

# 1. Create EC2 Instance:

## Instance: i-08cc8bfd073906145 (Imran)

<p><b>Instance ID:</b> i-08cc8bfd073906145 (Imran)</p> <p><b>IPv6 address:</b> -</p> <p><b>Hostname type:</b> IP name: ip-172-31-44-177.ap-south-1.compute.internal</p> <p><b>Answer private resource DNS name:</b> IPv4 (A)</p> <p><b>Auto-assigned IP address:</b> 3.110.134.177 [Public IP]</p> <p><b>IAM Role:</b> -</p> <p><a href="#">Instance details info</a></p> <p><b>Platform:</b> Ubuntu (Inferred)</p> <p><b>Platform details:</b> Linux/UNIX</p> <p><b>Stop protection:</b> Disabled</p> <p><b>Instance auto-recovery:</b> Default</p>	<p><b>Public IP address:</b> 3.110.134.177   <a href="#">open address</a></p> <p><b>Instance state:</b> <span style="color: green;">●</span> Running</p> <p><b>Private IP DNS name (IPv4 only):</b> ip-172-31-44-177.ap-south-1.compute.internal</p> <p><b>Instance type:</b> t2.micro</p> <p><b>VPC ID:</b> vpc-681b2100</p> <p><b>Subnet ID:</b> subnet-1d4c6f75</p>	<p><b>Private IP address:</b> 172.31.44.177</p> <p><b>Public IPv4 DNS:</b> ec2-3-110-134-177.ap-south-1.compute.amazonaws.com   <a href="#">open address</a></p> <p><b>Elastic IP addresses:</b> -</p> <p><b>AWS Compute Optimizer finding:</b> <a href="#">Opt-in to AWS Compute Optimizer for recommendations.   Learn more</a></p> <p><b>Auto Scaling Group name:</b> -</p>
<p><b>AMI ID:</b> ami-062df10d14676e201</p> <p><b>AMI name:</b> ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20220912</p> <p><b>Launch time:</b> Tue Nov 22 2022 14:22:35 GMT+0530 (India Standard Time) (about 1 hour)</p> <p><b>Lifecycle:</b> normal</p>	<p><b>Monitoring:</b> disabled</p> <p><b>Termination protection:</b> Disabled</p> <p><b>AMI location:</b> amazon/ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20220912</p> <p><b>Stop-hibernate behavior:</b> disabled</p>	

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**Instances (1/2) Info** Connect Instance state Actions Launch instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...
Mohammed	i-07b489e29ca21b158	● Running	t2.micro	Initializing	No alarms +	ap-south-1a	ec2-3-108-67-181.ap-s...	3.108.67.181
<input checked="" type="checkbox"/>	Imran	i-08cc8bfd073906145	● Running	t2.micro	-	ap-south-1a	ec2-3-110-134-177.ap-...	3.110.134.177

**Instance: i-08cc8bfd073906145 (Mohammed Imran)**

**Details** | Security | Networking | Storage | Status checks | Monitoring | Tags

**Instance summary info**

<p><b>Instance ID:</b> i-08cc8bfd073906145 (Mohammed Imran)</p> <p><b>IPv6 address:</b> -</p> <p><b>Hostname type:</b> IP name: ip-172-31-44-177.ap-south-1.compute.internal</p> <p><b>Answer private resource DNS name:</b> IPv4 (A)</p> <p><b>Auto-assigned IP address:</b> 3.110.134.177 [Public IP]</p> <p><b>IAM Role:</b> -</p>	<p><b>Public IPv4 address:</b> 3.110.134.177   <a href="#">open address</a></p> <p><b>Instance state:</b> <span style="color: green;">●</span> Running</p> <p><b>Private IP DNS name (IPv4 only):</b> ip-172-31-44-177.ap-south-1.compute.internal</p> <p><b>Instance type:</b> t2.micro</p> <p><b>VPC ID:</b> vpc-681b2100</p> <p><b>Subnet ID:</b> subnet-1d4c6f75</p>	<p><b>Private IPv4 addresses:</b> 172.31.44.177</p> <p><b>Public IPv4 DNS:</b> ec2-3-110-134-177.ap-south-1.compute.amazonaws.com   <a href="#">open address</a></p> <p><b>Elastic IP addresses:</b> -</p> <p><b>AWS Compute Optimizer finding:</b> <a href="#">Opt-in to AWS Compute Optimizer for recommendations.   Learn more</a></p> <p><b>Auto Scaling Group name:</b> -</p>
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**Instance details info**

<p><b>Platform:</b> Ubuntu (Inferred)</p> <p><b>Platform details:</b> -</p>	<p><b>AMI ID:</b> ami-062df10d14676e201</p> <p><b>AMI name:</b> -</p>	<p><b>Monitoring:</b> disabled</p> <p><b>Termination protection:</b> -</p>
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## 2. Elastic Block Store

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 (gp2) ▼

Size (GiB) [Info](#)

100 ▼

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

IOPS [Info](#)

300 / 3000

Baseline of 3 IOPS per GiB with a minimum of 100 IOPS, burstable to 3000 IOPS.

