# EC2

**Amazon Elastic Compute Cloud (EC2)** is a core component of **Amazon Web Services (AWS)**., allowing users to launch virtual machines (known as **instances**) on-demand.

## Steps to Launch an EC2 Instance from AWS Console

Step 1: Log in to AWS Console

1. Go to [AWS Management Console](https://aws.amazon.com/console/) and log in with your credentials.
2. Navigate to EC2

**Step 2: Launch a New EC2 Instance**

1. Click **Launch Instance** under the "Instances" section.
2. Enter a name for your instance.

Step 3: Choose an Amazon Machine Image (AMI)

1. Select an AMI (Amazon Machine Image).
   * You can choose Amazon Linux, Ubuntu, Windows, or any custom image.
   * For free-tier usage, select Amazon Linux 2 AMI.

Step 4: Select Instance Type

1. Choose an instance type based on your needs.
   * **t2.micro** is free-tier eligible and good for basic workloads.

Step 5: Configure Key Pair (For SSH Access)

1. Under **Key Pair**, create a new key pair or select an existing one.
2. If creating a new key, **download the private key (.pem file-Privacy-Enhanced Mail.)** and store it securely (needed for SSH login).

Step 6: Configure Network Settings

1. Select a **VPC and Subnet** (default is usually fine).

Step 8: Review and Launch

1. Review your configurations.
2. Click **Launch Instance**.

Step 10: Stop, Start, or Terminate Instance (When Done)

1. Go to **EC2 Dashboard > Instances**.
2. Select the instance and choose **Stop, Start, or Terminate**.

Why You Used Public IPv4?

Since you are connecting from **MobaXterm on your local machine (outside AWS)**, you **must use the Public IPv4** because the Private IP is only accessible within AWS.

Take this public Ip and connect thorugh ur instance from mobxterm, while configuring mobxterm we need to provide key pair(.pmem file)

