

Experiment No:6

Aim : Install and Use Telnet in Ubuntu.

Theory:

The telnet command is used for interactive communication with another host using the TELNET protocol. It begins in command mode, where it prints a telnet prompt ("telnet>"). If telnet is invoked with a host argument, it performs an open command implicitly; see the description below.

Options:

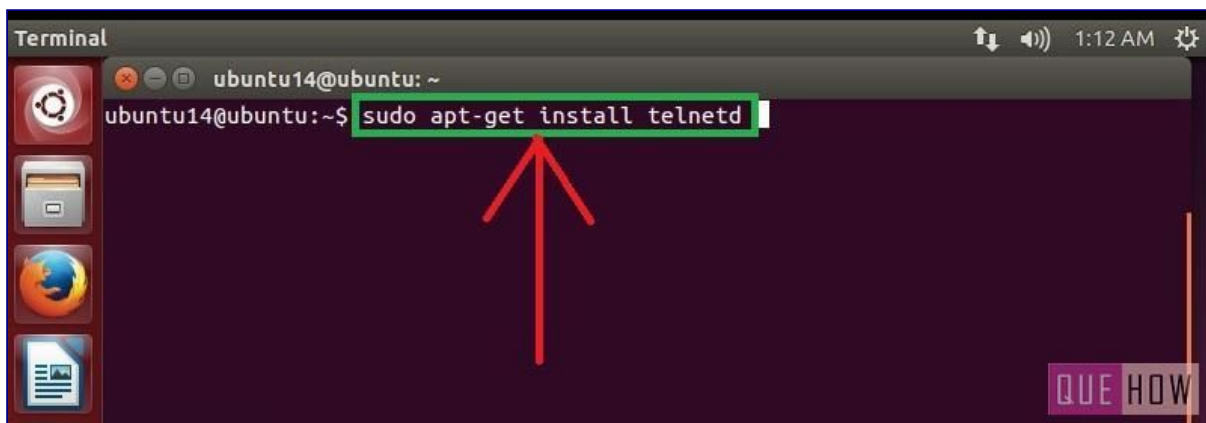
- 4 Force IPv4 address resolution.
- 6 Force IPv6 address resolution.
- 8 Request 8-bit operation. This causes an attempt to negotiate the TELNET BINARY option for both input and output. By default telnet is not 8-bit clean.
- E Disables the escape character functionality; that is, sets the escape character to ``no character''.
- K Specifies no automatic login to the remote system.
- L Specifies an 8-bit data path on output. This causes the TELNET BINARY option to be negotiated on just output.

Once a connection has been opened, **telnet** will attempt to enable the TELNET LINEMODE option. If this fails, then **telnet** will revert to one of two input modes: either "character at a time" or "old line by line" depending on what the remote system supports

Steps to Install and Use Telnet in Ubuntu:

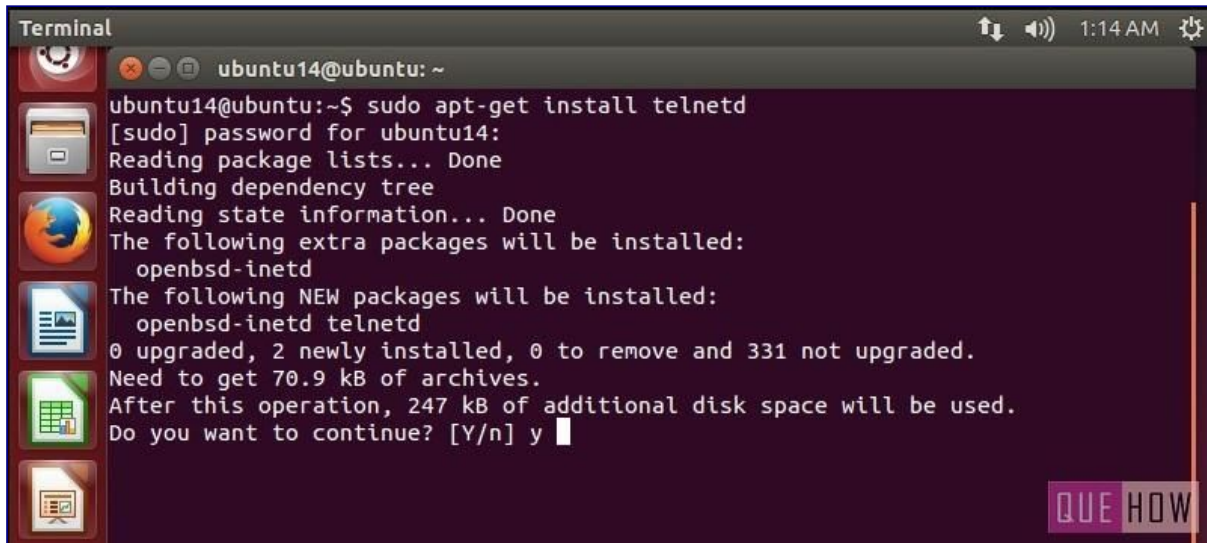
Step 1: Firstly, open the "Terminal" window by pressing "Ctrl + Alt + T". In the figure, you may see "\$" that signifies that you are not logged in as a root user.

