

```
(ayush@ayush)-[~]
```

```
$ sudo ufw deny 23
```

```
Rule added
```

```
Rule added (v6)
```

```
(ayush@ayush)-[~]
```

```
$ sudo ufw allow 22
```

```
Rule added
```

```
Rule added (v6)
```

```
(ayush@ayush)-[~]
```

```
$ sudo ufw status numbered
```

```
Status: active
```

	To	Action	From
	--	-----	-----
[1]	23	DENY IN	Anywhere
[2]	22	ALLOW IN	Anywhere
[3]	23 (v6)	DENY IN	Anywhere (v6)
[4]	22 (v6)	ALLOW IN	Anywhere (v6)

```
(ayush@ayush)-[~]
```

```
$ telnet localhost 23
```

```
Trying ::1...
```

```
Connection failed: Connection refused
```

```
Trying 127.0.0.1...
```

```
telnet: Unable to connect to remote host: Connection refused
```

```
(ayush@ayush)-[~]
```

```
$ sudo apt install telnet
```

```
The following packages were automatically installed and are no longer required:
```

```
python3-packaging-whl python3-wheel-whl  
python3-pyinstaller-hooks-contrib
```

```
Use 'sudo apt autoremove' to remove them.
```

```
Installing:
```

```
telnet
```

```
Summary:
```

```
Upgrading: 0, Installing: 1, Removing: 0, Not Upgrading: 78
```

```
Download size: 43.3 kB
```

```
Space needed: 56.3 kB / 180 GB available
```

```
(ayush@ayush)-[~]
```

```
$ ssh localhost
```

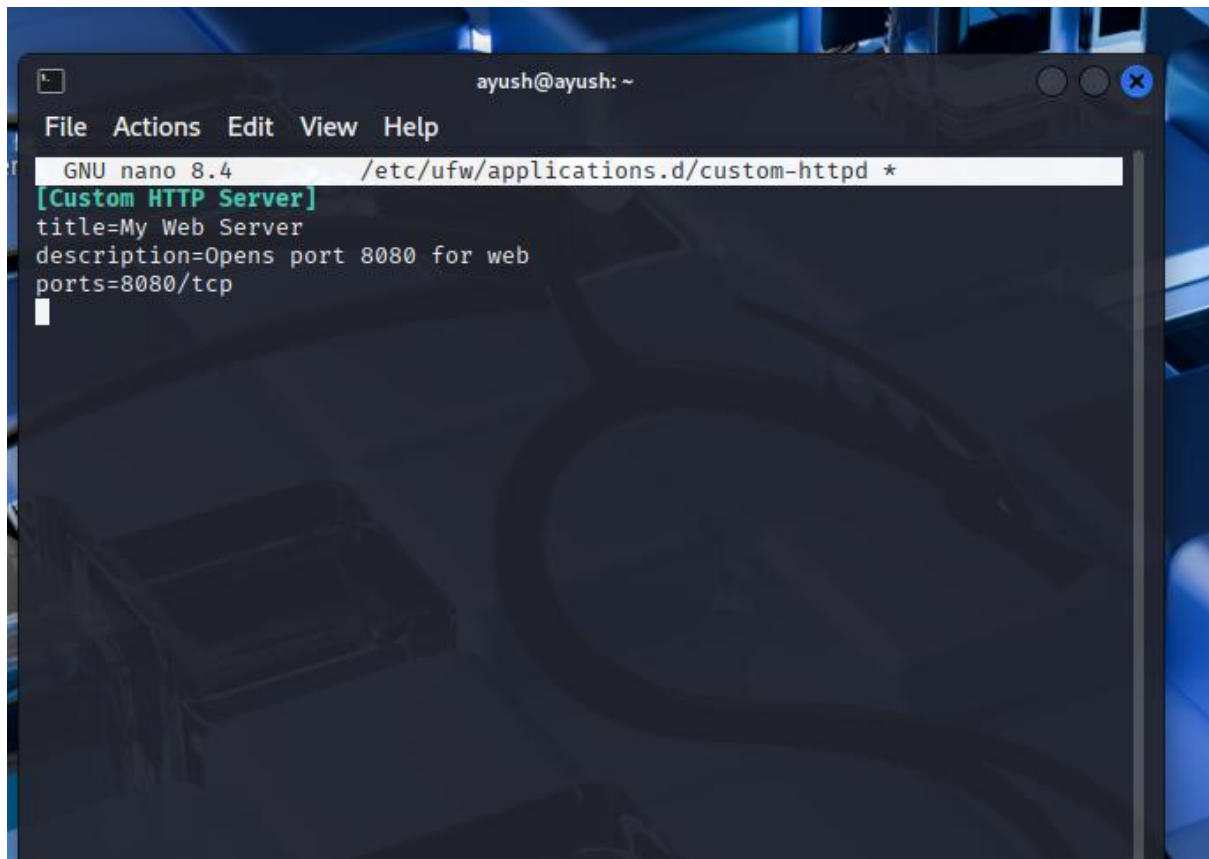
```
ssh: connect to host localhost port 22: Connection refused
```

```
(ayush@ayush)-[~]
```

```
(ayush@ayush)-[~]  
$ sudo ufw delete 1  
Deleting:  
deny 23  
Proceed with operation (y|n)? y  
Rule deleted
```

```
(ayush@ayush)-[~]  
$
```

```
(ayush@ayush)-[~]  
$ sudo ufw limit ssh  
Rule added  
Rule added (v6)  
  
(ayush@ayush)-[~]  
$ sudo ufw allow from 192.168.56.0/24 to any port 22  
  
Rule added  
  
(ayush@ayush)-[~]  
$ sudo ufw delete allow 22  
  
Rule deleted  
Rule deleted (v6)  
  
(ayush@ayush)-[~]  
$ sudo ufw default deny incoming  
sudo ufw default allow outgoing  
  
Default incoming policy changed to 'deny'  
(be sure to update your rules accordingly)  
Default outgoing policy changed to 'allow'  
(be sure to update your rules accordingly)  
  
(ayush@ayush)-[~]  
$ sudo ufw logging on
```



```
ayush@ayush: ~  
File Actions Edit View Help  
GNU nano 8.4 /etc/ufw/applications.d/custom-httpd *  
[Custom HTTP Server]  
title=My Web Server  
description=Opens port 8080 for web  
ports=8080/tcp  
|
```

