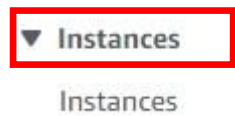


AWS Instance launching

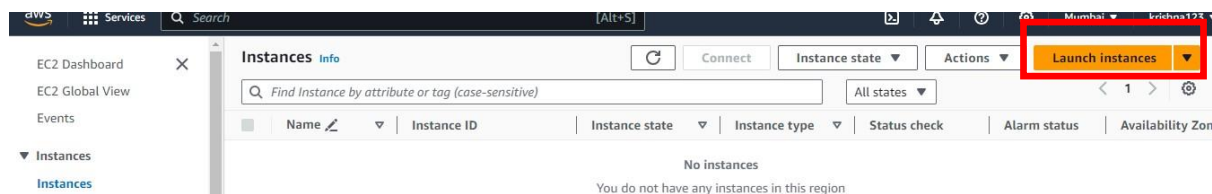
Select Ec2 instance



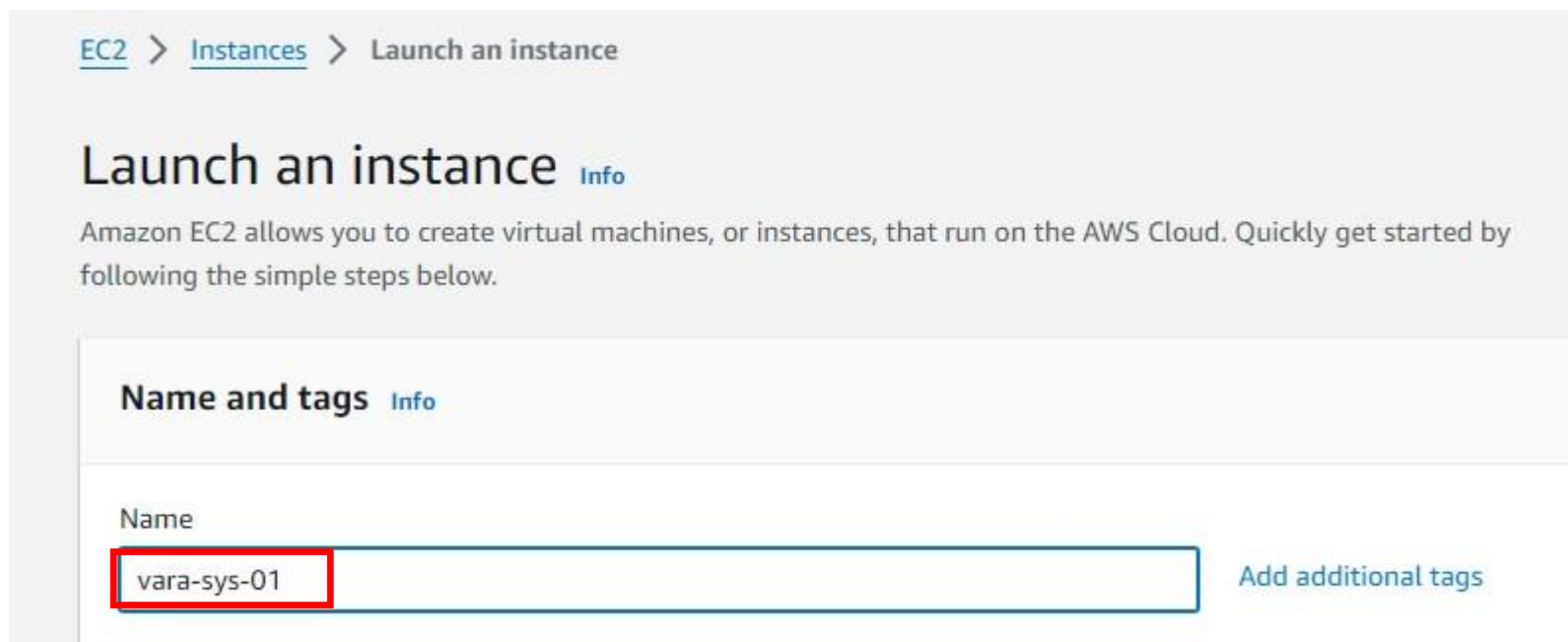
Go to instances



Go to instance and select launch instance.



Instance name



Now select the amazon linux aws and select the ami free tier eligible.

