

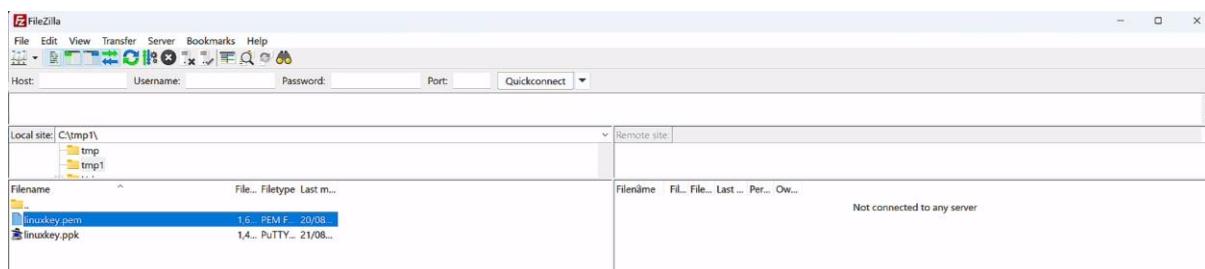


Launching Database Server

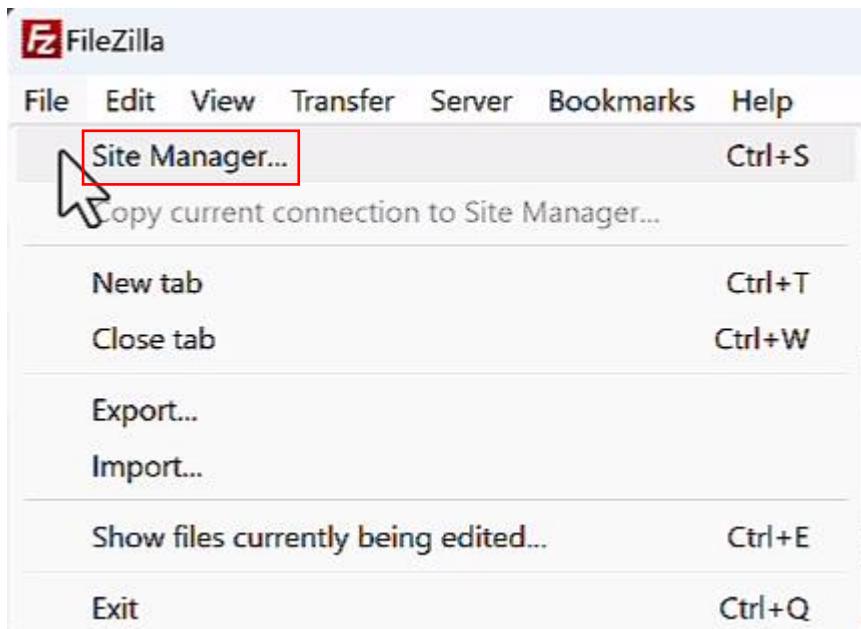
1. Now you are going to launch an EC2 instance again.
2. Give your instance a name, then select Ubuntu as your OS.
3. Select t2.micro as your instance type because it is free tier eligible.
4. Then select your key pair.
5. Now in the network settings select your VPC. Then for the subnet select DB subnet.
6. Keep your auto assign public IP to disable.
7. Then just launch your instance.

The screenshot shows the AWS VPC configuration interface. It highlights the selection of a specific VPC (vpc-0592817f98a3df74e) and its associated subnet (subnet-0e92eea36802b1b92). The subnet is identified as a 'db-subnet' with a CIDR range of 10.0.1.0/24. The 'Auto-assign public IP' setting is set to 'Disable'. The interface includes standard navigation buttons like back, forward, and search.