So, I'll write "**sudo apt-get install telnetd**" and press enter. If you are a root user, then you don't need to write sudo in Ubuntu. "**telnetd**" is a daemon that gets invoked by "*inetd*" or its extension "*xinetd*", both are the internet servers.



Step 2: Then you are asked to enter the user password and then press enter. Processing will start as soon as you press enter. After this, I have noticed a line **“274 KB additional disk space will be used”** on the terminal screen.

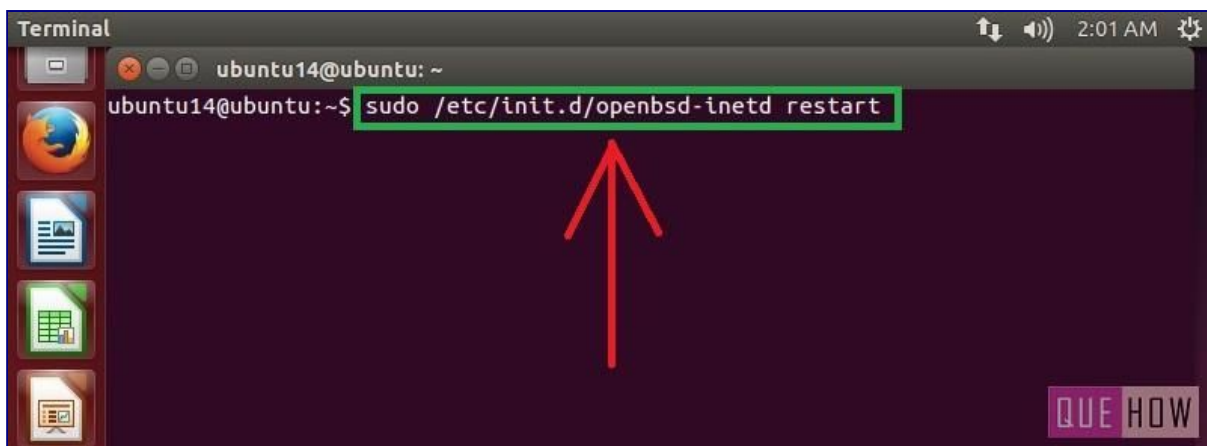
You may also observe some sort of a message like this and then you’ll be asked to continue or not. Just write **“y”** and then press enter to continue.