File Actions Edit View Help

└─\$ sudo nano /etc/ufw/applications.d/custom-httpd

Home

(ayush@ayush)-[~]

└─\$ sudo ufw app list

Available applications:

AIM
Apache
Apache Full
Apache Secure
Bonjour
CIFS
Custom HTTP Server
DNS
Deluge
IMAP
IMAPS
IPP
KTorrent
Kerberos Admin
Kerberos Full
Kerberos KDC
Kerberos Password
LDAP
LDAPS
LPD
MSN
MSN SSL
Mail submission
NFS
Nginx Full
Nginx HTTP
Nginx HTTPS
Nginx QUIC
OpenSSH
POP3
POP3S
PeopleNearby
SMTP
SSH
Samba
Socks
Telnet
Transmission
Transparent Proxy
VNC
WWW
WWW Cache
WWW Full
WWW Secure
XMPP
Yahoo
qBittorrent
svnserve

```
(ayush@ayush)-[~]
$ sudo ufw allow "Custom HTTP Server"

Rule added
Rule added (v6)

(ayush@ayush)-[~]
$ sudo ufw app info "Custom HTTP Server"

Profile: Custom HTTP Server
Title: My Web Server
Description: Opens port 8080 for web

Port:
  8080/tcp
```

```
(ayush@ayush)-[~]
$ sudo systemctl status rsyslog

Unit rsyslog.service could not be found.

(ayush@ayush)-[~]
$ sudo apt install rsyslog -y
$ sudo systemctl start rsyslog
$ sudo systemctl enable rsyslog

The following packages were automatically installed and are no longer required:
python3-packaging-whl python3-pyinstaller-hooks-contrib python3-wheel-whl
Use 'sudo apt autoremove' to remove them.

Installing:
  rsyslog

Installing dependencies:
  libestr0 libfastjson4 liblognorm5

Suggested packages:
  rsyslog-doc      rsyslog-mongodb      rsyslog-hiredis      rsyslog-docker      | rsyslog-gnutls
  rsyslog-mysql    rsyslog-elasticsearch rsyslog-snmp         rsyslog-clickhouse  rsyslog-gssapi
  | rsyslog-pgsql   rsyslog-kafka        rsyslog-kubernetes  rsyslog-openssl     rsyslog-relp

Summary:
Upgrading: 0, Installing: 4, Removing: 0, Not Upgrading: 78
Download size: 863 kB
Space needed: 2,338 kB / 180 GB available
```

```
(ayush@ayush)-[~]
$ sudo ufw logging on

logging enabled

(ayush@ayush)-[~]
$ cat /etc/rsyslog.d/20-ufw.conf

# Log kernel generated UFW log messages to file
msg,contains,"[UFW " /var/log/ufw.log

# Uncomment the following to stop logging anything that matches the last rule.
# Doing this will stop logging kernel generated UFW log messages to the file
# normally containing kern.* messages (eg, /var/log/kern.log)
# & stop

(ayush@ayush)-[~]
$ sudo nano /etc/rsyslog.d/20-ufw.conf

(ayush@ayush)-[~]
$

(ayush@ayush)-[~]
$ sudo systemctl restart rsyslog

