNOS Software

After you have reinstalled the software, you must copy the router's configuration files back to the router. (You also can configure the router from scratch as described in "Configure the Software Initially" on page 175.) However, before you can copy the configuration files, you must establish network connectivity.

To reconfigure the software, follow these steps:

1. Log in as "root." There is no password.
2. Start the CLI:

```
root# cli
root@>
```

3. Enter configuration mode:

```
cli> configure
[edit]
root@#
```

4. Configure the name of the machine. If the name includes spaces, enclose the entire name in quotation marks (" ").

```
[edit]
root@# set system host-name host-name
```

5. Configure the machine's domain name:

```
[edit]
root@# set system domain-name domain-name
```

6. Configure the IP address and prefix length for the router's management Ethernet interface:

```
[edit]
root@# set interfaces fxp0 unit 0 family inet address address/prefix-length
```

7. Configure the IP address of a default router. This system is called the backup router because it is used only while the routing protocol process is not running.

```
[edit]
root@# set system backup-router address
```

8. Configure the IP address of a DNS server:

```
[edit]
root@# set system name-server address
```

9. Set the root password, entering either a clear-text password that the system will encrypt, a password that is already encrypted, or an SSH public key string.

To enter a clear-text password, use the following command to set the root password:

```
[edit]
root@# set system root-authentication plain-text-password
New password: type password
Retype new password: retype password
```

To enter a password that is already encrypted, use the following command to set the root password:

```
[edit]
root@# set system root-authentication encrypted-password encrypted-password
```

To enter an SSH public string, use the following command to set the root password:

```
[edit]
root@# set system root-authentication ssh-rsa key
```

10. Commit the changes:

```
[edit]
root@# commit
```

11. Exit from configuration mode:

```
[edit]
root@# exit
root@>
```

12. To check that the router has network connectivity, issue a ping command to a system on the network:

```
root@> ping address
```

If there is no response, reboot the router.

- 13. Copy the existing configuration and any backup configurations back onto the router. Place the files in the /config directory. To copy the files, use the file copy command.

- 14. Load and activate the desired configuration:

```
root@> configure  
[edit]  
root@# load merge /config/filename or load replace /config/filename  
[edit]  
root@# commit
```

- 15. After you have installed the software on the router, committed the configuration, and are satisfied that the new configuration is successfully running, you should issue the request system snapshot command to back up the new software onto the /altconfig file system. If you do not issue the request system snapshot command, the configuration on the alternate boot drive will be out of sync with the configuration on the primary boot drive.

The request system snapshot command causes the root file system to be backed up to /altroot, and /config to be backed up to /altconfig. The root and /config file systems are on the router's flash drive and the /altroot and /altconfig file systems are on the router's hard drive.



**Note**

After you issue this command, you cannot return to the previous version of the software, because the running and backup copies of the software are identical.