Home / AWS / Guided Lab / Configure Application Auto Scaling using Target Tracking policy in ECS

Configure Application Auto Scaling using Target Tracking policy in ECS

Level: **Intermediate**

Amazon Web Services | Elastic Load Balancing | Amazon Elastic Container Service | Amazon EC2 Auto Scaling

English ▾

1h 29m 0s left

15 MIN

End Lab

Open Console

Validation

WHIZLABS 0 K

Password

61ae5ac4-6a22-47fc-8850-906f3760b7c7

Access Key

AKIAWLWDXAZAL4YXAKPC

Secret Key

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

Lab Resources

No Lab Resources Found

ns

Support Documents

1. FAQs and Troubleshooting
2. SSH into EC2 Instance
3. Labs - Instructions and Guidelines
4. SSH into EC2 Instance using Putty

Need help?

How to use Hands on Lab

Troubleshooting Lab

FAQs

Submit Feedback Share

Lab Overview Lab Steps Lab Validation

Cloud Architect

Compute, Containers

Lab Steps

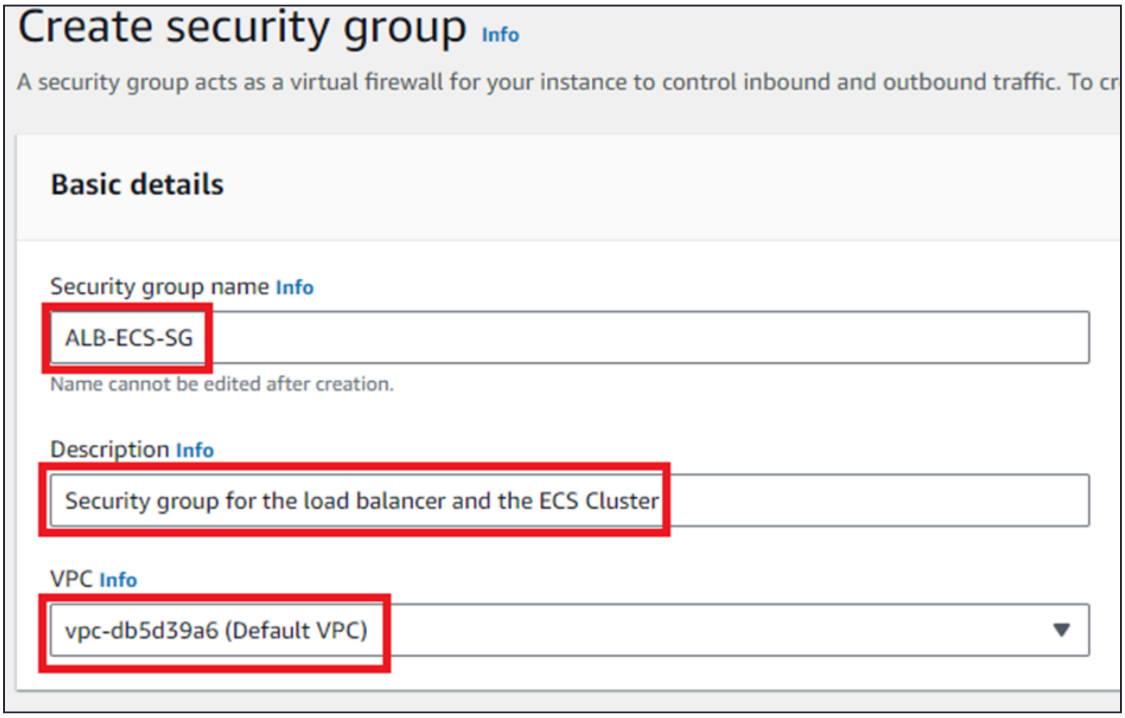
Task 1: Sign in to AWS Management Console

1. Click on the **Open Console** button, and you will get redirected to AWS Console in a new browser tab.
2. On the AWS sign-in page,
   - Leave the Account ID as default. Never edit/remove the 12 digit Account ID present in the AWS Console. otherwise, you cannot proceed with the lab.
   - Now copy your **User Name** and **Password** in the Lab Console to the **IAM Username and Password** in AWS Console and click on the **Sign in** button.
3. Once Signed In to the AWS Management Console, Make the default AWS Region as **US East (N. Virginia) us-east-1.**

Task 2: Create a Security Group for the Load balancer and the ECS Cluster

1. Make sure you are in the **N.Virginia** Region.
2. Navigate to **EC2** by clicking on the **Services** menu available under the **Compute** section.
3. On the left panel menu, Select the **Security Groups** under the **Network & Security** section.
4. Click on the **Create security group** button.
5. We are going to create a Security group for the ECS cluster and load balancer

   - Security group name: Enter ***ALB-ECS-SG***
   - Description: Enter ***Security group for the load balancer and the ECS Cluster***
   - VPC: Select **Default VPC**



Create security group Info

A security group acts as a virtual firewall for your instance to control inbound and outbound traffic. To cr

Basic details

Security group name Info

ALB-ECS-SG

Name cannot be edited after creation.

Description Info

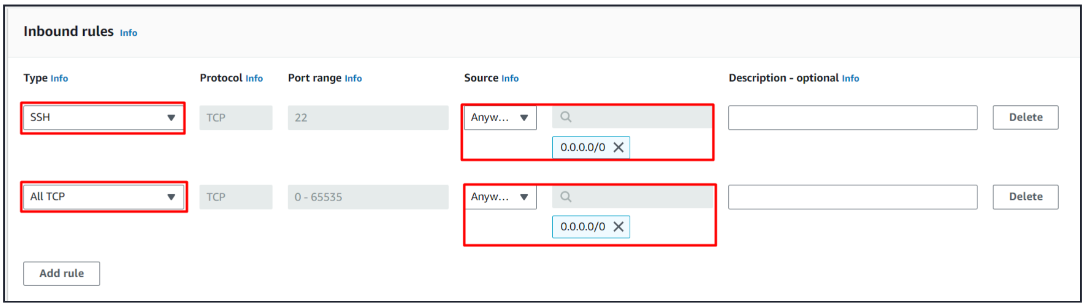
Security group for the load balancer and the ECS Cluster

VPC Info

vpc-db5d39a6 (Default VPC)

- Click on the **Add rule** button under **Inbound rules.**
  - Type : Select **SSH**
  - Source : Select **Custom**
  - In the textbox add **0.0.0.0/0**
- Click on the **Add rule** under **Inbound rules.**
  - Type : Select **ALL TCP**

- Source : Select **Custom**
- In the textbox add **0.0.0.0/0**



Inbound rules Info

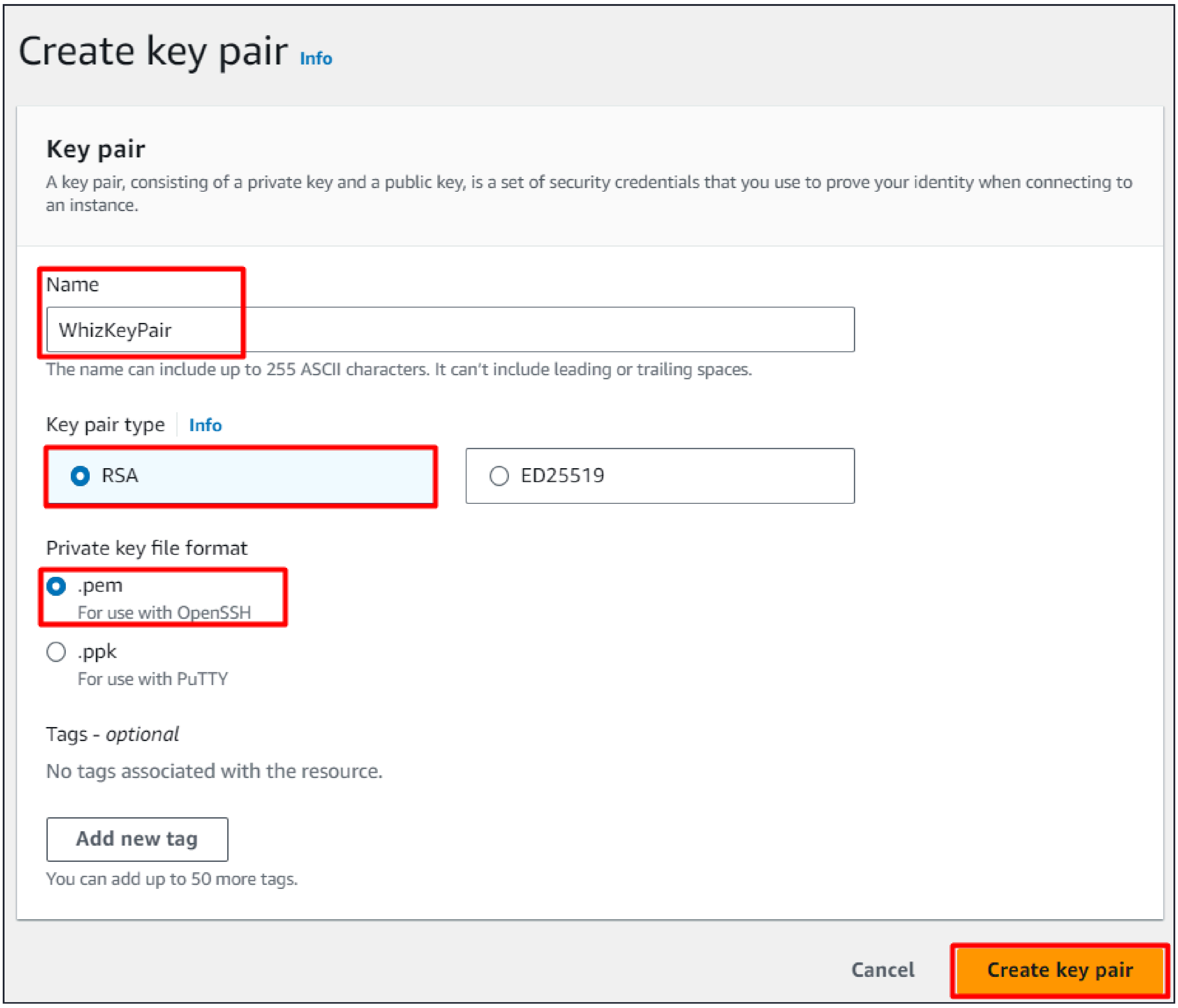
Type Info	Protocol Info	Port range Info	Source Info		Description - optional Info	
SSH	TCP	22	Anyw...	0.0.0.0/0		Delete
All TCP	TCP	0 - 65535	Anyw...	0.0.0.0/0		Delete

Add rule

6. Leave everything as default and click on the **Create security group** button.

Task 3: Create a Key Pair for the EC2 instances, inside the ECS Cluster

1. In the left navigation pane (scroll down) within **Network & Security**, click on the **Key Pairs**
2. To create a new key pair, click on the **Create key pair** button.
3. Fill in the details below:
   - Name: Enter ***WhizKeyPair***
   - File format: **pem (Linux & Mac Users)** or **ppk (Windows users)**
   - Leave other options as default.
   - Click on the **Create key pair** button.



Create key pair Info

Key pair

A key pair, consisting of a private key and a public key, is a set of security credentials that you use to prove your identity when connecting to an instance.

Name

WhizKeyPair

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

Key pair type Info

● RSA

○ ED25519

Private key file format

● .pem
For use with OpenSSH

○ .ppk
For use with PuTTY

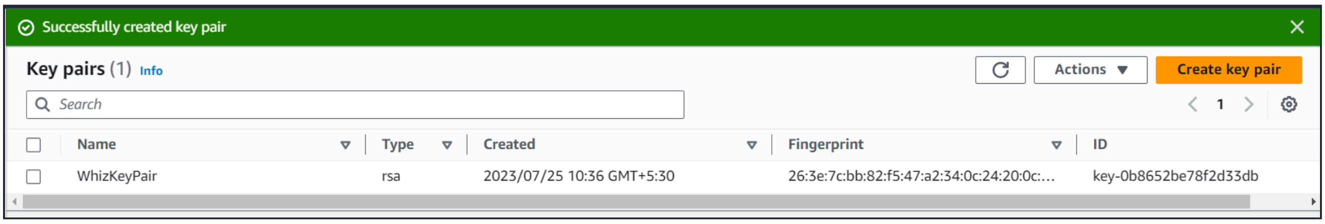
Tags - *optional*

No tags associated with the resource.

You can add up to 50 more tags.

