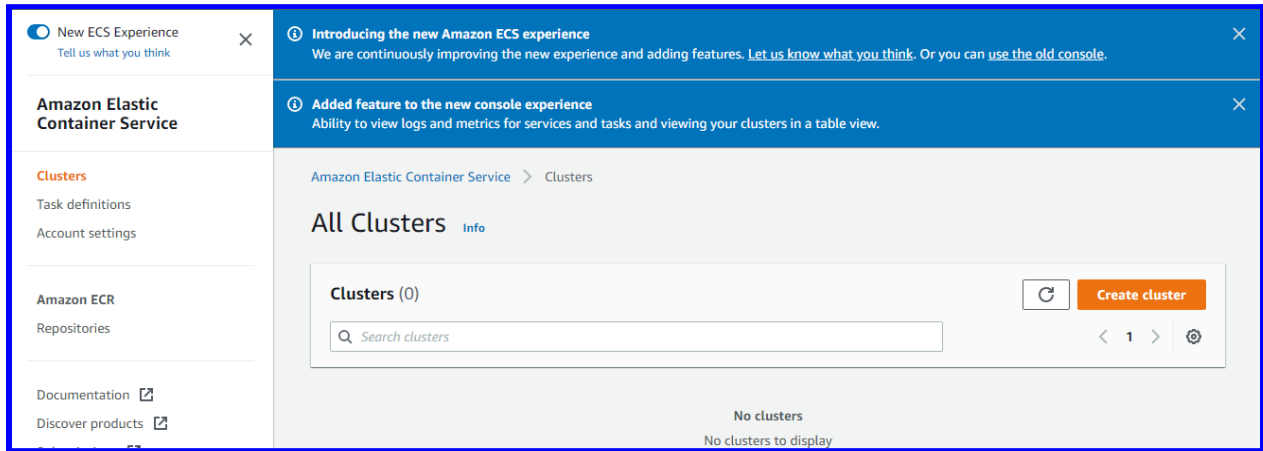
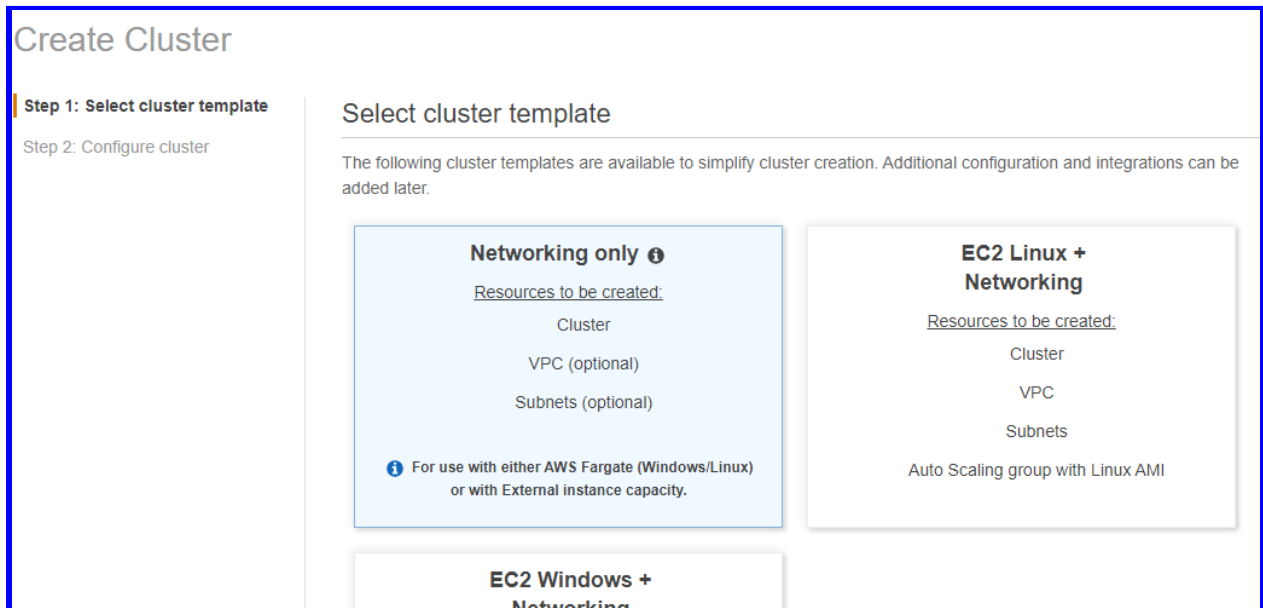


Deploy ***one*** of uploaded image in ECS Fargate.