A terminal window titled 'Terminal' with a dark background. The prompt is 'ubuntu14@ubuntu: ~'. The user has entered 'sudo apt-get install telnetd'. The terminal shows the password prompt, package list reading, dependency tree building, and state information reading. It lists 'openbsd-inetd' as an extra package and 'openbsd-inetd telnetd' as new packages. It states '0 upgraded, 2 newly installed, 0 to remove and 331 not upgraded.' and 'Need to get 70.9 kB of archives.' and 'After this operation, 247 kB of additional disk space will be used.' The prompt 'Do you want to continue? [Y/n] y' is shown with a cursor. A 'QUE HOW' logo is in the bottom right.

```
Terminal
ubuntu14@ubuntu: ~
ubuntu14@ubuntu:~$ sudo apt-get install telnetd
[sudo] password for ubuntu14:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  openbsd-inetd
The following NEW packages will be installed:
  openbsd-inetd telnetd
0 upgraded, 2 newly installed, 0 to remove and 331 not upgraded.
Need to get 70.9 kB of archives.
After this operation, 247 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

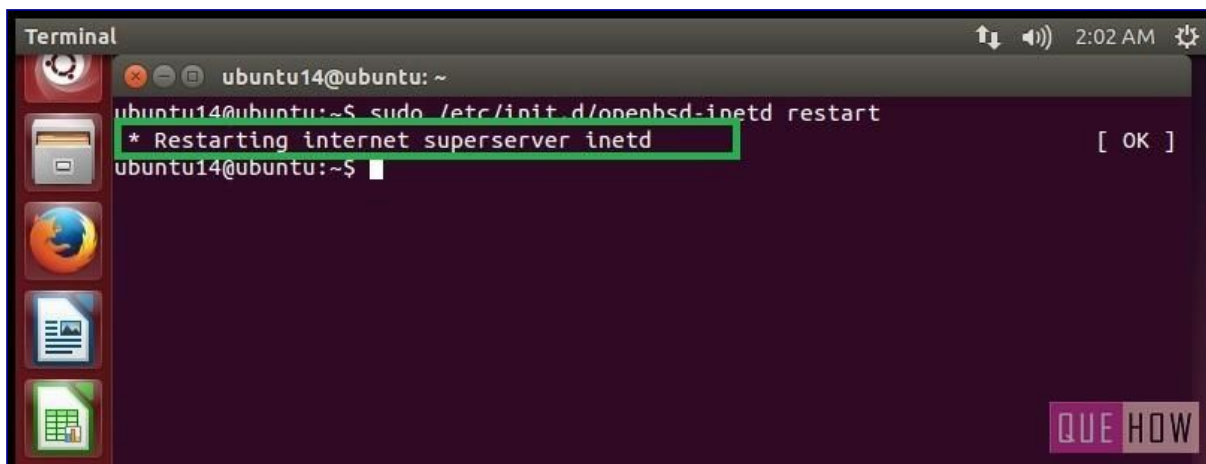
Step 3: Now when you are done with it, **restart “inetd”**. Type **“sudo /etc/init.d.open-basd-inetd restart”**.

“inetd” is daemon used for *dealing with incoming network* and it is responsible for deciding which program to run when a request comes.

A terminal window titled 'Terminal' with a dark background. The prompt is 'ubuntu14@ubuntu: ~'. The user has entered 'sudo /etc/init.d/openbsd-inetd restart'. The command is highlighted with a green box. A red arrow points upwards from below the command. A 'QUE HOW' logo is in the bottom right.

```
Terminal
ubuntu14@ubuntu: ~
ubuntu14@ubuntu:~$ sudo /etc/init.d/openbsd-inetd restart
```

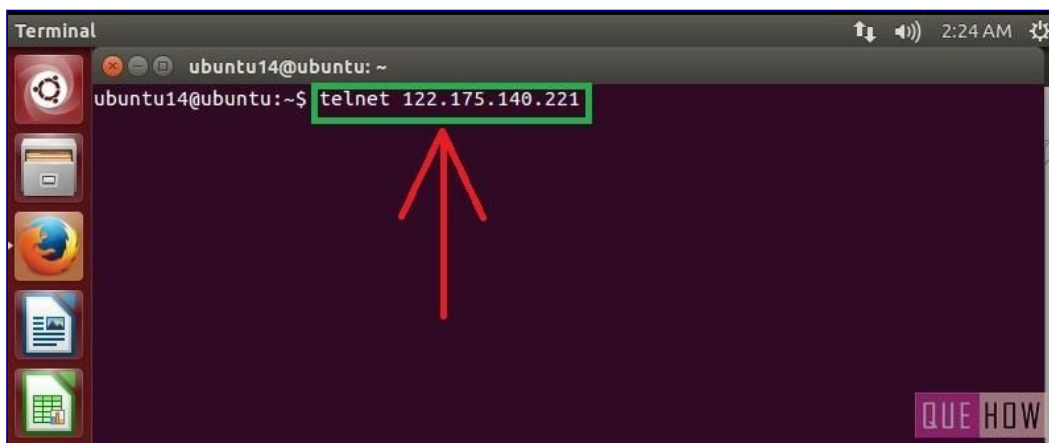
Step 4: To ensure “inetd” is started, press enter after writing the above command.

A terminal window titled 'Terminal' with a dark background. The prompt is 'ubuntu14@ubuntu: ~'. The command 'sudo /etc/init.d/openbsd-inetd restart' has been entered. Below it, a green box highlights the output '* Restarting internet superserver inetd'. To the right of the box is '[OK]'. The prompt is now 'ubuntu14@ubuntu:~\$'. On the left side of the terminal, there is a vertical dock with icons for a file manager, Firefox, a document, and a spreadsheet. In the bottom right corner, there is a 'QUE HOW' logo.

