

הוראות התקנה:

1. יצירת VPC:

הגדרות:

שם VPC

2 רשתות פומביות ו-2 רשתות פרטיות

024

▼ Customize subnets CIDR blocks

Public subnet CIDR block in us-east-1a

10.0.0.0/2732 IPs

Public subnet CIDR block in us-east-1b

10.0.0.32/2732 IPs

Private subnet CIDR block in us-east-1a

10.0.0.64/2732 IPs

Private subnet CIDR block in us-east-1b

10.0.0.96/2732 IPs

2. יצירת Cloud9 לפני Ec2:

Additional instance types

Explore additional instances to fit your need.

Additional instance types

t3.micro

Platform Info

This will be installed on your EC2 instance. We recommend Amazon Linux 2023.

Amazon Linux 2023

Timeout

How long Cloud9 can be inactive (no user input) before auto-hibernating. This helps prevent unnecessary charges.

30 minutes

Network settings Info

Connection

How your environment is accessed.

☐ AWS Systems Manager (SSM)

Accesses environment via SSM without opening inbound ports (no ingress).

☒ Secure Shell (SSH)

Accesses environment directly via SSH, opens inbound ports.

▼ VPC settings Info

Amazon Virtual Private Cloud (VPC)

The VPC that your environment will access. To allow the AWS Cloud9 environment to connect to its EC2 instance, attach an internet gateway (IGW) to your VPC. [Create new VPC](#)

vpc-015a3a766e4e8bb8b

Name - myLab1app-vpc

Subnet

Used to setup your VPC configuration. To use a private subnet, select AWS Systems Manager (SSM) as the connection type. [Create new subnet](#)

subnet-0c7ae07b5e0a3be66

Name - myLab1app-subnet-public1-us-east-1a

3. יצירת EC2: בחירת שם והגדרות המכונה

Launch an instance [Info](#)

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.

Name and tags [Info](#)

Name

myEc2Lab1

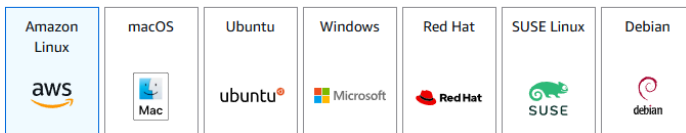
[Add additional tags](#)

▼ 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

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Quick Start



🔍
[Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI
ami-0f88e80871fd81e91 (64-bit (x86), uefi-preferred) / ami-0bc72bd3b8ba0b59d (64-bit (Arm), uefi)
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible ▼

Description

Amazon Linux 2023 is a modern, general purpose Linux-based OS that comes with 5 years of long term support. It is optimized for AWS and designed to provide a secure, stable and high-performance execution environment to develop and run your cloud applications.

Amazon Linux 2023 AMI 2023.7.20250428.1 x86_64 HVM kernel-6.1

Architecture	Boot mode	AMI ID	Publish Date	Username ⓘ
x86_64	uefi-preferred	ami-0f88e80871fd81e91	2025-04-30	ec2-user

Verified provider

החלפת הגדרות Network settings לVPC שיצרנו

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-015a3a766e4e8bb8b (myLab1app-vpc)
10.0.0.0/24



🔍

vpc-015a3a766e4e8bb8b (myLab1app-vpc)
10.0.0.0/24



[Create new subnet](#)

vpc-00e68ce05a03ca8d8
172.31.0.0/16

(default)

הוספת חוק עבור HTTP ו-MYSQL והוספת Cloud9 בהגדרות גישה

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 80, 0.0.0.0/0)

Remove

Type | Info

Protocol | Info

Port range | Info

HTTP

TCP

80

Source type | Info

Source | Info

Description - optional | Info

Anywhere

Q Add CIDR, prefix list or security group

0.0.0.0/0 X

e.g. SSH for admin desktop

▼ Security group rule 2 (TCP, 3306, sg-0885f31aa6c9efef3)

Remove

Type | Info

Protocol | Info

Port range | Info

MYSQL/Aurora

TCP

3306

Source type | Info

Source | Info

Description - optional | Info

Custom

Q Add CIDR, prefix list or security group

sg-0885f31aa6c9efef3 X

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

► Advanced network configuration

הוספת הגדרה IAM:

▼ Advanced details | Info

Domain join directory | Info

Select

Create new directory

IAM instance profile | Info

LabInstanceProfile

arn:aws:iam::091104818139:instance-profile/LabInstanceProfile

Create new IAM profile

הוספת קובץ או טקסט סקיפט מתוך הקובץ הנתון במעבדה
UserdataScript-phase-2.sh

How days in metadata | Info

Select

User data - optional | Info

Upload a file with your user data or enter it in the field.

