

Learning EC2 with Basic Commands

What is EC2?

EC2 (Elastic Compute Cloud) is a virtual server from AWS that lets you run applications, store files, and do many tasks like a real computer — but online (in the cloud).

What I Learned

- How to connect to an EC2 instance using SSH.
- How to upload and download files using SCP.
- How to check files and folders inside the EC2 server.

Step-by-Step Work Done

1. Connecting to EC2 Using SSH

To work on your EC2 instance, you need to connect to it securely using a .pem file (a key that proves its you).

```
ssh -i "C:\Users\Prikshit\Downloads\Demo1.pem" ubuntu@51.21.202.175
```

- ssh: Secure Shell – helps connect securely.
- -i: This tells SSH to use your key file.
- ubuntu@...: The EC2 instances username and public IP address.

This command opens a remote terminal where you can type Linux commands on your EC2 server.

2. Listing Files in EC2 Instance

Once connected, I wanted to check what files are already there in the home folder.

```
ls -l /home/ubuntu/
```

- ls -l: Lists files with details like permissions, size, and date.
- /home/ubuntu/: This is the main folder for the Ubuntu user.

3. Uploading a File to EC2 Using SCP

I uploaded an image file (images.jpg) from my Windows PC to the EC2 server.

```
- scp -i "C:\Users\Prikshit\Downloads\Demo1.pem"  
"C:\Users\Prikshit\OneDrive\Desktop\images.jpg" ubuntu@51.21.202.175:/home/ubuntu
```

- scp: Secure Copy – used to transfer files securely.
- The path in quotes is where the file is stored on my PC.
- ubuntu@...:/home/ubuntu: This is where the file will be stored in EC2.

Now the file is available on the EC2 server!

4. Downloading a File from EC2 to Local System

I later downloaded the same image from EC2 to my local computer (Downloads folder).

```
- scp -i "C:\Users\Prikshit\Downloads\Demo1.pem"  
ubuntu@51.21.202.175:/home/ubuntu/images.jpg C:\Users\Prikshit\Downloads\
```

- The first part is the file path on the EC2 server.
- The last part is where I want to save it on my PC.

Now I have a copy of images.jpg back on my local computer.

Tips for Beginners

- Never share your .pem file. Its like a password.
- If connection fails, check your instances ****security group rules**** (allow port 22).
- Always give correct paths while using SCP (Windows paths use \, Linux uses /).
- Use ls to explore files and cd to navigate folders.

Summary of Commands

Purpose	Command
Connect to EC2	ssh -i "path_to_pem" ubuntu@public_ip
List files	ls -l /home/ubuntu/
Upload file to EC2	scp -i "path_to_pem" "local_path" ubuntu@public_ip:/home/ubuntu
Download file from EC2	scp -i "path_to_pem" ubuntu@public_ip:/home/ubuntu/file local_folder_path