Scalable Web Application with ALB and Auto Scaling

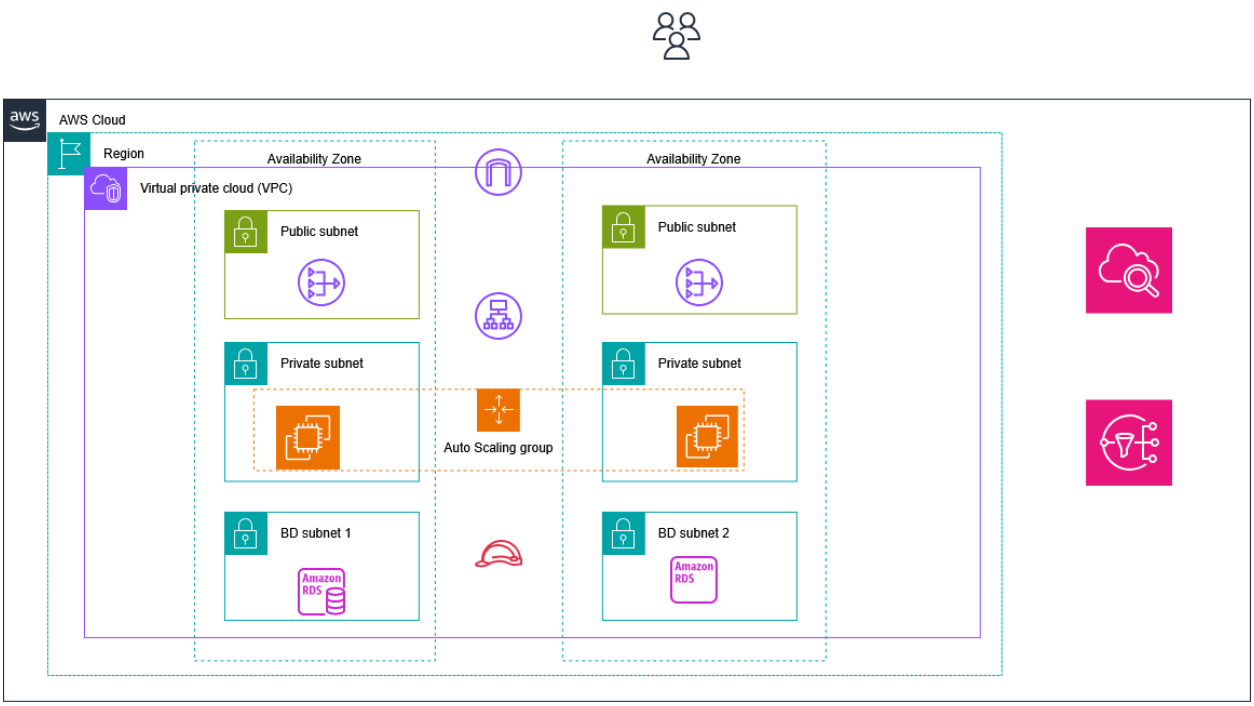
Solution Overview:

This project deploys a highly available and scalable web application on AWS using Amazon EC2, an Application Load Balancer (ALB), and an Auto Scaling Group (ASG). The application runs on EC2 instances placed in private subnets, while an internet-facing ALB distributes user traffic across them. The ASG automatically scales the number of instances based on demand, ensuring performance and cost efficiency.

Networking is built in a VPC across multiple Availability Zones for fault tolerance. Public subnets host the ALB and NAT Gateways, while private subnets host the EC2 instances. Security is enforced using IAM roles, security groups, and subnet isolation. Monitoring is handled by Amazon CloudWatch with alerts delivered through Amazon SNS.

This architecture ensures resilience, scalability, and secure operations while following AWS best practices.

Project Architecture:



Creating VPC:

1. Go to VPS console.

2. Click create VPC.

3. In VPC settings choose VPC and more to create the VPC

with the subnets and route table.

4. Write the VPC name.

5. Create ipv4 CIDR block (10.0.0.0/16).

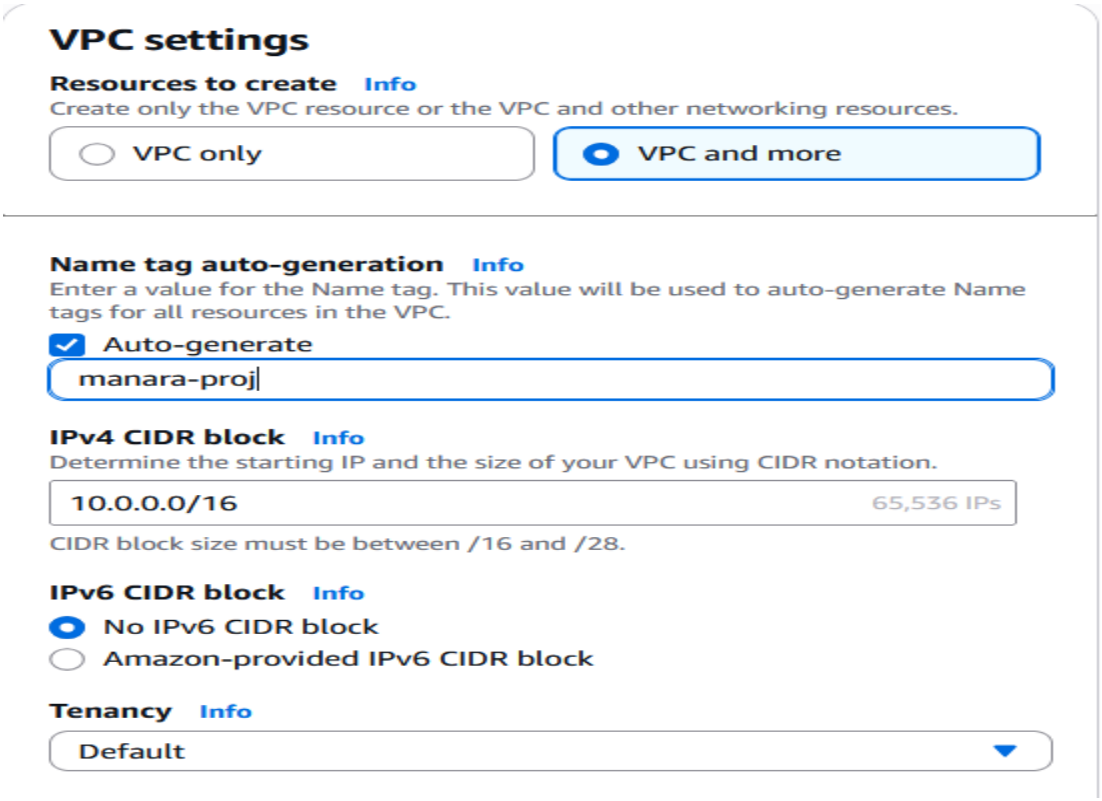
6. Choose number of availability zones (2).

7. Choose the availability zones.

8. Choose the number of public(2) and private subnets (4).

9. Create Nat gateway per AZ .

10.enable DNS resolution then create the VPC.



Number of Availability Zones (AZs) Info

Choose the number of AZs in which to provision subnets. We recommend at least two AZs for high availability.

1 | 2 | 3

▼ Customize AZs

First availability zone

euw1-az3 (eu-west-1a)

Second availability zone

euw1-az1 (eu-west-1b)

Number of public subnets Info

The number of public subnets to add to your VPC. Use public subnets for web applications that need to be publicly accessible over the internet.

0 | 2

Number of private subnets Info

The number of private subnets to add to your VPC. Use private subnets to secure backend resources that don't need public access.

0 | 2 | 4

▶ Customize subnets CIDR blocks

NAT gateways ($) Info

Choose the number of Availability Zones (AZs) in which to create NAT gateways. Note that there is a charge for each NAT gateway

None | In 1 AZ | 1 per AZ

VPC endpoints Info

Endpoints can help reduce NAT gateway charges and improve security by accessing S3 directly from the VPC. By default, full access policy is used. You can customize this policy at any time.

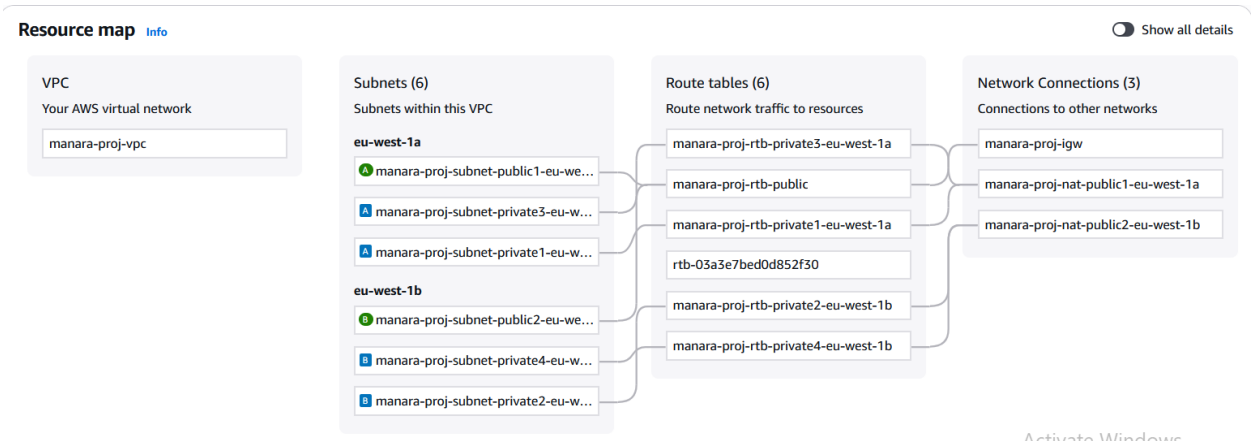
None | S3 Gateway

DNS options Info

- [x] Enable DNS hostnames
- [x] Enable DNS resolution

▶ Additional tags

Cancel Preview code Create VPC



Create Security Groups for ALB, EC2, and RDS:

1.click create SG

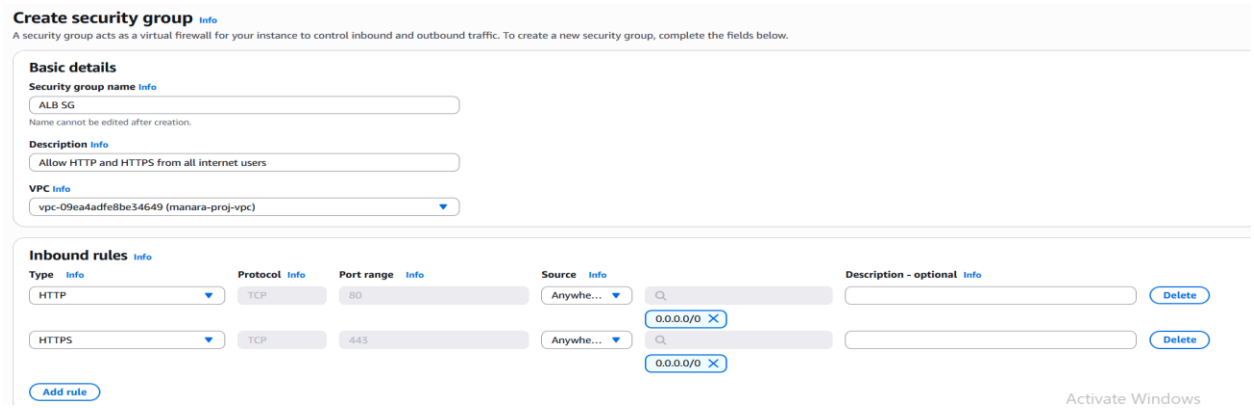
2.write SG name

3.write description for it which traffic will allow

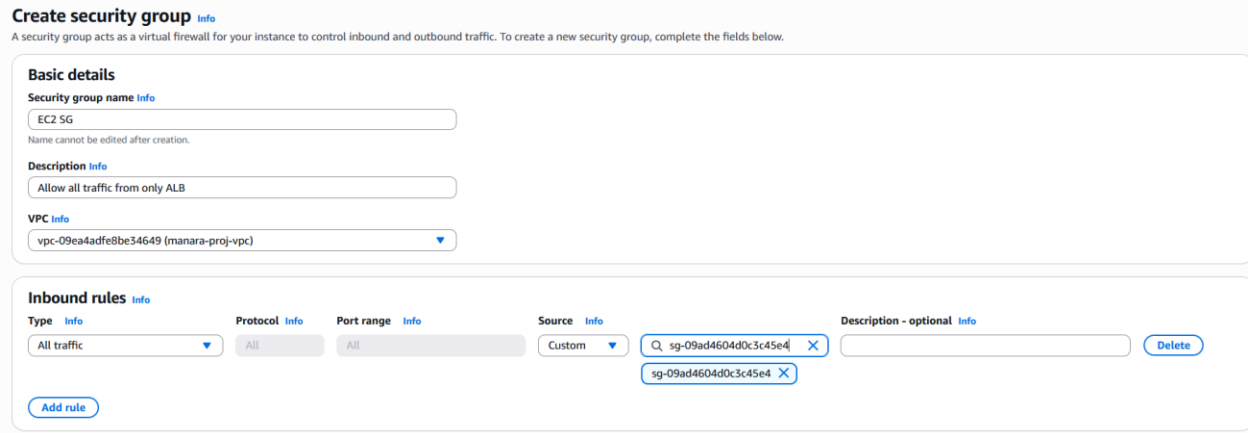
4.choose VPC

5.Add inbound and outbound rules

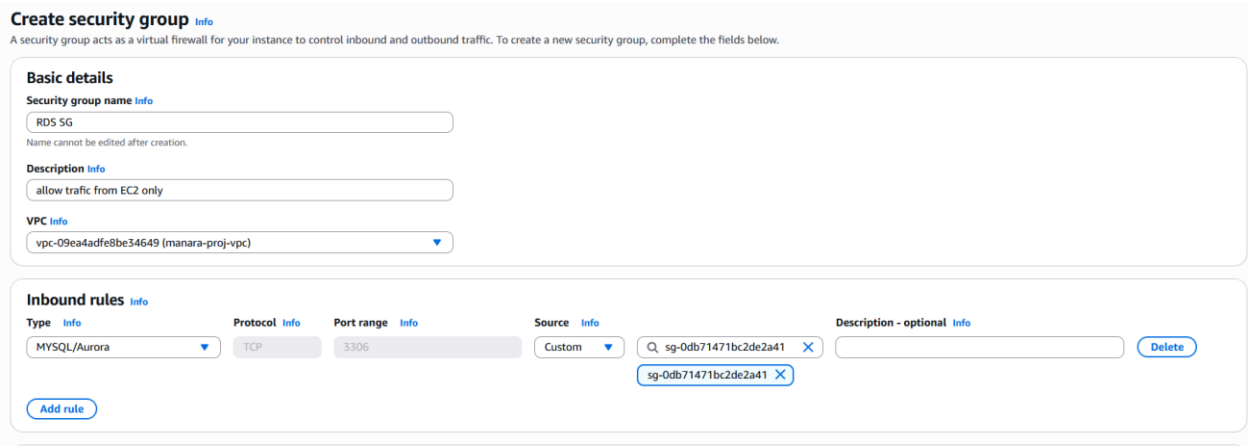
For ALB:



For EC2:



For RDS:



Creating DB:

First, we create a DB subnet group:

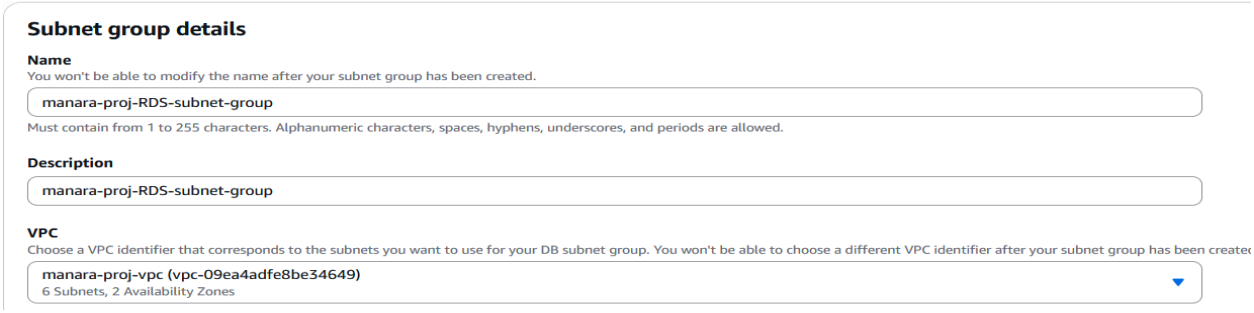
1.navigate to aurora and RDS

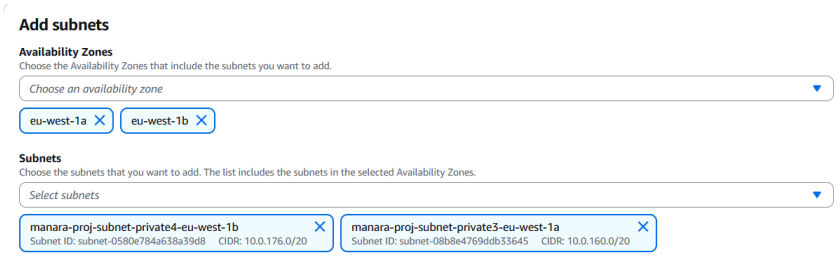
2.click subnet groups and create one

3.write name and description

4.choose VPC

5.choose AZs and Subnets





Creating the RDS:

1. Go to the RDS console.
2. Click Create database.
3. Choose Standard create.
4. Select the Engine type (MariaDB).
5. Choose the Version you want.
6. In Templates, pick the deployment option (Dev/Test).
7. In DB instance class, select the instance size (db.t3.micro).
8. Set DB instance identifier .
9. Choose credentials to be stored in AWS Secrete Manager.
10. Under Storage, choose the allocated storage size and enable storage autoscaling if needed.
11. In Availability & durability, enable Multi-AZ deployment (recommended for high availability).
12. In Connectivity, choose your VPC.
13. Select the DB Subnet Group (private subnets across 2 AZs).
14. Set Public access = No (to keep it private).
15. Select or create a Security Group that only allows inbound traffic from your EC2 SG.

Create database Info

Choose a database creation method

- (•) **Standard create**
  You set all of the configuration options, including ones for availability, security, backups, and maintenance.
- ( ) **Easy create**
  Use recommended best-practice configurations. Some configuration options can be changed after the database is created.

Engine options

Engine type Info

- ( ) Aurora (MySQL Compatible)
- ( ) Aurora (PostgreSQL Compatible)
- ( ) MySQL
- ( ) PostgreSQL
- (•) MariaDB
- ( ) Oracle

Templates

Choose a sample template to meet your use case.

- ( ) **Production**
  Use defaults for high availability and fast, consistent performance.
- (•) **Dev/Test**
  This instance is intended for development use outside of a production environment.
- ( ) **Free tier**
  Use RDS Free Tier to develop new applications, test existing applications, or gain hands-on experience with Amazon RDS. Info

Settings

DB instance identifier Info
Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.

database-1

The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.

▼ **Credentials Settings**

Master username Info
Type a login ID for the master user of your DB instance.

root

1 to 16 alphanumeric characters. The first character must be a letter.

Credentials management
You can use AWS Secrets Manager or manage your master user credentials.

- (•) **Managed in AWS Secrets Manager - *most secure***
  RDS generates a password for you and manages it throughout its lifecycle using AWS Secrets Manager.
- ( ) **Self managed**
  Create your own password or have RDS create a password that you manage.

Instance configuration

The DB instance configuration options below are limited to those supported by the engine that you selected above.

DB instance class Info

▼ **Hide filters**

- [ ] Show instance classes that support Amazon RDS Optimized Writes Info
  Amazon RDS Optimized Writes improves write throughput by up to 2x at no additional cost.
- [ ] Include previous generation classes

- ( ) Standard classes (includes m classes)
- ( ) Memory optimized classes (includes r and x classes)
- (•) Burstable classes (includes t classes)

db.t3.micro
2 vCPUs 1 GiB RAM Network: Up to 2,085 Mbps

Storage

Storage type Info
Provisioned IOPS SSD (io2) storage volumes are now available.

General Purpose SSD (gp3)
Performance scales independently from storage

Allocated storage Info

20 GiB

Minimum: 20 GiB. Maximum: 6,144 GiB

DB subnet group Info
Choose the DB subnet group. The DB subnet group defines which subnets and IP ranges the DB instance can use in the VPC that you selected.

manara-proj-rds-subnet-group
2 Subnets, 2 Availability Zones

Public access Info

- ( ) Yes
  RDS assigns a public IP address to the database. Amazon EC2 instances and other resources outside of the VPC can connect to your database. Resources inside the VPC can also connect to the database. Choose one or more VPC security groups that specify which resources can connect to the database.
- (•) No
  RDS doesn't assign a public IP address to the database. Only Amazon EC2 instances and other resources inside the VPC can connect to your database. Choose one or more VPC security groups that specify which resources can connect to the database.

VPC security group (firewall) Info
Choose one or more VPC security groups to allow access to your database. Make sure that the security group rules allow the appropriate incoming traffic.

