

The AWS Command Line Interface (CLI) is a command-line tool provided by Amazon Web Services (AWS) that allows you to interact with various AWS services from your terminal or command prompt. It provides a convenient way to manage your AWS resources, automate tasks, and build scripts or applications that interact with AWS.

The AWS CLI offers a wide range of commands and options for performing tasks such as creating and managing EC2 instances, managing S3 buckets, configuring networking, managing IAM roles and policies, and much more. It provides a unified interface for interacting with different AWS services, making it easier to work with AWS resources across multiple services.

To use the AWS CLI, you need to have it installed on your local machine or the system from which you want to run the commands. The AWS CLI is available for Windows, macOS, and Linux.

Once installed, you can configure the AWS CLI with your AWS credentials (access key and secret key) to authenticate and authorize your requests to AWS services. The credentials can be configured using the `aws configure` command, which prompts you to provide your access key ID, secret access key, default region, and output format.

How to install CLI in machine Command link:

<https://docs.aws.amazon.com/cli/latest/userguide/getting-started-install.html>

By using the above link you can install the AWS CLI in your machine

After installing the AWS cli in your machine, you need to configure it by using access key and secret key

```
~$ aws configure
AWS Access Key ID [None]: AKIA344FMDA35XEO3GE
AWS Secret Access Key [None]: qPsXssfnoszds2p0YR8kKw6zd1pXodxwxSBCIC
Default region name [None]: us-east-1
Default output format [None]: json
```

After the configuration we will list and create and remove s3 bucket

`aws s3 ls` ----- this command is used to list the s3 buckets

`aws s3 mb s3://myfirstbucketcli.bucket` ----- this command is used to create the my s3 bucket

`aws s3 rb s3://myfirstbucketcli.bucket` -----to remove bucket you can use this command

```
~ - aws s3 ls
~ - aws s3 mb s3://myfirstbucketcli.bucket
make_bucket: myfirstbucketcli.bucket
~ - aws s3 ls
2023-05-24 02:16:04 myfirstbucketcli.bucket
~ - aws s3 rb s3://myfirstbucketcli.bucket
remove_bucket: myfirstbucketcli.bucket
~ -
```

Commands for launching EC2 instance (aws cli to launch instance)

Launch your instance

To launch an Amazon EC2 instance using the AMI you selected, use the `aws ec2 run-instances` command. You can launch the instance into a virtual private cloud (VPC).

Initially, your instance appears in the `pending` state, but changes to the `running` state after a few minutes.

The following example shows how to launch a `t2.micro` instance in the specified subnet of a VPC. Replace the *italicized* parameter values with your own.

