

## Viewing Files and Directories on a Device Running JUNOS Software

---

JUNOS Software stores information in files on the device, including configuration files, log files, and router software files. This topic shows some examples of operational commands that you can use to view files and directories on a device running JUNOS Software.

Sections include:

- Directories on the Router on page 1
- Listing Files and Directories on page 2
- Specifying Filenames and URLs on page 4

### Directories on the Router

Table 1 lists some standard directories on a device running JUNOS Software.

**Table 1: Directories on the Router**

Directory	Description
/config	This directory is located on the router's internal flash drive. It contains the active configuration ( <code>juniper.conf</code> ) and rollback files 1, 2, and 3.
/var/db/config	This directory is located on the router's hard drive and contains rollback files 4 through 49.
/var/tmp	This directory is located on the router's hard drive. It holds core files from the various processes on the Routing Engines. Core files are generated when a particular process crashes and are used by Juniper Networks engineers to diagnose the reason for failure.
/var/log	This directory is located on the router's hard drive. It contains files generated by both the router's logging function as well as the <code>traceoptions</code> command.
/var/home	This directory is located on the router's hard drive. It contains a subdirectory for each configured user on the router. These individual user directories are the default file location for many JUNOS Software commands.
/altroot	This directory is located on the router's hard drive and contains a copy of the root file structure from the internal flash drive. This directory is used in certain disaster recovery modes where the internal flash drive is not operational.
/altconfig	This directory is located on the router's hard drive and contains a copy of the <code>/config</code> file structure from the internal flash drive. This directory is also used in certain disaster recovery modes when the internal flash drive is not operational.

## Listing Files and Directories

You can view the device's directory structure as well as individual files by issuing the `file` command in operational mode.

1. To get help about the `file` command, type the following:

```
user@host> file ?
Possible completions:
<[Enter]>      Execute this command
archive        Archives files from the system
checksum       Calculate file checksum
compare        Compare files
copy           Copy files (local or remote)
delete         Delete files from the system
list           List file information
rename         Rename files
show           Show file contents
source-address Local address to use in originating the connection

|
Pipe through a command
user@host> file
```

Help shows that the `file` command includes several options for manipulating files.

2. Use the `list` option to see the directory structure of the router. For example, to show the files located in your home directory on the router:

```
user@host> file list
.ssh/
common
```

The default directory for the `file list` command is the home directory of the user logged in to the router. In fact, the user's home directory is the default directory for most of JUNOS Software commands requiring a filename.

3. To view the contents of other file directories, specify the directory location. For example:

```
user@host> file list /config
juniper.conf
juniper.conf.1.gz
juniper.conf.2.gz
juniper.conf.3.gz
```

4. You can also use the router's context-sensitive help system to locate a directory. For example:

```
user@host> file list /?
Possible completions:
<[Enter]>      Execute this command
<path>        Path to list
/COPYRIGHT     Size: 6355, Last changed: Feb 13 2005
/altconfig/    Last changed: Aug 07 2007
/altroot/      Last changed: Aug 07 2007
/bin/          Last changed: Apr 09 22:31:35
```

```

/boot/                Last changed: Apr 09 23:28:39
/config/              Last changed: Apr 16 22:35:35
/data/                Last changed: Aug 07 2007
/dev/                 Last changed: Apr 09 22:36:21
/etc/                 Last changed: Apr 11 03:14:22
/kernel               Size: 27823246, Last changed: Aug 07 2007
/mfs/                 Last changed: Apr 09 22:36:49
/mnt/                 Last changed: Jan 11 2007
/modules/             Last changed: Apr 09 22:33:54
/opt/                 Last changed: Apr 09 22:31:00
/packages/            Last changed: Apr 09 22:34:38
/proc/                Last changed: May 07 20:25:46
/rdm.taf              Size: 498, Last changed: Apr 09 22:37:31
/root/                Last changed: Apr 10 02:19:45
/sbin/                Last changed: Apr 09 22:33:55
/staging/             Last changed: Apr 09 23:28:41
/tmp/                 Last changed: Apr 11 03:14:49
/usr/                 Last changed: Apr 09 22:31:34
/var/                 Last changed: Apr 09 22:37:30
user@host> file list /var/?
<[Enter]>             Execute this command
<path>                Path to list
/var/account/         Last changed: Jul 09 2007
/var/at/              Last changed: Jul 09 2007
/var/backups/         Last changed: Jul 09 2007
/var/bin/             Last changed: Jul 09 2007
/var/crash/           Last changed: Apr 09 22:31:08
/var/cron/            Last changed: Jul 09 2007
/var/db/              Last changed: May 07 20:28:40
/var/empty/           Last changed: Jul 09 2007
/var/etc/             Last changed: Apr 16 22:35:36
/var/heimdal/         Last changed: Jul 10 2007
/var/home/            Last changed: Apr 09 22:59:18
/var/jail/            Last changed: Oct 31 2007
/var/log/             Last changed: Apr 17 02:00:10
/var/mail/            Last changed: Jul 09 2007
/var/msg/             Last changed: Jul 09 2007
/var/named/           Last changed: Jul 10 2007
/var/packages/        Last changed: Jan 18 02:38:59
/var/pdb/             Last changed: Oct 31 2007
/var/preserve/        Last changed: Jul 09 2007
/var/run/             Last changed: Apr 17 02:00:01
/var/rundb/           Last changed: Apr 17 00:46:00
/var/rwho/            Last changed: Jul 09 2007
/var/sdb/             Last changed: Apr 09 22:37:31
/var/spool/           Last changed: Jul 09 2007
/var/sw/              Last changed: Jul 09 2007
/var/tmp/             Last changed: Apr 09 23:28:41
/var/transfer/        Last changed: Jul 09 2007
/var/yp/              Last changed: Jul 09 2007
user@host> file list /var/