▼ Application and OS Images (Amazon Machine Image) [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

 Search our full catalog including 1000s of application and OS images

Quick Start

 Amazon Linux aws	 macOS	 Ubuntu	 Windows	 Red Hat	 SUSE Linux	 Browse more AMIs Including AMIs from AWS, Marketplace and the Community
-----------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI

ami-0cc9838aa7ab1dce7 (64-bit (x86), uefi-preferred) / ami-08edb522fe54744b1 (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible



Description

Amazon Linux 2023 AMI 2023.4.20240513.0 x86_64 HVM kernel-6.1

Architecture

64-bit (x86)

Boot mode

uefi-preferred

AMI ID

ami-0cc9838aa7ab1dce7

Verified provider

▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro

Free tier eligible

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

On-Demand Linux base pricing: 0.0124 USD per Hour

On-Demand Windows base pricing: 0.017 USD per Hour

On-Demand RHEL base pricing: 0.0724 USD per Hour

On-Demand SUSE base pricing: 0.0124 USD per Hour



☒ All generations

[Compare instance types](#)

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

▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

 [Create new key pair](#)

Create new key pair

Create key pair



Key pair name

Key pairs allow you to connect to your instance securely.

krishna@01

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type



RSA

RSA encrypted private and public key pair



ED25519

ED25519 encrypted private and public key pair

Private key file format



.pem

For use with OpenSSH



.ppk

For use with PuTTY



When prompted, store the private key in a secure and accessible location on

Cancel

Create key pair

Now select the subnet a, b, c and create a security group

▼ Network settings

Info

Edit

Network

Info

vpc-01c2989a49b19c381

Subnet

Info

No preference (Default subnet in any availability zone)

Auto-assign public IP

Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups)

Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☒ Create security group

☐ Select existing security group

We'll create a new security group called 'launch-wizard-60' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere
0.0.0.0/0

☐ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet

Description - *required* [Info](#)

launch-wizard-60 created 2024-05-18T06:00:15.960Z

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)

Remove

Type [Info](#)

ssh

Protocol [Info](#)

TCP

Port range [Info](#)

22

Source type [Info](#)

Anywhere

Source [Info](#)

Q Add CIDR, prefix list or security

0.0.0.0/0 X

Description - *optional* [Info](#)

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. X

Add security group rule

Edit type ssh to all traffic.

Description - *required* [Info](#)

launch-wizard-60 created 2024-05-18T06:00:15.960Z

Inbound Security Group Rules

▼ Security group rule 1 (All, All, 0.0.0.0/0)

Remove

Type [Info](#)

All traffic ▼

Protocol [Info](#)

All

Port range [Info](#)

All

Source type [Info](#)

Anywhere ▼

Source [Info](#)

🔍 Add CIDR, prefix list or security

0.0.0.0/0 ✕

Description - *optional* [Info](#)

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. ✕



Add security group rule

Finally launch the instance.

▼ **Configure storage** [Info](#)

[Advanced](#)

1x GiB ▼ Root volume (Not encrypted)

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

[Add new volume](#)

 Click refresh to view backup information

The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.



0 x File systems

[Edit](#)

► **Advanced details** [Info](#)

Number of instances [Info](#)

Software Image (AMI)

Amazon Linux 2023 AMI 2023.4.2...[read more](#)
ami-0cc9838aa7ab1dce7

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

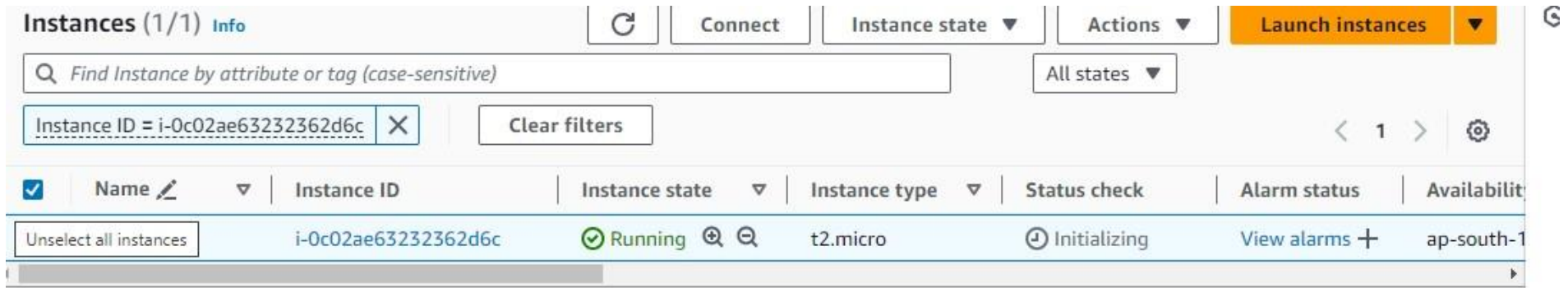
1 volume(s) - 8 GiB

[Cancel](#)

[Launch instance](#)

[Review commands](#)

After launching the instance details or info.