(ayush@ayush)-[~]
$ nc -v localhost 8080

localhost [127.0.0.1] 8080 (http-alt) : Connection refused

(ayush@ayush)-[~]
$ sudo tail -f /var/log/ufw.log

tail: cannot open '/var/log/ufw.log' for reading: No such file or directory
tail: no files remaining

(ayush@ayush)-[~]
$ sudo ufw logging high

logging enabled

(ayush@ayush)-[~]
$ sudo systemctl restart rsyslog

(ayush@ayush)-[~]
$ nc -v localhost 8080

localhost [127.0.0.1] 8080 (http-alt) : Connection refused
```



```
localhost [127.0.0.1] 8080 (http-alt) : Connection refused

(ayush@ayush)-[~]
$ sudo tail -f /var/log/ufw.log

tail: cannot open '/var/log/ufw.log' for reading: No such file or directory
tail: no files remaining

(ayush@ayush)-[~]
$ sudo ufw logging high

Logging enabled

(ayush@ayush)-[~]
$ sudo systemctl restart rsyslog

(ayush@ayush)-[~]
$ nc -v localhost 8080

localhost [127.0.0.1] 8080 (http-alt) : Connection refused

(ayush@ayush)-[~]
$ V
V: command not found

(ayush@ayush)-[~]
$ telnet localhost 8080

Trying ::1...
Connection failed: Connection refused
Trying 127.0.0.1...
telnet: Unable to connect to remote host: Connection refused

(ayush@ayush)-[~]
$ ls -l /var/log/ufw.log

-rw-r--r-- 1 root adm 2948 Aug  8 12:54 /var/log/ufw.log
```

```
$ telnet localhost 8080

rying ::1...
onnection failed: Connection refused
rying 127.0.0.1...
elnet: Unable to connect to remote host: Connection refused

(ayush@ayush)-[~]
$ ls -l /var/log/ufw.log

-rw-r----- 1 root adm 2948 Aug  8 12:54 /var/log/ufw.log

(ayush@ayush)-[~]
$ sudo tail -f /var/log/ufw.log

025-08-08T12:54:24.695111+05:30 ayush kernel: [UFW AUDIT] IN= OUT=lo SRC=127.0.0.1 DST=127.0.0.1 LEN=40 TOS=0x00 P
EC=0x00 TTL=64 ID=0 DF PROTO=TCP SPT=8080 DPT=34878 WINDOW=0 RES=0x00 ACK RST URG=0
025-08-08T12:54:24.695112+05:30 ayush kernel: [UFW AUDIT] IN=lo OUT= MAC=00:00:00:00:00:00:00:00:00:00:00:08:00
SRC=127.0.0.1 DST=127.0.0.1 LEN=40 TOS=0x00 PREC=0x00 TTL=64 ID=0 DF PROTO=TCP SPT=8080 DPT=34878 WINDOW=0 RES=0x0
ACK RST URG=0
025-08-08T12:54:34.286105+05:30 ayush kernel: [UFW AUDIT] IN= OUT=lo SRC=0000:0000:0000:0000:0000:0000:0001 D
T=0000:0000:0000:0000:0000:0000:0001 LEN=80 TC=0 HOPLIMIT=64 FLOWLBL=664866 PROTO=TCP SPT=42210 DPT=8080 WIND
W=65476 RES=0x00 SYN URG=0
025-08-08T12:54:34.286190+05:30 ayush kernel: [UFW AUDIT] IN=lo OUT= MAC=00:00:00:00:00:00:00:00:00:00:00:86:dd
SRC=0000:0000:0000:0000:0000:0000:0001 DST=0000:0000:0000:0000:0000:0000:0001 LEN=80 TC=0 HOPLIMIT=64 FL
WLBL=664866 PROTO=TCP SPT=42210 DPT=8080 WINDOW=65476 RES=0x00 SYN URG=0
025-08-08T12:54:34.286193+05:30 ayush kernel: [UFW AUDIT] IN= OUT=lo SRC=0000:0000:0000:0000:0000:0000:0001 D
T=0000:0000:0000:0000:0000:0000:0001 LEN=60 TC=0 HOPLIMIT=64 FLOWLBL=138455 PROTO=TCP SPT=8080 DPT=42210 WIND
W=0 RES=0x00 ACK RST URG=0
025-08-08T12:54:34.286194+05:30 ayush kernel: [UFW AUDIT] IN=lo OUT= MAC=00:00:00:00:00:00:00:00:00:00:00:86:dd
SRC=0000:0000:0000:0000:0000:0000:0001 DST=0000:0000:0000:0000:0000:0000:0001 LEN=60 TC=0 HOPLIMIT=64 FL
WLBL=138455 PROTO=TCP SPT=8080 DPT=42210 WINDOW=0 RES=0x00 ACK RST URG=0
025-08-08T12:54:34.286195+05:30 ayush kernel: [UFW AUDIT] IN= OUT=lo SRC=127.0.0.1 DST=127.0.0.1 LEN=60 TOS=0x00 P
EC=0x00 TTL=64 ID=11810 DF PROTO=TCP SPT=34384 DPT=8080 WINDOW=65495 RES=0x00 SYN URG=0
025-08-08T12:54:34.286222+05:30 ayush kernel: [UFW AUDIT] IN=lo OUT= MAC=00:00:00:00:00:00:00:00:00:00:00:08:00
SRC=127.0.0.1 DST=127.0.0.1 LEN=60 TOS=0x00 PREC=0x00 TTL=64 ID=11810 DF PROTO=TCP SPT=34384 DPT=8080 WINDOW=65495
RES=0x00 SYN URG=0
025-08-08T12:54:34.286223+05:30 ayush kernel: [UFW AUDIT] IN= OUT=lo SRC=127.0.0.1 DST=127.0.0.1 LEN=40 TOS=0x00 P
EC=0x00 TTL=64 ID=0 DF PROTO=TCP SPT=8080 DPT=34384 WINDOW=0 RES=0x00 ACK RST URG=0
025-08-08T12:54:34.286224+05:30 ayush kernel: [UFW AUDIT] IN=lo OUT= MAC=00:00:00:00:00:00:00:00:00:00:00:08:00
SRC=127.0.0.1 DST=127.0.0.1 LEN=40 TOS=0x00 PREC=0x00 TTL=64 ID=0 DF PROTO=TCP SPT=8080 DPT=34384 WINDOW=0 RES=0x0
ACK RST URG=0
025-08-08T13:01:40.222597+05:30 ayush kernel: [UFW AUDIT] IN=eth0 OUT= MAC=33:33:00:00:00:01:52:56:00:00:00:02:86:
d SRC=fe80:0000:0000:0000:0000:0000:0002 DST=ff02:0000:0000:0000:0000:0000:0001 LEN=96 TC=0 HOPLIMIT=255
FLOWLBL=0 PROTO=ICMPv6 TYPE=134 CODE=0
025-08-08T13:01:40.240836+05:30 ayush kernel: [UFW AUDIT] IN= OUT=eth0 SRC=fe80:0000:0000:0000:0a00:27ff:fe5d:a797
DST=ff02:0000:0000:0000:0000:0000:0016 LEN=96 TC=0 HOPLIMIT=1 FLOWLBL=0 PROTO=ICMPv6 TYPE=143 CODE=0 MARK=0xd
025-08-08T13:01:40.672254+05:30 ayush kernel: [UFW AUDIT] IN= OUT=eth0 SRC=fe80:0000:0000:0000:0a00:27ff:fe5d:a797
DST=ff02:0000:0000:0000:0000:0000:0016 LEN=96 TC=0 HOPLIMIT=1 FLOWLBL=0 PROTO=ICMPv6 TYPE=143 CODE=0 MARK=0xd
```