

2. Installation of SSH Server

Output :-

```
rcp@ubuntu:~$ sudo apt install openssh-server
[sudo] password for rcp:
Reading package lists... Done
Building dependency tree
Reading state information... Done
openssh-server is already the newest version (1:7.2p2-4ubuntu2.10).
0 upgraded, 0 newly installed, 0 to remove and 764 not upgraded.
rcp@ubuntu:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
  Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
  Active: active (running) since Fri 2022-11-25 00:17:24 PST; 5min ago
    Main PID: 6786 (sshd)
      Tasks: 1 (limit: 512)
     CGroup: /system.slice/ssh.service
             └─6786 /usr/sbin/sshd -D

Nov 25 00:17:24 ubuntu systemd[1]: Starting OpenBSD Secure Shell server...
Nov 25 00:17:24 ubuntu sshd[6786]: Server listening on 0.0.0.0 port 22.
Nov 25 00:17:24 ubuntu sshd[6786]: Server listening on :: port 22.
Nov 25 00:17:24 ubuntu systemd[1]: Started OpenBSD Secure Shell server.
Nov 25 00:19:01 ubuntu systemd[1]: Started OpenBSD Secure Shell server.
Nov 25 00:22:23 ubuntu sshd[7182]: Accepted password for rcp from 192.168.240.128 port 45820 ssh2
Nov 25 00:22:23 ubuntu sshd[7182]: pam_unix(sshd:session): session opened for user rcp by (uid=0)
rcp@ubuntu:~$ sudo systemctl enable ssh
Synchronizing state of ssh.service with SysV init with /lib/systemd/systemd-sysv-install...
Executing /lib/systemd/systemd-sysv-install enable ssh
rcp@ubuntu:~$ sudo systemctl start ssh
rcp@ubuntu:~$ sudo ufw allow ssh
Skipping adding existing rule
Skipping adding existing rule (v6)
rcp@ubuntu:~$ ssh rcp@192.168.240.128
rcp@192.168.240.128's password:
Welcome to Ubuntu 16.04 LTS (GNU/Linux 4.4.0-21-generic i686)

 * Documentation:  https://help.ubuntu.com/

796 packages can be updated.
535 updates are security updates.

Last login: Fri Nov 25 00:22:23 2022 from 192.168.240.128
rcp@ubuntu:~$
```