4. After clicking on the Create key pair, you will get a pop-up to download the key pair in your local, save that file.

5. Key pair will be created.



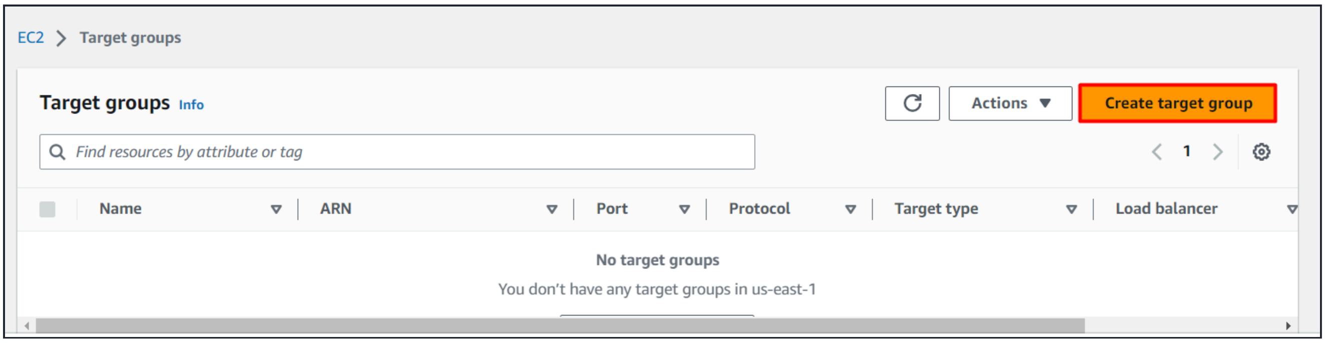
Successfully created key pair

Key pairs (1) Info

□	Name	Type	Created	Fingerprint	ID
□	WhizKeyPair	rsa	2023/07/25 10:36 GMT+5:30	26:3e:7c:bb:82:f5:47:a2:34:0c:24:20:0c:...	key-0b8652be78f2d33db

Task 4: Creating the Target Group and Load Balancer

1. In the **EC2** Console, Navigate to **Target Groups**, present in the left panel under **Load Balancing**.
2. Click on the **Create target group** button.



Target groups

Name	ARN	Port	Protocol	Target type	Load balancer

No target groups

You don't have any target groups in us-east-1

3. For **Step 1, Specify group details**

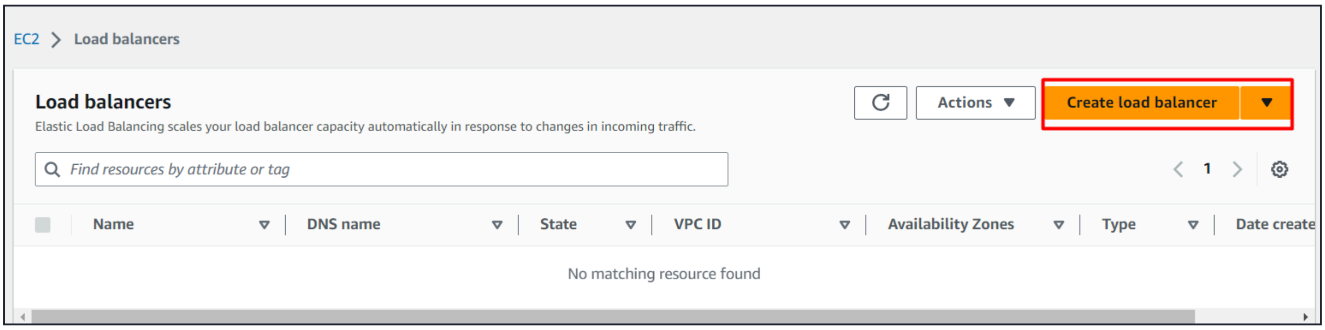
- Under Basic configurations,
  - Choose a target group: Choose **Instances**
  - Target group name: Enter ***ecs-TG***
- **Keep all the settings as default.**
- Scroll to the end of the page and click on the **Next** button.

4. For **Step 2, Register targets**

- **Keep all the settings as default.**
- Click on the **Create target group** button.

5. Navigate to **Load Balancers** in the left-side navigation panel.

6. Click on **Create load balancer** button at the top-left to create a new load balancer for our web servers.



Load balancers

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

Name	DNS name	State	VPC ID	Availability Zones	Type	Date create

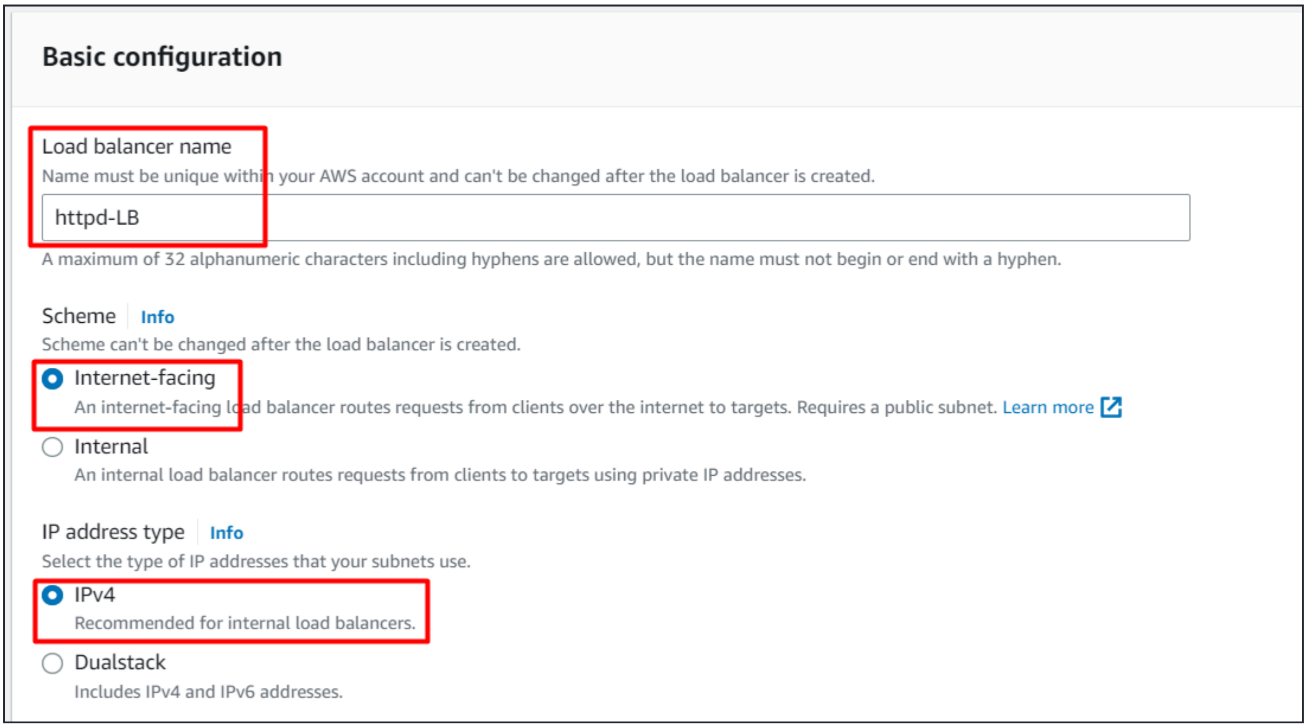
No matching resource found

7. **Compare and select load balancer type**: Under the **Application load balancer**, click on **Create** button.

8. To create an Application load balancer, **configuring the load balancer** as below

- For the **Basic configuration** section,
  - Load balancer name: Enter ***httpd-LB***

  - Scheme: Select **Internet-facing**
  - IP address type: Choose **IPv4**



Basic configuration

Load balancer name

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

httpd-LB

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

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.

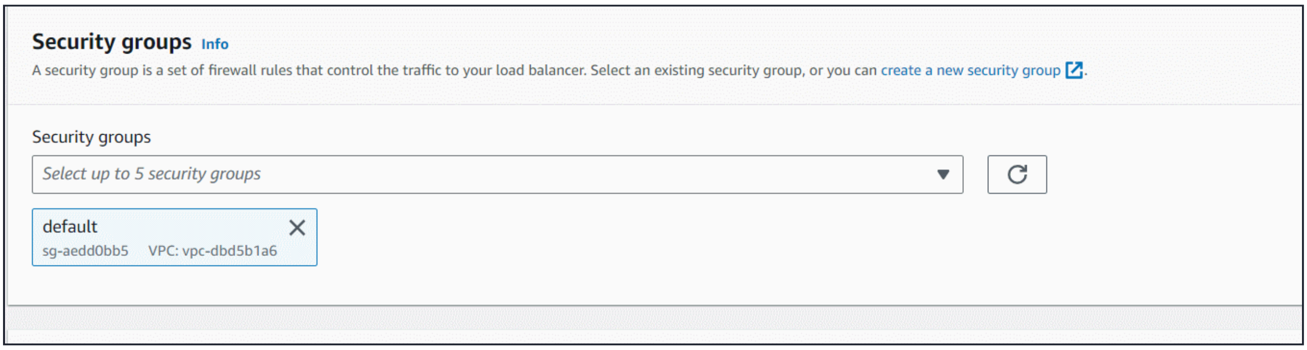
● IPv4

Recommended for internal load balancers.

○ Dualstack

Includes IPv4 and IPv6 addresses.

- For the **Network mapping** section:
  - VPC: Leave it as **default**
  - Mappings: Select **all the availability zones.**
- For the Security groups section,
  - Select the **ALB-ECS-SG** from the dropdown and **remove the default security group**.



Security groups Info

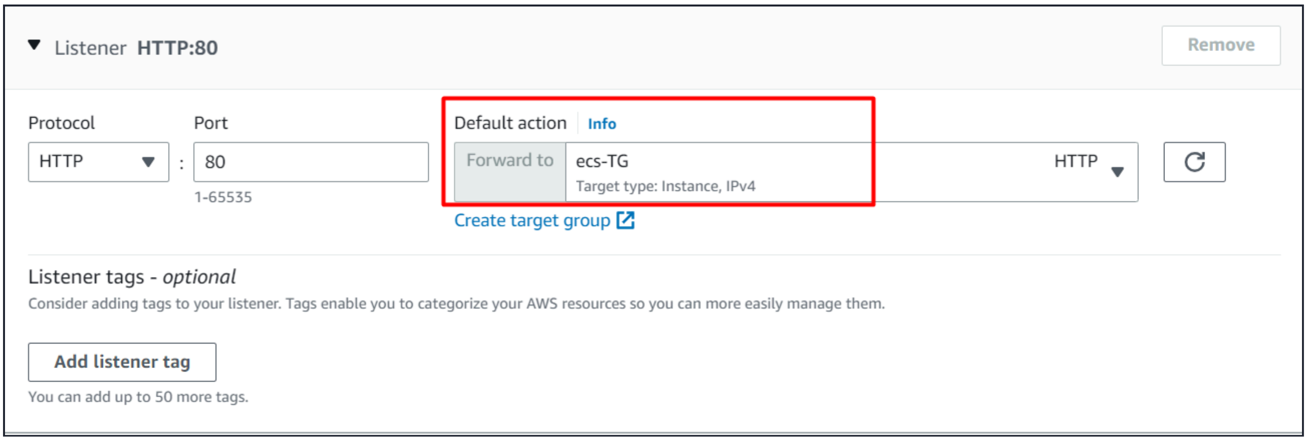
A security group is a set of firewall rules that control the traffic to your load balancer. Select an existing security group, or you can create a new security group.

Security groups

Select up to 5 security groups

default ✕
sg-aedd0bb5 VPC: vpc-dbd5b1a6

- For the **Listeners and routing** section,
  - The listener is already present with Protocol HTTP and Port 80.
    - **Select the target group ecs-TG for the Default action forwards to option.**

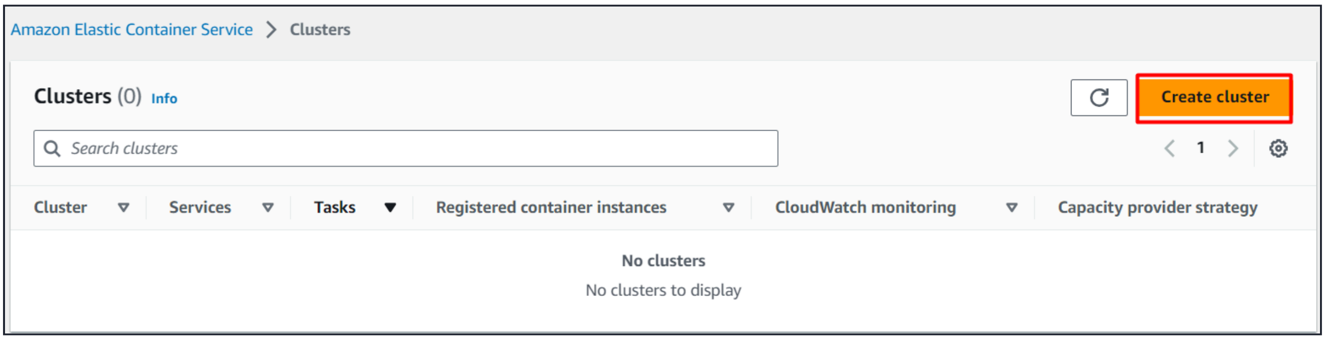

Listener HTTP:80
Remove
Protocol
HTTP
Port
80
1-65535
Default action Info
Forward to
ecs-TG
Target type: Instance, IPv4
HTTP
Create target group
Listener tags - optional
Consider adding tags to your listener. Tags enable you to categorize your AWS resources so you can more easily manage them.
Add listener tag
You can add up to 50 more tags.

