

EC2 Creation

Elastic Cloud Compute, or EC2, is the core service for Compute in Amazon Web Services (AWS). An EC2 instance is effectively a virtual server that you “rent,” meaning you only pay for what you use.

First step is navigate to EC2 in the console and launch instance

The screenshot shows the 'Launch an instance' page in the AWS Management Console. The breadcrumb navigation at the top reads 'EC2 > Instances > Launch an instance'. The main heading is 'Launch an instance' with an 'Info' link. Below this is a brief description: 'Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.' The page is divided into two main sections. The left section, titled 'Name and tags' with an 'Info' link, contains a 'Name' input field with the placeholder text 'e.g. My Web Server' and an 'Add additional tags' button. Below this is a section titled 'Application and OS Images (Amazon Machine Image)' with an 'Info' link. It includes a search bar with the placeholder text 'Search our full catalog including 1000s of application and OS images' and a 'Quick Start' link. The right section, titled 'Summary', displays the configuration for the instance: 'Number of instances' set to 1, 'Software Image (AMI)' as 'Amazon Linux 2023.2.2...read more' with the ID 'ami-0d406e26e5ad4de53', 'Virtual server type (instance type)' as 't2.micro', and 'Firewall (security group)' as 'New security group'. At the bottom of the summary are 'Storage (volumes)' set to '1 volume(s) - 8 GiB', a 'Cancel' button, a 'Launch instance' button, and a 'Review commands' link.

1. Choose AMI

As we are choosing the AMI you are free to go with any options available according to the OS that's been used. Since I am on windows I will be using that

The screenshot shows the 'Quick Start' section for choosing an Amazon Machine Image (AMI). It features a row of six AMI categories: 'Amazon Linux' (with the AWS logo), 'macOS' (with a Mac logo), 'Ubuntu' (with the Ubuntu logo), 'Windows' (with the Microsoft logo and highlighted with a blue border), 'Red Hat' (with the Red Hat logo), and 'SUSE Li' (with the SUSE logo). To the right of these categories is a search icon and the text 'Browse more AMIs' followed by 'Including AMIs from AWS, Marketplace and the Community'. Below this row is a search bar labeled 'Amazon Machine Image (AMI)' containing the text 'Microsoft Windows Server 2022 Base'. To the right of the search bar is the text 'Free tier eligible'.

2. Choose Instance

Again while choosing the instance various options are depending on the requirement we will use it. Here I am using t2.micro as it's included in free tier. And you can also see the pricing for various other instances

▼ Instance type [Info](#)

Instance type

t2.micro

Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Linux base pricing: 0.0116 USD per Hour

On-Demand SUSE base pricing: 0.0116 USD per Hour

On-Demand Windows base pricing: 0.0162 USD per Hour

On-Demand RHEL base pricing: 0.0716 USD per Hour

☐ All generations

[Compare instance types](#)

[Additional costs apply for AMIs with pre-installed software](#)

3. Configure Instance

In the configure section we will create only 1 EC2 instance but you can create multiple EC2 instances if required. Also under network settings go with default VPC . Again if you need a new one feel free to create.

We can go with default settings without changing anything until required. There is something called Shutdown-behavior under

advanced settings make sure you have selected stop (It will be selected by default)

Stop - It will stop the instance when required without deleting the data in the instance

Terminate - It will shutdown the instance and the data in it will be deleted.

Shutdown behavior [Info](#)

Stop

4. Add Storage

We can go with default volume or add up new volume . I will go with default which is 30 giB

▼ Configure storage [Info](#)

[Advanced](#)

1x 30 GiB gp2 Root volume (Not encrypted)

[i](#) Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage [×](#)

[Add new volume](#)

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

0 x File systems

[Edit](#)

Microsoft Windows Server 2022 ...[read more](#)
ami-060b1c20c93e475fd

[Virtual server type \(instance type\)](#)

t2.micro

[Firewall \(security group\)](#)

New security group

[Storage \(volumes\)](#)

1 volume(s) - 30 GiB

[Cancel](#)

[Launch instance](#)

[Review commands](#)

5. Add Tags

We can add Tags which are key value pairs added to instances, volumes and network interfaces.

Key	Value	Resource types
Environment	dev	Instances, Volumes

6. Configure Security Groups

They allow traffic to the instance

If you see the access is given to create an RDP session with a custom access as 0.0.0.0/0 which gives access to any IP address.

Hence it's not a best practice. Make sure to change it while working on it to the destined IP.

Type	Protocol	Port range
rdp	TCP	3389

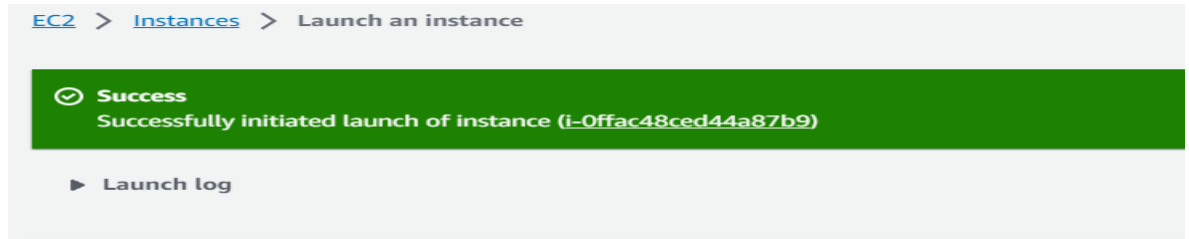
Source type	Source	Description - optional
Anywhere	0.0.0.0/0	e.g. SSH for admin desktop

Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

7. Key-pair

Go ahead and give the name as MyNewProject and launch. It would install the key-pair PEM file automatically for you

8. Before launching you can also review the instance and launch



9. Open the link given it will take to the instance dashboard. It would say initializing

Instance ID = i-Offac48ced44a87b9

X

Clear filters

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input type="checkbox"/>	-	i-Offac48ced44a87b9	<div> <div>Running</div> <div> </div> </div>	t2.micro	<div> <div>Initializing</div> <div> </div> </div>	No alarms <div>+</div>

10. Refresh the page after 2 secs and it would show 2/2 checks

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check
<input type="checkbox"/>	-	i-Offac48ced44a87b9	Running	t2.micro	2/2 checks passed

11. Click on the instance and go to connect and connect using RDP client

12. Using the key- value pair we will decrypt the password to login to administrator.

Make sure you download the PEM file and

upload the file to get the decrypted password

Password [Get password](#)

13. Launch the RDP session with the Password.

14. Make sure you terminate the instance as it's not required any longer. It will say status as terminated and will drop-off

<input checked="" type="checkbox"/>	Name ▾	Instance ID	Instance state ▾	Instance type ▾	Status check	Alarm status
<input checked="" type="checkbox"/>	-	i-0ffac48ced44a87b9	⌚ Shutting-down ⌚	t2.micro	✔ 2/2 checks passed	No alarms +