3. Configuration of Telnet Server (Output)

```
rpc@ubuntu:~$ sudo apt install telnetd -y
[sudo] password for rpc:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional 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 764 not upgraded.
Need to get 65.7 kB of archives.
After this operation, 222 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu xential/main i386 openbsd-inetd i386 0.20140418-2 [27.7 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu xential/universe i386 telnetd i386 0.17-40 [38.0 kB]
Fetched 65.7 kB in 5s (11.2 kB/s)
Selecting previously unselected package openbsd-inetd.
(Reading database ... 175964 files and directories currently installed.)
Preparing to unpack .../openbsd-inetd_0.20140418-2_i386.deb ...
Unpacking openbsd-inetd (0.20140418-2) ...
Selecting previously unselected package telnetd.
Preparing to unpack .../telnetd_0.17-40_i386.deb ...
Unpacking telnetd (0.17-40) ...
Processing triggers for man-db (2.7.5-1) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
Setting up openbsd-inetd (0.20140418-2) ...
Setting up telnetd (0.17-40) ...
Adding user telnetd to group utmp
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
rpc@ubuntu:~$ sudo systemctl status inetd
● inetd.service - Internet superserver
  Loaded: loaded (/lib/systemd/system/inetd.service; enabled; vendor preset: enabled)
  Active: active (running) since Fri 2022-11-25 00:27:44 PST; 28s ago
    Docs: man:inetd(8)
 Main PID: 7883 (inetd)
   CGroup: /system.slice/inetd.service
           └─7883 /usr/sbin/inetd -i

Nov 25 00:27:44 ubuntu systemd[1]: Started Internet superserver.
rpc@ubuntu:~$ sudo ufw allow 23/tcp
Rule added
Rule added (v6)
rpc@ubuntu:~$ sudo ufw reload
Firewall reloaded
rpc@ubuntu:~$ sudo ufw status numbered
Status: active
To          Action      From
--          ----      --
rpc@ubuntu:~$ 
Processing triggers for man-db (2.7.5-1) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
Setting up openbsd-inetd (0.20140418-2) ...
Setting up telnetd (0.17-40) ...
Adding user telnetd to group utmp
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
rpc@ubuntu:~$ sudo systemctl status inetd
● inetd.service - Internet superserver
  Loaded: loaded (/lib/systemd/system/inetd.service; enabled; vendor preset: enabled)
  Active: active (running) since Fri 2022-11-25 00:27:44 PST; 28s ago
    Docs: man:inetd(8)
 Main PID: 7883 (inetd)
   CGroup: /system.slice/inetd.service
           └─7883 /usr/sbin/inetd -i

Nov 25 00:27:44 ubuntu systemd[1]: Started Internet superserver.
rpc@ubuntu:~$ sudo ufw allow 23/tcp
Rule added
Rule added (v6)
rpc@ubuntu:~$ sudo ufw reload
Firewall reloaded
rpc@ubuntu:~$ sudo ufw status numbered
Status: active
To          Action      From
--          ----      --
[ 1] Samba        ALLOW IN  Anywhere
[ 2] 22          ALLOW IN  Anywhere
[ 3] 23/tcp       ALLOW IN  Anywhere
[ 4] Samba (v6)   ALLOW IN  Anywhere (v6)
[ 5] 22 (v6)     ALLOW IN  Anywhere (v6)
[ 6] 23/tcp (v6) ALLOW IN  Anywhere (v6)

rpc@ubuntu:~$ telnet 192.168.240.128 23
Trying 192.168.240.128...
Connected to 192.168.240.128.
Escape character is '^].
Ubuntu 16.04 LTS
ubuntu login: rcp
Password:
Last login: Fri Nov 25 00:24:17 PST 2022 from 192.168.240.128 on pts/6
Welcome to Ubuntu 16.04 LTS (GNU/Linux 4.4.0-21-generic i686)

 * Documentation:  https://help.ubuntu.com/

796 packages can be updated.
535 updates are security updates.

rpc@ubuntu:~$
```

4. Configuration of FTP Server

Output :-

```
rpc@ubuntu:~$ sudo apt install vsftpd
[sudo] password for rpc:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following NEW packages will be installed:
  vsftpd
0 upgraded, 1 newly installed, 0 to remove and 764 not upgraded.
Need to get 126 kB of archives.
After this operation, 371 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu xenial/main i386 vsftpd i386 3.0.3-3ubuntu2 [126 kB]
Fetched 126 kB in 1min 43s (1,213 B/s)
Preconfiguring packages ...
Selecting previously unselected package vsftpd.
(Reading database ... 175985 files and directories currently installed.)
Preparing to unpack .../vsftpd_3.0.3-3ubuntu2_i386.deb ...
Unpacking vsftpd (3.0.3-3ubuntu2) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
Processing triggers for man-db (2.7.5-1) ...
Setting up vsftpd (3.0.3-3ubuntu2) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for systemd (229-4ubuntu4) ...
rpc@ubuntu:~$ sudo systemctl start vsftpd
rpc@ubuntu:~$ sudo systemctl enable vsftpd
Synchronizing state of vsftpd.service with SysV init with /lib/systemd/systemd-sysv-install...
Executing /lib/systemd/systemd-sysv-install enable vsftpd
rpc@ubuntu:~$ sudo cp /etc/vsftpd.conf /etc/vsftpd.conf_default
rpc@ubuntu:~$ sudo useradd -m testuser
rpc@ubuntu:~$ sudo passwd testuser
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
rpc@ubuntu:~$ sudo ufw allow 20/tcp
Rule added
Rule added (v6)
rpc@ubuntu:~$ sudo ufw allow 21/tcp
Rule added
Rule added (v6)
rpc@ubuntu:~$ sudo ftp rpc
ftp: rpc: Name or service not known
ftp> ^C
ftp> ^C
ftp>
ftp> exit
rpc@ubuntu:~$ sudo ftp testuser
ftp: testuser: Name or service not known
ftp>
```