9. Keep the tags as default and click on the **Create load balancer** button.

10. **You have successfully created the Application Load balancer.** Click on the **View load balancers button.** Wait for 2 to 3 minutes for the load balancer to become **Active**.

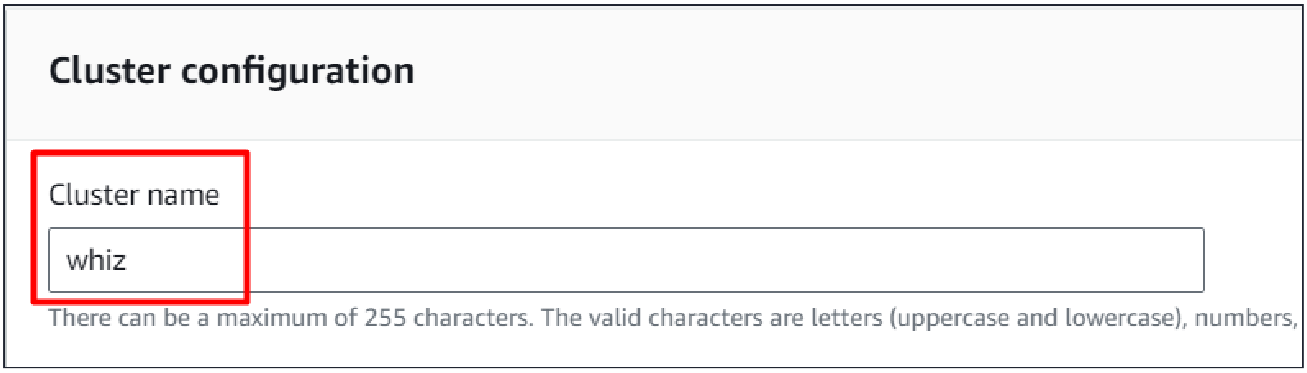
Task 5: Launching an ECS Cluster

1. Navigate to **Elastic Container Service** by clicking on the **Services** menu in the top, then click on **Elastic Container Service** in the **Containers** section.
2. On the left sidebar, click on the **Clusters** option present under the **Amazon ECS** section.
3. Click on **Create cluster** button.



4. Create cluster:

   - For **Step 1: Cluster Configuration**
     - Cluster name: Enter ***whiz***



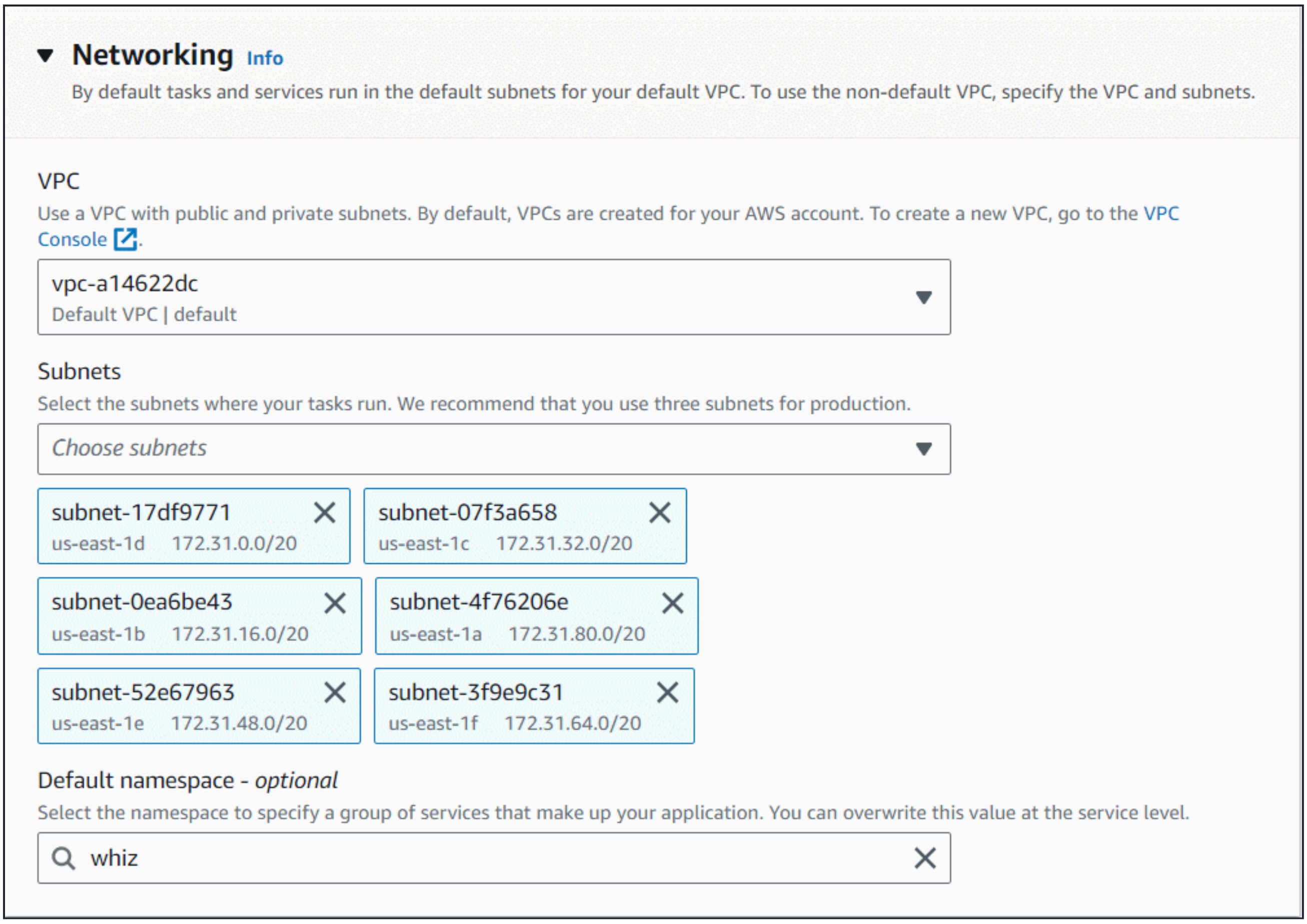
Cluster configuration

Cluster name

whiz

There can be a maximum of 255 characters. The valid characters are letters (uppercase and lowercase), numbers,

- For **Step 2:** In **Infrastructure** Section :
  - **Check** Amazon EC2 Instances checkbox:
    - Auto Scaling group (ASG) : Select **Create new ASG**
    - Operating System/Architecture : Select **Amazon Linux 2**
    - EC2 instance type : Select **t2.small**
    - Desired capacity :
      - Minimum : Enter **1**
      - Maximum : Enter **3**
    - SSH Key pair: Select **WhizKeyPair**
- For Step 3: In **Networking** section:
  - VPC: Keep it as default.
  - Subnets: **Select all the subnets**



▼ Networking Info

By default tasks and services run in the default subnets for your default VPC. To use the non-default VPC, specify the VPC and subnets.

VPC

Use a VPC with public and private subnets. By default, VPCs are created for your AWS account. To create a new VPC, go to the VPC Console.

vpc-a14622dc
Default VPC | default

Subnets

Select the subnets where your tasks run. We recommend that you use three subnets for production.

Choose subnets

subnet-17df9771 us-east-1d 172.31.0.0/20 ✕
subnet-07f3a658 us-east-1c 172.31.32.0/20 ✕
subnet-0ea6be43 us-east-1b 172.31.16.0/20 ✕
subnet-4f76206e us-east-1a 172.31.80.0/20 ✕
subnet-52e67963 us-east-1e 172.31.48.0/20 ✕
subnet-3f9e9c31 us-east-1f 172.31.64.0/20 ✕

Default namespace - *optional*

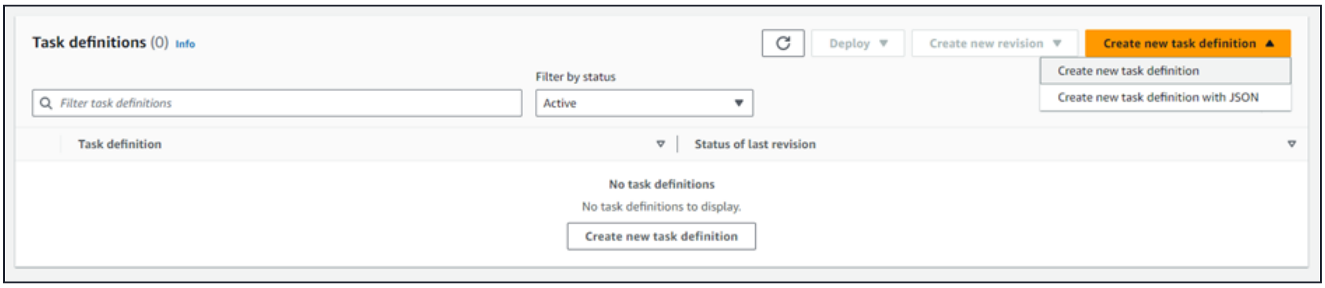
Select the namespace to specify a group of services that make up your application. You can overwrite this value at the service level.

whiz ✕

- Click on the **Create** button to create the **whiz ECS cluster. Whiz ECS Cluster will be created with 1 Container instances.**

Task 6: Create Task Definitions

1. On the left sidebar, click on the **Task Definitions** option present under the **Amazon ECS** section.
2. Click on the **Create new Task Definition** button.



Task definitions (0) Info

Deploy ▼
Create new revision ▼
Create new task definition ▲
Create new task definition
Create new task definition with JSON
Filter by status
Filter task definitions
Active ▼
Task definition
Status of last revision

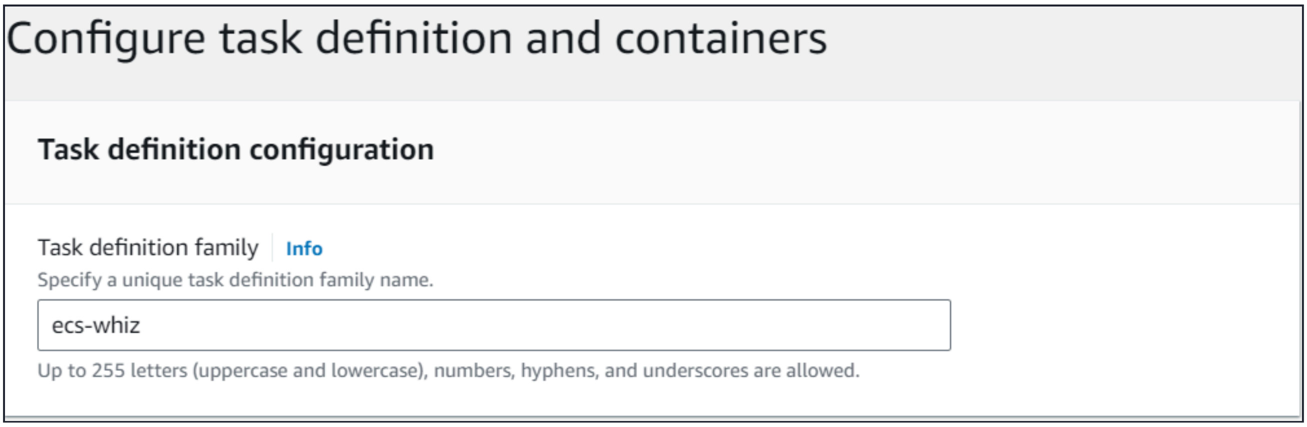
No task definitions

No task definitions to display.