- (•) **Choose existing**
  Choose existing VPC security groups
- ( ) **Create new**
  Create new VPC security group

Existing VPC security groups

Choose one or more options

RDS SG ×

Launch EC2 Instance, install the web app, and create an AMI:

1.go to EC2 console and choose launch instance

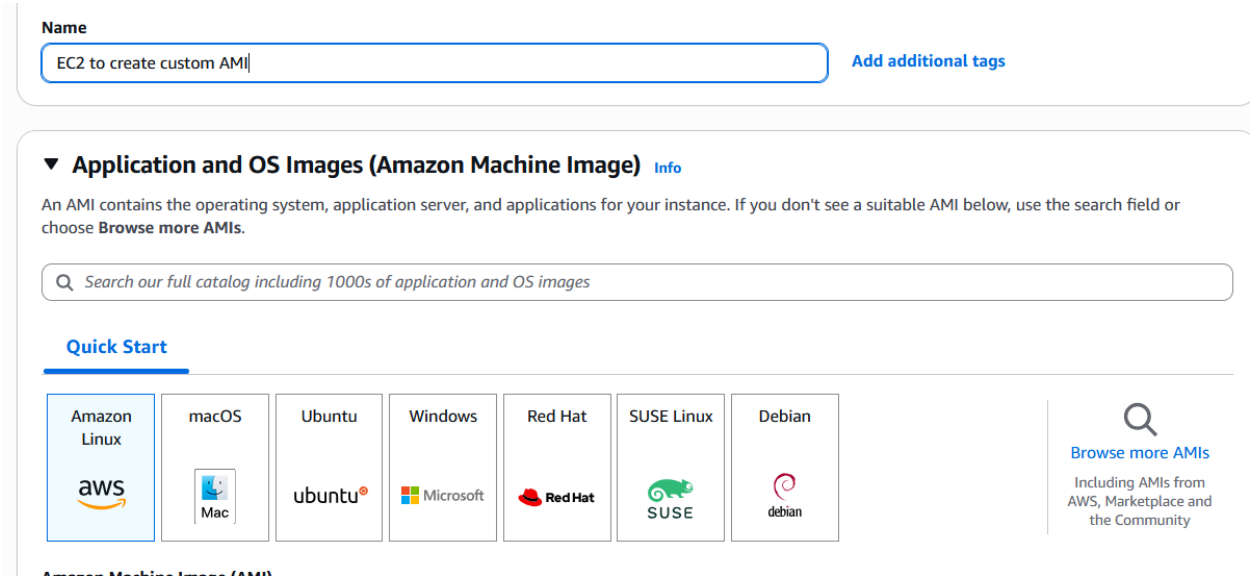
2.type a name and choose OS

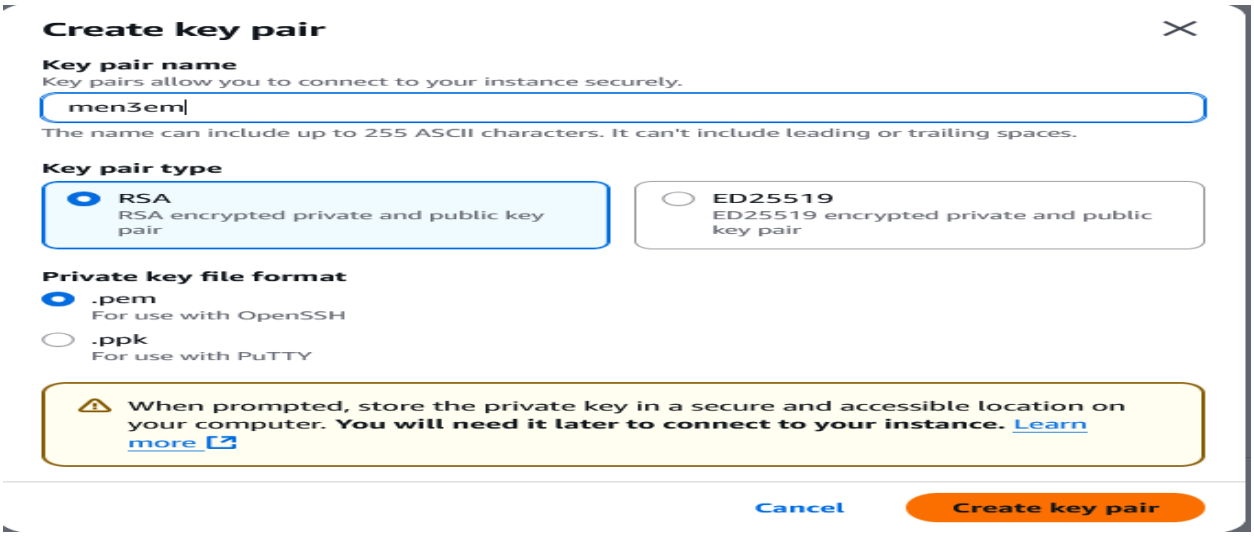
3.choose instance size

4. put or create a keypair

5.put it in a public subnet with public IP

6. Login into the instance





Instance type Info | Get advice

Instance type

t2.micro — Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true On-Demand RHEL base pricing: 0.027 USD per Hour
On-Demand Linux base pricing: 0.0126 USD per Hour On-Demand SUSE base pricing: 0.0126 USD per Hour
On-Demand Ubuntu Pro base pricing: 0.0144 USD per Hour On-Demand Windows base pricing: 0.0172 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*

men3em

Create new key pair

Network settings Info

VPC - *required* | Info

vpc-09ea4adfe8be34649 (manara-proj-vpc)
10.0.0.0/16

Subnet | Info

subnet-0c2599a33ba597934 manara-proj-subnet-public1-eu-west-1a
VPC: vpc-09ea4adfe8be34649 Owner: 850470019231 Availability Zone: eu-west-1a (euw1-az3)
Zone type: Availability Zone IP addresses available: 4090 CIDR: 10.0.0.0/20)

Create new subnet

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

Security group name - *required*

test

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*

Description - *required* | Info

launch-wizard-1 created 2025-08-16T05:45:07.030Z

Inbound Security Group Rules

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

Type	Protocol	Port range
ssh	TCP	22

Source type	Source	Description - *optional*
Anywhere	Add CIDR, prefix list or security group	e.g. SSH for admin desktop

0.0.0.0/0

Setting the web/app tire:

Install Apache web server

#yum install -y httpd

```
[root@ip-10-0-1-201 ~]# yum install -y httpd
Amazon Linux 2023 Kernel Livepatch repository                                                    171 kB/s |  19 kB     00:00
Dependencies resolved.
================================================================================================================================
 Package                          Architecture          Version                          Repository                       Size
================================================================================================================================
Installing:
 httpd                            x86_64                2.4.64-1.amzn2023.0.1            amazonlinux                      47 k
Installing dependencies:
 apr                              x86_64                1.7.5-1.amzn2023.0.4             amazonlinux                     129 k
 apr-util                         x86_64                1.6.3-1.amzn2023.0.1             amazonlinux                      98 k
 generic-logos-httpd              noarch                18.0.0-12.amzn2023.0.3           amazonlinux                      19 k
 httpd-core                       x86_64                2.4.64-1.amzn2023.0.1            amazonlinux                     1.4 M
 httpd-filesystem                 noarch                2.4.64-1.amzn2023.0.1            amazonlinux                      13 k
 httpd-tools                      x86_64                2.4.64-1.amzn2023.0.1            amazonlinux                      81 k
 libbrotli                        x86_64                1.0.9-4.amzn2023.0.2             amazonlinux                     315 k
 mailcap                          noarch                2.1.49-3.amzn2023.0.3            amazonlinux                      33 k
Installing weak dependencies:
 apr-util-openssl                 x86_64                1.6.3-1.amzn2023.0.1             amazonlinux                      17 k
 mod_http2                        x86_64                2.0.27-1.amzn2023.0.3            amazonlinux                     166 k
 mod_lua                          x86_64                2.4.64-1.amzn2023.0.1            amazonlinux                      60 k

Transaction Summary
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```

Make it active and running all the time

#systemctl enable –-now httpd

```
[root@ip-10-0-1-201 ~]# systemctl enable --now httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-10-0-1-201 ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
     Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
     Active: active (running) since Sat 2025-08-16 06:04:39 UTC; 9s ago
       Docs: man:httpd.service(8)
   Main PID: 26606 (httpd)
     Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec:   0 B/sec"
      Tasks: 177 (limit: 1111)
     Memory: 12.9M
        CPU: 64ms
     CGroup: /system.slice/httpd.service
             ├─26606 /usr/sbin/httpd -DFOREGROUND
             ├─26607 /usr/sbin/httpd -DFOREGROUND
             ├─26608 /usr/sbin/httpd -DFOREGROUND
             ├─26609 /usr/sbin/httpd -DFOREGROUND
             └─26610 /usr/sbin/httpd -DFOREGROUND
```

Download the web files in the right place:

#cd /var/www/html/

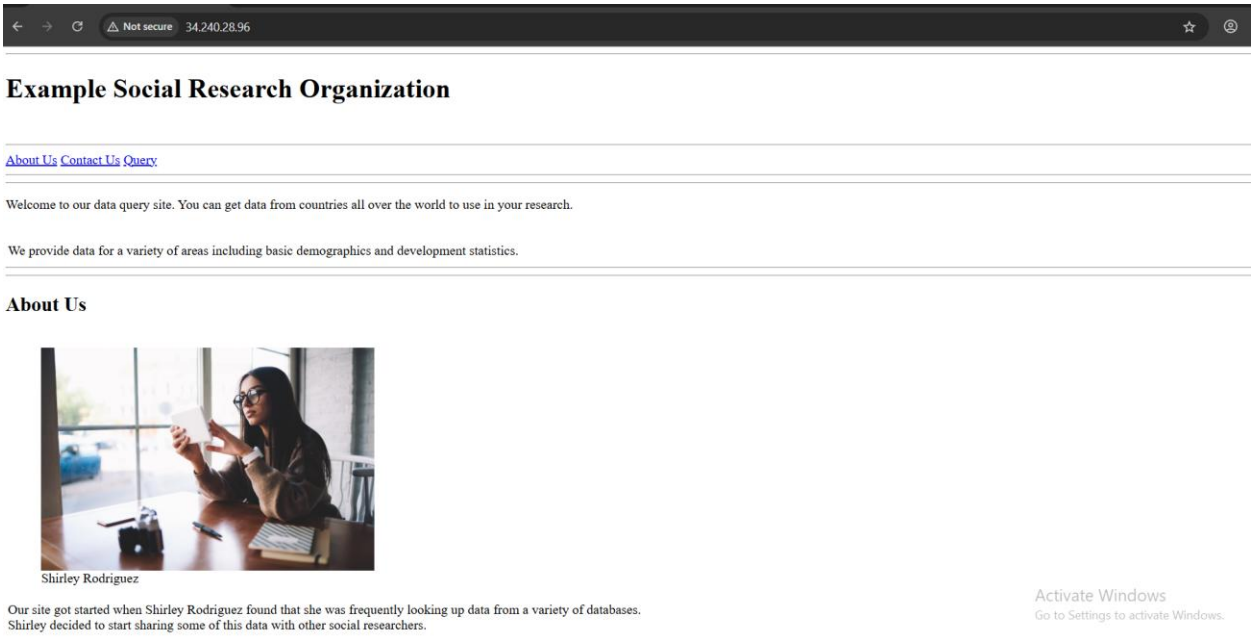
#wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACACAD-3-113230/22-lab-Capstone-project/s3/Example.zip