```
Terminal
ubuntu14@ubuntu: ~
ubuntu14@ubuntu:~$ sudo /etc/init.d/openbsd-inetd restart
* Restarting internet superserver inetd
ubuntu14@ubuntu:~$
```

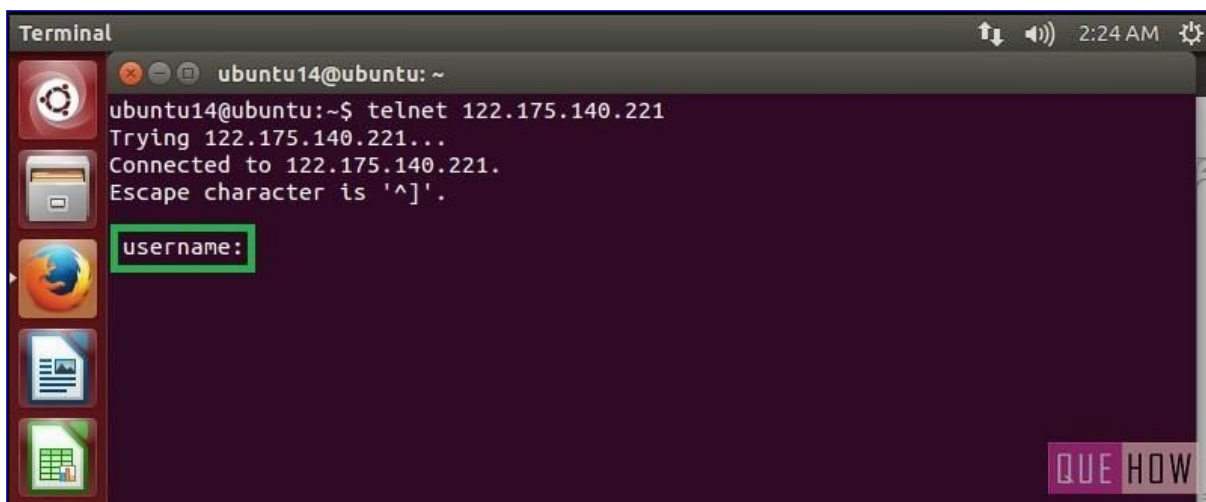
To connect with any remote client:

Step 5: Just type: “telnet hostipaddress”. For an example: “telnet 122.175.140.221” and press enter.

A terminal window titled 'Terminal' with a dark background. The prompt is 'ubuntu14@ubuntu: ~'. The command 'telnet 122.175.140.221' is being entered, with the entire line highlighted by a green box. A red arrow points upwards from below the terminal window towards the command. On the left side of the terminal, there is a vertical dock with icons for a file manager, Firefox, a document, and a spreadsheet. In the bottom right corner, there is a 'QUE HOW' logo.

```
Terminal
ubuntu14@ubuntu: ~
ubuntu14@ubuntu:~$ telnet 122.175.140.221
```

Step 6: Then you’ll see, it is connected to “host ip address”. For security reasons, you are required to provide “username” and “password” as well.

A terminal window titled 'Terminal' with a dark background. The prompt is 'ubuntu14@ubuntu: ~'. The command 'telnet 122.175.140.221' has been entered. The output shows 'Trying 122.175.140.221...', 'Connected to 122.175.140.221.', and 'Escape character is '^[''. Below this, the prompt 'username:' is displayed, with the text highlighted by a green box. On the left side of the terminal, there is a vertical dock with icons for a file manager, Firefox, a document, and a spreadsheet. In the bottom right corner, there is a 'QUE HOW' logo.

```
Terminal
ubuntu14@ubuntu: ~
ubuntu14@ubuntu:~$ telnet 122.175.140.221
Trying 122.175.140.221...
Connected to 122.175.140.221.
Escape character is '^['.
username:
```

Conclusion: Hence we successfully studied the program of telnet.

Date:

Sign:

Grade: