

- **Set Up a Firewall with UFW on Ubuntu 20.04**

UFW is installed by default on Ubuntu. If it has been uninstalled for some reason, you can install it with this command:

```
root@server:/home/arash# apt install ufw
Reading package lists... Done
Building dependency tree
Reading state information... Done
ufw is already the newest version (0.36-6ubuntu1).
ufw set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
```

Check the current status of UFW using the terminal command below:

```
root@server:/home/arash# ufw status
Status: inactive
root@server:/home/arash#
```

The SSH daemon listens on port 32445, enter the following command to allow connections on that port:

```
root@server:/home/arash# ufw allow 32445/tcp
Rules updated
Rules updated (v6)
root@server:/home/arash#
```

Now that the firewall is configured to allow incoming SSH connections, you can enable it.

```
root@server:/home/arash# ufw enable
Firewall is active and enabled on system startup
```

Now i'm going to check the status of ufw.

```
root@server:/home/arash# ufw status verbose
Status: active
Logging: on (low)
Default: deny (incoming), allow (outgoing), disabled (routed)
New profiles: skip
```

To	Action	From
32445/tcp	ALLOW IN	Anywhere
32445/tcp (v6)	ALLOW IN	Anywhere (v6)

```
root@server:/home/arash#
```

Stop the built-in SSH and remove it, then reboot the server to make sure everything works.

```
root@server:/home/arash# systemctl stop ssh
root@server:/home/arash#
```

I remove the open-SSH server.

```
root@server:/home/arash# apt remove openssh-server

Reading package lists... Done

Building dependency tree

Reading state information... Done

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

  libwrap0 openssh-sftp-server ssh-import-id

Use 'sudo apt autoremove' to remove them.

The following packages will be REMOVED:

  openssh-server

0 upgraded, 0 newly installed, 1 to remove and 0 not upgraded.

After this operation, 1,527 kB disk space will be freed.

Do you want to continue? [Y/n] y

(Reading database ... 71668 files and directories currently installed.)

Removing openssh-server (1:8.2p1-4ubuntu0.3) ...

Processing triggers for man-db (2.9.1-1) ...

root@server:/home/arash#
```

Now i try to login to server with SSH built-in and You can see that the SSH built-in port is removed.

```
46704@Lenovo5 MINGW64 ~

$ ssh arash@192.168.68.123

ssh: connect to host 192.168.68.123 port 22: Connection timed out
```

Reboot the server to check that everything is working .

```
root@server:/home/arash# shutdown -r now
```

```
root@server:/home/arash#
```

Try to logging again from client side to server side.

```
46704@Lenovo5 MINGW64 ~
```

```
$ ssh -p 32445 arash@192.168.68.123
```

```
arash@192.168.68.123's password:
```

```
arash@server:~$
```