```
[root@ip-10-0-1-201 ~]# cd /var/www/html/
[root@ip-10-0-1-201 html]# wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACACAD-3-113230/22-lab-Capstone-project/s3/Example.zip
--2025-08-16 06:07:29--  https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACACAD-3-113230/22-lab-Capstone-project/s3/Example.zip
Resolving aws-tc-largeobjects.s3.us-west-2.amazonaws.com (aws-tc-largeobjects.s3.us-west-2.amazonaws.com)... 52.92.154.250, 52.92.203.178, 52.218.182.9, ...
Connecting to aws-tc-largeobjects.s3.us-west-2.amazonaws.com (aws-tc-largeobjects.s3.us-west-2.amazonaws.com)|52.92.154.250|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 4917744 (4.7M) [application/zip]
Saving to: 'Example.zip'

Example.zip                         100%[=============================================================================>]   4.69M  4.99MB/s    in 0.9s

2025-08-16 06:07:31 (4.99 MB/s) - 'Example.zip' saved [4917744/4917744]

[root@ip-10-0-1-201 html]# ls
Example.zip
[root@ip-10-0-1-201 html]#
```

```
[root@ip-10-0-1-201 html]# unzip Example.zip
Archive:  Example.zip
  inflating: Logo.png
  inflating: Shirley.jpeg
  inflating: gdp.php
  inflating: get-parameters.php
  inflating: index.php
  inflating: lifeexpectancy.php
  inflating: menu.php
  inflating: mobile.php
  inflating: mortality.php
  inflating: population.php
  inflating: query.php
  inflating: query2.php
  inflating: query3.php
 extracting: style.css
[root@ip-10-0-1-201 html]# cp index.php index.html
[root@ip-10-0-1-201 html]#
```

Testing the website:

Paste the public IP of the EC2 and do not forget to make the SG to allow http



Making the DB tier:

Download DB dump to use as DB:

#wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACACAD-3-113230/22-lab-Capstone-project/s3/Countrydatadump.sql

```
[root@ip-10-0-1-201 ~]# wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACACAD-3-113230/22-lab-Capstone-project/s3/Countrydatadump.sql
--2025-08-16 06:14:43--  https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACACAD-3-113230/22-lab-Capstone-project/s3/Countrydatadump.sql
Resolving aws-tc-largeobjects.s3.us-west-2.amazonaws.com (aws-tc-largeobjects.s3.us-west-2.amazonaws.com)... 52.92.224.50, 3.5.79.117, 3.5.79.125, ...
Connecting to aws-tc-largeobjects.s3.us-west-2.amazonaws.com (aws-tc-largeobjects.s3.us-west-2.amazonaws.com)|52.92.224.50|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 15508 (15K) [binary/octet-stream]
Saving to: 'Countrydatadump.sql'

Countrydatadump.sql                 100%[=============================================================================>]  15.14K  --.-KB/s    in 0s

2025-08-16 06:14:43 (123 MB/s) - 'Countrydatadump.sql' saved [15508/15508]

[root@ip-10-0-1-201 ~]# ls
Countrydatadump.sql
```

Install MariaDB client

#yum install -y mariadb105

```
[root@ip-10-0-1-201 ~]# sudo yum install -y mariadb105
Last metadata expiration check: 0:15:07 ago on Sat Aug 16 06:02:04 2025.
Dependencies resolved.
================================================================================================================================================
 Package                                  Architecture                Version                                  Repository                    Size
================================================================================================================================================
Installing:
 mariadb105                               x86_64                      3:10.5.29-1.amzn2023.0.1                 amazonlinux                  1.5 M
Installing dependencies:
 mariadb-connector-c                      x86_64                      3.3.10-1.amzn2023.0.1                    amazonlinux                  211 k
 mariadb-connector-c-config               noarch                      3.3.10-1.amzn2023.0.1                    amazonlinux                  9.9 k
 mariadb105-common                        x86_64                      3:10.5.29-1.amzn2023.0.1                 amazonlinux                   28 k
 perl-Sys-Hostname                        x86_64                      1.23-477.amzn2023.0.7                    amazonlinux                   16 k

Transaction Summary
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```

Move the DB dump to the RDS and connect to it:

mysql -h database-1.c3m64s8ywaii.eu-west-1.rds.amazonaws.com -u root -p myappdb < Countrydatadump.sql

mysql -h database-1.c3m64s8ywaii.eu-west-1.rds.amazonaws.com -u root -p myappdb

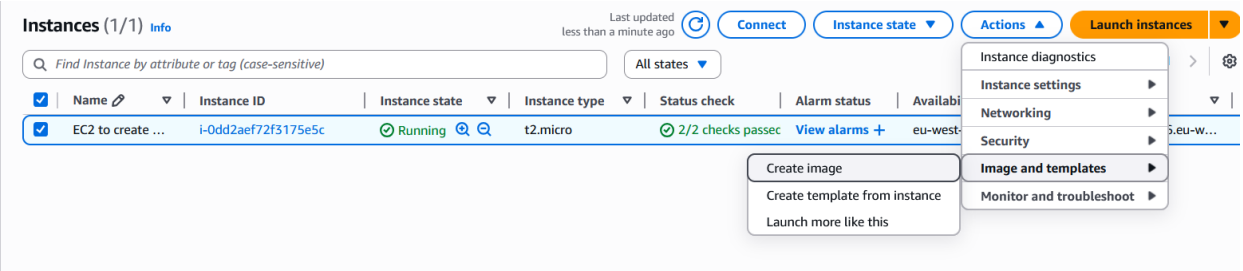
```
[root@ip-10-0-1-201 ~]# mysql -h database-1.c3m64s8ywaii.eu-west-1.rds.amazonaws.com -u root -p myappdb < Countrydatadump.sql
Enter password:
[root@ip-10-0-1-201 ~]# mysql -h database-1.c3m64s8ywaii.eu-west-1.rds.amazonaws.com -u root -p myappdb
Enter password:
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 85
Server version: 11.4.5-MariaDB-log managed by https://aws.amazon.com/rds/

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
```

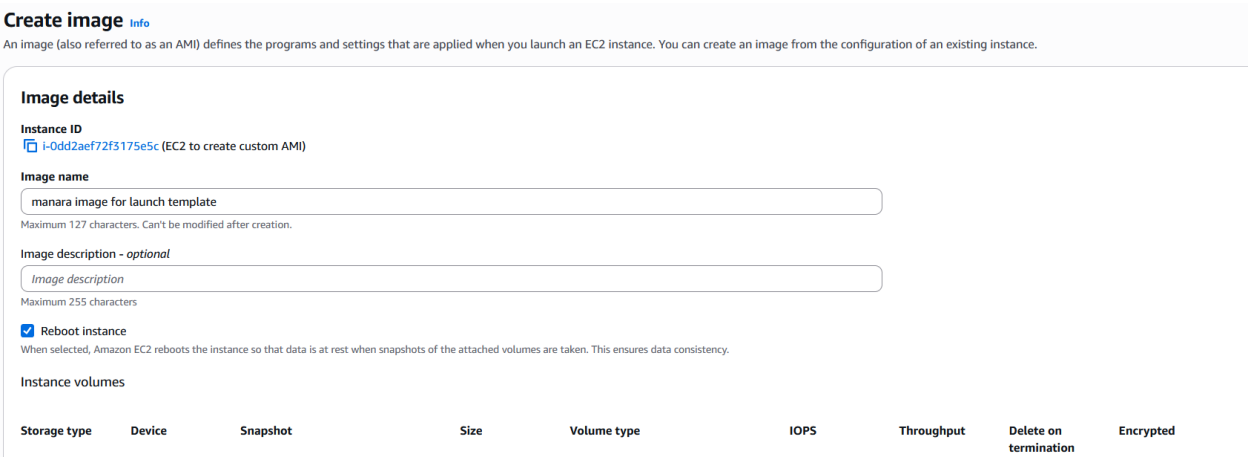
```
MariaDB [myappdb]> select myappdb;
ERROR 1054 (42S22): Unknown column 'myappdb' in 'SELECT'
MariaDB [myappdb]> SHOW TABLES;
+-------------------+
| Tables_in_myappdb |
+-------------------+
| countrydata_final |
+-------------------+
1 row in set (0.001 sec)

MariaDB [myappdb]> SHOW TABLES;
+-------------------+
| Tables_in_myappdb |
+-------------------+
| countrydata_final |
+-------------------+
1 row in set (0.001 sec)

MariaDB [myappdb]> DESCRIBE countrydata_final;
+------------------------------+--------+------+-----+---------+-------+
| Field                        | Type   | Null | Key | Default | Extra |
+------------------------------+--------+------+-----+---------+-------+
| name                         | text   | YES  |     | NULL    |       |
| mobilephones                 | double | YES  |     | NULL    |       |
| mortalityunder5              | double | YES  |     | NULL    |       |
| healthexpenditurepercapita   | double | YES  |     | NULL    |       |
| healthexpenditureppercentGDP | double | YES  |     | NULL    |       |
| population                   | double | YES  |     | NULL    |       |
| populationurban              | double | YES  |     | NULL    |       |
| birthrate                    | double | YES  |     | NULL    |       |
```

Create AMI from this instance:

1.choose the instance > actions > Image and template > create image

2.type a name





Creating an AMI from this instance to be used in the launch template.

