

CYBER SECURITY INTERNSHIP



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

UFW ON LINUX

Deny 23port on linux

Add a rule to block inbound traffic on 23 telnet

Sudo ufw deny 23/tcp

Nmap -P 23 127.0.0.1

Remotely in windows:

Opening in powershell:

Test-NetConnection -Computername linux ipaddress -port 23

Restoring to its original state:

Sudo ufw reset

```
vboxuser@ubuntu:~$ sudo ufw status
[sudo] password for vboxuser:
Status: inactive
vboxuser@ubuntu:~$ sudo ufw deny 23/tcp
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
     - -
                                DENY IN
[ 1] 23/tcp
                                           Anvwhere
[ 2] 23/tcp (v6)
                                           Anywhere (v6)
                                DENY IN
vboxuser@ubuntu:~$ nmap -p 23 127.0.0.1
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-09-28 09:53 UTC
Nmap scan report for localhost.localdomain (127.0.0.1)
Host is up (0.00013s latency).
PORT STATE SERVICE
23/tcp closed telnet
Nmap done: 1 IP address (1 host up) scanned in 0.03 seconds
vboxuser@ubuntu:~$
```

```
X Windows PowerShell
                                                  X Windows PowerShell
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 WARNING: TCP connect to (2) : 23) failed
                                                                    port 23
ComputerName
RemoteAddress
                        : 23
: WiFi
RemotePort
InterfaceAlias
SourceAddress
PingSucceeded
PingReplyDetails (RTT): 0 ms
TcpTestSucceeded
                        : False
PS C:\Users\Lenovo>
```

```
Nmap done: 1 IP address (1 host up) scanned in 0.05 seconds

vboxuser@ubuntu:-5 sudo ufw delete 1
[sudo] password for vboxuser:

beleting:

deny 23/tcp
Proceed with operation (y|n)? y
Rule deleted

vboxuser@ubuntu:-5 sudo ufw delete 1

beleting:

deny 23/tcp
Proceed with operation (y|n)? y
Rule deleted (v6)

vboxuser@ubuntu:-5 sudo ufw reset
Resetting all rules to installed defaults. Proceed with operation (y|n)? y
Backing up 'user.rules' to '/etc/ufw/user.rules.20250928_065607'

Backing up 'before.rules' to '/etc/ufw/user.rules.20250928_065607'

Backing up 'sefre.rules' to '/etc/ufw/user.rules.20250928_065607'

Backing up 'sfter6.rules' to '/etc/ufw/defore6.rules.20250928_065607'

Backing up 'sfter6.rules' to '/etc/ufw/after6.rules.20250928_065607'

Backing up 'sfter6.rules' to '/etc/ufw/after6.rules.20250928_065607'
```