

## SSH Connection between two servers

1. Create a two separate instance with the name **Server\_ssh connection1** and **Server\_ssh connection2**, we can use the existing key pair for both the instance.

2. Connect to any one server as source, ex: **Server\_ssh connection1**
3. We can login as ubuntu user or root user.
4. Create a ssh key using **ssh-keygen -t rsa**
5. It will save the file in default path **/home/ubuntu/.ssh/id\_rsa**
6. Go inside the ssh, **cd .ssh/**

```
ubuntu@ip-172-31-13-133:~/.ssh$ ls
authorized_keys  id_rsa  id_rsa.pub  known_hosts  known_hosts.old
```

7. **id\_rsa** is a private key, **id\_rsa.pub** is a public key
8. Cat the **id\_rsa.pub** to copy the public key, make a note in notepad
9. Connect to the destination server, ex; **Server\_ssh connection2**
10. Add the public key under **authorized\_keys**
11. Cat the **authorized\_keys** i.e, **cat ~/.ssh/authorized\_keys**
12. Edit the **authorized\_keys**, add the copied public key in 2<sup>nd</sup> line, 1<sup>st</sup> line will be the keypair  
don't delete this keypair

```
ubuntu@ip-172-31-12-178:~$ cat ~/.ssh/authorized_keys
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDLtVfjZ/CwRyXvBuPvFy7+pmhiy6id6w0j7dbwf5zouPBYXfkgzpdDcNp20d42bEzdbP53L5Jv010XssiUPn553xZ0Xh9BxULecEs16W2tv5yNMhGW2Jv2kUmKVAcG
qd5G13kAwVwV06F44fF6XZ+1rQy1A7Yw3v06HCckxbqp5eQr4ePNI0Na2GwIM9d30g912E+ZuhoQvp3ePY1AUaSSnNSBD/GliJhcg3xIU490U9s64bqUwAx4/zYHgaGol6CSvZygBtosAGY/VIAcGvrtkkYad4krFda
Mq7MnTUymn13oS/zhvPgmuyHA1ap5QeNtOfWWhXijhlWmZ keypair16
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQGCXkhByD/YTWJZPwciR1xuT3EcG0PwXubE5644foXx6gNvfPpabmwS0BfMOO8k+W1BhD1jFRkholymXuiCSpWcd5WzhI9H2VFRnJE1wLXDae2Jn/JTpD+PuWfuYHop0/7
PdFlSjrIFi7u1A8jft2ciXHXNWjYDqgUoZ+j/KdKDLeb2olGaf/QnftZ5jppj2fEr4C4g9T+inmYU5ZwjSKKMBASjA8Fuy1KqSF/czIwgoMip1g69ccFxpCGqJEGRQ74DjoXeqVn1VH46BJPduodXB308wPvhVjD/Px2
zsFpTz9qkFSUE/MUOfmAH1qaYgM2z/PVaDrV+5/gtgccm1DaHh/ybTuv4gac3WOLlq1wfvgl551x5BvRw2LJpwBAORR8tt7Dpt7fqBopXYTy9v9xq03MVY1Wjkc8u/K+GkeayjHawSFOc6QUa0ApzQ1pmeB/BQ/gNmm/C8
tCVTRNmk1V2gmc90f6SMjPThwR/DH+tzLfrvdi9Jt/ctdgjIQE= ubuntu@ip-172-31-13-133
```

13. Once done go to the source server and check the permission for public key it should be 600
14. If not set the permission for **id\_rsa.pub** i.e, **chmod 600 id\_rsa.pub**

```
ubuntu@ip-172-31-13-133:~$ cd .ssh/
ubuntu@ip-172-31-13-133:~/.ssh$ ls -l
total 20
-rw----- 1 ubuntu ubuntu 391 Nov 28 09:40 authorized_keys
-rw----- 1 ubuntu ubuntu 2610 Nov 28 11:32 id_rsa
-rw----- 1 ubuntu ubuntu 577 Nov 28 11:32 id_rsa.pub
-rw----- 1 ubuntu ubuntu 1120 Nov 28 11:37 known_hosts
-rw-r--r-- 1 ubuntu ubuntu 284 Nov 28 11:37 known_hosts.old
ubuntu@ip-172-31-13-133:~/.ssh$ ls
```

15. Now we can ssh the destination server using source server  
**ubuntu@ip-172-31-13-133:~/.ssh\$ ssh ubuntu@172.31.12.178 ( IP of destination server)**

Its connected to the destination server.

```
ubuntu@ip-172-31-13-133:~/.ssh$ ssh ubuntu@172.31.12.178
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.8.0-1016-aws x86_64)

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

System information as of Thu Nov 28 12:06:44 UTC 2024

System load:  0.0               Processes:            106
Usage of /:   23.2% of 6.71GB   Users logged in:     1
Memory usage: 20%              IPv4 address for enx0: 172.31.12.178
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Thu Nov 28 12:00:35 2024 from 13.233.177.3
ubuntu@ip-172-31-12-178:~$
```

Note: We can copy the public key using command from source server as well

**ssh-copy-id -i .ssh/id\_rsa.pub ubuntu@ip address of destination server**

Then check from step 13 to connect the destination server.