

## Chapter 4

# Reinstalling the Software Using jinstall

If the JUNOS system 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 information from the previous version. Additionally, 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 for the release you want to return to.



**NOTE:** We recommend that you reinstall software packages out-of-band using the console because in-band connections can be lost during the installation process.

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The installation process removes stored files (except `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.

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 the U.S. and Canada Version or the 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>.

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 disk, 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 copy, and backup copy of the software are identical.

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- Copy the jinstall package to the /var/tmp directory on the hard disk.

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

- Add the jinstall package:

```
user@host> request system software add /var/tmp/
jinstall-8.x-package-name-signed.tgz
```

```
Installing package
'/var/tmp/jinstall-8.x-package-name-signed.tgz...
Verified jinstall-8.x-package-name-signed.tgz signed by PackageDevelopment_0
Adding jinstall...
```

```
WARNING: This package will load JUNOS 8.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-8.x-package-name-signed.tgz...
Saving state for rollback...
```

- If desired, add the optional jweb package. For more information, see “The J-Web Package” on page 9.
- Reboot the router to load the JUNOS software:

```
user@host> request system reboot
Reboot the system? [yes,no] (no) yes
Shutdown NOW!
Reboot consistency check bypassed - jinstall 8.xR1.12 will complete
installation upon reboot

*** FINAL System shutdown message from user@host-re0 ***
System going down IMMEDIATELY
```



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

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All the software is loaded when you reboot the system. Installation can take between 5 and 10 minutes. The router then reboots from the boot device on which the software was just installed. When the reboot is complete, the router displays the login prompt.

7. Log in and verify the version of software running after the router reboots. Issue the **show log message** or **show version** command.
8. 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 disk, 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 copy, and backup copy of the software are identical.

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