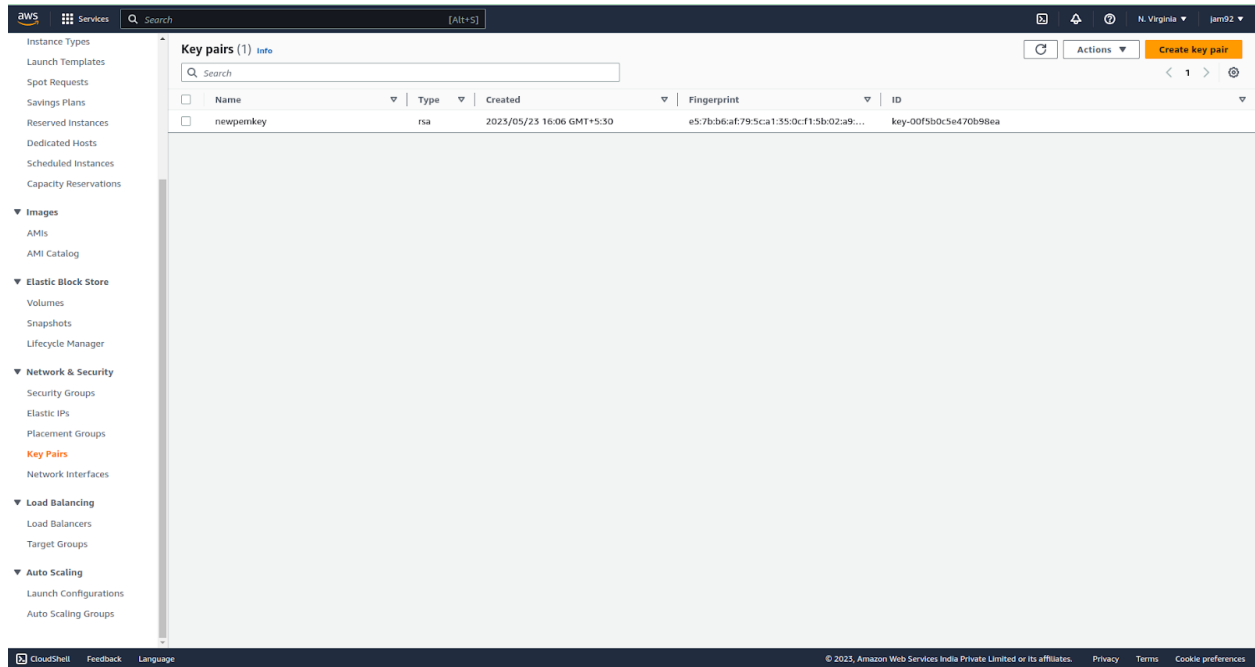
```
aws ec2 run-instances --image-id ami-xxxxxxx --count 1 --instance-type t2.micro --key-name MyKeyPair --security-group-ids sg-903004f8 --subnet-id subnet-6e7f829e
```

```
aws ec2 run-instances --image-id ami-053b0d53c279acc90 --count 1 --instance-type t2.micro --key-name newpemkey --security-group-ids sg-01285594d9409f4b4 --subnet-id subnet-0384cbfb8e320237a
```

Image id –ami you can find it, while you are creating the instances,

The screenshot shows the AWS Management Console interface for launching an instance. The main panel is titled 'Application and OS Images (Amazon Machine Image)' and includes a search bar and a 'Quick Start' section with icons for various operating systems. The 'Amazon Linux 2023 AMI' is highlighted, showing its details: 'ami-08b9a44b531db0194' (64-bit x86), 'ami-08b9a44b531db0194' (64-bit ARM), and 'Free tier eligible'. The 'Summary' panel on the right displays the configuration for the instance: 'Number of instances' (1), 'Software Image (AMI)' (Amazon Linux 2023 AMI 2023.0.2...), 'Virtual server type (instance type)' (t2.micro), 'Firewall (security group)' (New security group), and 'Storage (volumes)' (1 volume(s) - 8 GiB). A 'Free tier' notification is also visible, stating: 'Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.' The bottom of the console shows the 'Launch Instance' button and a 'Review commands' link.

You can find the key nama by th below image



You can find the security group by the below image

Security Groups (1/4) Info

Filter security groups

	Name	Security group ID	Security group name	VPC ID	Description	Owner	Inbound rules count	Outbound
<input checked="" type="checkbox"/>	-	sg-01285594d9409f4b4	default	vpc-0bab55f383b7e26f8	default VPC security gr...	817933785143	1 Permission entry	1 Permissi...
<input type="checkbox"/>	-	sg-09ffe0be063e745b8	launch-wizard-1	vpc-0bab55f383b7e26f8	launch-wizard-1 create...	817933785143	1 Permission entry	1 Permissi...
<input type="checkbox"/>	-	sg-0428dc42996461c8b	launch-wizard-3	vpc-0bab55f383b7e26f8	launch-wizard-3 create...	817933785143	1 Permission entry	1 Permissi...
<input type="checkbox"/>	-	sg-07e17eb510bbb2a2	launch-wizard-2	vpc-0bab55f383b7e26f8	launch-wizard-2 create...	817933785143	1 Permission entry	1 Permissi...

sg-01285594d9409f4b4 - default

Details Inbound rules Outbound rules Tags

You can now check network connectivity with Reachability Analyzer [Run Reachability Analyzer](#)

