

Instalasi SSH Server pada Ubuntu 22.04

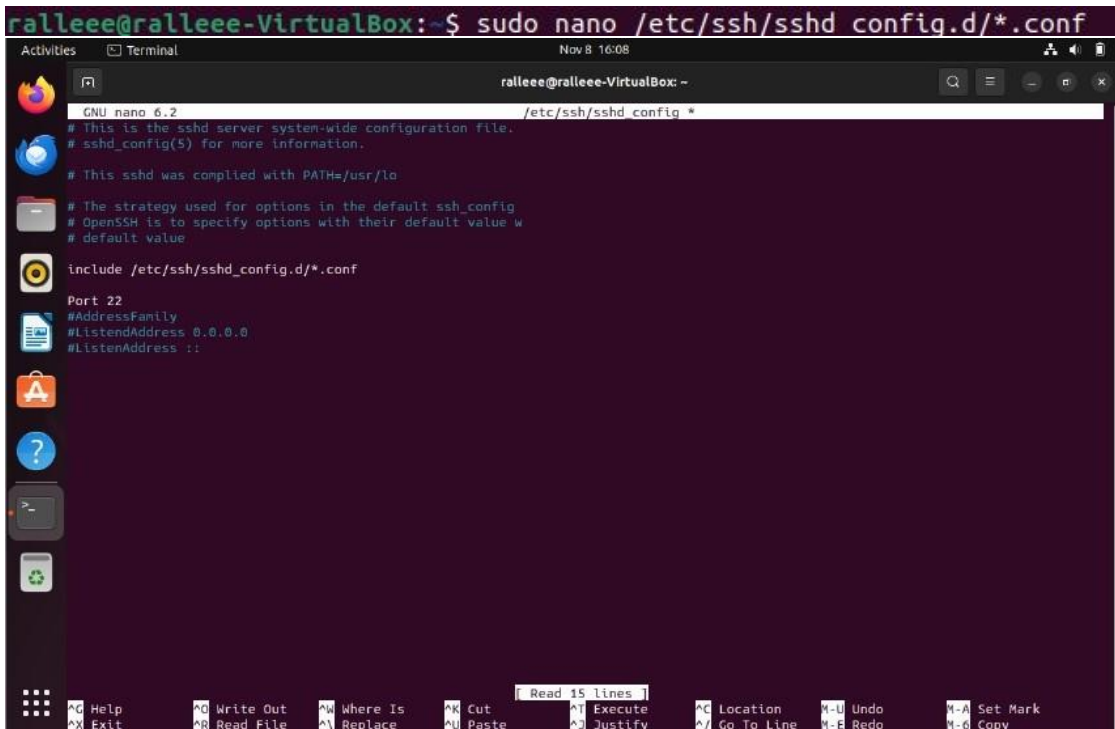
1. Langkah pertama untuk menginstall SSH Server adalah membuka Linux Ubuntu 22.04 pada Virtual Machine, lalu login dan buka terminal.
2. Setelah terminal terbuka, kita masuk ke mode super user dengan “sudo su”.
3. Setelah masuk ke mode root atau superuser, kita lakukan update dengan perintah :

```
ralleee@ralleee-VirtualBox:~$ sudo apt update && apt upgrade
Hit:1 http://id.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://id.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Get:3 http://id.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]
Get:4 http://id.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [718 kB]
Get:5 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2.146 kB]
Get:6 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:7 http://id.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [367 kB]
Get:8 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 DEP-11 Metadata [103 kB]
Get:9 http://id.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2.633 kB]
Get:10 http://id.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [455 kB]
Get:11 http://id.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 DEP-11 Metadata [212 B]
Get:12 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1.134 kB]
Get:13 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe i386 Packages [738 kB]
Get:14 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [265 kB]
Get:15 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 DEP-11 Metadata [357 kB]
Get:16 http://id.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 DEP-11 Metadata [940 B]
Get:17 http://id.archive.ubuntu.com/ubuntu jammy-backports/main amd64 DEP-11 Metadata [5.304 B]
Get:18 http://id.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 DEP-11 Metadata [212 B]
Get:19 http://id.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 DEP-11 Metadata [23,1 kB]
Get:20 http://id.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 DEP-11 Metadata [212 B]
Get:21 http://security.ubuntu.com/ubuntu jammy-security/main i386 Packages [556 kB]
Get:22 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1.911 kB]
Get:23 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [307 kB]
Get:24 http://security.ubuntu.com/ubuntu jammy-security/main amd64 DEP-11 Metadata [43,1 kB]
Get:25 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2.545 kB]
Get:26 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [440 kB]
Get:27 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 DEP-11 Metadata [208 B]
Get:28 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [913 kB]
Get:29 http://security.ubuntu.com/ubuntu jammy-security/universe i386 Packages [633 kB]
Get:30 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [181 kB]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 DEP-11 Metadata [126 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 DEP-11 Metadata [208 B]
Fetched 17,0 MB in 5s (3.727 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
100 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

4. Setelah update berhasil, kita lanjut dengan menginstallasi paket OpenSSH dengan perintah:

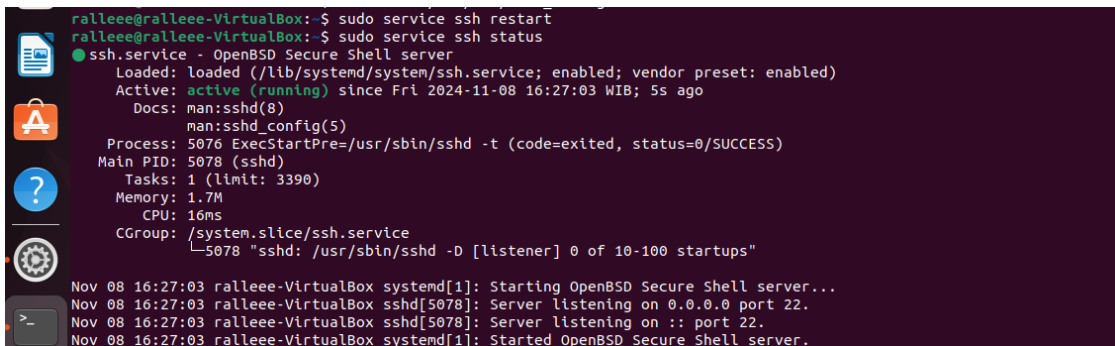
```
ralleee@ralleee-VirtualBox:~$ sudo apt install openssh-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openssh-server is already the newest version (1:8.9p1-3ubuntu0.10).
0 upgraded, 0 newly installed, 0 to remove and 100 not upgraded.
```

- Setelah instalasi berhasil dengan mengetik “Y”, lanjut dengan mengedit file `sshd_config` dengan teks editor nano. Lalu kita uncommand pada line 13 dengan cara menghapus tanda “#” sebelum “Port 22”