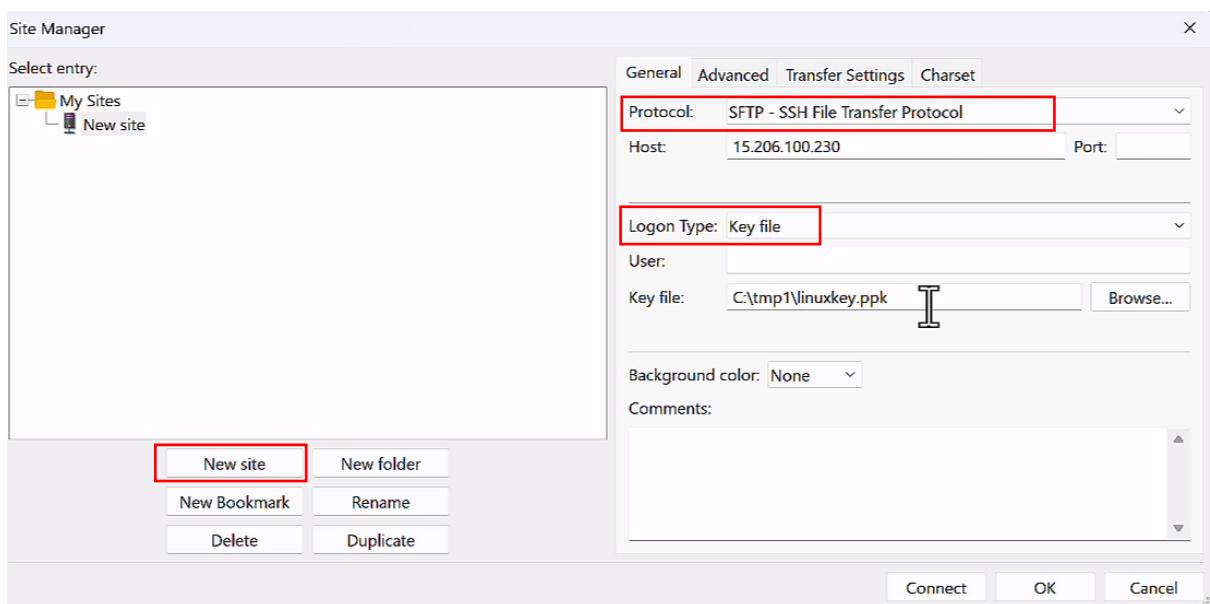
- See, you are launching an instance in your DB subnet and your DB subnet is a private subnet. You will not be allocated a public IP address. So how are you going to connect onto your DB instance itself?
 - But you will connect via your web instance onto the DB instance.
 - See within the VPC, right? You have a route in your route tables that tells that all communication within the VPC is possible. So, you should be able to connect from web VM. Onto your database server via its private IP address.
 - Now you just need to copy the dot pem file. That's the private key file from our local machine on to web VM so that you can use that key file to connect onto your database server.
 - For this particular lab you are going to use a tool called **file zilla**. Below is the link for file zilla. Download and install this tool.
 - <https://filezilla-project.org/>
- In file zilla tool first you should go to the directory or folder where your .pem file is located.
➤ Then you need to connect file zilla with your web instance using your public IP address.



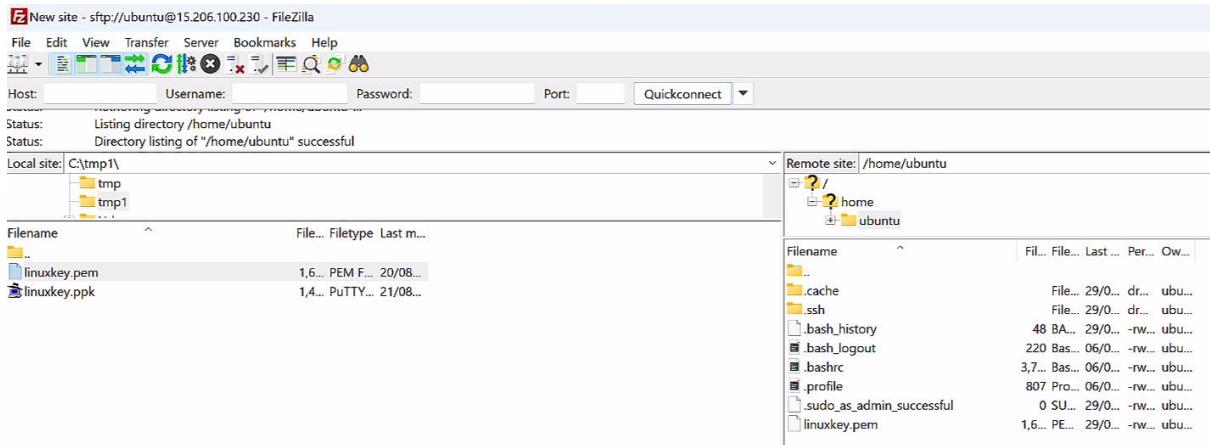
- Here you need to click on file then on Site manager to establish connection.



- Now you need to click on new site, then select SFTP as your protocol.
- Then paste your public IP address. Now in logon type choose key file, then browse for your key file.
- Now click on connect.



- Here you just need to drag your file from left side to right side and that'll do it.



- Now connect to putty tool and there list the content what you have in your server. And you will see your .pem file there.

```
ubuntu@ip-10-0-0-68:~$ ls
linuxkey.pem
ubuntu@ip-10-0-0-68:~$
```

- Now if you will try to connect with the DB instance it will give you an error of bad permission.
- This below command will help you to log in, you just need to write name of our .pem file and what is the private IP address of DB instance.
- **ssh -i linuxkey.pem ubuntu@10.0.1.25**

```
ubuntu@ip-10-0-0-68:~$ ssh -i linuxkey.pem ubuntu@10.0.1.25
The authenticity of host '10.0.1.25 (10.0.1.25)' can't be established.
ED25519 key fingerprint is SHA256:7006g5Fqc9CWkw69N4hiMdJ3CSNI5QxF3Ld0g7camsY.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.1.25' (ED25519) to the list of known hosts.
@@@@@@@WARNING: UNPROTECTED PRIVATE KEY FILE!@@@@@@@
Permissions 0664 for 'linuxkey.pem' are too open.
It is required that your private key files are NOT accessible by others.
This private key will be ignored.
Load key "linuxkey.pem": bad permissions
ubuntu@10.0.1.25: Permission denied (publickey).
ubuntu@ip-10-0-0-68:~$
```

- So, now you need to change the permission in order to connect with DB instance.
- **sudo chmod 400 linuxkey.pem**

```
ubuntu@ip-10-0-0-68:~$ sudo chmod 400 linuxkey.pem
```

- After that try again to connect with the instance.
- Here you can see that you are connected.

```
ubuntu@ip-10-0-1-25:~$
```