



Accessing EC2 Instance using AWS CLI

Section 1: Security Groups

Security Groups help you to connect the EC2 instance with the local machine. It is able to do so by providing permission to the public IP address of your local machine.

The following command is used to create a security group for an EC2 instance using AWS CLI:

```
aws ec2 authorize-security-group-ingress --group-id xxxxxxxxxxxx  
--protocol tcp --port 22 --cidr xx.xx.xx.xx/xx
```

You can find your public IP address using the link below: <https://www.ip2location.com/>

The screenshot shows the IP2Location website interface. At the top, there's a navigation bar with links like 'with no explicit permission', 'extra cost required for IP location', 'information using Database, REST API and SDK (Java, .NET, PHP, Ruby, Python, Perl and many more)', and 'information granularity to suit your business needs. Pay for what you need.' Below this is a section titled 'Learn more about your Internet traffics'. It contains a table with the following data:

Your IP Address	ISP	
202.173.127.198	Excitel	
Country	Coordinates	Time Zone
India	28.63576, 77.22445	+05:30
Region	Usage Type	Net Speed
Delhi	ISP	DSL
City	Domain	IDD & Area Code
New Delhi	excitel.com	+(91) 011

To the right of the table is a 'Try IP2Location Demo' section with a search bar containing '202.173.127.198' and a 'LOOK UP' button. Below the search bar, it says 'Try out the demo to get the comprehensive geolocation data of an IP address. Supports both IPv4 and IPv6 address lookup.'

Example:

```
aws ec2 authorize-security-group-ingress --group-id  
sg-00cf2c3bcb10c2015 --protocol tcp --port 22 --cidr 20.13.17.18/32
```

```
aws ec2 authorize-security-group-ingress --group-id  
sg-00cf2c3bcb10c2015 --protocol tcp --port 8888 --cidr 20.13.17.18/32
```

However, the IP address is not fixed and refreshes on your existing network or changes every time you connect to a new network. Therefore, you must be careful when you access



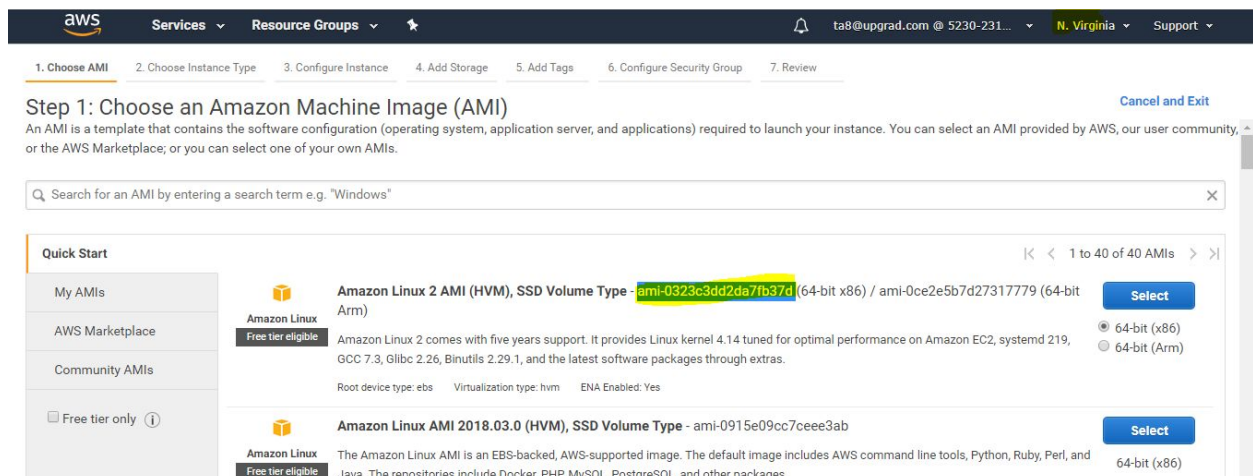
the instance. As the best practice, you must always start the process with checking the IP address of the instance. In case you are using an office laptop then check your IP address with Network administrator or you put 0.0.0.0/0 in place of my IP.

Section 2: Instance ami-ID

You are expected to work in the **N. Virginia** region. The ami-id for the instance may be updated regularly and hence, you should always check it on the AWS platform.

AMI ID- ami-0323c3dd2da7fb37d (ami id is available on the AWS console)

```
aws ec2 run-instances --image-id ami-0323c3dd2da7fb37d --count 1
--instance-type t2.micro --key-name keypair1 --security-group-ids
security_group_ID --subnet-id subnet_ID
```



Once the EC2 instance is created, you can find the status of it and the public DNS to login with this instance for Windows (using PuTTY) or Mac/Linux.

```
aws ec2 describe-instances --instance-id i-xxxxxxx
```

Note: You must stop the instance using the below command or AWS console:

```
aws ec2 stop-instances --instance-ids i-xxxx
```

Do not terminate the instance as it will be used later to work with the Jupyter Notebook.