Task 4 : Setup and Use a Firewall on Windows/Linux

UFW ON LINUX

Adding ssh rule:

#commands

sudo ufw allow ssh

now enabling firewall

sudo ufw enable

sudo ufw status numbered

checking ssh server status:

sudo systemctl status ssh

sudo apt install netcat-traditional

sudo test local connection

ssh localhost

sudo test remote connection

Test-NetConnection -ComputerName linux ipadd -Port 22

RESTORING TO ORIGINAL STATE:

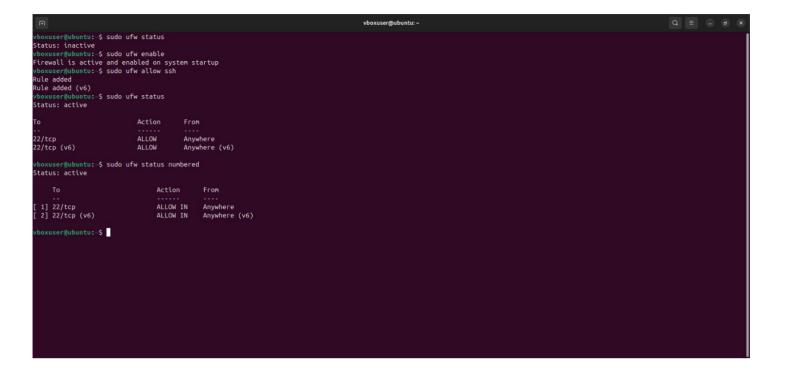**sudo ufw delete 1 sudo ufw disable**

or **sudo ufw reset**

sudo apt purge netcat-traditional

sudo apt purge openssg-server

sudo systemctl stop ssh

sudo apt autoremove

```
vboxuser@ubuntu:~$ sudo ufw status
Status: inactive
vboxuser@ubuntu:~$ sudo ufw enable
Firewall is active and enabled on system startup
vboxuser@ubuntu:~$ sudo ufw allow ssh
Rule added
Rule added (v6)
vboxuser@ubuntu:~$ sudo ufw status
Status: active

To                         Action      From
--                         ------      ----
22/tcp                     ALLOW       Anywhere
22/tcp (v6)                ALLOW       Anywhere (v6)

vboxuser@ubuntu:~$ sudo ufw status numbered
Status: active

     To                    Action      From
     --                    ------      ----
[ 1] 22/tcp                ALLOW IN    Anywhere
[ 2] 22/tcp (v6)           ALLOW IN    Anywhere (v6)

vboxuser@ubuntu:~$
```

```
vboxuser@ubuntu:~$ sudo ufw status
[sudo] password for vboxuser:
Status: inactive
vboxuser@ubuntu:~$ sudo ufw allow ssh
Rules updated
Rules updated (v6)
vboxuser@ubuntu:~$ sudo ufw enable
Firewall is active and enabled on system startup
vboxuser@ubuntu:~$ sudo ufw status numbered
Status: active

     To                    Action      From
     --                    ------      ----
[ 1] 22/tcp                ALLOW IN    Anywhere
[ 2] 22/tcp (v6)           ALLOW IN    Anywhere (v6)

vboxuser@ubuntu:~$ sudo systemctl status ssh
Unit ssh.service could not be found.
vboxuser@ubuntu:~$ ssh localhost
ssh: connect to host localhost port 22: Connection refused
vboxuser@ubuntu:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
     Loaded: loaded (/usr/lib/systemd/system/ssh.service; disabled; preset: enabled)
     Active: active (running) since Sun 2025-09-28 07:38:28 UTC; 1min 42s ago
   TriggeredBy: ● ssh.socket
```

```
vboxuser@ubuntu:~$ ssh localhost
The authenticity of host 'localhost (::1)' can't be established.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'localhost' (           ) to the list of known hosts.
vboxuser@localhost's password:
Welcome to Ubuntu 24.04.3 LTS (GNU/Linux 6.14.0-32-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

Expanded Security Maintenance for Applications is not enabled.

58 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
```

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Command Prompt          X       Windows PowerShell       X       +  v                                           —    □    ×

Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Lenovo> Test-NetConnection -ComputerName             -Port 22


ComputerName      :
RemoteAddress     :
RemotePort        : 22
InterfaceAlias    : WiFi
SourceAddress     : 10.69.24.67
TcpTestSucceeded  : True



PS C:\Users\Lenovo>
```