ECS Cluster Home_Page (New ECS Experience)



Creating Cluster step 1 - Selecting Fargate type



Creating Cluster step 2 - Name **Team-D-ECS-Cluster**, Enabling CloudWatch Insights

Create Cluster

Step 1: Select cluster template

Step 2: Configure cluster

Configure cluster

Cluster name* ⓘ

Networking

Create a new VPC for your cluster to use. A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Fargate tasks.

Create VPC ☐ Create a new VPC for this cluster

Tags

Key	Value
<input type="text" value="Add key"/>	<input type="text" value="Add value"/>

CloudWatch Container Insights

CloudWatch Container Insights is a monitoring and troubleshooting solution for containerized applications and microservices. It collects, aggregates, and summarizes compute utilization such as CPU, memory, disk, and network; and diagnostic information such as container restart failures to help you isolate issues with your clusters and resolve them quickly. [Learn more](#)

CloudWatch Container Insights ☒ Enable Container Insights

Launch Status

Launch status

Your container instances are launching, and it may take a few minutes until they are in the state you want. You can view the status of your cluster and instances in the console or using the CLI.

ECS status - 1 of 1 complete **Team-D-ECS-Cluster**

✓

ECS cluster
ECS Cluster Team-D-ECS-Cluster successfully created

Task Definition Home Page

New ECS Experience
Tell us what you think

Amazon Elastic Container Service

Clusters
Task definitions
Account settings

Amazon ECR
Repositories

Documentation
Discover products
Subscriptions

Amazon Elastic Container Service > Task definitions

Introducing the new ECS console experience!
We have redesigned the task definition experience. The actions for deploying service, running tasks, creating new revision, or deactivating existing revisions are available with previous console while we complete the migration. To use these actions, [use the classic console](#).

Task definitions (0) Info
Deploy Create new task definition

Filter task definitions by property or value

Task definition	Status of last revision	Revisions
No task definitions No task definitions to display. Create new task definition		

Creating Task Definition for Nginx

Task definition configuration

Task definition family Info
Specify a unique task definition family name.
team-d-task-def-nginx
Up to 255 letters (uppercase and lowercase), numbers, hyphens, and underscores are allowed.

Container - 1 Info

Essential container Remove

Container details
Specify a name, container image, and whether the container should be marked as essential. Each task definition must have at least one essential container.

Name	Image URI	Essential container
nginx	949263681218.dkr.ecr.us-east-2.amazonaws.com/team	Yes

Port mappings Info
Add port mappings to allow the container to access ports on the host to send or receive traffic.

Container port	Protocol	
80	TCP	Remove

Task Definition Step 2

Configure environment, storage, monitoring, and tags

▼ Environment
Specify the infrastructure requirements for the task definition.

App environment [Info](#)
Specify the infrastructure for the task definition.

Add an option ▼

AWS Fargate (serverless) ✕

Operating system/Architecture [Info](#)
Linux/X86_64 ▼

Task size [Info](#)
Specify the amount of CPU and memory to reserve for your task.

CPU
.25 vCPU ▼

Memory
.5 GB ▼

► Task roles, network mode - conditional

Task Definition Step 3

Task definition team-d-task-def-nginx is being created
The task definition resources are being created using a CloudFormation stack. The process may take some time.

Amazon Elastic Container Service > Task definitions > Create

Step 1
Configure task definition and containers

Step 2
Configure environment, storage, monitoring, and tags

Step 3
Review and create

Review and create

Step 1: Configure task definition and containers [Edit](#)


Task definition configuration

Task definition family
team-d-task-def-nginx

Container - 1 [Essential container](#)


Container details		
Name	Image URI	Essential container
nginx	949263681218.dkr.ecr.us-east-2.amazonaws.com/team	Yes

Task Definition Successfully Created



 **Task definition successfully created**
team-d-task-def-nginx has been successfully created. You can use this task definition to deploy a service or run a task.

Amazon Elastic Container Service > Task definitions > team-d-task-def-nginx > Revision 1 > Containers

team-d-task-def-nginx:1 Deploy ▼ Deregister

 **Introducing the new ECS console experience!**
We have redesigned the task definition experience. The actions for deploying service, running tasks, creating new revision, or deactivating existing revisions are available with previous console while we complete the migration. To use these actions, [use the classic console](#).

General configuration Info

Time created 07/12/2021, 12:48:09 UTC	Status  ACTIVE	App environment FARGATE
Network mode awsvpc	Task role -	Task execution role ECS-Console-V2-TaskDefinition-ECSTaskExecutionRole-AG3Y3QWA15PM 

Creating and Deploying Service

Services Tasks Infrastructure Metrics Tags

Services (0) Refresh Edit Delete Deploy

< 1 > Settings

	Service name ▼	ARN	Status ▼	Deployments and tasks	Task definition ▼	Revision	Launch t...
No services No services to display. Deploy							

Service Deployment Step 1

Amazon Elastic Container Service > Clusters > Team-D-ECS-Cluster > Services > Deploy

Deploy

[Info](#)

Environment

Existing cluster
Select an existing cluster. To create a new cluster, go to [Clusters](#).