Create new task definition

3. Configure task definition and containers:

- For **Step 1: Task definition configuration**
  - Task definition family : Enter ***ecs-whiz***



Configure task definition and containers

Task definition configuration

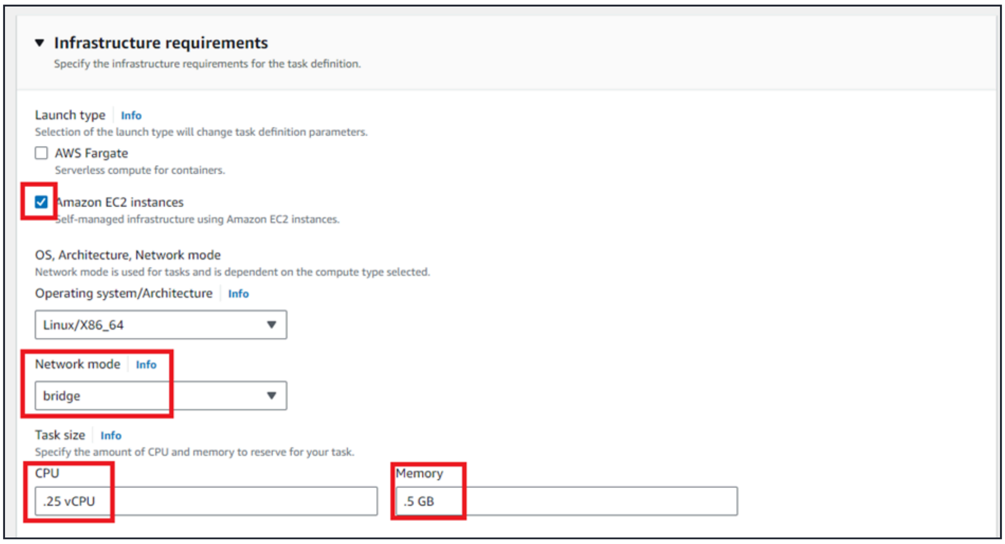
Task definition family Info

Specify a unique task definition family name.

ecs-whiz

Up to 255 letters (uppercase and lowercase), numbers, hyphens, and underscores are allowed.

- For **Step 2: Infrastructure requirements**
  - App Environment: **Remove AWS Fargate** and Select **Amazon EC2 Instances**
  - Network Mode: Select **Bridge**
  - In the **Task size** section,
    - CPU: **.25 vCPU**
    - Memory: **.5 GB**



▼ Infrastructure requirements

Specify the infrastructure requirements for the task definition.

Launch type Info

Selection of the launch type will change task definition parameters.

☐ AWS Fargate

Serverless compute for containers.

☑ Amazon EC2 instances

Self-managed infrastructure using Amazon EC2 instances.

OS, Architecture, Network mode

Network mode is used for tasks and is dependent on the compute type selected.

Operating system/Architecture Info

Linux/X86_64

Network mode Info

bridge

Task size Info

Specify the amount of CPU and memory to reserve for your task.

CPU

.25 vCPU

Memory

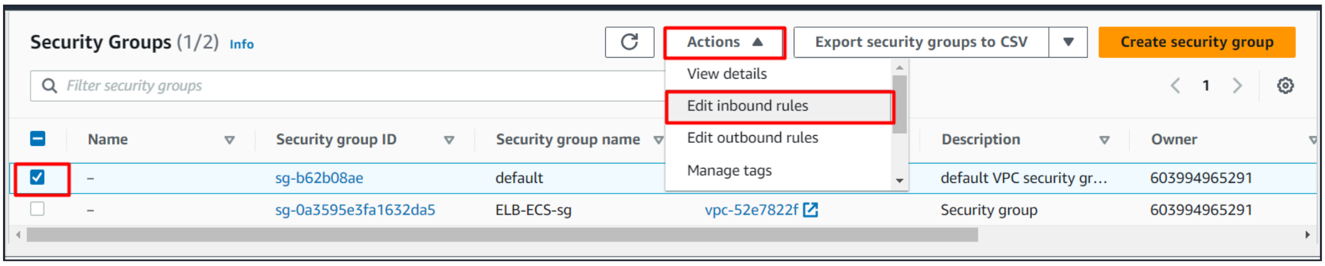
.5 GB

- For **Step 3: Container - 1:**
  - Name: Enter ***httpd***
  - Image URI: Enter ***httpd:latest***
  - In the **Port mappings** field, fill the following information:
    - Container port: Enter **80**
    - Protocol: **TCP**
    - App Protocol: Select **None**
- Scroll down and Click on **Create button.**

4. Task Definition **ecs-whiz** is now created.

Task 7: Update the default security group

1. Make sure you are in the **N.Virginia** Region.
2. Navigate to **EC2** by clicking on the **Services** menu available under the **Compute** section.
3. On the left panel menu, Select the **Security Groups** under the **Network & Security** section.
4. Select the default security group and go to **Actions** and click on **Edit inbound rules.**



Security Groups (1/2) Info

☑	Name	Security group ID	Security group name		Description	Owner
☑	–	sg-b62b08ae	default		default VPC security gr…	603994965291
□	–	sg-0a3595e3fa1632da5	ELB-ECS-sg	vpc-52e7822f	Security group	603994965291

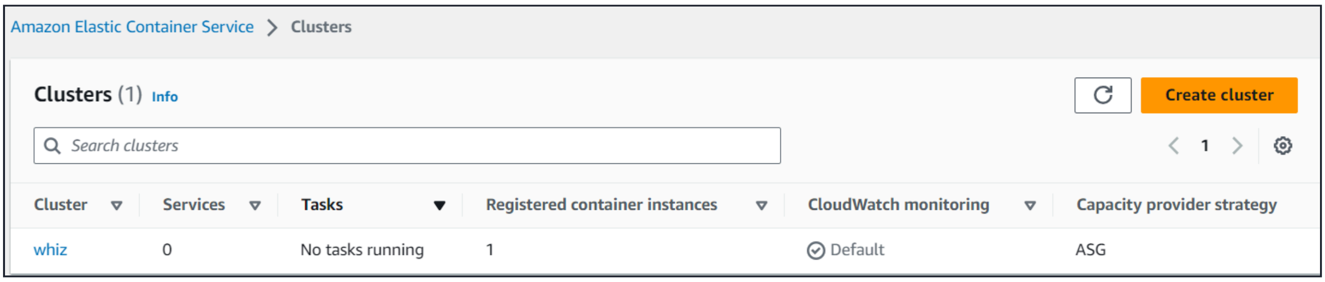
5. Scroll down and Click on **Add Rule** button.

- Type : Select **ALL TCP**
- Source : Select **Custom**
- In the textbox add **0.0.0.0/0**

6. Click on **Save rules** button.

Task 8: Create a Service and start HTTPD container in ECS

1. On the left sidebar, click on the **Clusters** option present under the **Amazon ECS** section.
2. whiz ECS Cluster will be listed here, Click on the whiz.

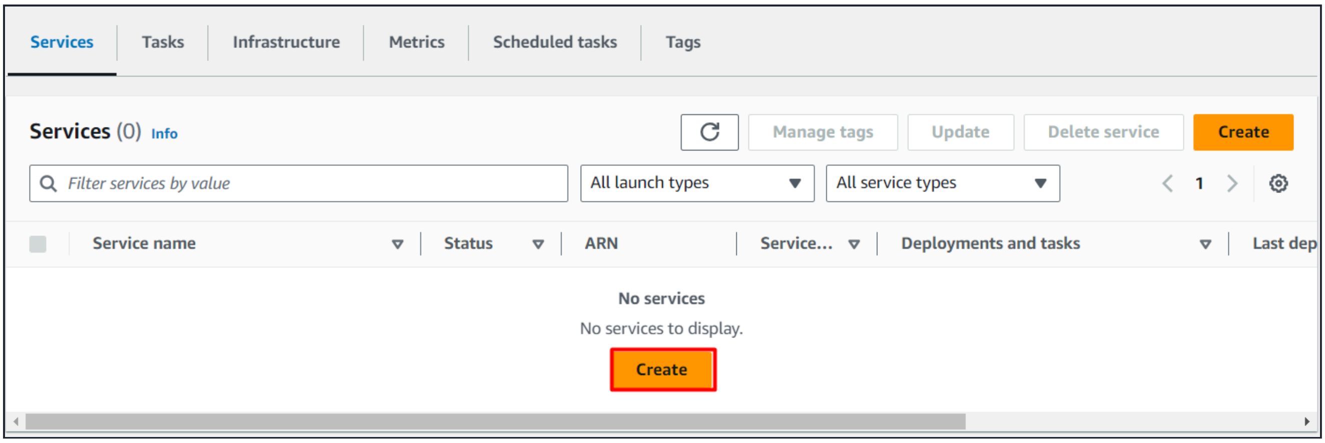


Amazon Elastic Container Service > Clusters

Clusters (1) Info

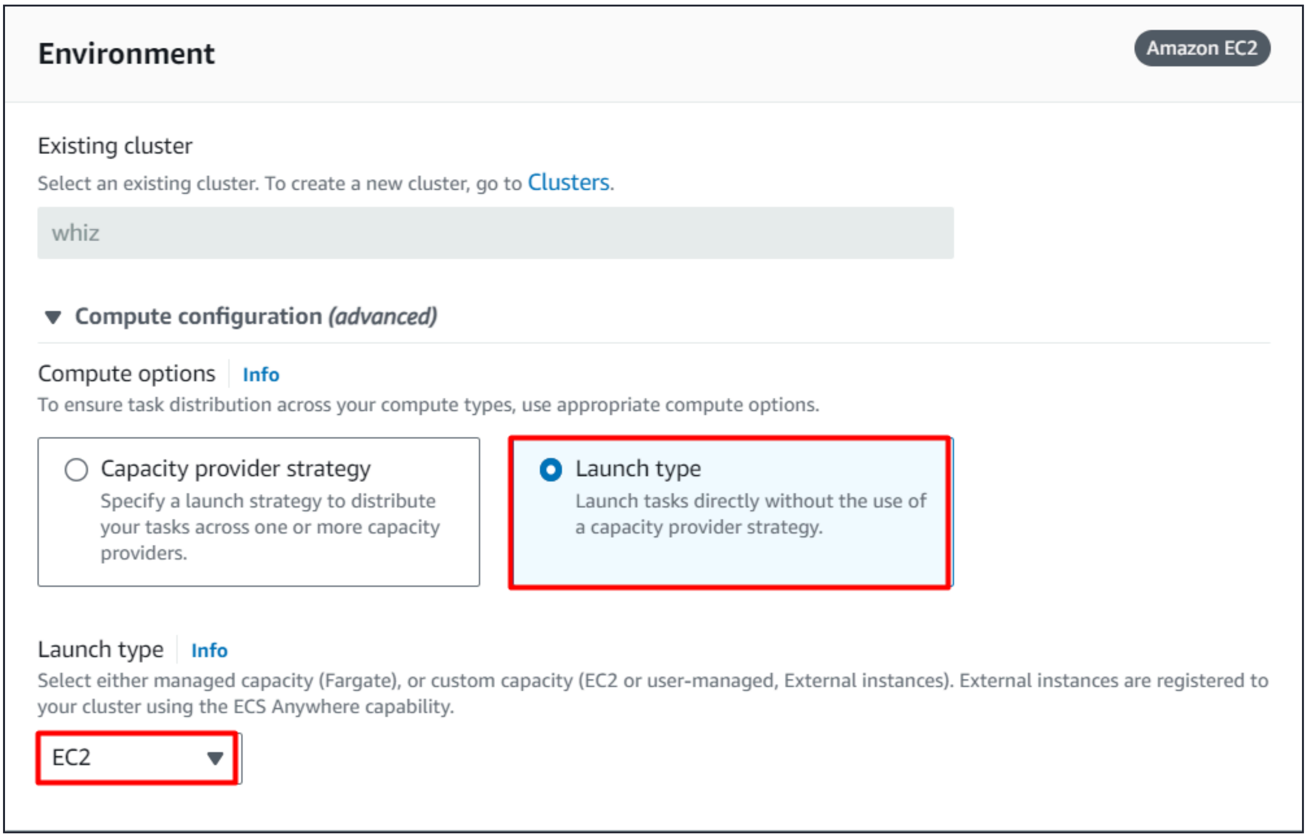
Cluster	Services	Tasks	Registered container instances	CloudWatch monitoring	Capacity provider strategy
whiz	0	No tasks running	1	Default	ASG

3. To create a service, click on the **Create** button.



4. For Step 1: Environment

- Compute options: Select **Launch Type**
- Launch type: Select **EC2**



Existing cluster

Select an existing cluster. To create a new cluster, go to Clusters.

whiz

Compute configuration *(advanced)*

Compute options Info

To ensure task distribution across your compute types, use appropriate compute options.

○ Capacity provider strategy
Specify a launch strategy to distribute your tasks across one or more capacity providers.