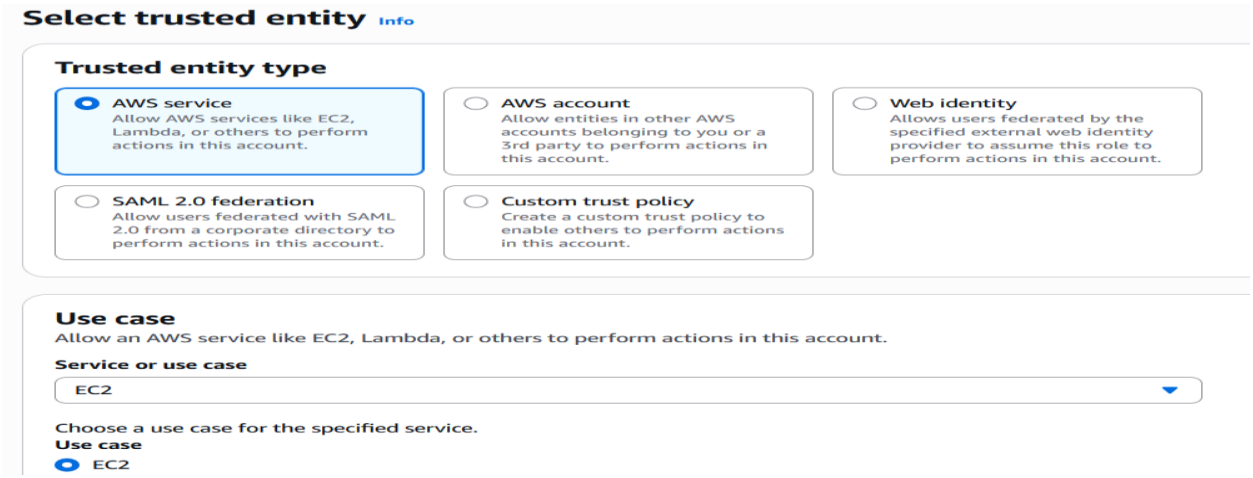
1.go to IAM console then role section

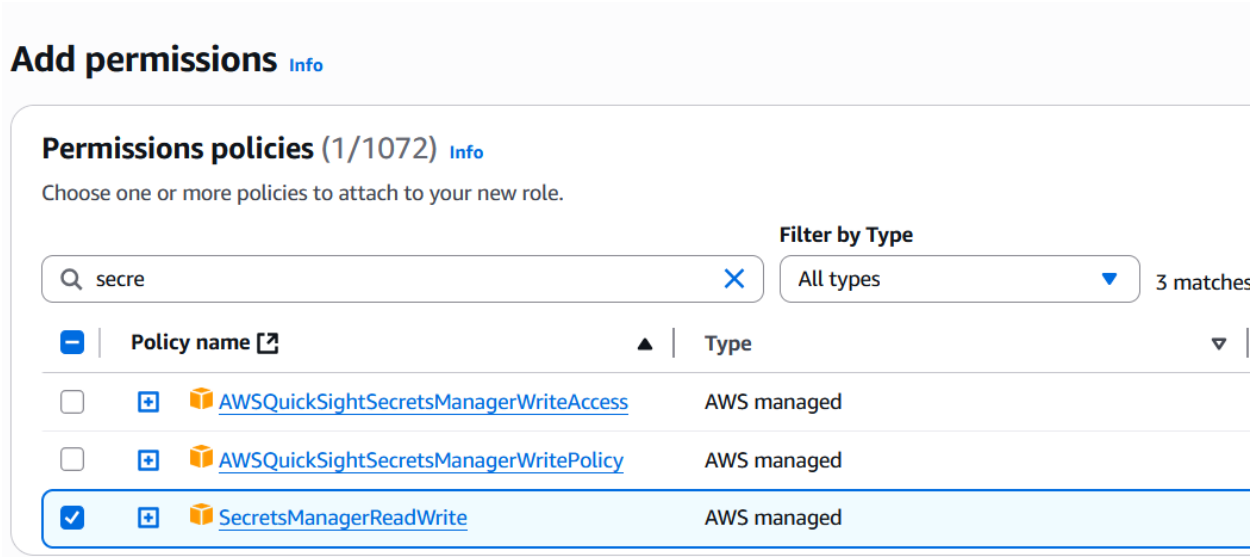
2.choose create role

3.choose aws service then EC2

4.then choose secret manager policy

5.type role name





Creating a launch template:

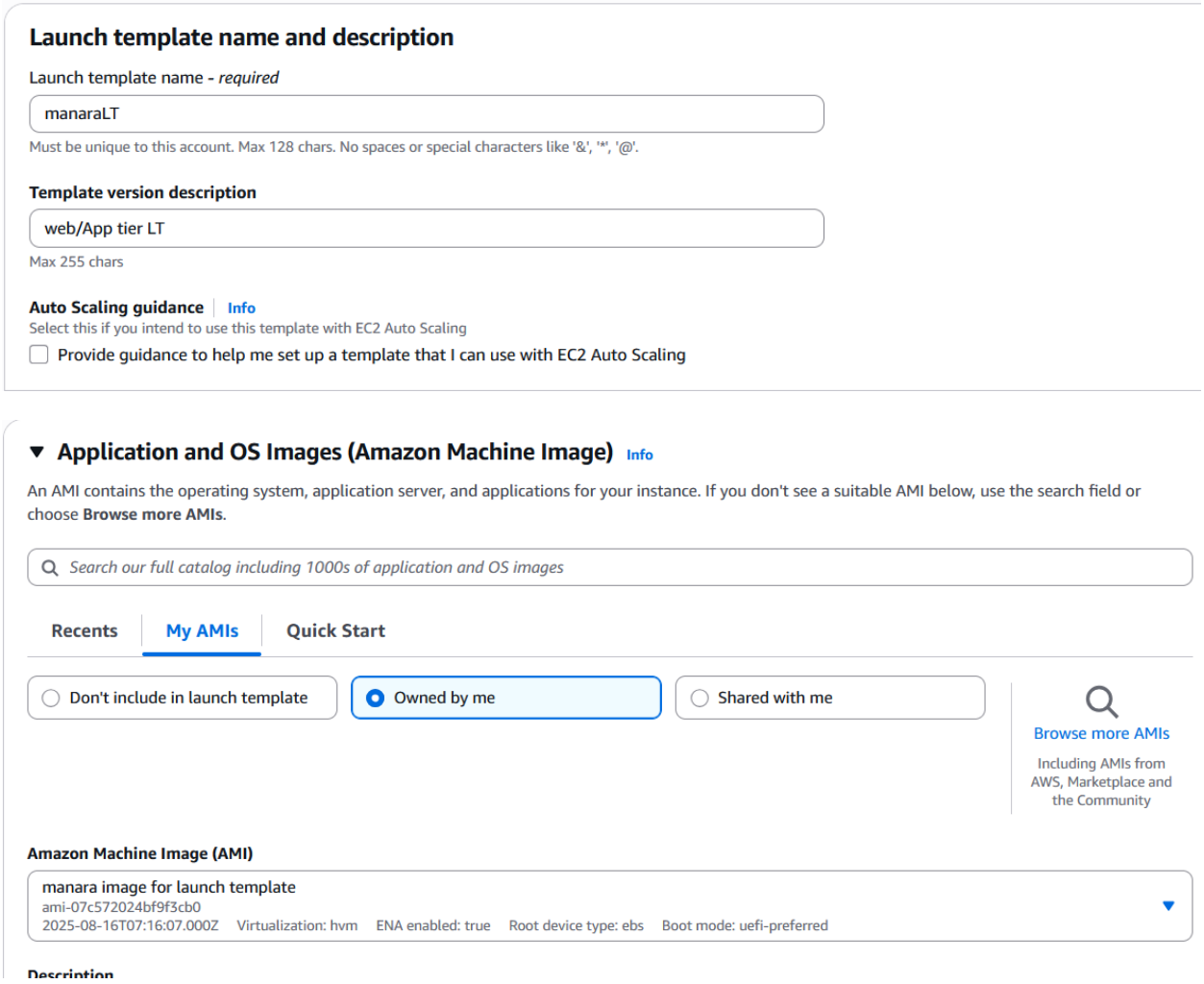
1.type name and description

2.choose the AMI we created

3.choose instance type and keypair

4.put network details

5.put the IAM role



Instance type Info | Get advice

Advanced

Instance type

t2.micro — Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true On-Demand RHEL base pricing: 0.027 USD per Hour
On-Demand Linux base pricing: 0.0126 USD per Hour On-Demand SUSE base pricing: 0.0126 USD per Hour
On-Demand Ubuntu Pro base pricing: 0.0144 USD per Hour On-Demand Windows base pricing: 0.0172 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

men3em

Create new key pair

Network settings Info

Subnet Info

subnet-008f89dd413c36620 manara-proj-subnet-private1-eu-west-1a
VPC: vpc-09ea4adfe8be34649 Owner: 850470019231 Availability Zone: eu-west-1a (euw1-az3)
Zone type: Availability Zone IP addresses available: 4091 CIDR: 10.0.128.0/20)

Create new subnet

When you specify a subnet, a network interface is automatically added to your template.

Availability Zone Info

eu-west-1a euw1-az3

Enable additional zones

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.

(•) Select existing security group ( ) Create security group

Common security groups Info

Select security groups

EC2 SG sg-0db71471bc2de2a41
VPC: vpc-09ea4adfe8be34649

Compare security group rules

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▸ **Advanced network configuration**

Advanced details Info

IAM instance profile Info

EC2-retrive-rds-cred
arn:aws:iam::850470019231:instance-profile/EC2-retrive-rds-cred

Create new IAM profile

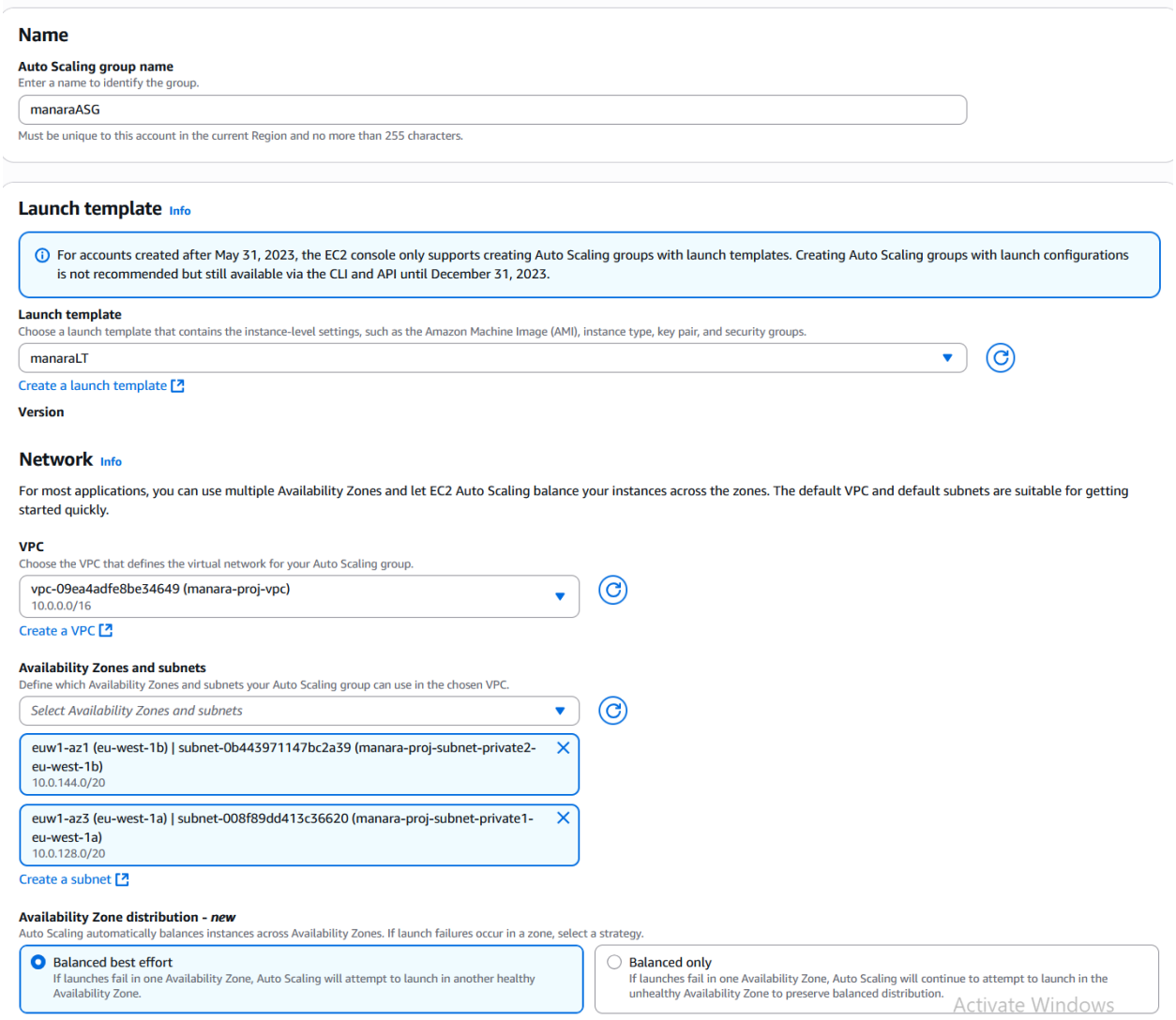
Creating Auto-scaling group:

1.type a name and choose the launch template

2.choose VPC and subnets

3.choose the capacity

4.choose scaling policy



Group size Info

Set the initial size of the Auto Scaling group. After creating the group, you can change its size to meet demand, either manually or by using automatic scaling.