Choose file

```
#!/bin/bash -xe
apt update -y
apt install nodejs unzip wget npm mysql-server -y
#wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACCAP1-1-DEV/code.zip -P /home/ubuntu
wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACCAP1-1-91571/1-lab-capstone-project-1/code.zip -P /home/ubuntu
cd /home/ubuntu
unzip code.zip -x "resources/codebase_partner/node_modules/*"
cd resources/codebase_partner
npm install aws aws-sdk
mysql -u root -e "CREATE USER 'nodeapp' IDENTIFIED WITH mysql_native_password BY 'student12';"
mysql -u root -e "GRANT all privileges on *.* to 'nodeapp'@'%';"
mysql -u root -e "CREATE DATABASE STUDENTS;"
mysql -u root -e "USE STUDENTS; CREATE TABLE students(
```

☐ User data has already been base64 encoded

4. יצירת RDS ו-subnet group: הוספה תחת הרשתות הפרטיות

You won't be able to modify the name after your subnet group has been created.

DBSubnetGroup

Must contain from 1 to 255 characters. Alphanumeric characters, spaces, hyphens, underscores, and periods are allowed.

Description

private 1 & 2 for Lab1

VPC

Choose a VPC identifier that corresponds to the subnets you want to use for your DB subnet group. You won't be able to choose a different VPC identifier after your subnet group has been created.

myLab1app-vpc (vpc-015a3a766e4e8bb8b)
4 Subnets, 2 Availability Zones

Add subnets

Availability Zones

Choose the Availability Zones that include the subnets you want to add.

Choose an availability zone

us-east-1a X us-east-1b X

Subnets

Choose the subnets that you want to add. The list includes the subnets in the selected Availability Zones.

Select subnets

myLab1app-subnet-private1-us-east-1a X
Subnet ID: subnet-0892e11d3da07594e CIDR: 10.0.0.64/27

myLab1app-subnet-private2-us-east-1b X
Subnet ID: subnet-0465c92ab3868b9b4 CIDR: 10.0.0.96/27

For Multi-AZ DB clusters, you must select 3 subnets in 3 different Availability Zones.

Subnets selected (2)

Availability zone	Subnet name	Subnet ID	CIDR block
us-east-1a	myLab1app-subnet-private1-us-east-1a	subnet-0892e11d3da07594e	10.0.0.64/27
us-east-1b	myLab1app-subnet-private2-us-east-1b	subnet-0465c92ab3868b9b4	10.0.0.96/27

5. יצירת security group עם גישה לMySQL: הוספת 2 חוקים עבור EC2 ו-Cloud9

Create security group Info

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To create a new security group, complete the fields below.

Basic details

Security group name Info

dbAccessEc2

Name cannot be edited after creation.

Description Info

allows Ec2 and Cloud9 DB access

VPC Info

vpc-015a3a766e4e8bb8b (myLab1app-vpc)

Inbound rules Info

Type	Protocol	Port range	Source	Description - optional
MySQL/Aurora	TCP	3306	Custom	Q sg-0885f31aa6c9efef3 X
				sg-0885f31aa6c9efef3 X
MySQL/Aurora	TCP	3306	Custom	Q sg-0bbcb31fb2a2bd3a67 X
				sg-0bbcb31fb2a2bd3a67 X

Add rule

Outbound rules Info

Type	Protocol	Port range	Destination	Description - optional
All traffic	All	All	Custom	Q
				0.0.0.0/0 X

Add rule

6. יצירת DB: בחירת MySQL ו-Free tier הגדרת משתמש אדמין:

nodeapp
student12

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.

myDBLab1

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.

myAdminLab1

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.

☐ **Auto generate password**
Amazon RDS can generate a password for you, or you can specify your own password.

Master password [Info](#)

Password strength [Very weak](#)
Minimum constraints: At least 8 printable ASCII characters. Can't contain any of the following symbols: / * @

Confirm master password [Info](#)

חוספת הגדרת ה-security group

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.

dbsubnetgroup
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

dbAccessEc2 X

Availability Zone [Info](#)
us-east-1a

RDS Proxy
RDS Proxy is a fully managed, highly available database proxy that improves application scalability, resiliency, and security.

☐ **Create an RDS Proxy** [Info](#)
RDS automatically creates an IAM role and a Secrets Manager secret for the proxy. RDS Proxy has additional costs. For more information, see [Amazon RDS Proxy pricing](#).