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

Not applicable

Availability Zone [Info](#)

ap-south-1a ▼

Snapshot ID - optional [Info](#)

Don't create volume from a snapshot ▼ 

Encryption [Info](#)

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

Encrypt this 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.

Cancel

Create volume

**Volumes (1/2)** Search Actions Create volume

Name	Volume ID	Type	Size	IOPS	Throughput	Snapshot	Created	Availability Zone	Volume state	Alarm status	Attached
Mohammed EBS	vol-05618f4ff24f44fce	gp2	8 GiB	100	-	snap-0fe9c6d...	2022/11/22 14:20 GMT+5:...	ap-south-1a	In-use	No alarms	I-07b489c
Imran EBS	vol-0374e6cddda77a9e	gp2	8 GiB	100	-	snap-0fe9c6d...	2022/11/22 14:22 GMT+5:...	ap-south-1a	In-use	No alarms	I-08cc8bf

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**Volume ID: vol-0374e6cddda77a9e (Imran EBS)**

**Details** | Status checks | Monitoring | Tags

Volume ID vol-0374e6cddda77a9e (Imran EBS)	Size 8 GiB	Type gp2	Volume status Okay
Volume state In-use	IOPS 100	Throughput -	Encryption Not encrypted
KMS key ID -	KMS key alias -	KMS key ARN -	Snapshot snap-0fe9c6db6f710a9e
Availability Zone ap-south-1a	Created Tue Nov 22 2022 14:22:36 GMT+0530 (India Standard Time)	Multi-Attach enabled No	Attached Instances I-08cc8bf073906145 (Imran); /dev/sda1 (attached)
Outposts ARN -			

### 3. Snapshot Screenshot creation:

EC2 > Snapshots > snap-01a97c4f9f2e12bc8

**snap-01a97c4f9f2e12bc8** Refresh Delete Actions

**Snapshot settings**

Snapshot ID snap-01a97c4f9f2e12bc8	Size 8 GiB	Progress Available (100%)	Snapshot status Completed
Owner 537771290997	Volume ID vol-05618f4ff24f44fce	Started Tue Nov 22 2022 14:46:29 GMT+0530 (India Standard Time)	Product codes -
Encryption Not encrypted	KMS key ID -	KMS key alias -	KMS key ARN -
Fast snapshot restore -	Description Mohammed Snapshot Screenshot Creation		

**Permissions** | Storage tier | Tags

Snapshot share permissions Modify permissions

**Private**  
The snapshot is shared only with AWS accounts that you specified.

**Shared accounts (0)** Add account ID

The snapshot is shared with the following AWS accounts.

**AWS account ID**

The snapshot is currently not shared.

Add account ID

Snapshots (1/1)

Owned by me

Name	Snapshot ID	Size	Description	Storage...	Snapshot status	Started	Progress	Encryption	KMS key ID	KMS key s
-	snap-01a97c4f9f2e12bc8	8 GiB	Mohammed Snapshot Scre...	Standard	Completed	2022/11/22 14:46 GMT+5...	Available (100%)	Not encrypted	-	-

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Snapshot ID: snap-01a97c4f9f2e12bc8

Details | Permissions | Storage tier | Tags

<p>Snapshot ID</p> <p>🔗 snap-01a97c4f9f2e12bc8</p> <p>Owner</p> <p>👤 537771290997</p> <p>Encryption</p> <p>Not encrypted</p> <p>Fast snapshot restore</p> <p>-</p>	<p>Size</p> <p>📏 8 GiB</p> <p>Volume ID</p> <p>🔗 vol-05618f4ff24f4fce</p> <p>KMS key ID</p> <p>-</p> <p>Description</p> <p>📄 Mohammed Snapshot Screenshot Creation</p>	<p>Progress</p> <p>🟢 Available (100%)</p> <p>Started</p> <p>📅 Tue Nov 22 2022 14:46:29 GMT+0530 (India Standard Time)</p> <p>KMS key alias</p> <p>-</p>	<p>Snapshot status</p> <p>🟢 Completed</p> <p>Product codes</p> <p>-</p> <p>KMS key ARN</p> <p>-</p>
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## 4. AMI Creation:

EC2 > Launch templates > Create launch template

### Create launch template

Creating a launch template allows you to create a saved instance configuration that can be reused, shared and launched at a later time. Templates can have multiple versions.

