

SSH Connection Refused Issue

```
Microsoft Windows [Version 10.0.19045.3448]
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C:\Users\VIHAAN>ssh root@192.168.20.131
ssh: connect to host 192.168.20.131 port 22: Connection refused

C:\Users\VIHAAN>ssh docker@192.168.20.131
ssh: connect to host 192.168.20.131 port 22: Connection refused

C:\Users\VIHAAN>ping 192.168.20.131

Pinging 192.168.20.131 with 32 bytes of data:
Reply from 192.168.20.131: bytes=32 time<1ms TTL=64
Reply from 192.168.20.131: bytes=32 time<1ms TTL=64
Reply from 192.168.20.131: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.20.131:
    Packets: Sent = 3, Received = 3, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
Control-C
```

What are the reasons for the error “Connection Refused” in SSH?

1) Wrong SSH credentials or port and machine password

The default port is 22, but administrators often change it for security reasons. You can specify the port with the **-p** option,

like this: **ssh user@hostname -p port_number**.

```
C:\Users\VIHAAN>ssh root@192.168.20.131
```

```
C:\Users\VIHAAN>ssh root@192.168.20.131 -p 22
```

2) Local computer doesn't have an SSH installed

1. First check SSH server is installed Using below command

in the terminal:

1) **dpkg -l | grep openssh-server**

```
root@docker:~# dpkg -l | grep openssh-server
root@docker:~#
```

2) ssh -V

If OpenSSH server is not installed then use below command and install it.

\$sudo apt install openssh-server openssh-client -y

```
docker@docker:~$ sudo apt install openssh-server openssh-client -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
```

3) SSH service Status is active or down

\$systemctl status ssh

```
docker@docker:~$ systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: v
   Active: active (running) since Fri 2023-09-22 14:53:12 IST; 13min ago
     Docs: man:sshd(8)
```

4) SSH port not allow in Firewall

\$sudo ufw allow 22

```
docker@docker:~$ sudo ufw allow 22
Rules updated
Rules updated (v6)
docker@docker:~$
```

5) Permission not allowing in **SSH Configuration** file for root login
(/etc/ssh/sshd_config)

Check the permission using below command

\$ sudo cat /etc/ssh/sshd_config

```
docker@docker:~$ cat /etc/ssh/sshd_config
#      $OpenBSD: sshd_config,v 1.103 2018/04/09 20:41:22 tj Exp $

# This is the sshd server system-wide configuration file.  See
# sshd_config(5) for more information.

#LoginGraceTime 2m
#PermitRootLogin prohibit-password
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

#PubkeyAuthentication yes
```

First Method:-

Open the /etc/ssh/sshd_config file with administrative privileges and change the prohibit-password to yes

FROM:

#PermitRootLogin prohibit-password

TO:

PermitRootLogin yes

```
$ sudo vim /etc/ssh/sshd_config
```

```
# Authentication:

#LoginGraceTime 2m
PermitRootLogin yes
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

#PubkeyAuthentication yes
```

Second Method:-

```
$ sudo sed -i 's/#PermitRootLogin prohibit-password/PermitRootLogin yes/'
/etc/ssh/sshd_config
```

```
docker@docker:~$ sudo sed -i 's/#PermitRootLogin prohibit-password/PermitRootLo
gin yes/' /etc/ssh/sshd_config
docker@docker:~$
```

After making changes, restart the SSH service

```
$ sudo systemctl restart ssh
```

Note:- By default the root's password is not set on Ubuntu and the error message Permission denied, please try again will appear when attempting to SSH login as a root user.

```
$ sudo su
```

```
[sudo] password for docker:
```

```
root@docker:/home/docker# passwd
```

```
New password:
```

```
Retype new password:
```

```
passwd: password updated successfully
```



```
docker@docker:~$ sudo su
[sudo] password for docker:
root@docker:/home/docker# passwd
New password:
Retype new password:
passwd: password updated successfully
root@docker:/home/docker#
```

After that take remote using below option

- 1)Putty
- 2)gitbash
- 3)windows cmd or powershell

Normal User Login:

```
C:\Users\VIHAAN>ssh docker@192.168.20.131
The authenticity of host '192.168.20.131 (192.168.20.131)' can't be established
.
ECDSA key fingerprint is SHA256:1zjPoX9nUTaM7Q7AW/E6Sn2X2QSVpDb9xm6A+vCqy1Y.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.20.131' (ECDSA) to the list of known hosts.

docker@192.168.20.131's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-42-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
```

Root Login:-

```
C:\Users\VIHAAN>ssh root@192.168.20.131
root@192.168.20.131's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-42-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

672 updates can be installed immediately.
458 of these updates are security updates.
To see these additional updates run: apt list --upgradable
```