Details

Security group name default	Security group ID sg-01285594d9409f4b4	Description default VPC security group	VPC ID vpc-0bab55f383b7e26f8
Owner	Inbound rules count	Outbound rules count	

Now you can find the subnet id in the VPC

Subnets (1/6) Info

Filter subnets

	Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR	Available IPv4 addresses
<input checked="" type="checkbox"/>	-	subnet-0384cbfb8e320237a	Available	vpc-0bab55f383b7e26f8	172.31.32.0/20	-	4091
<input type="checkbox"/>	-	subnet-0228c6d79248a61e1	Available	vpc-0bab55f383b7e26f8	172.31.16.0/20	-	4091
<input type="checkbox"/>	-	subnet-0e7c8dc09539ef3bb	Available	vpc-0bab55f383b7e26f8	172.31.0.0/20	-	4091
<input type="checkbox"/>	-	subnet-0837fa76f8560ead3	Available	vpc-0bab55f383b7e26f8	172.31.80.0/20	-	4091
<input type="checkbox"/>	-	subnet-065158944d5c7b805	Available	vpc-0bab55f383b7e26f8	172.31.48.0/20	-	4091
<input type="checkbox"/>	-	subnet-0d49c8fa09d0e0deb	Available	vpc-0bab55f383b7e26f8	172.31.64.0/20	-	4091

