

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

Objective: Configure and test basic firewall rules to allow or block traffic.

Tools: Windows Firewall / UFW (Uncomplicated Firewall) on Linux.

1. Search for "Windows Defender Firewall with Advanced Security".

2. Select Inbound Rules in the left pane to view the list.

3.

1) Right-click Inbound Rules → New Rule...

2) Rule Type: Port → Next

3) Protocol: TCP → Specific local ports: 23 → Next

4) Action: Block the connection → Next

5) Profile: Check all three (Domain, Private, Public) → Next \

6) Name: TEST_BLOCK_TELNET_23 → Finish

4) Test Rule Test with telnet as described above.

5) Remove Block Rule Find the rule TEST_BLOCK_TELNET_23 in Inbound Rules, right-click, and select Delete.

2. Linux - Uncomplicated Firewall (UFW - Terminal Commands)

1) Open Firewall Tool

```
sudo ufw status
```

2) List Current Rules

```
sudo ufw status numbered
```

3) Add Block Rule (Port 23)

```
sudo ufw deny 23/tcp
```

4) Add SSH Rule (Port 22)

```
sudo ufw allow 22/tcp
```

5) Test Rule

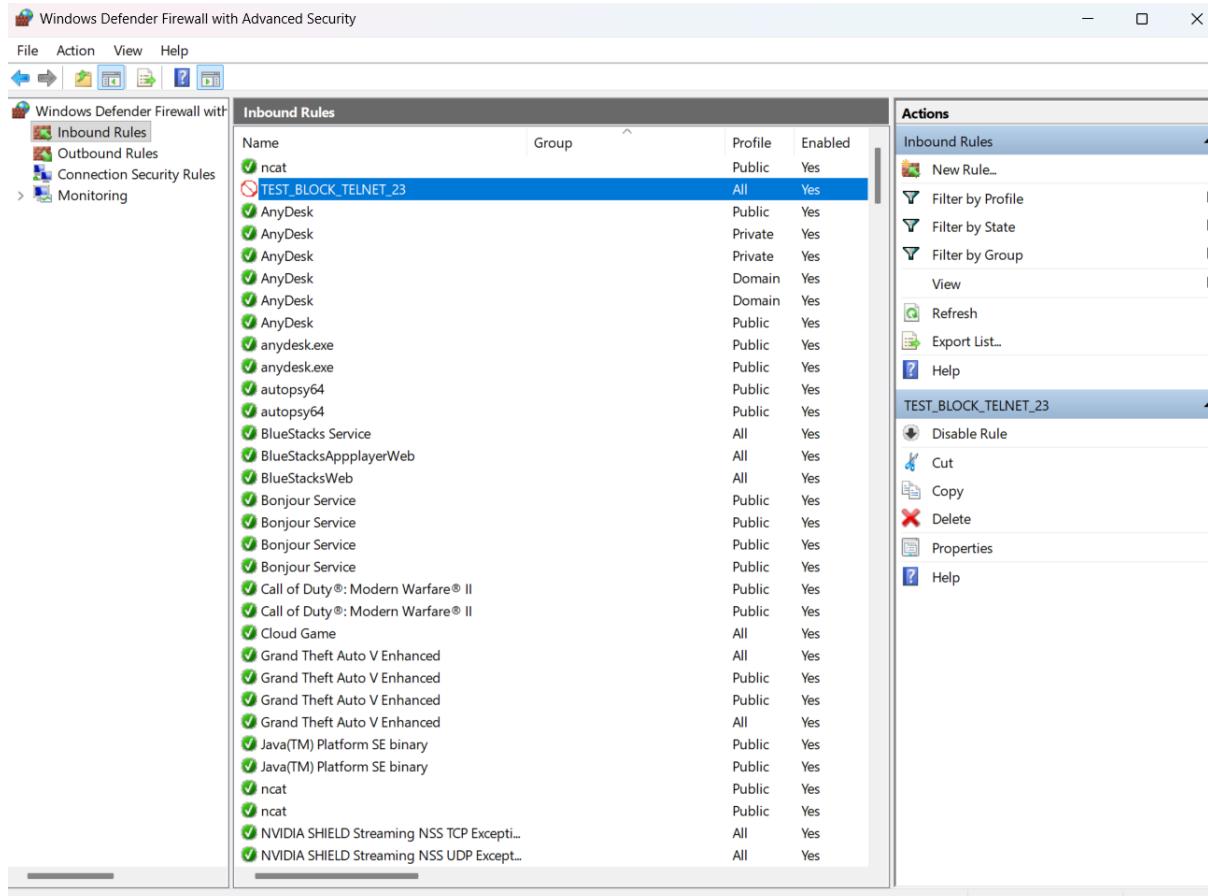
From a remote machine, try connecting: telnet <IP> 23 (You should see a Connection refused or timeout). This confirms the rule is active.

6) Remove Block Rule

```
sudo ufw status numbered (find the number)
```

```
sudo ufw delete <RULE_NUMBER>
```

❖ Screenshots



```
C:\Users\dilip>telnet 10.217.147.153
Connecting To 10.217.147.153...Could not open connection to the host, on port 23: Connect failed

C:\Users\dilip>telnet 10.217.147.153
Connecting To 10.217.147.153...Could not open connection to the host, on port 23: Connect failed
```

```
└─(root㉿kali)-[~/home/kali]
└─# ufw status
Status: active

To                         Action      From
--                         --          --
80,443/tcp                 ALLOW OUT   Anywhere
80,443/tcp (v6)            ALLOW OUT   Anywhere (v6)

└─(root㉿kali)-[~/home/kali]
└─# ufw status numbered
Status: active

To                         Action      From
--                         --          --
[ 1] 80,443/tcp             ALLOW OUT   Anywhere           (out)
[ 2] 80,443/tcp (v6)        ALLOW OUT   Anywhere (v6)       (out)
```

```
└─(root㉿kali)-[~/home/kali]
└─# ufw allow 22/tcp
Rule added
Rule added (v6)

└─(root㉿kali)-[~/home/kali]
└─# ufw status numbered
Status: active

To                         Action      From
--                         --          --
[ 1] 80,443/tcp             ALLOW OUT   Anywhere           (out)
[ 2] 22/tcp                  ALLOW IN    Anywhere
[ 3] 80,443/tcp (v6)        ALLOW OUT   Anywhere (v6)       (out)
[ 4] 22/tcp (v6)            ALLOW IN    Anywhere (v6)
```

```
└─(root㉿kali)-[~/home/kali]
└─# ufw status numbered
Status: active

To                         Action      From
--                         --          --
[ 1] 80,443/tcp             ALLOW OUT   Anywhere           (out)
[ 2] 22/tcp                  ALLOW IN    Anywhere
[ 3] 80,443/tcp (v6)        ALLOW OUT   Anywhere (v6)       (out)

└─(root㉿kali)-[~/home/kali]
└─# ufw delete 2
Deleting:
allow 22/tcp
Proceed with operation (y|n)? y
Rule deleted
```