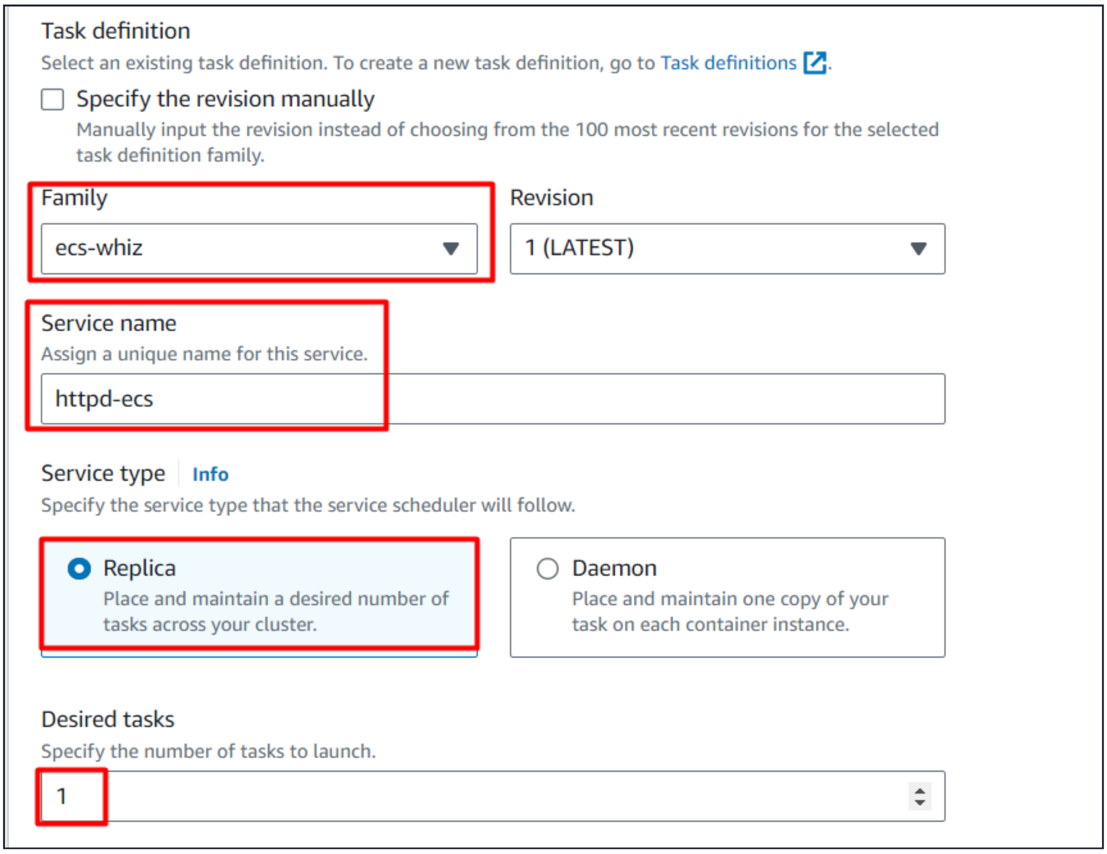
● Launch type
Launch tasks directly without the use of a capacity provider strategy.

Launch type Info

Select either managed capacity (Fargate), or custom capacity (EC2 or user-managed, External instances). External instances are registered to your cluster using the ECS Anywhere capability.

EC2

- Family: **ecs-whiz**
- Revision: **1 (latest).** [It can be different for you]
- Service name: Enter ***httpd-ecs***
- Service type: **REPLICA**
- Desired tasks: **1**



Task definition

Select an existing task definition. To create a new task definition, go to Task definitions.

□ Specify the revision manually

Manually input the revision instead of choosing from the 100 most recent revisions for the selected task definition family.

Family: ecs-whiz

Revision: 1 (LATEST)

Service name

Assign a unique name for this service.

httpd-ecs

Service type Info

Specify the service type that the service scheduler will follow.

● Replica
Place and maintain a desired number of tasks across your cluster.

○ Daemon
Place and maintain one copy of your task on each container instance.

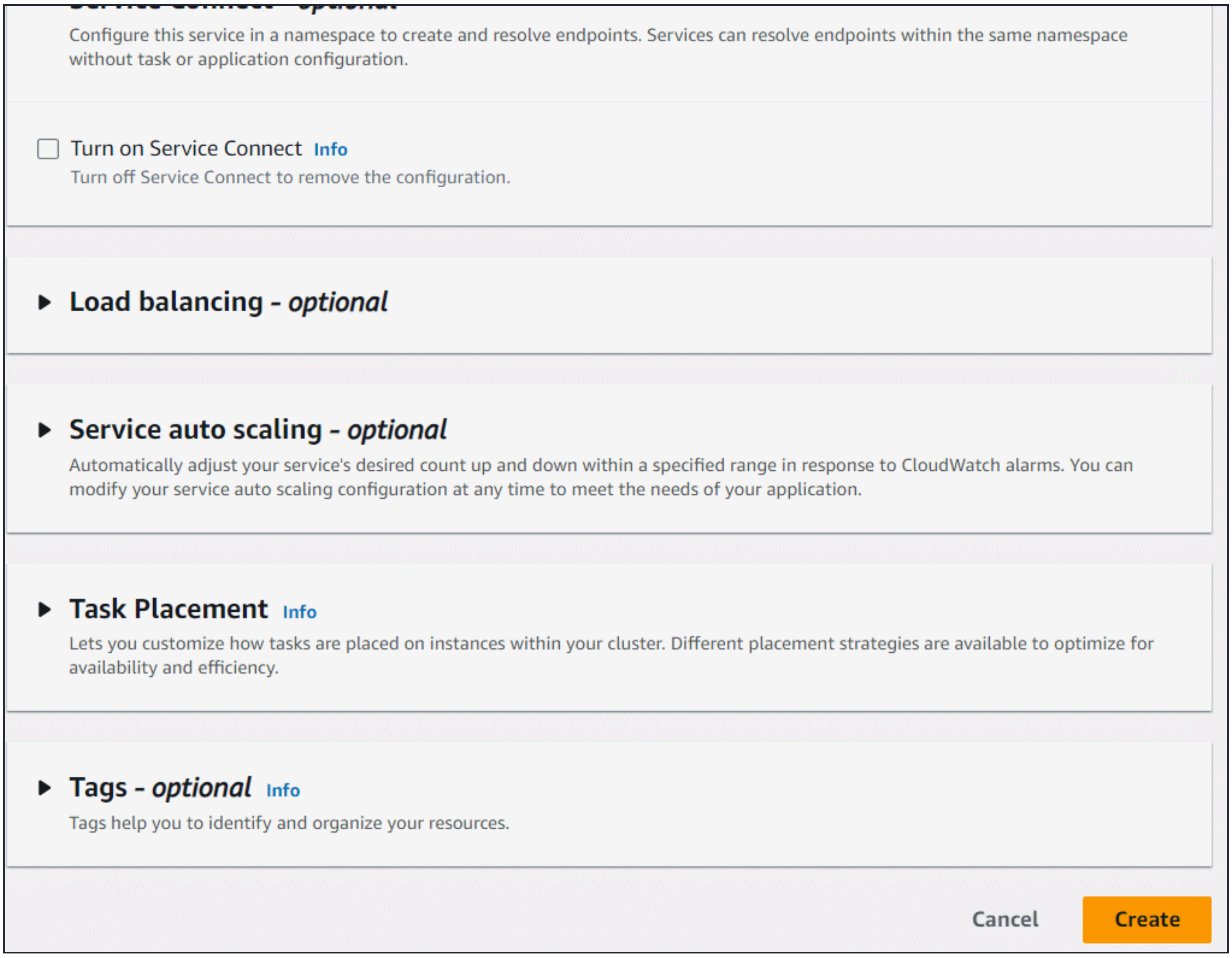
Desired tasks

Specify the number of tasks to launch.

1

5. Under **Load balancing**

- Load balancer type: Select **Application Load Balancer**
- Application Load Balancer: Select **Use an existing load balancer**
- Load balancer : Select **httpd-LB**
- Listener: Choose **Use an existing Listener**
- **Listener port** : Choose **80:HTTP**
- **Target group:** Select **Use an existing target group**
- Target group name: Select **ecs-tg**



Service Connect - *optional*

Configure this service in a namespace to create and resolve endpoints. Services can resolve endpoints within the same namespace without task or application configuration.

□ Turn on Service Connect Info
Turn off Service Connect to remove the configuration.

▸ Load balancing - *optional*

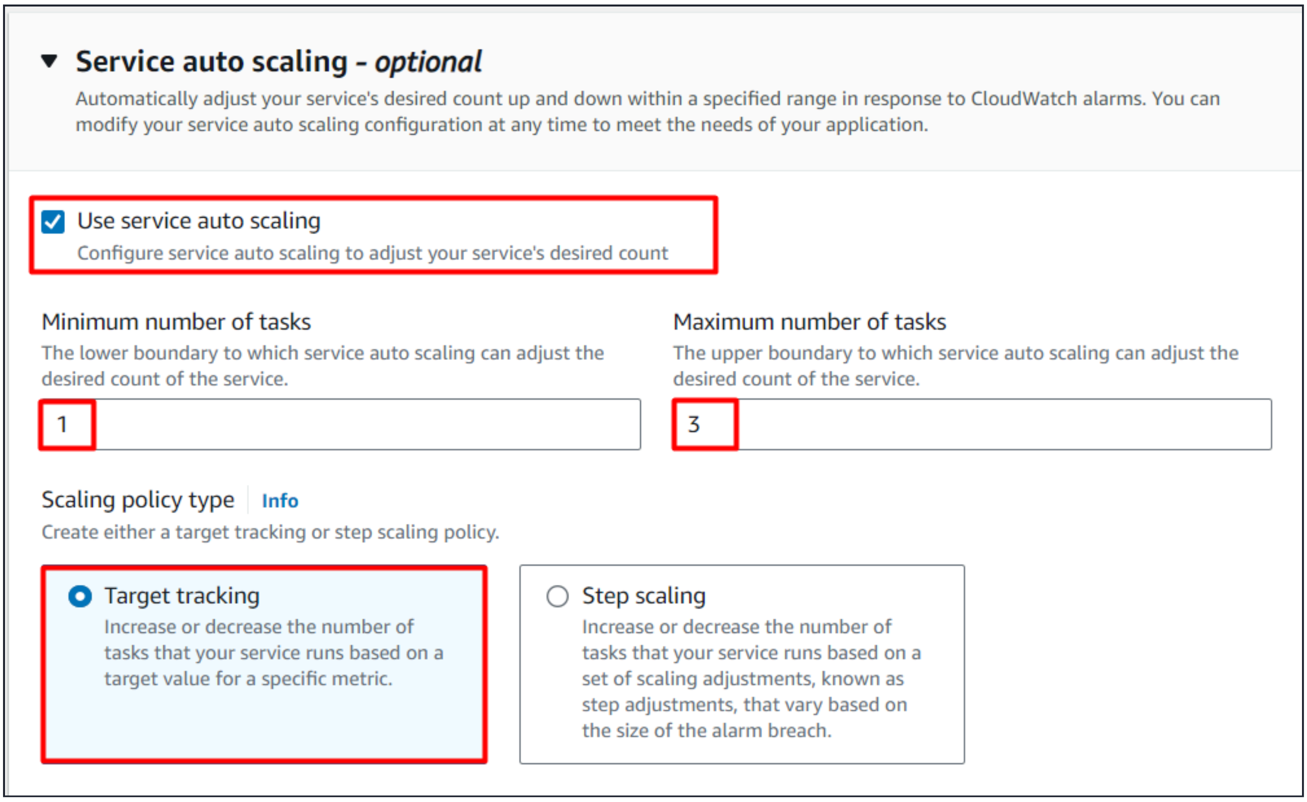
▸ Service auto scaling - *optional*
Automatically adjust your service's desired count up and down within a specified range in response to CloudWatch alarms. You can modify your service auto scaling configuration at any time to meet the needs of your application.

▸ Task Placement Info
Lets you customize how tasks are placed on instances within your cluster. Different placement strategies are available to optimize for availability and efficiency.

▸ Tags - *optional* Info
Tags help you to identify and organize your resources.

6. For Step 3: Set Auto Scaling (optional),

- **Check** the **Use Service Auto Scaling checkbox**
- Minimum number of Tasks: **1**
- Maximum number of Tasks: **3**
- Scaling policy type: **Target tracking**



▼ Service auto scaling - *optional*

Automatically adjust your service's desired count up and down within a specified range in response to CloudWatch alarms. You can modify your service auto scaling configuration at any time to meet the needs of your application.