6. Configuration of SAMBA Server (Output)

```
rcp@ubuntu:~  
rcp@ubuntu:~$ sudo apt install samba  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
samba is already the newest version (2:4.3.11+dfsg-0ubuntu0.16.04.34).  
0 upgraded, 0 newly installed, 0 to remove and 765 not upgraded.  
rcp@ubuntu:~$ whereis samba  
samba: /usr/sbin/samba /usr/lib/samba /etc/samba /usr/share/samba /usr/share/man/man8/samba.8.gz /usr/share/man/man7/samba.7.gz  
rcp@ubuntu:~$ sudo ufw allow samba  
Skipping adding existing rule  
Skipping adding existing rule (v6)  
rcp@ubuntu:~$ sudo mkdir /home/rcp/sambaa/  
rcp@ubuntu:~$ sudo nano /etc/samba/smb.conf  
rcp@ubuntu:~$ sudo service smbd restart  
rcp@ubuntu:~$ sudo smbpasswd -a rcp  
New SMB password:  
Retype new SMB password:  
rcp@ubuntu:~$ sudo service smbd restart  
rcp@ubuntu:~$ sudo service smbd status  
● smbd.service - LSB: start Samba SMB/CIFS daemon (smbd)  
  Loaded: loaded (/etc/init.d/smbd; bad; vendor preset: enabled)  
  Active: active (running) since Fri 2022-11-25 00:06:23 PST; 6s ago  
    Docs: man:systemd-sysv-generator(8)  
  Process: 5702 ExecStop=/etc/init.d/smbd stop (code=exited, status=0/SUCCESS)  
  Process: 5716 ExecStart=/etc/init.d/smbd start (code=exited, status=0/SUCCESS)  
    Tasks: 3 (limit: 512)  
   CGroup: /system.slice/smbd.service  
         ├─5734 /usr/sbin/smbd -D  
         ├─5735 /usr/sbin/smbd -D  
         ├─5737 /usr/sbin/smbd -D  
Nov 25 00:06:23 ubuntu systemd[1]: Starting LSB: start Samba SMB/CIFS daemon (smbd)...  
Nov 25 00:06:23 ubuntu smbd[5716]: * Starting SMB/CIFS daemon smbd  
Nov 25 00:06:23 ubuntu smbd[5716]: ...done.  
Nov 25 00:06:23 ubuntu systemd[1]: Started LSB: start Samba SMB/CIFS daemon (smbd).  
rcp@ubuntu:~$ ifconfig  
ens33 Link encap:Ethernet HWaddr 00:0c:29:5c:19:dc  
      inet addr:192.168.240.128 Bcast:192.168.240.255 Mask:255.255.255.0  
      inet6 addr: fe80::ff90:6e5:1211:8b37/64 Scope:link  
        UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1  
        RX packets:5408 errors:0 dropped:0 overruns:0 frame:0  
        TX packets:4975 errors:0 dropped:0 overruns:0 carrier:0  
        collisions:0 txqueuelen:1000  
        RX bytes:6756135 (6.7 MB) TX bytes:362118 (362.1 KB)  
        Interrupt:19 Base address:0x2000  
  
lo Link encap:Local Loopback  
      inet addr:127.0.0.1 Mask:255.0.0.0  
      inet6 addr: ::1/128 Scope:Host  
        UP LOOPBACK RUNNING MTU:65536 Metric:1  
rcp@ubuntu:~  
GNU nano 2.5.3  
File: /etc/samba/smb.conf  
Modified  
printable = yes  
guest ok = no  
read only = yes  
create mask = 0700  
  
# Windows clients look for this share name as a source of downloadable  
# printer drivers  
[print$]  
comment = Printer Drivers  
path = /var/lib/samba/printers  
browseable = yes  
read only = yes  
guest ok = no  
# Uncomment to allow remote administration of Windows print drivers.  
# You may need to replace 'lpadmin' with the name of the group your  
# admin users are members of.  
# Please note that you also need to set appropriate Unix permissions  
# to the drivers directory for these users to have write rights in it  
; write list = root, @lpadmin  
  
[sambashare]  
comment = Samba on Ubuntu  
path = /home/rcp/sambaa  
read only = no  
browsable = yes  
  
System Settings  
Get Help Write Out Where Is Cut Text Justify Cur Pos Prev Page First Line Where Is Next  
Exit Read File Replace Uncut Text To Spell Go To Line Next Page Last Line To Bracket
```