Certificate authority - optional [Info](#)
Using a server certificate provides an extra layer of security by validating that the connection is being made to an Amazon database. It does so by checking the server certificate that is automatically installed on all databases that you provision.

rds-ca-rsa2048-g1 (default)
Expiry: May 26, 2061

If you don't select a certificate authority, RDS chooses one for you.

7. הפרדת בסיס הנתונים של EC2

נכנסים ל-CLOUD9 ומריצים את סקריפט 3 מתוך cloud9-scripts.yml

```
mysqldump -h <EC2instancePrivateip> -u nodeapp -p --databases STUDENTS > data.sql
```

מכניסים את המידע מתוך הקובץ הנוצר ל-MySQL

```
mysql -h <RDSEndpoint> -u nodeapp -p STUDENTS < data.sql
```

אם יש תקלה אז קודם ניצור בסיס נתונים של STUDENTS

```
mysql -h <RDSEndpoint> -u nodeapp -p
```

רושמים את הסיסמא: student12

ואז:

```
CREATE DATABASE IF NOT EXISTS STUDENTS;
```

לאחר מכן ניתן לצאת ע"י

```
quit;
```

ולכתוב את הפקודה הראשונה

```
mysql -h <RDSEndpoint> -u nodeapp -p STUDENTS < data.sql
```

8. יצירת Secret

ניצור Secret חדש בסביבת הCloud9

נשתמש בסקריפט 1 מתוך הקובץ cloud9-scripts.yml

```
aws secretsmanager create-secret \
```

```
--name Mydbsecret \
```

```
--description "Database secret for web app" \
```

```
--secret-string "{\"user\":\"nodeapp\",\"password\":\"student12\",\"host\":\"<RDS  
Endpoint>\",\"db\":\"STUDENTS\"}"
```

9. ניצור EC2 חדש

נשתמש בסקריפט UserdataScript-phase3.sh

Name: myNewEc2 [Add additional tags](#)

▼ 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

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Recents | **Quick Start**

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

SUSE Linux

Debian

[Browse more AMIs](#)
Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type
ami-084568db4383264d4 (64-bit (x86)) / ami-0c4e709339fa8521a (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs Free tier eligible

Description

Ubuntu Server 24.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).
Canonical, Ubuntu, 24.04, amd64 noble image

Architecture	AMI ID	Publish Date	Username
64-bit (x86)	ami-084568db4383264d4	2025-03-05	ubuntu

[Verified provider](#)

▼ 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*

vockey

 [Create new key pair](#)

▼ Network settings [Info](#)

VPC - *required* [Info](#)

vpc-08ebf77475f02e81b (myAppVPC-vpc)
10.0.0.0/16



Subnet [Info](#)

subnet-0f2d8e82c066a76ae myAppVPC-subnet-public1-us-east-1a
VPC: vpc-08ebf77475f02e81b Owner: 091104818139 Availability Zone: us-east-1a
Zone type: Availability Zone IP addresses available: 4086 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

Common security groups [Info](#)

Select security groups

mySecurityGroupForEc2 sg-007aa78867efc120d 
VPC: vpc-08ebf77475f02e81b


 [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](#)

Metadata version [Info](#)

V2 only (token required)

 For V2 requests, you must include a session token in all instance metadata requests. Applications or agents that use V1 for instance metadata access will break.

Metadata response hop limit [Info](#)

2

Allow tags in metadata [Info](#)

Select

User data - *optional* [Info](#)

Upload a file with your user data or enter it in the field.

 [Choose file](#)

```
#!/bin/bash -xe
apt update -y
apt install nodejs unzip wget npm mysql-client -y
#wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACCAP1-1-DEV/code.zip -P /home/ubuntu
wget https://aws-tc-largeobjects.s3.us-west-2.amazonaws.com/CUR-TF-200-ACCAP1-1-91571/1-lab-capstone-project-1/code.zip -P /home/ubuntu
cd /home/ubuntu
unzip code.zip -x "resources/codebase_partner/node_modules/*"
cd resources/codebase_partner
npm install aws aws-sdk
export APP_PORT=80
npm start &
echo '#!/bin/bash -xe
cd /home/ubuntu/resources/codebase_partner'
```

☐ User data has already been base64 encoded

10. יצירת Template של EC2

The screenshot shows the AWS Management Console interface for EC2 Instances. The left sidebar contains navigation links for EC2, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays a list of instances. The instance 'myWebAppFinal' with ID 'i-050107593afc72c6c' is selected. A context menu is open for this instance, showing various actions. The 'Image and templates' section is expanded, and the 'Create template from instance' button is highlighted. Below the instance list, the 'Details' tab for the selected instance is visible, showing the instance ID and a link to the instance summary.