☑ Use service auto scaling
Configure service auto scaling to adjust your service's desired count

Minimum number of tasks
The lower boundary to which service auto scaling can adjust the desired count of the service.
1

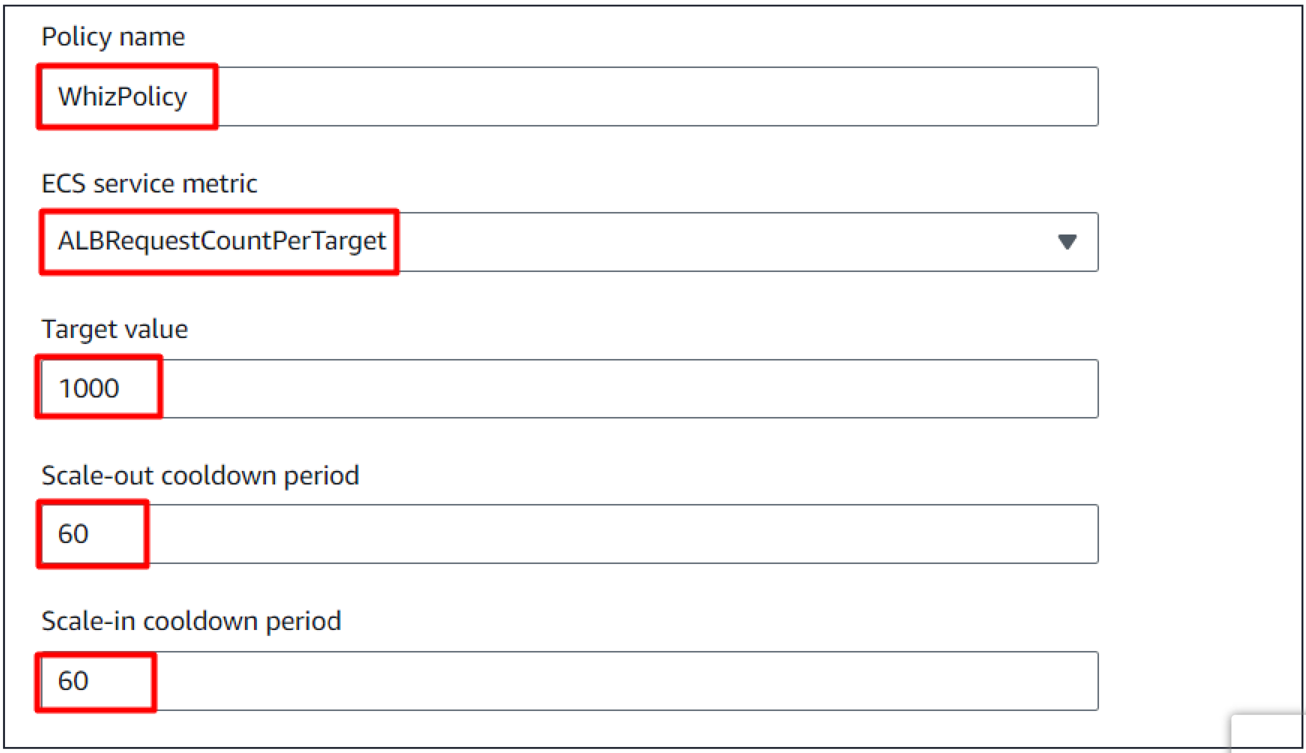
Maximum number of tasks
The upper boundary to which service auto scaling can adjust the desired count of the service.
3

Scaling policy type Info
Create either a target tracking or step scaling policy.

● Target tracking
Increase or decrease the number of tasks that your service runs based on a target value for a specific metric.

○ Step scaling
Increase or decrease the number of tasks that your service runs based on a set of scaling adjustments, known as step adjustments, that vary based on the size of the alarm breach.

- Policy name: Enter ***WhizPolicy***
- ECS Service metric: **ALBRequestCountPerTarget**
- Target value: **1000**
- Scale-out cooldown period: **60** seconds between scaling actions
- Scale-in cooldown period: **60** seconds between scaling actions



Policy name
WhizPolicy

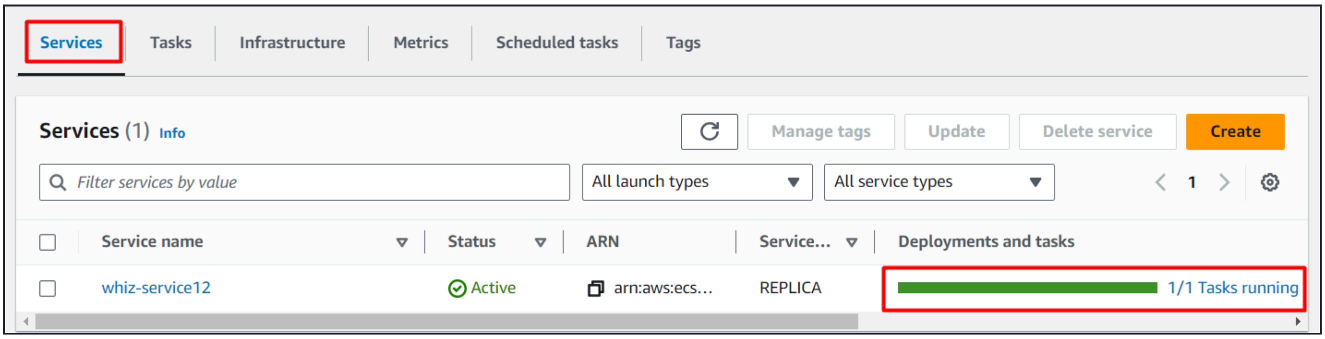
ECS service metric
ALBRequestCountPerTarget ▼

Target value
1000

Scale-out cooldown period
60

Scale-in cooldown period
60

7. Click on **Create** button.



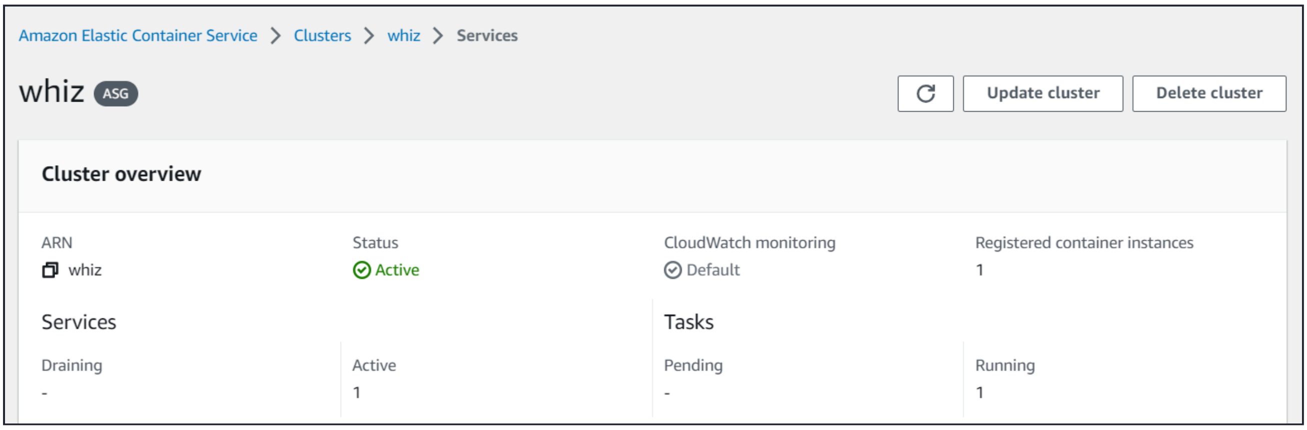
Services (1) Info

☐	Service name	Status	ARN	Service...	Deployments and tasks
☐	whiz-service12	✓ Active	arn:aws:ecs...	REPLICA	1/1 Tasks running

Task 9: Navigate to the cluster instance

1. On the left sidebar, click on the **Clusters** option present under the **Amazon ECS** section.

2. **whiz** ECS Cluster will be listed here, Click on the **whiz** cluster.


Amazon Elastic Container Service > Clusters > whiz > Services
whiz ASG
Update cluster
Delete cluster

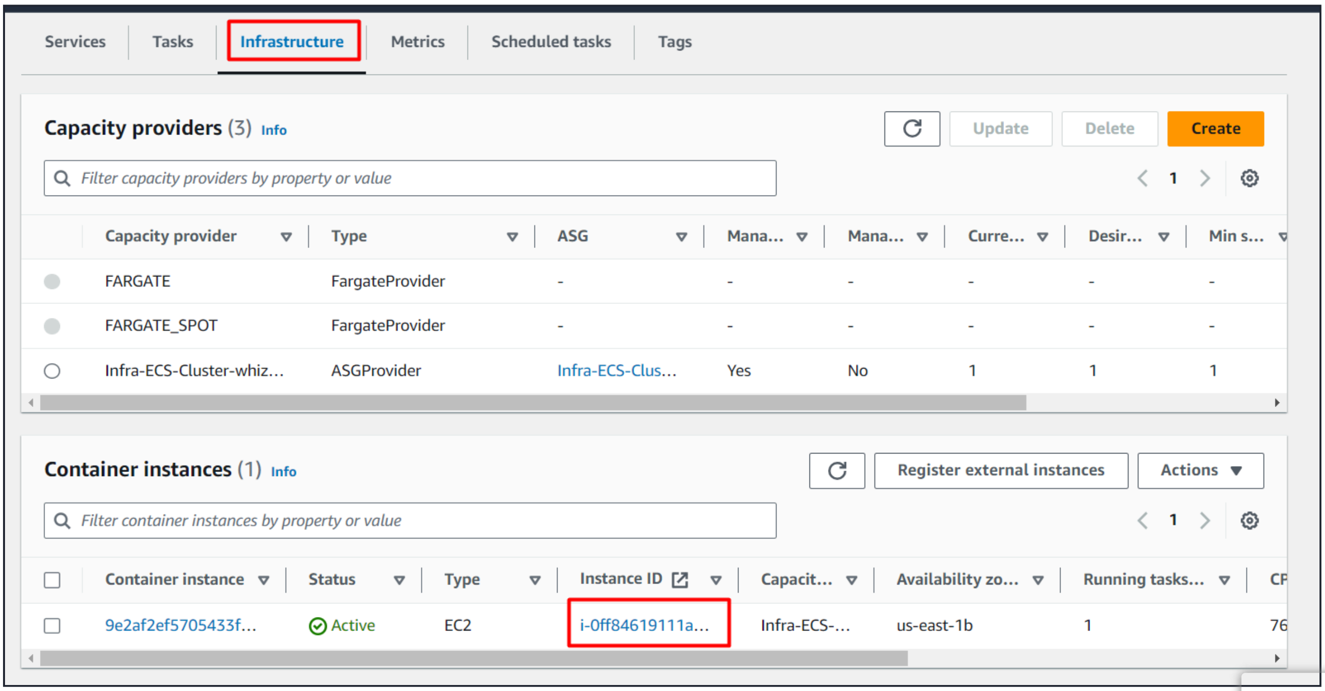
Cluster overview

ARN: whiz
Status: ✓ Active
CloudWatch monitoring: Default
Registered container instances: 1

Services
Draining: -
Active: 1

Tasks
Pending: -
Running: 1

3. To view the ECS Instance, Navigate to **Infrastructure** tab **and scroll down to see the Container instances.** Click on the **Instance ID**.


Services
Tasks
Infrastructure
Metrics
Scheduled tasks
Tags
Update
Delete
Create
Filter capacity providers by property or value
1
Register external instances
Actions
Filter container instances by property or value

Capacity providers (3) Info

	Capacity provider	Type	ASG	Mana...	Mana...	Curre...	Desir...	Min s...
●	FARGATE	FargateProvider	-	-	-	-	-	-
●	FARGATE_SPOT	FargateProvider	-	-	-	-	-	-
○	Infra-ECS-Cluster-whiz...	ASGProvider	Infra-ECS-Clus...	Yes	No	1	1	1

Container instances (1) Info

☐	Container instance	Status	Type	Instance ID	Capacit...	Availability zo...	Running tasks...	CF
☐	9e2af2ef5705433f...	✓ Active	EC2	i-0ff84619111a...	Infra-ECS-...	us-east-1b	1	76

Task 10: SSH into the underlying EC2 instance

1. Please follow the steps in SSH into EC2 Instance

Task 11: Trigger scaling activity

1. Get the root access using the following command:

```
sudo su
```

2. Now run the updates using the following command:

```
yum -y update
```

3. Check the Docker version by running the following command:

```
docker version
```

4. Check all the docker processes running in the ECS Cluster

```
docker ps
```

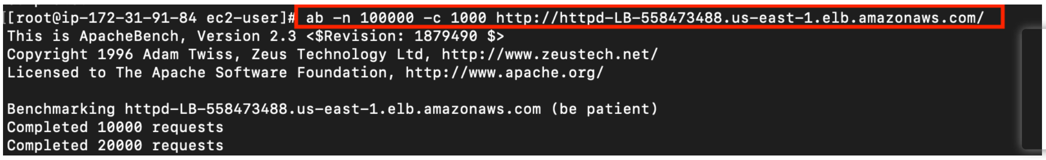
- Install **httpd-tools** for ApacheBench (**ab**) utility to make thousands of HTTP requests to your load balancer in a short period of time.

  ```
  yum install -y httpd-tools
  ```

- Run the following command, **substituting your load balancer's DNS name.**

  ```
  ab -n 1000000 -c 1000 http://httpd-lb-558473488.us-east-1.elb.amazonaws.com/
  ```

  - **While substituting your load balancers name make sure to add / at the end**
  - Wait for your **ab** HTTP requests to trigger the scale-out alarm in the CloudWatch console. You should see your Amazon ECS service scale-out and add two tasks to your service's desired count. Shortly after your **ab** HTTP requests complete (between 1 and 2 minutes), your scale in alarm should trigger and the scale in policy reduces your service's desired count back to 1.
  - Scaling activity might take longer than 5 minutes.