```

5. You can also display the contents of a file. For example:

```

user@host> file show /var/log/inventory
Jul  9 23:17:46 CHASSISD release 8.4I0 built by builder on 2007-06-12
07:58:27 UTC
Jul  9 23:18:05 CHASSISD release 8.4I0 built by builder on 2007-06-12
07:58:27 UTC
Jul  9 23:18:06 Routing Engine 0 - part number 740-003239, serial number

```

```

9000016755
Jul  9 23:18:15 Routing Engine 1 - part number 740-003239, serial number
9001018324
Jul  9 23:19:03 SSB 0 - part number 710-001951, serial number AZ8025
Jul  9 23:19:03 SSRAM bank 0 - part number 710-001385, serial number 243071
Jul  9 23:19:03 SSRAM bank 1 - part number 710-001385, serial number 410608
...

```

## Specifying Filenames and URLs

In some CLI commands and configuration statements—including file copy, file archive, load, save, set system login user *username* authentication *load-key-file*, and request system software add—you can include a filename. On a routing matrix, you can include chassis information as part of the filename (for example, lcc0, lcc0-re0, or lcc0-re1).

You can specify a filename or URL in one of the following ways:

- *filename*—File in the user’s current directory on the local flash drive. You can use wildcards to specify multiple source files or a single destination file. Wildcards are not supported in Hypertext Transfer Protocol (HTTP) or FTP.



**NOTE:** Wildcards are supported only by the file (compare | copy | delete | list | rename | show) commands. When you issue the file show command with a wildcard, it must resolve to one filename.

---

- *path/filename*—File on the local flash disk.
- */var/filename* or */var/path/filename*—File on the local hard disk. You can also specify a file on a local Routing Engine for a specific T640 router on a routing matrix:

```
user@host> file delete lcc0-re0:/var/tmp/junk
```

- *a:filename* or *a:path/filename*—File on the local drive. The default path is / (the root-level directory). The removable media can be in MS-DOS or UNIX (UFS) format.
- *hostname:/path/filename*, *hostname:filename*, *hostname:path/filename*, or *scp://hostname/path/filename*—File on an scp/ssh client. This form is not available in the worldwide version of JUNOS Software. The default path is the user’s home directory on the remote system. You can also specify *hostname* as *username@hostname*.
- *ftp://hostname/path/filename*—File on an FTP server. You can also specify *hostname* as *username@hostname* or *username:password@hostname*. The default path is the user’s home directory. To specify an absolute path, the path must start with %2F; for example, *ftp://hostname/%2Fpath/filename*. To have the system prompt you for the password, specify *prompt* in place of the password. If a password is required, and you do not specify the password or *prompt*, an error message is displayed:

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

```
file copy ftp.hostname.net: Not logged in.
```

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

```
Password for username@ftp.hostname.net:
```

- `http://hostname/path/filename`—File on an HTTP server. You can also specify *hostname* as `username@hostname` or `username:password@hostname`. If a password is required and you omit it, you are prompted for it.
- `re0:/path/filename` or `re1:/path/filename`—File on a local Routing Engine. You can also specify a file on a local Routing Engine for a specific T640 router on a routing matrix:

```
user@host> show log 1cc0-re1:chassisd
```

**Related Topics** ■ [Displaying JUNOS Software Information](#)

---

Published: 2010-04-27