Desired capacity type

Choose the unit of measurement for the desired capacity value. vCPUs and Memory(GiB) are only supported for mixed instances groups configured with a set of instance attributes.

Units (number of instances)

Desired capacity

Specify your group size.

2

Scaling Info

You can resize your Auto Scaling group manually or automatically to meet changes in demand.

Scaling limits

Set limits on how much your desired capacity can be increased or decreased.

Min desired capacity

2

Equal or less than desired capacity

Max desired capacity

4

Equal or greater than desired capacity

Instances (3) Info

Last updated less than a minute ago | Connect | Instance state | Actions | Launch instances

Find Instance by attribute or tag (case-sensitive) | All states | 1

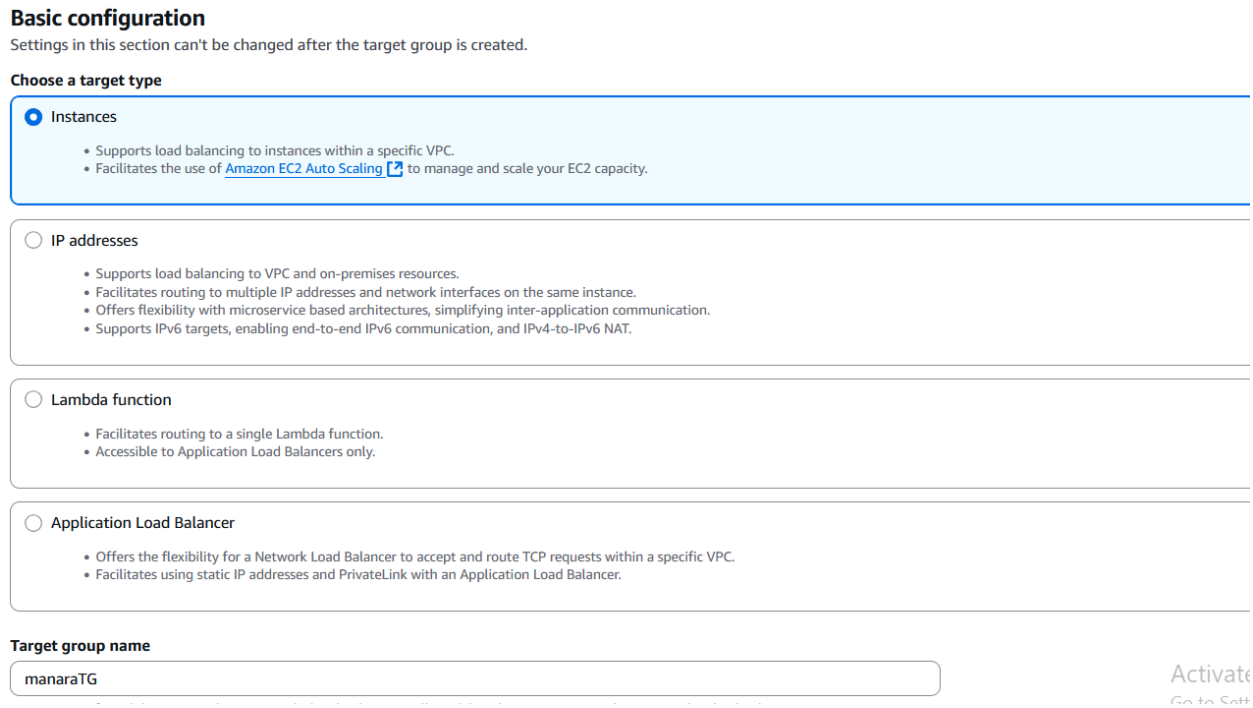
Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
EC2 to create custom AMI	i-0dd2aef72f3175e5c	Running	t2.micro	2/2 checks passed	View alarms +	eu-west-1a	ec2-34-240-28-96.
manara-proj	i-0d0353898896fc6e7	Pending	t2.micro	–	View alarms +	eu-west-1b	–
manara-proj	i-0cae0fa3dbd4b1129	Pending	t2.micro	–	View alarms +	eu-west-1a	–

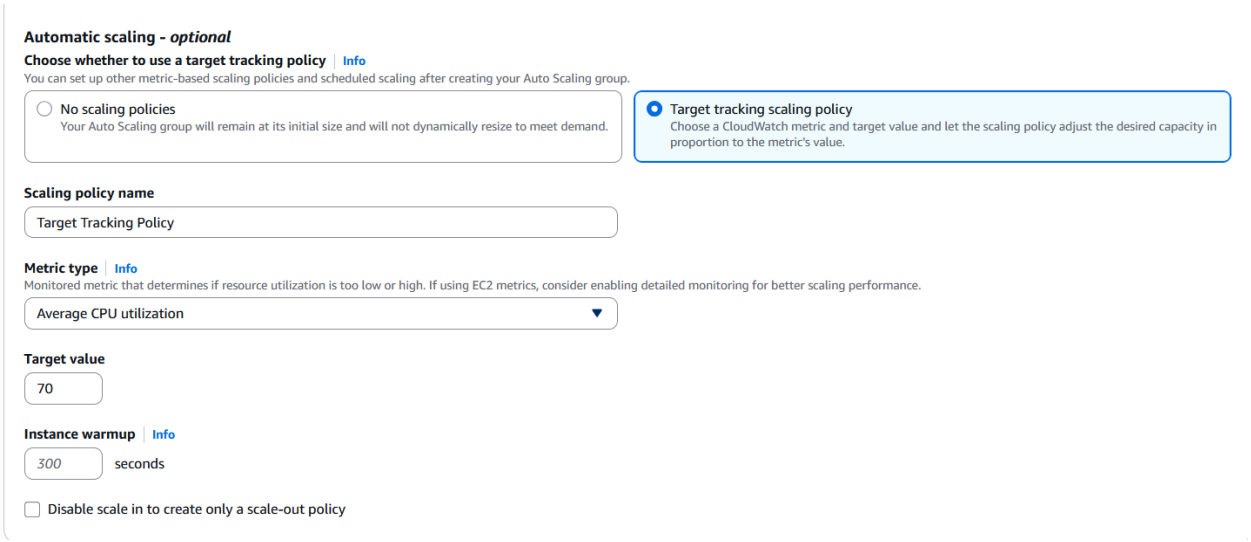
Creating a target group:

1.choose target type is instance

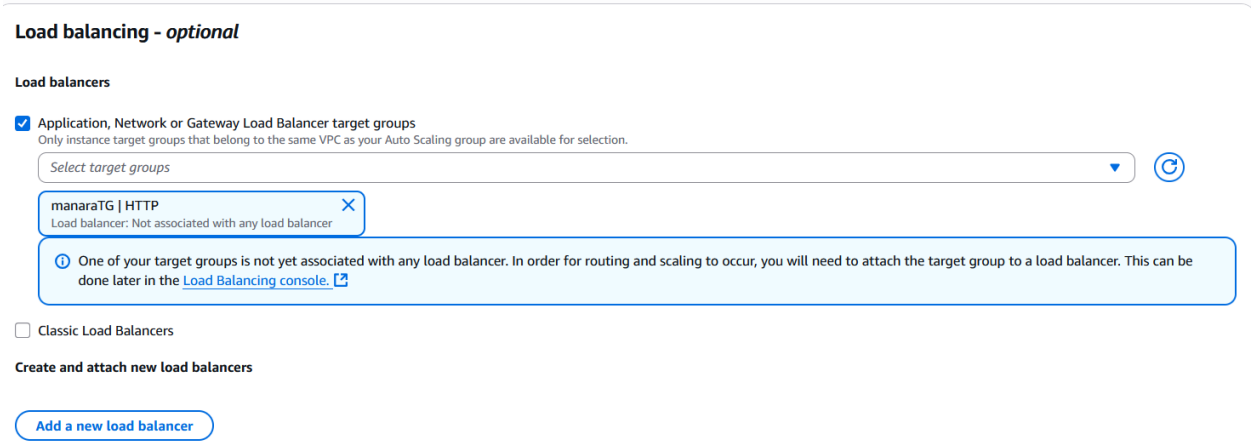
2.choose VPC

3.type a name

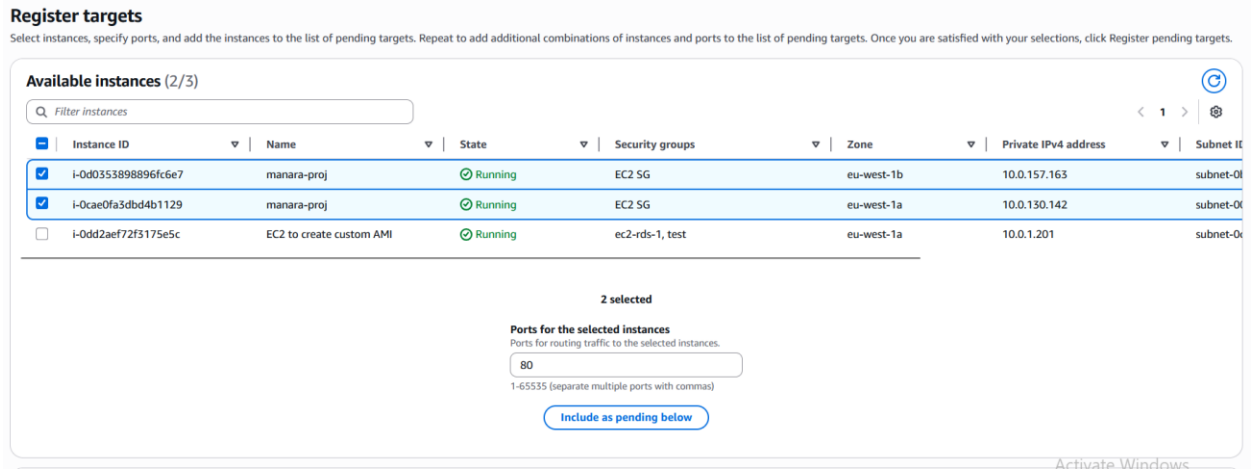




Edit the ASG to link it to the target group:



Register targets in the target group:



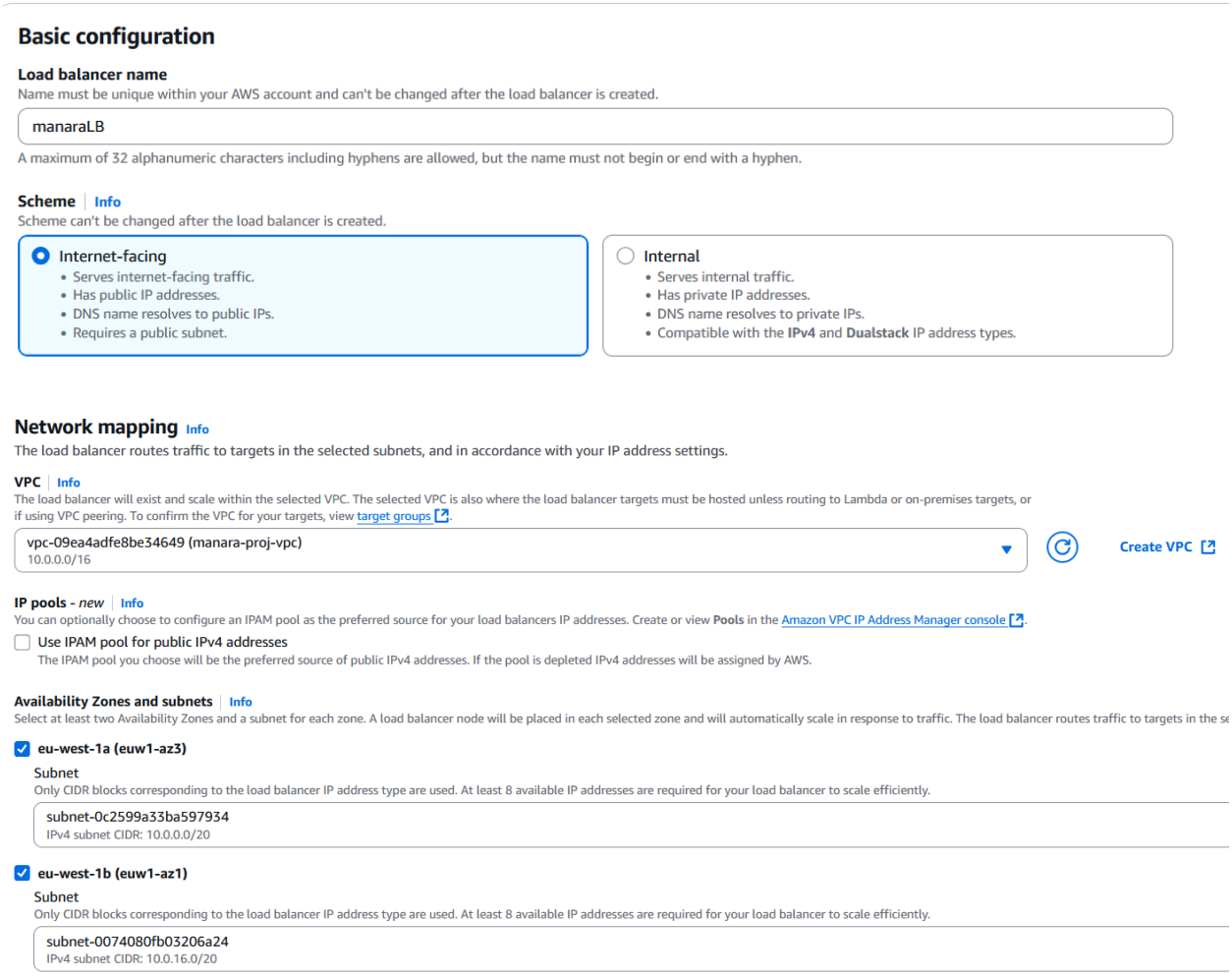
Creating a Load Balancer:

1.it will be ALB

2.type name and choose internet facing

3.choose VPC and public subnets

4.choose listener and target group



Security groups Info

A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can create a new security group.

Security groups

Select up to 5 security groups

ALB SG
sg-09ad4604d0c3c45e4 VPC: vpc-09ea4adfe8be34649

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 reque

Listener **HTTP:80**

Protocol	Port	Default action Info
HTTP	80 (1-65535)	Forward to: manaraTG, Target type: Instance, IPv4, HTTP

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.

Testing the website:

Not secure manaralb-1877193296.eu-west-1.elb.amazonaws.com/#aboutUs

Example Social Research Organization

About Us Contact Us Query

Welcome to our data query site. You can get data from countries all over the world to use in your research.

We provide data for a variety of areas including basic demographics and development statistics.

About Us

Shirley Rodriguez

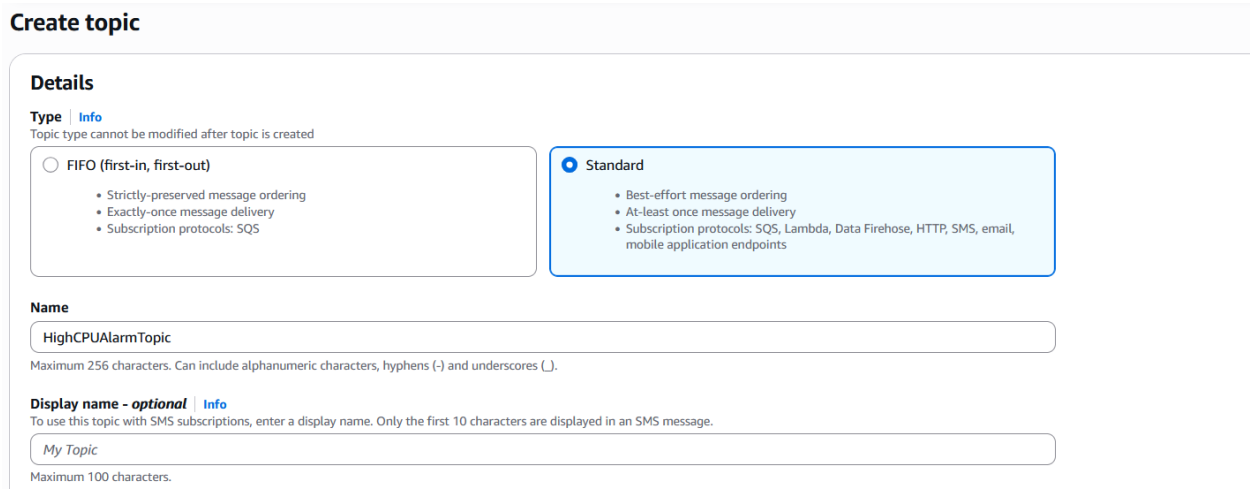
Our site got started when Shirley Rodriguez found that she was frequently looking up data from a variety of databases.
Shirley decided to start sharing some of this data with other social researchers.

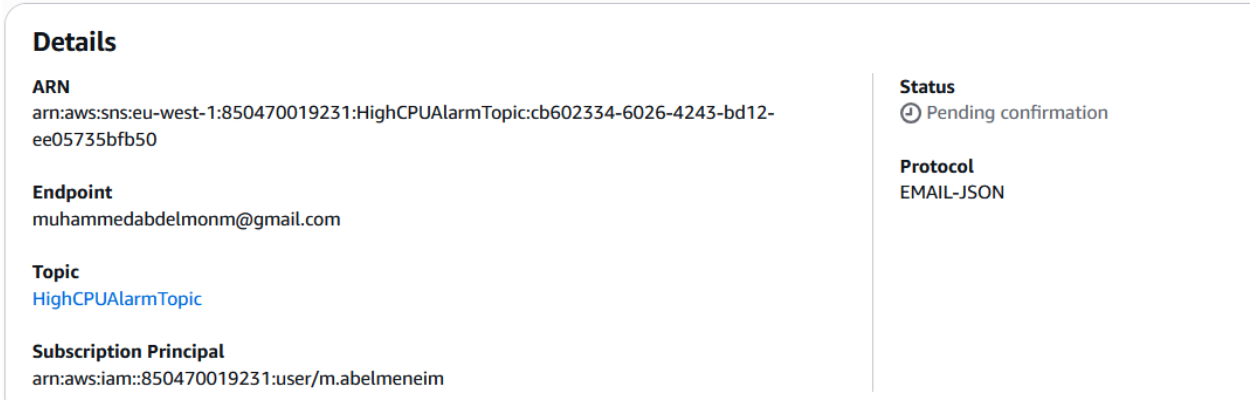
Creating SNS topic:

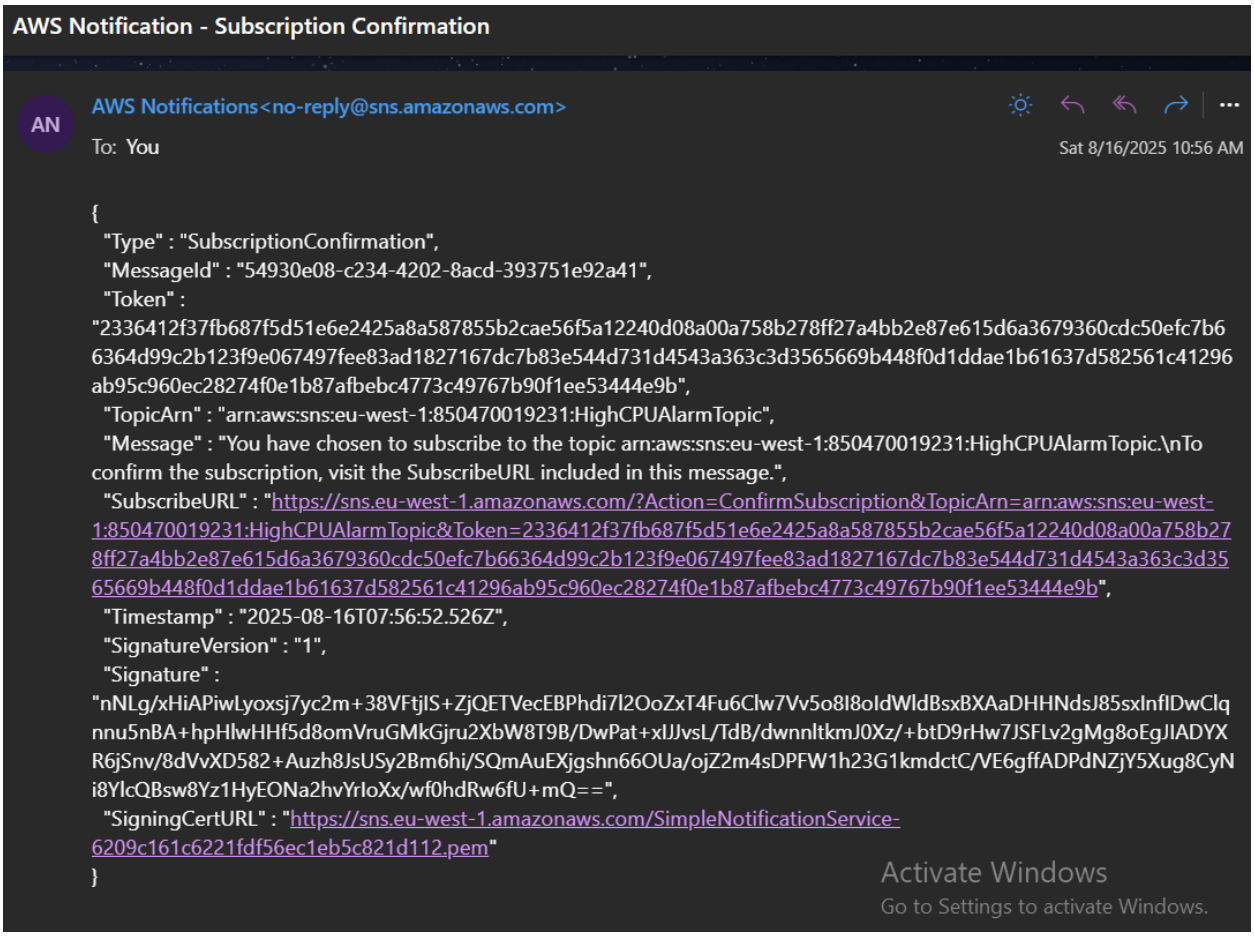
1.create topic

2.add subscription

3.confrim subscriptio







Create cloud watch alarm:

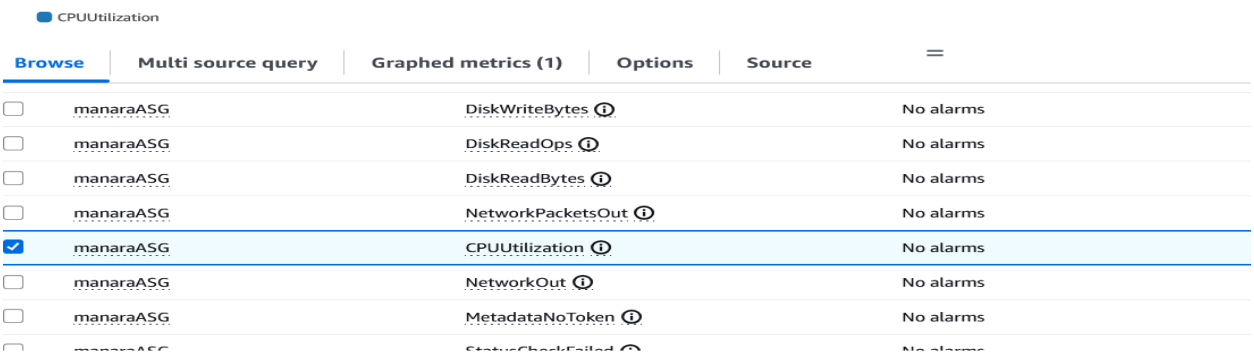
1.create alarm

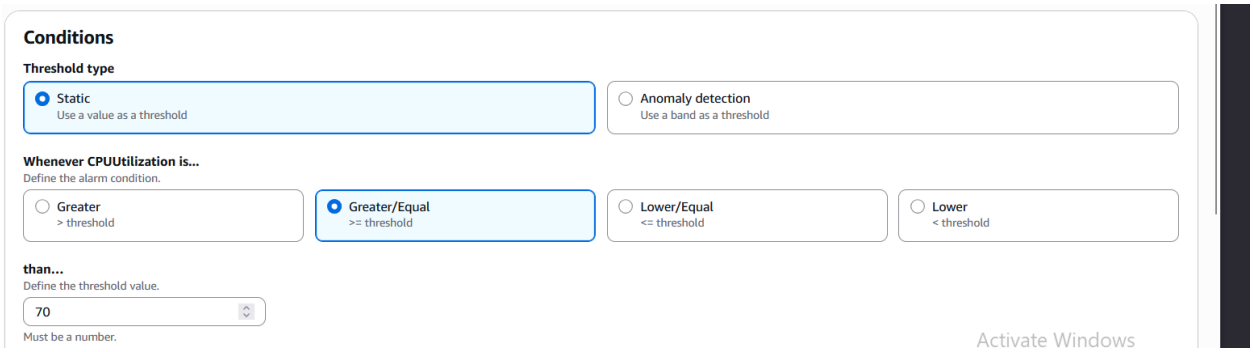
2.select metric

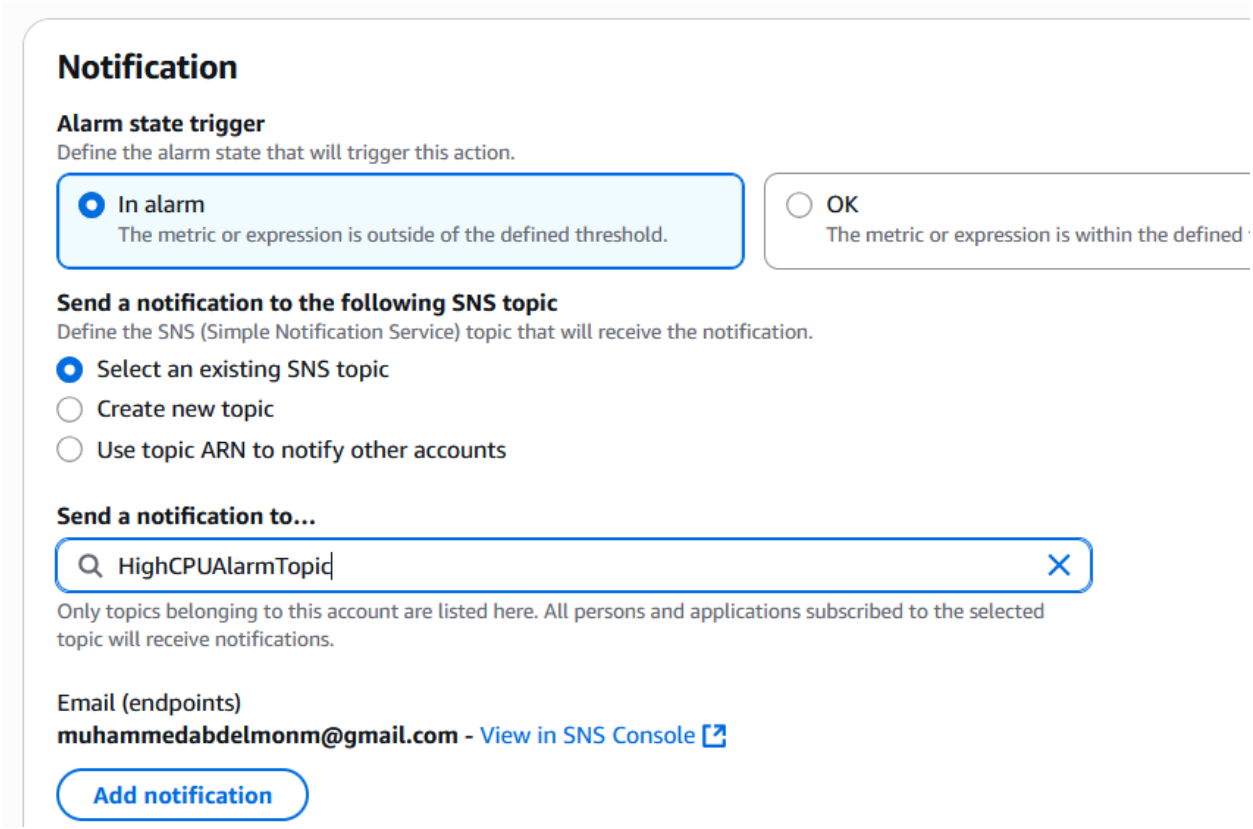
3.select CPU utilization for ASG

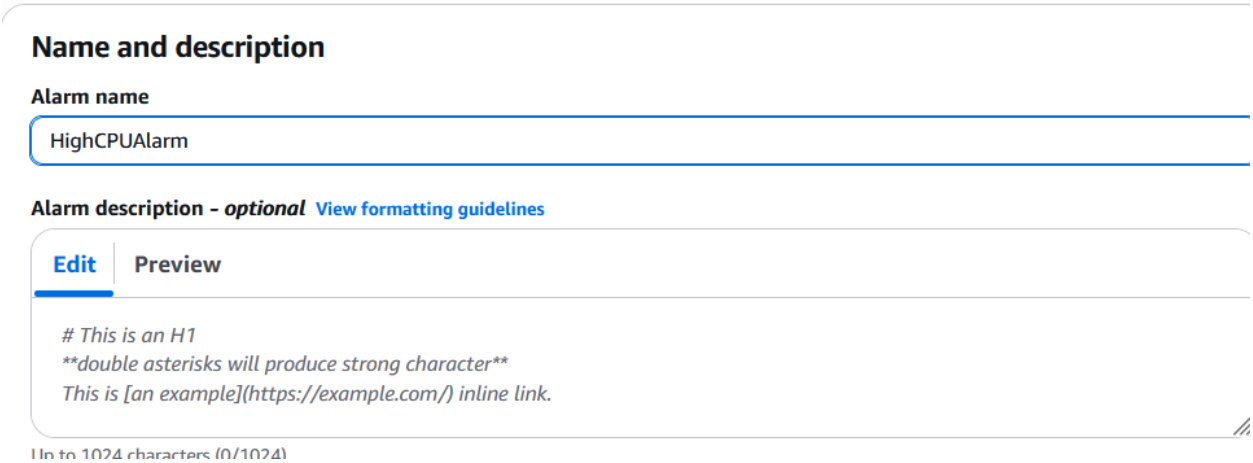
4.if greater than or equal to 70%

5.put SNS topic to send Email




Conditions
Threshold type
Static
Use a value as a threshold
Anomaly detection
Use a band as a threshold
Whenever CPUUtilization is...
Define the alarm condition.
Greater
> threshold
Greater/Equal
>= threshold
Lower/Equal
<= threshold
Lower
< threshold
than...
Define the threshold value.
70
Must be a number.
Activate Windows


Notification
Alarm state trigger
Define the alarm state that will trigger this action.
In alarm
The metric or expression is outside of the defined threshold.
OK
The metric or expression is within the defined
Send a notification to the following SNS topic
Define the SNS (Simple Notification Service) topic that will receive the notification.
Select an existing SNS topic
Create new topic
Use topic ARN to notify other accounts
Send a notification to...
HighCPUAlarmTopic
Only topics belonging to this account are listed here. All persons and applications subscribed to the selected topic will receive notifications.
Email (endpoints)
muhammedabdelmonm@gmail.com - View in SNS Console
Add notification


Name and description
Alarm name
HighCPUAlarm
Alarm description - optional View formatting guidelines
Edit
Preview
This is an H1
double asterisks will produce strong character
This is [an example](https://example.com/) inline link.
Up to 1024 characters (0/1024)