Team-D-ECS-Cluster

► [Compute configuration \(advanced\)](#)

Deployment configuration

Application type [Info](#)
Specify what type of application you want to run.

☒ **Service**
Launch a group of tasks handling a long-running computing work that can be stopped and restarted. For example, a web application.

☐ **Task**
Launch a standalone task that runs and terminates. For example, a batch job.

Service Deployment Step 2

Task definition

Select an existing task definition. To create a new task definition, go to [Task definitions](#).

☐ **Specify revision manually**

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

Family

team-d-task-def-nginx ▼

Revision

1 ▼

Service name

Assign a unique name for this service.

team-d-service-nginx

Desired tasks

Specify the number of tasks to launch.

1

► Deployment options

► Load balancing - *optional*

Service Deployment step 3

▼ Networking

VPC [Info](#)

Choose the Virtual Private Cloud to use.

vpc-0537baf72f80d5930
Team-D-VPC ▼

Subnets

Choose the subnets within the VPC that the task scheduler should consider for placement.

Choose subnets ▼

subnet-0f2289611791d484b ✕
us-east-2a | Team-D-Pub-Subnet-1

subnet-097d36c5a88e7499e ✕
us-east-2b | Team-D-Pub-Subnet-2

subnet-04cac1b8f8d29fd3d ✕
us-east-2c | Team-D-Pub-Subnet-3

Security group [Info](#)

Choose an existing security group or create a new security group.

☒ Use an existing security group

☐ Create a new security group

Security group name

Choose an existing security group.

▼

sg-07e18b5394de7f7e0 ✕
Team-d-80-port | Team-d-80-port

Service Created and Successfully Deployed

The screenshot shows the AWS Management Console interface for an ECS cluster. The 'Services' tab is selected, displaying a table with the following data:

Service name	ARN	Status	Deployments and tasks	Task definition	Revision	Launch ...
team-d-service-nginx	arn:aws:ecs...	Active	1/1 Tasks r...	team-d-task-def-nginx	1	

Tasks >> Networking (View IP)

The screenshot shows the AWS Management Console interface for a specific task's networking configuration. The 'Networking' tab is selected, displaying the following network configuration details:

Configuration	Logs	Networking	Tags
ENI ID eni-068b9dc2148f10d83	Task role -	Private IP 10.15.32.69	
Subnet subnet-04cac1b8f8d29fd3d	Task execution role ECS-Console-V2-TaskDefinition-ECSTaskExecutionRole-AG3Y3QWA15PM	Public IP 3.23.63.178	
		IPv6 address -	
		MAC address 0a:3f:cd:c2:bb:3e	

After browsing the IP we should see the message we deployed in Question 3 using this same image.

The screenshot shows a web browser window with the following content:

Hello From NGINX Container !!

From DevOps Internship !!

Created Task definition for Node Js Image for more testing purpose

Task definition successfully created
team-d-task-def-nodejs has been successfully created. You can use this task definition to deploy a service or run a task.

Amazon Elastic Container Service > Task definitions > team-d-task-def-nodejs > Revision 1 > Containers

team-d-task-def-nodejs:1

Deploy ▼ Dereister

Introducing the new ECS console experience!
We have redesigned the task definition experience. The actions for deploying service, running tasks, creating new revision, or deactivating existing revisions are available with previous console while we complete the migration. To use these actions, [use the classic console](#).

General configuration Info

Time created 07/12/2021, 13:06:15 UTC	Status ACTIVE	App environment FARGATE
Network mode awsvpc	Task role -	Task execution role ECS-Console-V2-TaskDefinition-ECSTaskExecutionRole-79M07Q56EG05

Creating Service for Node Js for more testing purpose

team-d-service-nginx has been deployed successfully.

Amazon Elastic Container Service > Clusters > Team-D-ECS-Cluster > Services > Deploy

Deploy Info

Environment

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

Team-D-ECS-Cluster

► Compute configuration (advanced)

Deployment configuration

Application type Info
Specify what type of application you want to run.

☒ Service
Launch a group of tasks handling a load of requests.

☐ Task
Launch a standalone task that runs and completes.

Creating Service for NodeJs Step 2

Deployment configuration

Application type [Info](#)

Specify what type of application you want to run.