Name	Instance ID	Instance state
aws-cloud9-myCloud9-c560fad891814901a5768a4bef54f4ee	i-03cb278fd230fb5bf	Running
myWebAppFinal	i-050107593afc72c6c	Running
myWebAppFinal	i-0ed0a692bbcc15a81	Running

Instance settings

- Networking
- Security
- Image and templates**
 - Create image
 - Create template from instance**
 - Launch more like this
- Monitor and troubleshoot

בחלון הבא נותנים שם ולוחצים create launch template

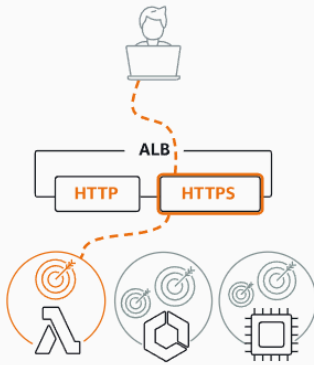
11. יצירת Load Balancer

Compare and select load balancer type

A complete feature-by-feature comparison along with detailed highlights is also available. [Learn more](#)

Load balancer types

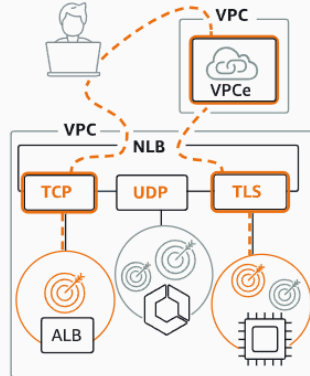
Application Load Balancer [Info](#)



Choose an Application Load Balancer when you need a flexible feature set for your applications with HTTP and HTTPS traffic. Operating at the request level, Application Load Balancers provide advanced routing and visibility features targeted at application architectures, including microservices and containers.

[Create](#)

Network Load Balancer [Info](#)



Choose a Network Load Balancer when you need ultra-high performance, TLS offloading at scale, centralized certificate deployment, support for UDP, and static IP addresses for your applications. Operating at the connection level, Network Load Balancers are capable of handling millions of requests per second securely while maintaining ultra-low latencies.

[Create](#)

Gateway Load Balancer [Info](#)



Choose a Gateway Load Balancer when you need to deploy and manage a fleet of third-party virtual appliances that support GENEVE. These appliances enable you to improve security, compliance, and policy controls.

[Create](#)

► Classic Load Balancer - *previous generation*

בחר 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 Application Load Balancers work

Basic configuration

Load balancer name

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

myLoadBalancer

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

Scheme [Info](#)

Scheme can't be changed after the load balancer is created.

☒ Internet-facing

- Serves internet-facing traffic.
- Has public IP addresses.
- DNS name resolves to public IPs.
- Requires a public subnet.

☐ Internal

- Serves internal traffic.
- Has private IP addresses.
- DNS name resolves to private IPs.
- Compatible with the IPv4 and Dualstack IP address types.

Load balancer IP address type [Info](#)

Select the front-end IP address type to assign to the load balancer. The VPC and subnets mapped to this load balancer must include the selected IP address types. Public IPv4 addresses have an additional cost.

☒ IPv4

Includes only IPv4 addresses.

☐ Dualstack

Includes IPv4 and IPv6 addresses.

☐ Dualstack without public IPv4

Includes a public IPv6 address, and private IPv4 and IPv6 addresses. Compatible with **Internet-facing** load balancers only.

Network mapping [info](#)

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

VPC [info](#)

The load balancer will exist and scale within the selected VPC. The selected VPC is also where the load balancer targets must be hosted unless routing to Lambda or on-premises targets, or if using VPC peering. To confirm the VPC for your targets, view [target groups](#). For a new VPC, [create a VPC](#).

myAppVPC-vpc
vpc-08ebf77475f02e81b
IPv4 VPC CIDR: 10.0.0.0/16

IP pools - new [info](#)

You can optionally choose to configure an IPAM pool as the preferred source for your load balancers IP addresses. Create or view Pools in [Amazon VPC IP Address Manager console](#).

☐ Use IPAM pool for public IPv4 addresses

The IPAM pool you choose will be the preferred source of public IPv4 addresses. If the pool is depleted IPv4 addresses will be assigned by AWS.

