Network communication utilities in Unix / Linux

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There are a few Unix utilities that are especially useful for users who communicate in a distributed, networked environment. This chapter lists some of them.

Ping utility in Unix / Linux

The **ping** command sends an echo request to an available host on the network. Using this command you can check if your remote host is responding well or not.

The ping command is useful because:

Monitor and analyze hardware independence and software problems.

Determine the status of the network and other diverse foreign hosts.

Check, evaluate and manage the network.

Syntax in Unix / Linux

The following is a simple syntax to use the **ping** command:

```
$ ping hostname or c ip - address
```

The above command will start printing a response every second. To exit this command you can end it by pressing CTRL + C.

Example in Unix / Linux:

Here is an example to check the availability of a host on the network:

```
$ ping google .  com PING google .  com ( 74.125 . 67.100 ) 56 ( 84 ) bytes of
```

If a host does not exist then it will run something like this:

```
$ ping giiiiigle .  com ping : unknown host giiiiigle .  $ com
```

Ftp utility in Unix / Linux

Here **ftp** stands for **F** ile **T** ransfer **P** rotocol. This utility helps you upload and download (upload and download) your files from one computer to another computer.

The ftp utility has its own set of settings in Unix as commands that allow you to perform tasks such as:

Connect and log in to a remote host.

Navigate folders;

List directory contents;

Set and receive files;

Transfer files in ASCII, EBCDIC or binary format.

Syntax in Unix / Linux

Here is a simple syntax to use **ftp** command:

```
$ ftp hostname or c ip - address
```

The above command will prompt you to enter your login ID and password. Once you have confirmed, you can access the main directory of the login account and you can perform various commands.

Some useful commands are listed below:

Description filename command Download a filename from the local device to the remote device get filename Download a filename down from the remote device to the internal device mput file list Download more than one file from the internal device to the device from far. mget file list Download more than one file from the device remotely to an internal device. prompt off Turn off the command prompt, by default you will be prompted to upload or download movies using the mput or mget command. prompt on Enable command prompt. dir Lists all files that are in the current directory of the remote device. cd dirname Change the directory to dirname on the remote device. lcd dirname Change directory to dirname on internal device. quit Exiting from the current login. It should be noted that the files will be downloaded or uploaded to or from the current directory. If you want to upload your files in a separate folder, then first change to that folder and then upload the requested file.

Example in Unix / Linux:

Here is an example to illustrate some commands:

```
$ ftp amrood .  com Connected to amrood .  com .  220 amrood .  com FTP server
```

Telnet utility in Unix / Linux

Sometimes you will need to connect to a remote Unix device and work on that device with remote control mode. Telnet is a utility that allows a computer user at a site to create a connection, log in, and then do the job on the computer at another site.

Once you log in using **telnet** , you can perform all operations on the device connected remotely. Here is an example of telnet:

```
C :> amrood telnet .  Trying com . Connected to amrood .  com .  Escape charac
```

Finger utility in Unix / Linux

The **finger** command displays information about users on a given host. Host can be internal or remote.

Finger may be powerless on other systems for security reasons.

Here is a simple syntax to use **finger** command:

Check all users who are logged on on the internal device as follows:

```
$ finger Login Name Tty Idle Login Time Office amrood pts / 0 Jun 25 08 : 03 (
```

Get information about a separate user available on the internal device:

```
$ finger amrood Login : amrood Name : ( null ) Directory : / home / amrood She
```

Check all users who have logged in on the remote device as follows:

```
$ finger @avtar .  com Login Name Tty Idle Login Time Office amrood pts / 0 Jun
```

Get information about a particular user available on the remote device as follows:

```
$ finger amrood @ avtar .  com Login : amrood Name : ( null ) Directory : / hom
```

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