☒ **Service**

Launch a group of tasks handling a long-running computing work that can be stopped and restarted. For example, a web application.

☐ **Task**

Launch a standalone task that runs and terminates. For example, a batch job.

Task definition

Select an existing task definition. To create a new task definition, go to [Task definitions](#).

☐ **Specify revision manually**

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

Family

team-d-task-def-nodejs ▼

Revision

1 ▼

Service name

Assign a unique name for this service.

team-d-service-nodejs

Creating Service for NodeJs Step 3

VPC [Info](#)
Choose the Virtual Private Cloud to use.

vpc-0537baf72f80d5930

Team-D-VPC

Subnets
Choose the subnets within the VPC that the task scheduler should consider for placement.

Choose subnets

subnet-0f2289611791d484b X

us-east-2a | Team-D-Pub-Subnet-1

subnet-097d36c5a88e7499e X

us-east-2b | Team-D-Pub-Subnet-2

subnet-04cac1b8f8d29fd3d X

us-east-2c | Team-D-Pub-Subnet-3

Security group [Info](#)
Choose an existing security group or create a new security group.

☒ Use an existing security group

☐ Create a new security group

Security group name
Choose an existing security group.

sg-07e18b5394de7f7e0 X

Team-d-80-port | Team-d-80-port

Public IP [Info](#)

Successfully created Service for NodeJS and Deployed Successfully

Services				Tasks			
Draining				Pending			
-				-			
Active				Running			
1				1			

Services

Tasks

Infrastructure

Metrics

Tags

Services (2)

Filter services by value

< 1 > ⚙

<input type="checkbox"/>	Service name ▾	ARN	Status ▾	Deployments and tasks	Task definition ▾	Revision	Launch ...
<input type="checkbox"/>	team-d-service-nginx	arn:aws:ecs...	✔ Active	<div></div> 1/1 Tasks r...	team-d-task-def-nginx	1	
<input type="checkbox"/>	team-d-service-no...	arn:aws:ecs...	✔ Active	<div></div> 1/1 Tasks r...	team-d-task-def-nodejs	1	

At last we can see two Tasks running Successfully

The screenshot shows the AWS ECS console with the 'Tasks' tab selected. It displays two running tasks for the 'team-d-task-def-nodejs' definition. The first task, with ID 61b1c04f7d864998a4823e34d75319..., has been running for 14 minutes. The second task, with ID 64009fd54b0d48c3865937f9fea02bf8, has been running for 46 seconds. Both tasks are launched on FARGATE infrastructure.

Task	Last status	Task definition	Revision	Started at	Container instan...	Launch ty
61b1c04f7d864998a4823e34d75319...	Running	team-d-task-def-nginx	1	14 minutes a...	-	FARGATE
64009fd54b0d48c3865937f9fea02bf8	Running	team-d-task-def-nodejs	1	46 seconds ago	-	FARGATE

We can view logs Tasks >> Logs

The screenshot shows the 'Logs' view for the task with ID 64009fd54b0d48c3865937f9fea02bf8. A green banner at the top indicates that the task has been deployed successfully. The logs show a single message: 'Hello Node JS From DevOps Internship' at 18:54:49 on 07/12/2021, from the 'nodejs' container.

team-d-service-nodejs has been deployed successfully.

Amazon Elastic Container Service > Clusters > Team-D-ECS-Cluster > Tasks > 64009fd54b0d48c3865937f9fea02bf8 > Logs

64009fd54b0d48c3865937f9fea02bf8

Configuration | **Logs** | Networking | Tags

Logs (100+) All 10m 1h 3h 12h 1d 3d 1w

Filter logs by message All containers

Timestamp	Message	Container
07/12/2021, 18:54:49	*Hello Node JS From DevOps Internship	nodejs

To view IP Tasks >> Networking

The screenshot shows the 'Networking' view for the task with ID 64009fd54b0d48c3865937f9fea02bf8. It displays the network configuration for the task, including the ENI ID, subnet, task role, and IP addresses.

Amazon Elastic Container Service > Clusters > Team-D-ECS-Cluster > Tasks > 64009fd54b0d48c3865937f9fea02bf8 > Networking

64009fd54b0d48c3865937f9fea02bf8

Configuration | Logs | **Networking** | Tags

Network

ENI ID eni-0392042cb0af323b3	Task role -	Private IP 10.15.32.60
Subnet subnet-097d36c5a88e7499e	Task execution role ECS-Console-V2-TaskDefinition-ECSTaskExecutionRole-79MO7QS6EG05	Public IP 3.128.190.111
		IPv6 address -
		MAC address 06:7b:74:5d:f5:f4

While Browsing the IP at port 6080 for NodeJS we can see this webpage