#### Launch template name and description

Launch template name - *required*

Must be unique to this account. Max 128 chars. No spaces or special characters like '&', '\*', '@'.

Template version description

Max 255 chars

**Auto Scaling guidance** [Info](#)

Select this if you intend to use this template with EC2 Auto Scaling

Provide guidance to help me set up a template that I can use with EC2 Auto Scaling

▶ Template tags

▶ Source template

#### Summary

**Software Image (AMI)**

Amazon Linux 2 Kernel 5.10 AMI...[read more](#)  
ami-074dc0a6f6c764218

**Virtual server type (instance type)**

-

**Firewall (security group)**

-

**Storage (volumes)**

1 volume(s) - 8 GiB

**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 IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Create launch template

**Launch template contents**

Specify the details of your launch template below. Leaving a field blank will result in the field not being included in the launch template.

## 5. Load Balancer creation:

EC2 > Load balancers > Create Application Load Balancer

### Create Application Load Balancer [Info](#)

The Application Load Balancer distributes incoming HTTP and HTTPS traffic across multiple targets such as Amazon EC2 instances, microservices, and containers, based on request attributes. When the load balancer receives a connection request, it evaluates the listener rules in priority order to determine which rule to apply, and if applicable, it selects a target from the target group for the rule action.

#### ► How Elastic Load balancing works

#### Basic configuration

##### Load balancer name [Info](#)

Name must be unique within your AWS account and cannot be changed after the load balancer is created.

A maximum of 32 alphanumeric characters including hyphens are allowed, but the name must not begin or end with a hyphen.

##### Scheme [Info](#)

Scheme cannot be changed after the load balancer is created.

**Internet-facing**

An internet-facing load balancer routes requests from clients over the internet to targets. Requires a public subnet. [Learn more](#)

**Internal**

An internal load balancer routes requests from clients to targets using private IP addresses.

##### IP address type [Info](#)

Select the type of IP addresses that your subnets use.

**IPv4**

Recommended for internal load balancers.

**Dualstack**

Includes IPv4 and IPv6 addresses.

#### Network mapping [Info](#)

The load balancer routes traffic to targets in the selected subnets, and in accordance with your IP address settings.

##### VPC [Info](#)

Select the virtual private cloud (VPC) for your targets. Only VPCs with an internet gateway are enabled for selection. The selected VPC cannot be changed after the load balancer is created. To confirm the VPC for your targets, view your [target groups](#)

  
vpc-681b2100  
IPv4: 172.31.0.0/16

##### MadDnAs [Info](#)

### Mappings [Info](#)

Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.

ap-south-1a

ap-south-1b

ap-south-1c

### Security groups [Info](#)

A security group is a set of firewall rules that control the traffic to your load balancer.

Security groups

Select up to 5 security groups

[Create new security group](#)

default sg-97f10df9 ✕  
VPC: vpc-681b2100

### Listeners and routing [Info](#)

A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

▼ Listener HTTP:80

Remove

Protocol

HTTP

Port

80

1-65535

Default action [Info](#)

Forward to

Select a target group

[Create target group](#)

Listener tags - *optional*

Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.

Add listener tag

You can add up to 50 more tags.

▼ **Add-on services - optional**

Additional AWS services can be integrated with this load balancer at launch. You can also add these and other services after your load balancer is created by reviewing the "Integrated Services" tab for the selected load balancer.

**AWS Global Accelerator** [Info](#)

- Create an accelerator to get static IP addresses and improve the performance and availability of your applications. [Additional charges apply](#)

► **Tags - optional**

Consider adding tags to your load balancer. Tags enable you to categorize your AWS resources so you can more easily manage them. The 'Key' is required, but 'Value' is optional. For example, you can have Key = production-webserver, or Key = webserver, and Value = production.

**Summary**

Review and confirm your configurations. [Estimate cost](#)

**Basic configuration** [Edit](#)

imran-ALB

- Internet-facing
- IPv4

**Security groups** [Edit](#)

- default [sg-97f10df9](#)

**Network mapping** [Edit](#)

VPC [vpc-681b2100](#)  
*Subnet not defined*

**Listeners and routing** [Edit](#)

- HTTP:80 defaults to *Target group not defined*

**Add-on services** [Edit](#)

None

**Tags** [Edit](#)

None

**Attributes**

ⓘ Certain default attributes will be applied to your load balancer. You can view and edit them after creating the load balancer.

Cancel

Create load balancer