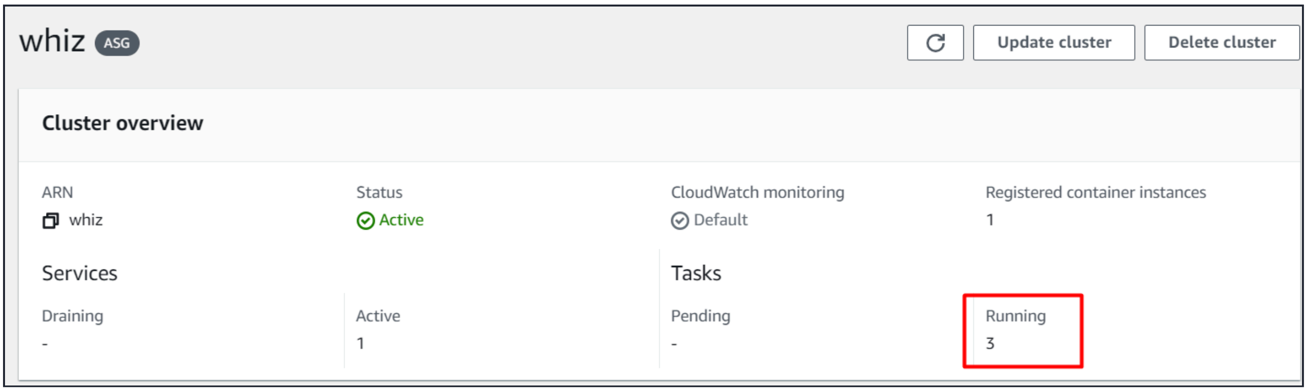
```
[root@ip-172-31-91-84 ec2-user]# ab -n 100000 -c 1000 http://httpd-LB-558473488.us-east-1.elb.amazonaws.com/
This is ApacheBench, Version 2.3 <$Revision: 1879490 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking httpd-LB-558473488.us-east-1.elb.amazonaws.com (be patient)
Completed 10000 requests
Completed 20000 requests
```

Task 12: Check the scaling activities in service events

1. On the left sidebar, click on the **Clusters** option present under the **Amazon ECS** section.

2. **whiz** ECS Cluster will be listed here, Click on the **whiz** cluster.

3. You can see the running tasks are 3 now.



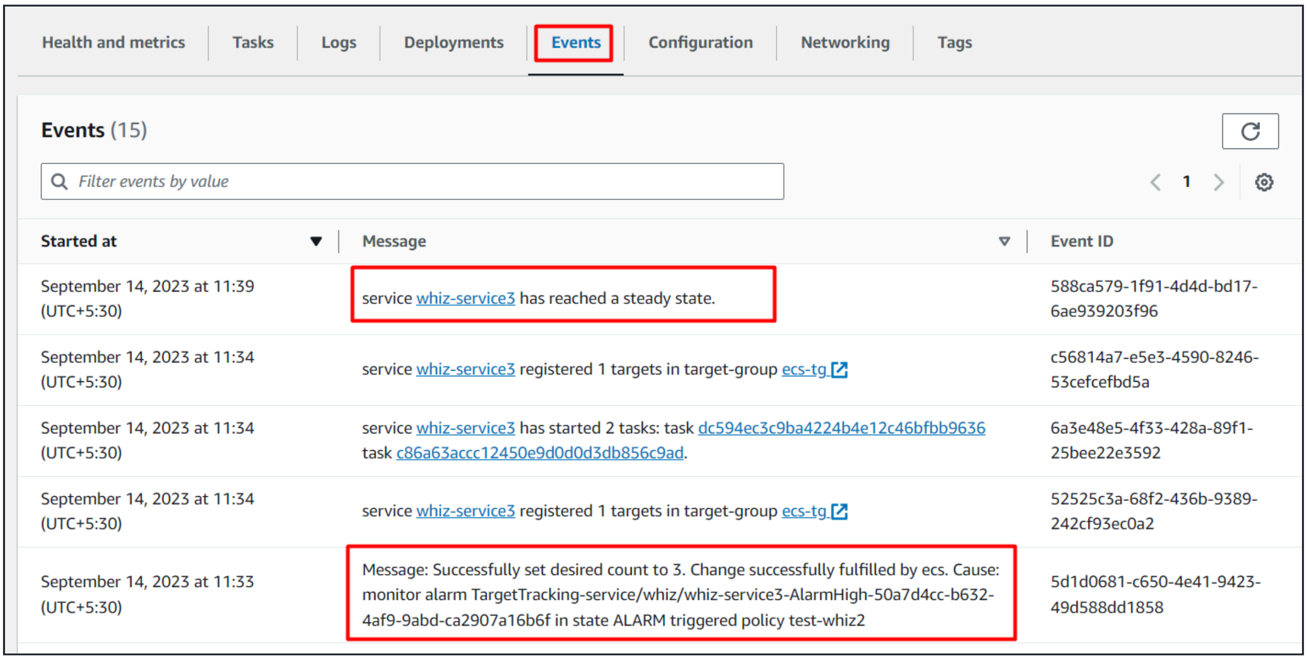
Cluster overview

ARN	Status	CloudWatch monitoring	Registered container instances
whiz	Active	Default	1

Services		Tasks	
Draining	Active	Pending	Running
-	1	-	3

4. Scroll down and click on the service

5. Navigate to the Events tab, Autoscaling has triggered the Alarm, and the desired count is now 3.



Events (15)

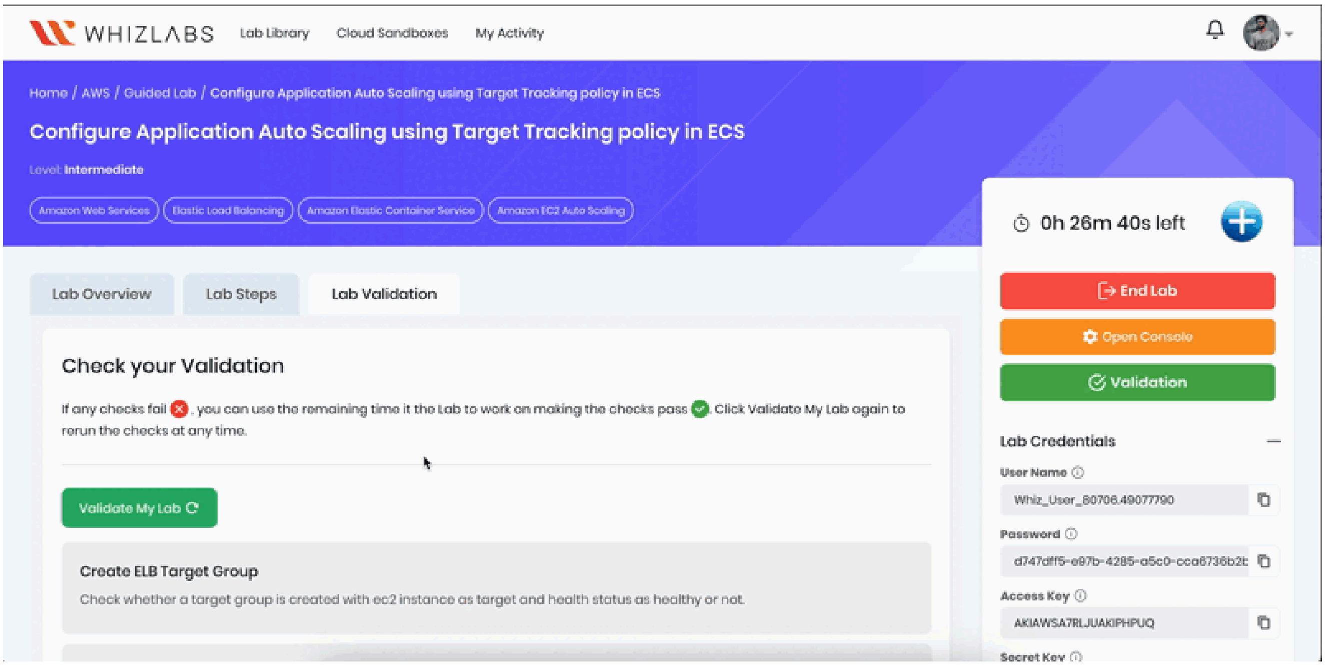
Started at	Message	Event ID
September 14, 2023 at 11:39 (UTC+5:30)	service whiz-service3 has reached a steady state.	588ca579-1f91-4d4d-bd17-6ae939203f96
September 14, 2023 at 11:34 (UTC+5:30)	service whiz-service3 registered 1 targets in target-group ecs-tg	c56814a7-e5e3-4590-8246-53cefcefbd5a
September 14, 2023 at 11:34 (UTC+5:30)	service whiz-service3 has started 2 tasks: task dc594ec3c9ba4224b4e12c46bfbb9636 task c86a63accc12450e9d0d0d3db856c9ad.	6a3e48e5-4f33-428a-89f1-25bee22e3592
September 14, 2023 at 11:34 (UTC+5:30)	service whiz-service3 registered 1 targets in target-group ecs-tg	52525c3a-68f2-436b-9389-242cf93ec0a2
September 14, 2023 at 11:33 (UTC+5:30)	Message: Successfully set desired count to 3. Change successfully fulfilled by ecs. Cause: monitor alarm TargetTracking-service/whiz/whiz-service3-AlarmHigh-50a7d4cc-b632-4af9-9abd-ca2907a16b6f in state ALARM triggered policy test-whiz2	5d1d0681-c650-4e41-9423-49d588dd1858

Do you know?

Behind the scenes, ECS target tracking policies leverage CloudWatch alarms to monitor the specified metrics. When the metric breaches the defined target, ECS takes scaling actions accordingly.

Task 13: Validation test

1. Once the lab steps are completed, please click on the **Validation** button on the right-side panel.
2. This will validate the resources in the AWS account and displays whether you have completed this lab successfully or not.
3. Sample output :



WHIZLABS
Lab Library
Cloud Sandboxes
My Activity
Home / AWS / Guided Lab / Configure Application Auto Scaling using Target Tracking policy in ECS

Configure Application Auto Scaling using Target Tracking policy in ECS

Level: Intermediate

Check your Validation

If any checks fail ✕ , you can use the remaining time it the Lab to work on making the checks pass ✓. Click Validate My Lab again to rerun the checks at any time.

Create ELB Target Group

Check whether a target group is created with ec2 instance as target and health status as healthy or not.

