

# LINUX TO LINUX INSTANCE CONNECT USING (PEM)

## Create two Linux EC2 instance(machine)

- Edit network settings while creating EC2 instances, enable auto-assign public IP for creating public instance this will make instance publicly accessible now create private instance for private instance disable auto-assign public IP. Create common security group vpc1-sg for both instances.
- ⚠ Your VPC should be connected to the Internet Gateway.

▼ Network settings Info

VPC - required Info

vpc-0ae4ac7e18b0bb366 (vpc1)  
10.0.0.0/16

↻

Subnet Info

subnet-069b102ff3b5117be  
VPC: vpc-0ae4ac7e18b0bb366 Owner: 436117849909  
Availability Zone: us-east-1e IP addresses available: 250 CIDR: 10.0.0.0/24

public\_subnet  
↻ Create new subnet

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group

☐ Select existing security group

Security group name - required

vpc1-sg

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and \_-~/!@#,%&\*+=&[]!\$\*

Description - required Info

launch-wizard-2 created 2023-02-19T13:42:10.581Z

Inbound security groups rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove

Type Info

ssh

Protocol Info

TCP

Port range Info

22

Source type Info

Anywhere

Source Info

0.0.0.0/0

Description - optional Info

e.g. SSH for admin desktop

Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Add security group rule

Open Public instance using putty and enter “sudo su –” command to switch to root user

```
root@ip-10-0-0-151:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
  
  _ |  _ | _ )  
  _ | ( _ | /  Amazon Linux 2 AMI  
  _ | \ _ | _ |  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-10-0-0-151 ~]$ sudo su -  
[root@ip-10-0-0-151 ~]#
```

- Now you have to access your private instance from the public instance for that go to private Ec2 instance we have created and click on connect and then click on SSH client, you will see the following procedure there

EC2 > Instances > i-056aa0920fab20c1d > Connect to instance

### Connect to instance Info

Connect to your instance i-056aa0920fab20c1d (private-m) using any of these options

EC2 Instance Connect

Session Manager

**SSH client**

EC2 serial console

Instance ID  
i-056aa0920fab20c1d (private-m)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is Dsp.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.  
chmod 400 Dsp.pem
4. Connect to your instance using its Private IP:  
10.0.1.228

Example:  
ssh -i "Dsp.pem" ec2-user@10.0.1.228

**Note:** In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

Cancel

Execute following in your linux CLI :

- vi Dsp.pem
- open your .pem file of your key assigned to the instance in Notepad and copy the key
- In CLI press I you will enter into insert mode and now paste the copied key.
- Now copy the commands from the connect to instance, as shown in the image above
- After successful connection you will see the following

```
[root@ip-10-0-0-151 ~]#
[root@ip-10-0-0-151 ~]# chmod 400 Dsp.pem
[root@ip-10-0-0-151 ~]# ssh -i "Dsp.pem" ec2-user@10.0.1.228
The authenticity of host '10.0.1.228 (10.0.1.228)' can't be established.
ECDSA key fingerprint is SHA256:K1NgxRCZ5u1TRGeiKXoTuU9qGle0Be724ymqPpQm3vk.
ECDSA key fingerprint is MD5:8f:4f:d1:e4:e8:c7:82:48:81:69:9e:f3:df:00:cb:bf.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.0.1.228' (ECDSA) to the list of known hosts.

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  _ | ( _ _ /   Amazon Linux 2 AMI
  _ | \ _ _ | _ |

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-0-1-228 ~]$
```