Availability Zones and subnets [info](#)

Select at least two Availability Zones and a subnet for each zone. A load balancer node will be placed in each selected zone and will automatically scale in response to traffic. The load balancer routes traffic to targets in the selected Availability Zones only.

☒ us-east-1a (use1-az1)

Subnet

Only CIDR blocks corresponding to the load balancer IP address type are used. At least 8 available IP addresses are required for your load balancer to scale efficiently.

subnet-0f2d8e82c066a76ae
IPv4 subnet CIDR: 10.0.0.0/20

myAppVPC-subnet-public1-us-east-1a

☒ us-east-1b (use1-az2)

Subnet

Only CIDR blocks corresponding to the load balancer IP address type are used. At least 8 available IP addresses are required for your load balancer to scale efficiently.

subnet-05b5c1fa0db875d27
IPv4 subnet CIDR: 10.0.16.0/20

myAppVPC-subnet-public2-us-east-1b

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

mySecurityGroupForEc2
sg-007aa78867efc120d VPC: vpc-08ebf77475f02e81b

12. יצירת Auto Scaling Group להרחבת המופעים של EC2

- Step 1
- ☒ Choose launch template
- Step 2
- ☐ Choose instance launch options
- Step 3 - optional
- ☐ Integrate with other services
- Step 4 - optional
- ☐ Configure group size and scaling
- Step 5 - optional
- ☐ Add notifications
- Step 6 - optional
- ☐ Add tags
- Step 7
- ☐ Review

Choose launch template [info](#)

Specify a launch template that contains settings common to all EC2 instances that are launched by this Auto Scaling group.

Name

Auto Scaling group name

Enter a name to identify the group.

scaling group

Must be unique to this account in the current Region and no more than 255 characters.

Launch template [info](#)

For accounts created after May 31, 2023, the EC2 console only supports creating Auto Scaling groups with launch templates. Creating Auto Scaling groups with launch configurations is not recommended but still available via the CLI and API until December 31, 2023.

Launch template

Choose a launch template that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

myWebAppRealEc2Template

[Create a launch template](#)

Version

Default (1)

[Create a launch template version](#)

Description

-

AMI ID

ami-084568db4383264d4

Key pair name

vockey

Launch template

myWebAppRealEc2Template

lt-0f0b3d8b62b60dda2

Security groups

-

Security group IDs

sg-007aa78867efc120d

Instance type

t2.micro

Request Spot Instances

No

Additional details

- Choose instance launch options
- Step 3 - optional
- Integrate with other services
- Step 4 - optional
- Configure group size and scaling
- Step 5 - optional
- Add notifications
- Step 6 - optional
- Add tags
- Step 7
- Review

Instance type requirements [Info](#)

You can keep the same instance attributes or instance type from your launch template, or you can choose to override the launch template by specifying different instance attributes or manually adding instance types.

Launch template
myWebAppRealEC2Template [↗](#)
lt-0f0b3d8b62b60dda2

Version
Default

Description
-

Instance type
t2.micro

[Override launch template](#)

Network [Info](#)

For most applications, you can use multiple Availability Zones and let EC2 Auto Scaling balance your instances across the zones. The default VPC and default subnets are suitable for getting started quickly.

VPC

Choose the VPC that defines the virtual network for your Auto Scaling group.

vpc-08ebf77475f02e81b (myAppVPC-vpc)
10.0.0.0/16



[Create a VPC](#) [↗](#)

Availability Zones and subnets

Define which Availability Zones and subnets your Auto Scaling group can use in the chosen VPC.

Select Availability Zones and subnets



us-east-1a | subnet-0f2d8e82c066a76ae (myAppVPC-subnet-public1-us-east-1a) [✕](#)
10.0.0.0/20

us-east-1b | subnet-05b5c1fa0db875d27 (myAppVPC-subnet-public2-us-east-1b) [✕](#)
10.0.16.0/20

[Create a subnet](#) [↗](#)

Availability Zone distribution - new

Auto Scaling automatically balances instances across Availability Zones. If launch failures occur in a zone, select a strategy.

☒ Balanced best effort

If launches fail in one Availability Zone, Auto Scaling will attempt to launch in another healthy Availability Zone.

☐ Balanced only

If launches fail in one Availability Zone, Auto Scaling will continue to attempt to launch in the unhealthy Availability Zone to preserve balanced distribution.