```
ralleee@ralleee-VirtualBox:~$ sudo nano /etc/ssh/sshd_config.d/*.conf
GNU nano 6.2 /etc/ssh/sshd_config
# This is the sshd server system-wide configuration file.
# sshd_config(5) for more information.
# This sshd was compiled with PATH=/usr/lo
# The strategy used for options in the default ssh_config
# OpenSSH is to specify options with their default value w
# default value
include /etc/ssh/sshd_config.d/*.conf
Port 22
#AddressFamily
#ListenAddress 0.0.0.0
#ListenAddress ::
```

- Setelah diedit, kita tutup dan simpan perubahan file tersebut dengan cara menekan “Ctrl+X”, lalu ketik “y” dan enter.
- Hal selanjutnya adalah me-restart service SSH yang berjalan, lalu sehabis itu kita bisa juga mengecek status keaktifan dari SSH Server tersebut:



```
ralleee@ralleee-VirtualBox:~$ sudo service ssh restart
ralleee@ralleee-VirtualBox:~$ sudo service ssh status
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2024-11-08 16:27:03 WIB; 5s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Process: 5076 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
    Main PID: 5078 (sshd)
      Tasks: 1 (limit: 3390)
     Memory: 1.7M
        CPU: 16ms
    CGroup: /system.slice/ssh.service
            └─5078 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Nov 08 16:27:03 ralleee-VirtualBox systemd[1]: Starting OpenBSD Secure Shell server...
Nov 08 16:27:03 ralleee-VirtualBox sshd[5078]: Server listening on 0.0.0.0 port 22.
Nov 08 16:27:03 ralleee-VirtualBox sshd[5078]: Server listening on :: port 22.
Nov 08 16:27:03 ralleee-VirtualBox systemd[1]: Started OpenBSD Secure Shell server.
```

8. Setelah melihat status SSH sudah aktif, kita kembali ke OS Host lalu membuka command prompt atau bisa juga powershell, lalu kita masukkan perintah “ssh username@ip-address”, untuk melihat ip address bisa masukkan perintah seperti dibawah pada OS Ubuntu 22.04:

```
rallee@rallee-VirtualBox:~$ ssh rallee@10.0.2.15
The authenticity of host '10.0.2.15 (10.0.2.15)' can't be established.
ED25519 key fingerprint is SHA256:k5ZauHG0sqeC5CcbWLD2pH1DRdVmfT8rm7xHjK7KLI.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.2.15' (ED25519) to the list of known hosts.
rallee@10.0.2.15's password:
rallee@rallee-VirtualBox:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:3c:9e:c2 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute enp0s3
        valid_lft 83729sec preferred_lft 83729sec
    inet6 fe80::8c02:a154:6fb0:b2c9/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
rallee@rallee-VirtualBox:~$ ssh rallee@10.0.2.15
rallee@10.0.2.15's password:
Last login: Fri Nov  8 16:36:00 2024 from 10.0.2.15
```