The screenshot displays the AWS Management Console interface for instance management. At the top, there's a header bar with 'Instances (1/1)' and an 'Info' link. To the right of the header are buttons for 'Refresh', 'Connect', 'Instance state' (dropdown), 'Actions' (dropdown), and a prominent orange 'Launch instances' button. Below the header is a search bar with the placeholder text 'Find Instance by attribute or tag (case-sensitive)'. A filter is applied: 'Instance ID = i-0c02ae63232362d6c', with a 'Clear filters' button. To the right of the filter is a pagination control showing '< 1 >' and a settings gear icon. The main content area is a table with columns: 'Name' (with a pencil icon), 'Instance ID', 'Instance state' (dropdown), 'Instance type' (dropdown), 'Status check', 'Alarm status', and 'Availability'. The first row of the table shows the instance 'i-0c02ae63232362d6c' in a 'Running' state (indicated by a green checkmark icon), with type 't2.micro' and status 'Initializing'. The 'Alarm status' column has a 'View alarms +' link. The 'Availability' column shows 'ap-south-1'. A 'Unselect all instances' button is located at the bottom left of the table.

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
<input type="checkbox"/>		i-0c02ae63232362d6c	Running	t2.micro	Initializing	View alarms +	ap-south-1

Then to check the launching instance information, like details , status, monitoring, security and networking ,storage,tags.

i-0c02ae63232362d6c (vara-sys-01)

Details

Status and alarms [New](#)

Monitoring

Security


Networking

Storage

Tags

▼ Instance summary [Info](#)

Instance ID

 i-0c02ae63232362d6c (vara-sys-01)

IPv6 address

–

Public IPv4 address

 15.206.173.111 | [open address](#) 

Instance state

 Running

Private IPv4 addresses

 172.31.38.47

Public IPv4 DNS



ec2-15-206-173-111.ap-south-
1.compute.amazonaws.com

After launching instance to create a volume and attach the volume.

Go to volumes and select create a volume.

Volumes (1) [Info](#)



Actions ▼

Create volume



 Search

< 1 >



<input type="checkbox"/>	Name ▼	name ▼	type ▼	volume ▼	Volume ID ▼	Type ▼	Size ▼	IOPS ▼	Throu
<input type="checkbox"/>	–	–	–	–	vol-0598ba942c5af55e9	gp3	8 GiB	3000	125

Now above select create a volume and volume type `gp3` and size 1 GB select.

[EC2](#) > [Volumes](#) > [Create volume](#)

Create volume [Info](#)

Create an Amazon EBS volume to attach to any EC2 instance in the same Availability Zone.

Volume settings

Volume type [Info](#)

General Purpose SSD (gp3) ▼

[i](#) General Purpose SSD gp3 is now the default selection. gp3 provides up to 20% lower cost per GB than gp2.
[Learn More](#) [↗](#)

Size (GiB) [Info](#)

1

Min: 1 GiB, Max: 16384 GiB. The value must be an integer.

Now here IOPS and throughput is customer requirement and select the availability zone a, b , c.

IOPS [Info](#)

Min: 3000 IOPS, Max: 16000 IOPS. The value must be an integer.

Throughput (MiB/s) [Info](#)

Min: 125 MiB, Max: 1000 MiB. Baseline: 125 MiB/s.

Availability Zone [Info](#)

Snapshot ID - *optional* [Info](#)



Encryption [Info](#)

Use Amazon EBS encryption as an encryption solution for your EBS resources associated with your EC2 instances.

☐ Encrypt this volume

Add a tags and finally create a volume.


Tags - optional [Info](#)


A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource.

Add tag

You can add 50 more tags.

Snapshot summary [Info](#) 

 Click refresh to view backup information
The volume type that you select and the tags that you assign determine whether the volume will be backed up by any Data Lifecycle Manager policies.

Cancel

Create volume

Now created volume as given below and select volume and go to actions dropdown volume and attach the volume select.

Successfully created volume `vol-05d865ddd63e8d5fc`.

