

Chapter 16

Reinstalling Software Using jinstall

If the software becomes damaged, you might want to reinstall it using jinstall. The jinstall package completely reinstalls the software. This package rebuilds the JUNOS file system only, but retains configuration, log files, and similar information from the previous version.

To completely reinstall the software using jinstall, follow these steps:

1. Download the software packages you need from the Juniper Networks Support Web site, <http://www.juniper.net/support/>. Choose either Canada and U.S. Version or Worldwide Version.

To download the software packages, you must have a service contract and an access account. If you need help obtaining an account, complete the registration form at the Juniper Networks Web site, <https://www.juniper.net/registration/Register.jsp>.



NOTE: We recommend that you upgrade and downgrade software packages out-of-band using the console because in-band connections can be lost during the downgrade or upgrade process.

2. Back up the currently running and active file system so that you can recover to a known, stable environment in case something goes wrong with the upgrade:

```
user@host> request system snapshot
```

The root file system is backed up to /altroot, and /config is 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 disk.



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.

3. Copy the jinstall package to the router. You might want to copy them to the /var/tmp directory, which is on the rotating media (hard disk) and is a large file system.

```
user@host> file copy ftp://username:prompt@ftp.hostname.net/  
filename /var/tmp/filename
```

4. Add the jinstall package:

```
user@host> request system software add /var/tmp/
jinstall-7.x-package-name-signed.tgz
```

```
Installing package
'/var/tmp/jinstall-7.x-package-name-signed.tgz ...
Verified jinstall-7.x-package-name-signed.tgz signed by PackageDevelopment_0
Adding jinstall...
```

```
WARNING: This package will load JUNOS 7.x software.
WARNING: It will save JUNOS configuration files, and SSH keys
WARNING: (if configured), but erase all other files and information
WARNING: stored on this machine. It will attempt to preserve dumps
WARNING: and log files, but this can not be guaranteed. This is the
WARNING: pre-installation stage and all the software is loaded when
WARNING: you reboot the system.
```

```
Saving the config files ...
Installing the bootstrap installer ...
```

```
WARNING: A REBOOT IS REQUIRED TO LOAD THIS SOFTWARE CORRECTLY.
WARNING: Use the 'request system reboot' command when software installation
WARNING: is complete. To abort the installation, do not reboot your system,
WARNING: instead use the 'request system software delete jinstall'
WARNING: command as soon as this operation completes.
```

```
Saving package file in
/var/sw/pkg/jinstall-7.x-package-name-signed.tgz ...
Saving state for rollback ...
```



NOTE: The installation process removes most stored files (except log, juniper.conf, and SSH files) on the router, such as configuration templates and shell scripts. To preserve these files, copy them to another system before upgrading or downgrading the software.

5. Reboot the router to load the JUNOS software:

```
root@host> request system reboot
Reboot the system ? [yes,no] (no) yes
Shutdown NOW!
```



NOTE: You must reboot to load the JUNOS software. To reboot, issue the request system reboot command when you are done installing the software.

To abort the installation, do not reboot your system; instead, issue the request system software delete jinstall command when you are done installing the software.

All the software is loaded when you reboot the system. Installation can take between 5 and 10 minutes. 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.

6. Log in and verify the version of software running after the router reboots. Issue the show log message or show version command.
7. After you have upgraded or downgraded the software and are satisfied that the new software is successfully running, issue the request system snapshot command to back up the new software.

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 disk.



NOTE: After you issue the request system snapshot command, you cannot return to the previous version of the software, because the running and backup copies of the software are identical.



NOTE: You cannot issue the request system software rollback command to return to the previously installed software after using a jinstall package.

To return to the previously installed software, use the jinstall package that corresponds with the previously installed software.
