

Ubuntu

# How to Install and Enable OpenSSH on Ubuntu 20.04

5 years ago • by Shehroz Azam

OpenSSH, abbreviated from OpenBSD Secure Shell, is a tool used to secure remote connectivity between the host and its client via SSH protocol. Since it uses the SSH protocol for network communication, it cares about connection hijacking and attacks, and it also encrypts the network traffic communication by using different authentication methods. This post will learn how to install the OpenSSH server on Ubuntu 20.04 and how to enable it for remote network communication.

## Installation

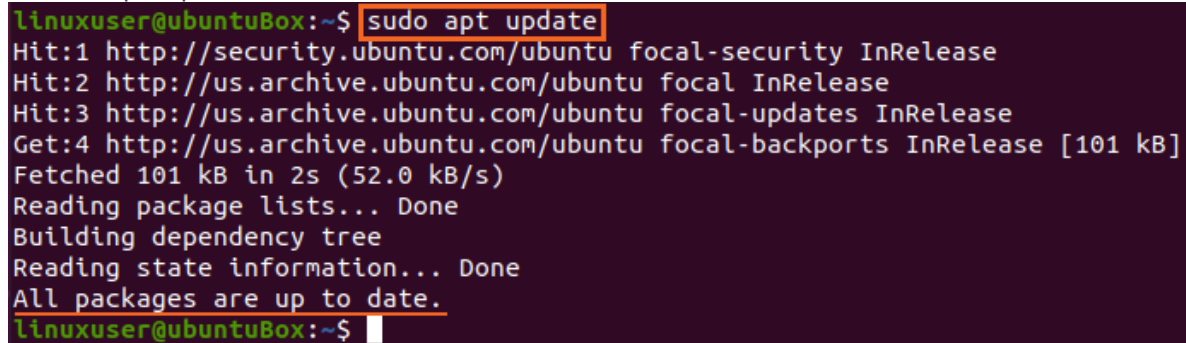
By default, remote access is not allowed in Ubuntu 20.04 using the SSH, and we first have to enable the SSH. Just follow the step-by-step guide given below, and you will have the OpenSSH server installed and enabled on your ubuntu 20.04 LTS system for remote access.

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## Step 1: Open up your terminal and update the system's APT cache repository

First of all, fire up the terminal in your ubuntu system by using the shortcut keys (CTRL+ALT+T) and type the command given below to update the system's APT cache repository.

```
$ sudo apt update
```



```
linuxuser@ubuntuBox:~$ sudo apt update
Hit:1 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:2 http://us.archive.ubuntu.com/ubuntu focal InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu focal-updates InRelease
Get:4 http://us.archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Fetched 101 kB in 2s (52.0 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
All packages are up to date.
linuxuser@ubuntuBox:~$
```

The system's APT cache repository is updated successfully.

## Step 2: Install OpenSSH server

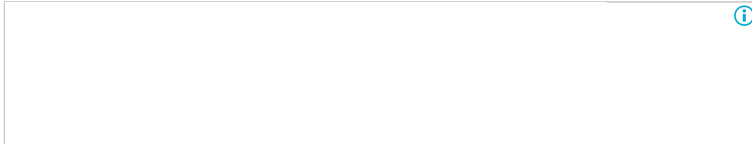
Right after updating your system's APT package repository, install the OpenSSH server on your Ubuntu machine by typing the command provided below.

```
$ sudo apt install openssh-server openssh-client
linuxuser@ubuntuBox:~$ sudo apt install openssh-server openssh-client
Reading package lists... Done
Building dependency tree
Reading state information... Done
openssh-client is already the newest version (1:8.2p1-4ubuntu0.1).
openssh-client set to manually installed.
The following packages were automatically installed and are no longer required:
  libfprint-2-tod1 libllvm10
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  ncurses-term openssh-sftp-server ssh-import-id
Suggested packages:
  molly-guard monkeysphere ssh_askpass
The following NEW packages will be installed:
  ncurses-term openssh-server openssh-sftp-server ssh-import-id
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
Need to get 688 kB of archives.
After this operation, 6,010 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

Type “Y” and hit “Enter” to grant permission for taking additional disk space for the OpenSSH server's installation.

```
rescue-ssh.target is a disabled or a static unit, not starting it.
Setting up ssh-import-id (5.10-0ubuntu1) ...
Attempting to convert /etc/ssh/ssh_import_id
Setting up ncurses-term (6.2-0ubuntu2) ...
Processing triggers for systemd (245.4-4ubuntu3.4) ...
```

After taking some time, the OpenSSH server's installation process will be completed, and the SSH server will automatically start.



### Step 3: Verify that the SSH service is running

To verify the status of the SSH server, type the command given below.

```
$ sudo systemctl status ssh
linuxuser@ubuntuBox:~$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
   Active: active (running) since Wed 2021-01-27 02:54:55 EST; 49s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
    Main PID: 12986 (sshd)
      Tasks: 1 (limit: 3522)
     Memory: 1.1M
    CGroup: /system.slice/ssh.service
            └─12986 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

Jan 27 02:54:55 ubuntuBox systemd[1]: Starting OpenBSD Secure Shell server...
Jan 27 02:54:55 ubuntuBox sshd[12986]: Server listening on 0.0.0.0 port 22.
Jan 27 02:54:55 ubuntuBox sshd[12986]: Server listening on :: port 22.
Jan 27 02:54:55 ubuntuBox systemd[1]: Started OpenBSD Secure Shell server.
lines 1-15/15 (END)
```

Type “q” to go back and configure the firewall.

## Step 4: Configure the firewall

Now you need to configure the firewall of Ubuntu using the UFW tool provided by Ubuntu itself. To enable the firewall for any remote machine to access this Ubuntu machine, you need to open an SSH port. The command for configuring and allowing remote access is typed below.

```
$ sudo ufw allow ssh
linuxuser@ubuntuBox:~$ sudo ufw allow ssh
Rule added
Rule added (v6)
```

After allowing SSH, it is time to enable the firewall as well. To check if it is enabled or not, the command for checking the status of UFW is given below

```
$ sudo ufw status
linuxuser@ubuntuBox:~$ sudo ufw status
Status: inactive
```

If it is inactive and the case is the same for you, then you need to enable it by typing the command

```
$ sudo ufw enable
linuxuser@ubuntuBox:~$ sudo ufw enable
Firewall is active and enabled on system startup
```

After enabling the UFW, check the status again

```
$ sudo ufw status
```

```
linuxuser@ubuntuBox:~$ sudo ufw status
Status: active

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

linuxuser@ubuntuBox:~$
```

You can see that SSH port 22 is opened. If you have the same output as shown in the picture, then the system is ready for remote connections via SSH.

## Conclusion

This post has shown you the step-by-step guide on how to install and enable the OpenSSH server on Ubuntu 20.04 for remote connections. After this configuration, you can log in to this machine from any remote machine via SSH.

#ssh

## ABOUT THE AUTHOR



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A Javascript Developer & Linux enthusiast with 4 years of industrial experience and proven know-how to combine creative and usability viewpoints resulting in world-class web applications. I have experience working with Vue, React & Node.js & currently working on article writing and video creation.

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