subnet-0384cbfb8e320237a

Details Flow logs Route table Network ACL CIDR reservations Sharing Tags

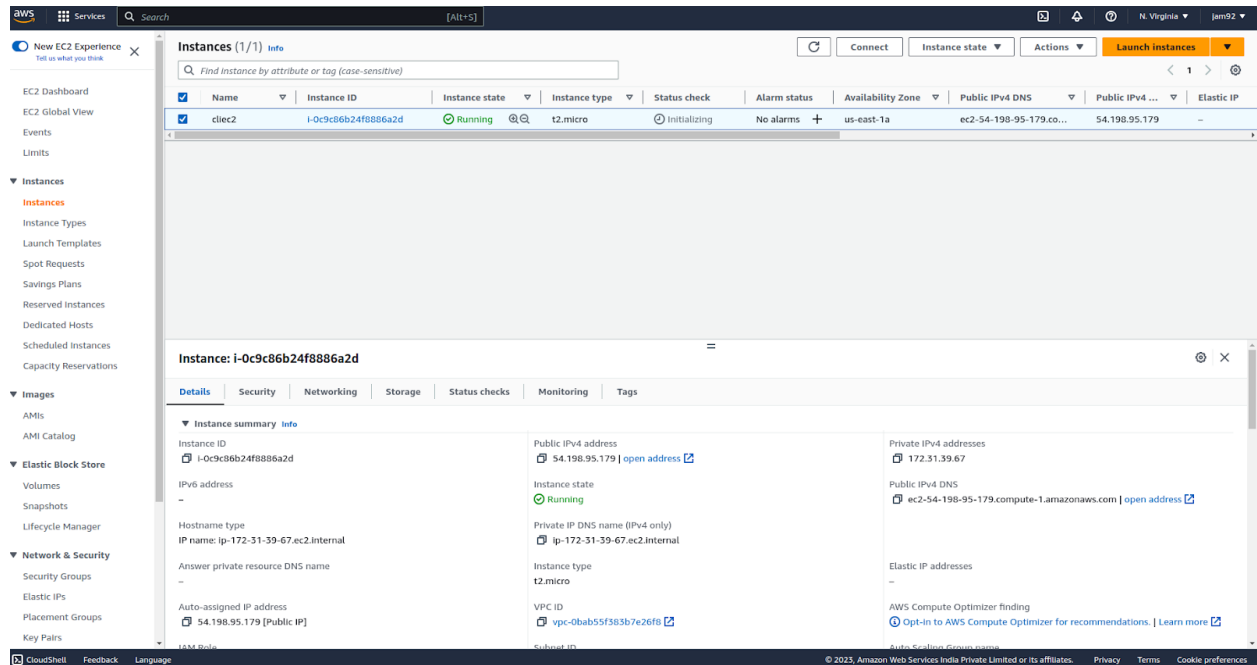
Details

Subnet ID subnet-0384cbfb8e320237a	Subnet ARN arn:aws:ec2:us-east-1:817933785143:subnet/subnet-0384cbfb8e320237a	State Available	IPv4 CIDR 172.31.32.0/20
Available IPv4 addresses 4091	Availability Zone us-east-1a	Availability Zone ID use1-az6	Network ACL acl-079a48c1cabe5fd6
Network border group us-east-1	VPC vpc-0bab55f383b7e26f8	Route table rtb-028f4ba7f2f1172ba	

```
aws ec2 run-instances --image-id ami-053b0d53c279acc90 --count 1 --instance-type t2.micro
--key-name newpemkey --security-group-ids sg-01285594d9409f4b4 --subnet-id
subnet-0384cbfb8e320237a
```

```
aws ec2 run-instances --image-id ami-053b0d53c279acc90 --count 1 --instance-type t2.micro --key-name newpemkey --security-group-ids sg-01285594d9409f4b4 --subnet-id subnet-0384cbfb8e320237a
{
  "Groups": [],
  "Instances": [
    {
      "AmiLaunchIndex": 0,
      "ImageId": "ami-053b0d53c279acc90",
      "InstanceId": "i-0c9c80b24f8880a2d",
      "InstanceType": "t2.micro",
      "KeyName": "newpemkey",
      "LaunchTime": "2023-05-23T21:10:26.000Z",
      "Monitoring": {
        "State": "disabled"
      },
      "Placement": {
        "AvailabilityZone": "us-east-1a",
        "GroupName": "",
        "Tenancy": "default"
      },
      "PrivateDnsName": "ip-172-31-39-67.ec2.internal",
      "PrivateIpAddress": "172.31.39.67",
      "ProductCodes": [],
      "PublicDnsName": "",
      "State": {
        "Code": 0,
        "Name": "pending"
      },
      "StateTransitionReason": "",
      "SubnetId": "subnet-0384cbfb8e320237a",
      "VpcId": "vpc-0bab55f383b7e26f8",
      "Architecture": "x86_64",
      "BlockDeviceMappings": [],
      "ClientToken": "caf90d04-e5e4-48b3-82b5-a809570a9011",
      "EbsOptimized": false,
      "EnaSupport": true,
      "Hypervisor": "xen",
      "NetworkInterfaces": [
        {
          "Attachment": {
            "AttachTime": "2023-05-23T21:10:26.000Z",
            "AttachmentId": "eni-attach-0b817b8422d2b02d8",
            "DeleteOnTermination": true,
            "DeviceIndex": 0,
            "Status": "attaching"
          },
          "Description": "",
          "Groups": [
            {
              "GroupName": "default",
              "GroupId": "sg-01285594d9409f4b4"
            }
          ]
        }
      ]
    }
  ],
}
```

After execution of the above command ec2 has been created,



Terminate your instance

Terminating an instance deletes it. You can't reconnect to an instance after you've terminated it.

As soon as the state of the instance changes to **shutting-down** or **terminated**, you stop incurring charges for that instance. If you want to reconnect to an instance later, use [stop-instances](#) instead of **terminate-instances**. For more information, see [Terminate Your Instance](#) in the *Amazon EC2 User Guide for Linux Instances*.

To delete an instance, you use the command `aws ec2 terminate-instances` to delete it.

```
aws ec2 terminate-instances --instance-ids i-5203422c
```

```
➜ ~ aws ec2 terminate-instances --instance-ids i-0c9c86b24f8886a2d
{
  "TerminatingInstances": [
    {
      "CurrentState": {
        "Code": 92,
        "Name": "shutting-down"
      },
      "InstanceId": "i-0c9c86b24f8886a2d",
      "PreviousState": {
        "Code": 16,
        "Name": "running"
      }
    }
  ]
}
```

Now you can reload your aws EC2 instances by using the above command the instance will be terminated