Lab Credentials

User Name: Whiz_User_80706.49077790

Password: d747dff5-e97b-4285-a5c0-cca6736b2b

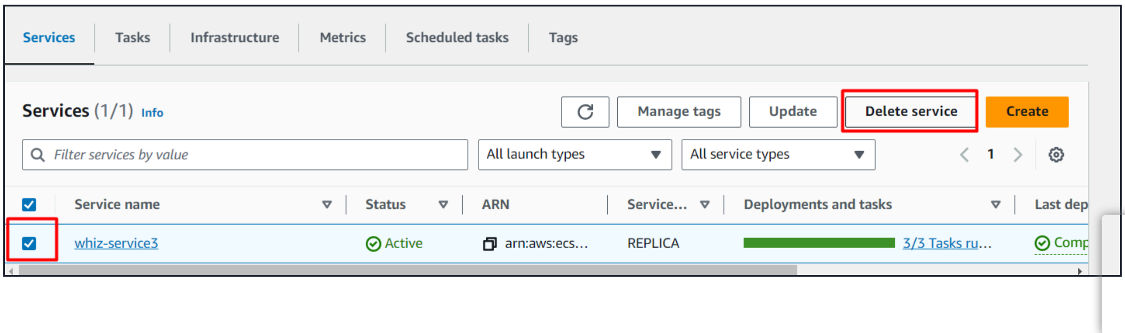
Access Key: AKIAWSA7RLJUAKIPHPUQ

Secret Key

Task 14: Delete AWS resources

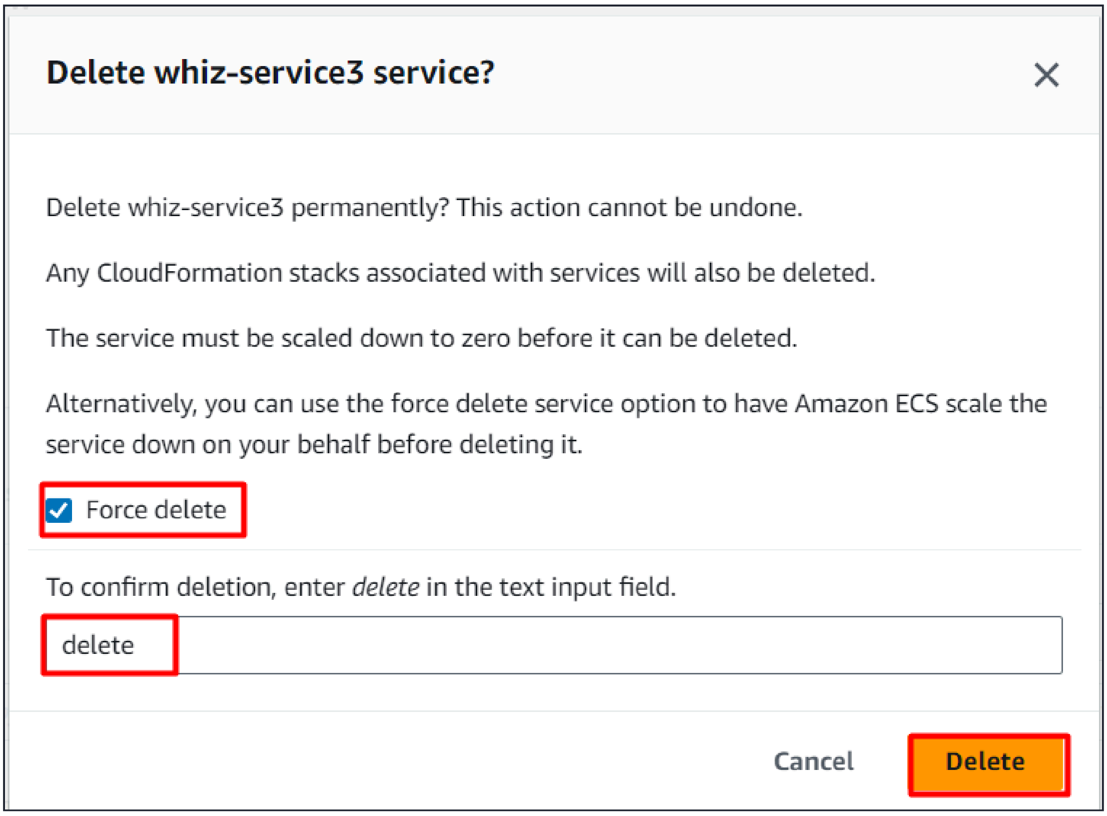
14.1 Deleting ECS Cluster Service

1. On the left sidebar, click on the **Clusters** option present under the **Amazon ECS** section.
2. whiz ECS Cluster will be listed here, Click on the **whiz.**
3. To delete the service, do the following task:
   - Select the present Service,
   - Click on the **Delete service** button.



☑	Service name	Status	ARN	Service...	Deployments and tasks	Last dep
☑	whiz-service3	Active	arn:aws:ecs...	REPLICA	3/3 Tasks ru...	Comp

4. Check the **Force delete** checkbox. Confirm the deletion by typing the **delete** phrase in the required field, and click on the Delete button.



Delete whiz-service3 service?

Delete whiz-service3 permanently? This action cannot be undone.

Any CloudFormation stacks associated with services will also be deleted.

The service must be scaled down to zero before it can be deleted.

Alternatively, you can use the force delete service option to have Amazon ECS scale the service down on your behalf before deleting it.

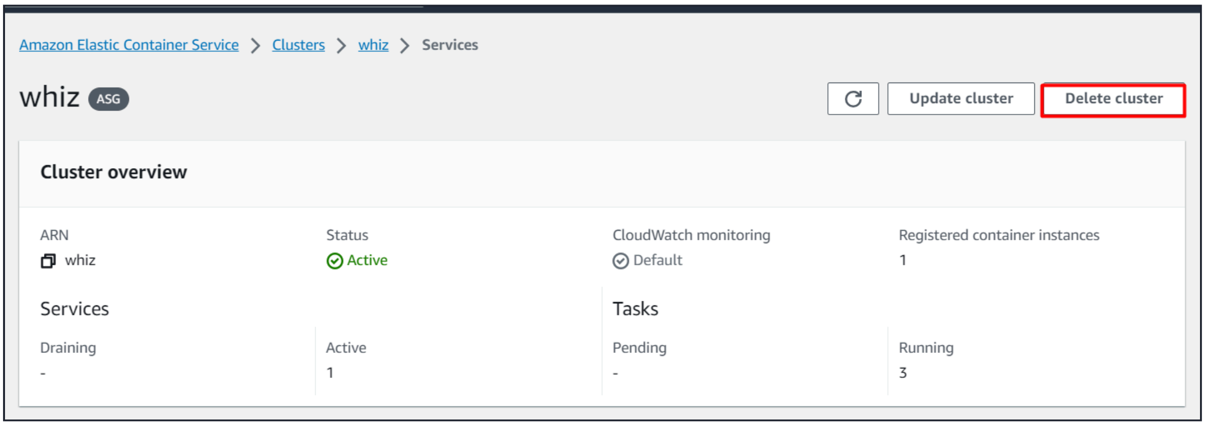
☑ Force delete

To confirm deletion, enter *delete* in the text input field.

delete

14.2 Deleting ECS Cluster

1. Click on the **Delete Cluster** option.



Amazon Elastic Container Service > Clusters > whiz > Services

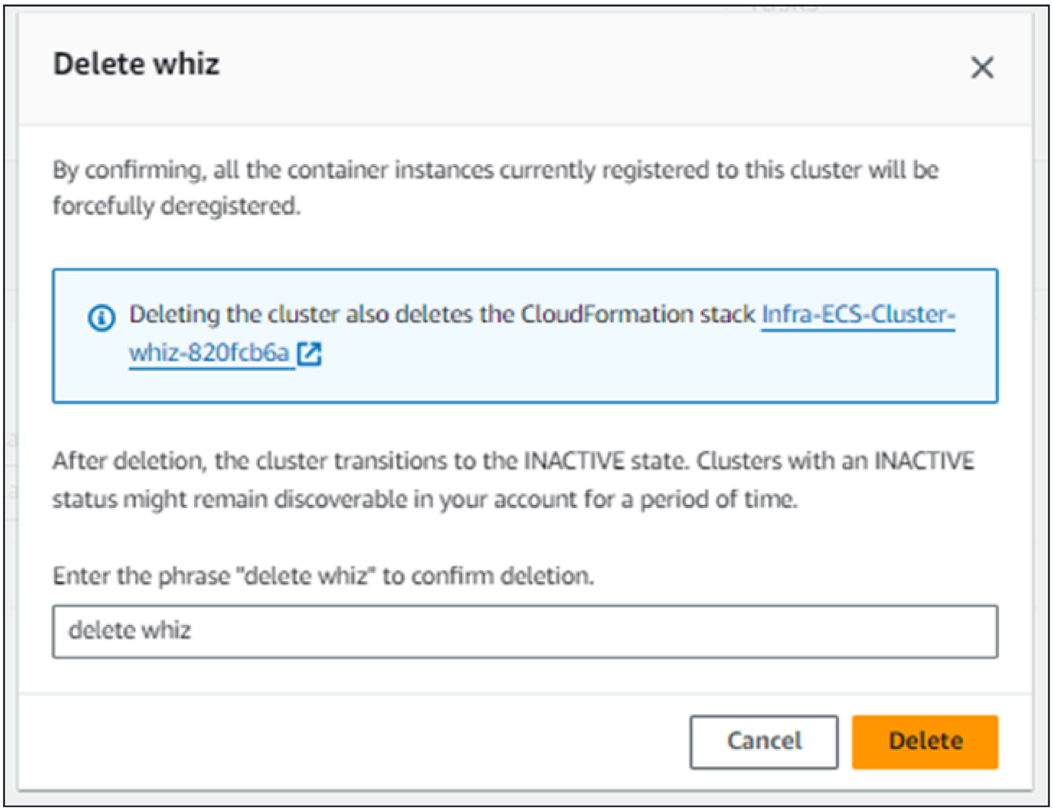
whiz ASG

Cluster overview

ARN	Status	CloudWatch monitoring	Registered container instances
whiz	Active	Default	1

Services		Tasks	
Draining	Active	Pending	Running
-	1	-	3

2. Confirm the deletion by entering the phrase **delete me** in the pop-up window. Click on **Delete** button.



By confirming, all the container instances currently registered to this cluster will be forcefully deregistered.

Deleting the cluster also deletes the CloudFormation stack Infra-ECS-Cluster-whiz-820fcb6a

After deletion, the cluster transitions to the INACTIVE state. Clusters with an INACTIVE status might remain discoverable in your account for a period of time.

Enter the phrase "delete whiz" to confirm deletion.

delete whiz

3. Deletion will take up to 3 minutes.

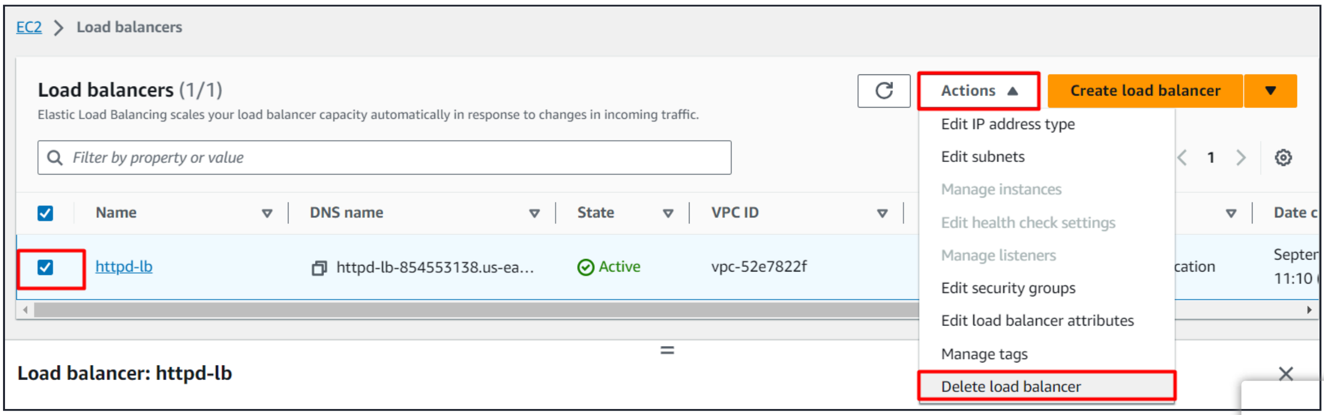
14.3 Deleting Load balancer

1. In the EC2 console, navigate to **Load Balancer** in the left-side panel.

2. **httpd-LB** will be listed here.

3. To **delete** the load balancer, need to perform the following actions:

- **Select** the load balancer,
- Click on the **Actions** button.
- Select the **Delete load balancer** option.



Load balancers (1/1)

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

Filter by property or value

☑	Name	DNS name	State	VPC ID		Date c
☑	httpd-lb	httpd-lb-854553138.us-ea...	Active	vpc-52e7822f	cation	Septer 11:10

Load balancer: httpd-lb

4. Type **confirm** and click on **Delete** button. **httpd-LB** will be deleted immediately.

14.4 Deleting Target group

1. In the EC2 console, navigate to **Target Groups** in the left-side panel.
2. **ecs-TG** will be listed here.
3. To **delete** the target group, need to perform the following actions:
    - **Select** the target group,
    - Click on the **Actions** button.
    - Select the **Delete** option.
4. Confirm by clicking on the **Yes, Delete** button when a pop-up is shown.
5. The target group will be deleted immediately.

Completion and Conclusion

1. You have successfully created and launched Amazon ECS Cluster.
2. You have successfully created an HTTPD container.
3. You have successfully created an Application load balancer and Target group.
4. You have successfully created an auto-scaling and triggered the activity.

End Lab

1. Sign out of AWS Account.
2. You have successfully completed the lab.
3. Once you have completed the steps, click on **End Lab** from your Whizlabs lab console and wait till the process gets completed.