- Choose instance launch options
- Step 3 - optional
- **Integrate with other services**
- Step 4 - optional
- Configure group size and scaling
- Step 5 - optional
- Add notifications
- Step 6 - optional
- Add tags
- Step 7
- Review

You can also customize health check replacements and monitoring.

Load balancing [Info](#)

Use the options below to attach your Auto Scaling group to an existing load balancer, or to a new load balancer that you define.

☐ No load balancer

Traffic to your Auto Scaling group will not be fronted by a load balancer.

☐ Attach to an existing load balancer

Choose from your existing load balancers.

☒ Attach to a new load balancer

Quickly create a basic load balancer to attach to your Auto Scaling group.

Attach to a new load balancer

Define a new load balancer to create for attachment to this Auto Scaling group.

Load balancer type

Choose from the load balancer types offered below. Type selection cannot be changed after the load balancer is created. If you need a different type of load balancer than those offered here, visit the [Load Balancing console](#) [↗](#).

☒ Application Load Balancer

HTTP, HTTPS

☐ Network Load Balancer

TCP, UDP, TLS

Load balancer name

Name cannot be changed after the load balancer is created.

scaling group-1

Load balancer scheme

Scheme cannot be changed after the load balancer is created.

☒ Internal

☐ Internet-facing

Network mapping

Your new load balancer will be created using the same VPC and Availability Zone selections as your Auto Scaling group. You can select different subnets and add subnets from additional Availability Zones.

VPC

vpc-08ebf77475f02e81b [↗](#)

myAppVPC-vpc

Availability Zones and subnets

You must select a single subnet for each Availability Zone enabled. Only public subnets are available for selection to support DNS resolution.

☒ us-east-1a

subnet-0f2d8e82c066a76ae

☒ us-east-1b

subnet-05b5c1fa0db875d27

Step 1

Choose launch template

Step 2

Choose instance launch options

Step 3 - optional

Integrate with other services

Step 4 - optional

Configure group size and scaling

Step 5 - optional

Add notifications

Step 6 - optional

Add tags

Step 7

Review

Configure group size and scaling - optional

Define your group's desired capacity and scaling limits. You can optionally add automatic scaling to adjust the size of your group.

Group size

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

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

3

Equal or greater than desired capacity

Automatic scaling - optional

Choose whether to use a target tracking policy

You can set up other metric-based scaling policies and scheduled scaling after creating your Auto Scaling group.

☒ No scaling policies

Your Auto Scaling group will remain at its initial size and will not dynamically resize to meet demand.

☐ Target tracking scaling policy

Choose a CloudWatch metric and target value and let the scaling policy adjust the desired capacity in proportion to the metric's value.

כעת ניתן להיכנס ל-Load Balancer מהקישור

EC2 > Load balancers

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

Network Interfaces

Load Balancing

Load Balancers

Target Groups

Trust Stores

Auto Scaling

Auto Scaling Groups

Load balancers (1/1)

Elastic Load Balancing scales your load balancer capacity automatically in response to changes in incoming traffic.

Filter load balancers

Name	DNS name	State	VPC ID	Availability Zones	Type	Date created
myWebAppLoadBalancer	myWebAppLoadBalancer-8...	Active	vpc-08ebf77475f02e81b	2 Availability Zones	application	May 13, 2025, 20:44 (UTC+03:00)

Load balancer: myWebAppLoadBalancer

Details

Listeners and rules

Network mapping

Resource map

Security

Monitoring

Integrations

Attributes

Capacity

Tags

Load balancer type

Application

Status

Active

VPC

vpc-08ebf77475f02e81b

Load balancer IP address type

IPv4

Scheme

Internet-facing

Hosted zone

Z35SXDOTRQ7X7K

Availability Zones

subnet-0f2d8e82c066a76ae us-east-1a (use1-az1)
subnet-05b5c1fa0db875d27 us-east-1b (use1-az2)

Date created

May 13, 2025, 20:44 (UTC+03:00)

לפי DNS name

Lab Instructions Building a H...

Console Home | Console Hom...

Databases | Aurora and RDS |


Load balancers | EC2 | us-east...

AWS Cloud9

myCloud9 - AWS Cloud9

Students

Not secure http://mywebapploadbalancer-864941368.us-east-1.elb.amazonaws.com/students



XYZ University

Home

Students list

All students

Name	Address	City	State	Email	Phone	
student1	someplace	somecity	somestate	abc@gmail.com	1111111122	edit
student2	someplace2	somecity2	state1	some@email.com	222222233	edit
abc	asdsad	asdaasdad	sadsadasd	asdsd@asdsad.com	112223123123	edit

Add a new student