Volumes (1/2) [Info](#)

Search

	Name	name	type	volume	Volume ID	Type
<input type="checkbox"/>	-	-	-	-	<code>vol-0598ba942c5af55e9</code>	gp3
<input checked="" type="checkbox"/>	-	-	-	-	<code>vol-05d865ddd63e8d5fc</code>	gp3

Actions

- Modify volume
- Create snapshot
- Create snapshot lifecycle policy
- Delete volume
- Attach volume**
- Detach volume

After attaching volume , select or dropdown instance id and device name /dev/sdb, finally attach the volume.

Volume ID

 vol-05d865ddd63e8d5fc

Availability Zone

ap-south-1a

Instance [Info](#)

i-0bdb17b136fd577f2 ▼



Only instances in the same Availability Zone as the selected volume are displayed.

Device name [Info](#)

/dev/sdb ▼

Recommended device names for Linux: /dev/xvda for root volume. /dev/sd[f-p] for data volumes.

 Newer Linux kernels may rename your devices to **/dev/xvdf** through **/dev/xvdp** internally, even when the device name entered here (and shown in the details) is **/dev/sdf** through **/dev/sdp**.

Cancel

Attach volume

Now attached volume through instance as given below, go to instance and select the instance info and select storage.

Instances (1/1) [Info](#)

Connect

Instance state ▼

Actions ▼

Launch instances ▼

Find Instance by attribute or tag (case-sensitive)

All states ▼

< 1 > ⚙

<input checked="" type="checkbox"/>	Name ✎ ▼	name ✎ ▼	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status
<input checked="" type="checkbox"/>	vara-sys-01		i-0bdb17b136fd577f2	Running 🔍 🔍	t2.micro	2/2 checks passed	View alarms +

i-0bdb17b136fd577f2 (vara-sys-01)

×

<input type="checkbox"/>	Volume ID	Device name	Volume size (GiB)	Attachment status	Attachment time	Encrypted
<input checked="" type="checkbox"/>	vol-0598ba942c5af55e9	/dev/xvda	8	Attached	2024/05/23 11:21 GMT+5:30	No
<input type="checkbox"/>	vol-05d865ddd63e8d5fc	/dev/sdb	1	Attached	2024/05/23 11:49 GMT+5:30	No

Now connect to putty as public ip address and check the disk is scanned or not by using this command #lsblk.

```
login as: ec2-user
Authenticating with public key "vara1"

#
##### Amazon Linux 2023
#####\
\###|
\#/ https://aws.amazon.com/linux/ama
V~' '->
~~~
~~.
_/_/m/'

[ec2-user@ip-172-31-45-21 ~]$ sudo -i
[root@ip-172-31-45-21 ~]# lsblk
```

NAME	MAJ:MIN	RM	SIZE	RO	TYPE	MOUNTPOINTS
xvda	202:0	0	8G	0	disk	
_xvda1	202:1	0	8G	0	part	/
_xvda127	259:0	0	1M	0	part	
_xvda128	259:1	0	10M	0	part	/boot/efi
xvdb	202:16	0	1G	0	disk	

Now to create a file system and create a mount point as per customer requirement and finally mount the file system.

```
[root@ip-172-31-45-21 ~]# mkfs.ext4 /dev/xvdb
mkfs 1.46.5 (30-Dec-2021)
/dev/xvdb contains a ext4 file system
    created on Thu May 23 06:29:44 2024
Proceed anyway? (y,N) y
Creating filesystem with 262144 4k blocks and 65536 inodes
Filesystem UUID: 61542dc9-e574-4bea-99f3-ec743bed39e3
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376

Allocating group tables: done
Writing inode tables: done
Creating journal (8192 blocks): done
Writing superblocks and filesystem accounting information: done

[root@ip-172-31-45-21 ~]# mkdir /data
[root@ip-172-31-45-21 ~]# mount /dev/xvdb /data
```

Finally check the mounted file system information

```
[root@ip-172-31-45-21 ~]# df -h
```

Filesystem	Size	Used	Avail	Use%	Mounted on
devtmpfs	4.0M	0	4.0M	0%	/dev
tmpfs	475M	0	475M	0%	/dev/shm
tmpfs	190M	2.9M	188M	2%	/run
/dev/xvda1	8.0G	1.6G	6.5G	20%	/
tmpfs	475M	0	475M	0%	/tmp
/dev/xvda128	10M	1.3M	8.7M	13%	/boot/efi
tmpfs	95M	0	95M	0%	/run/user/1000
/dev/xvdb	974M	24K	907M	1%	/data

