

Module 8: Container Management Tools

Demo Document 2

edureka!

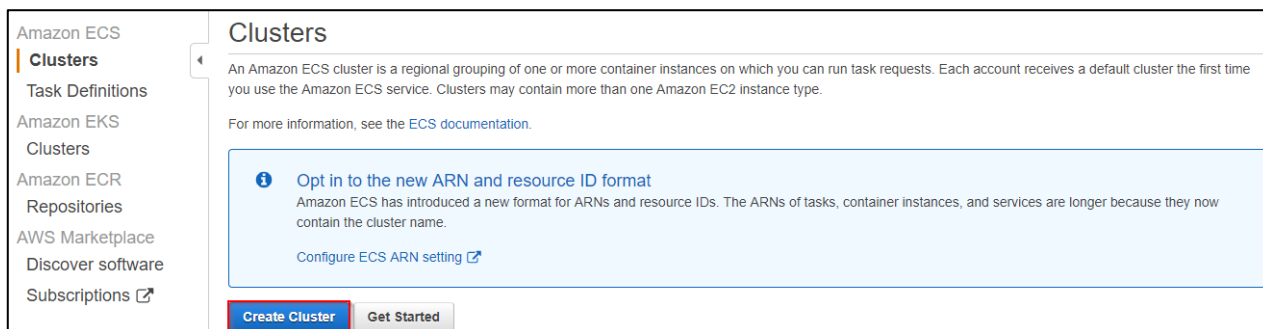
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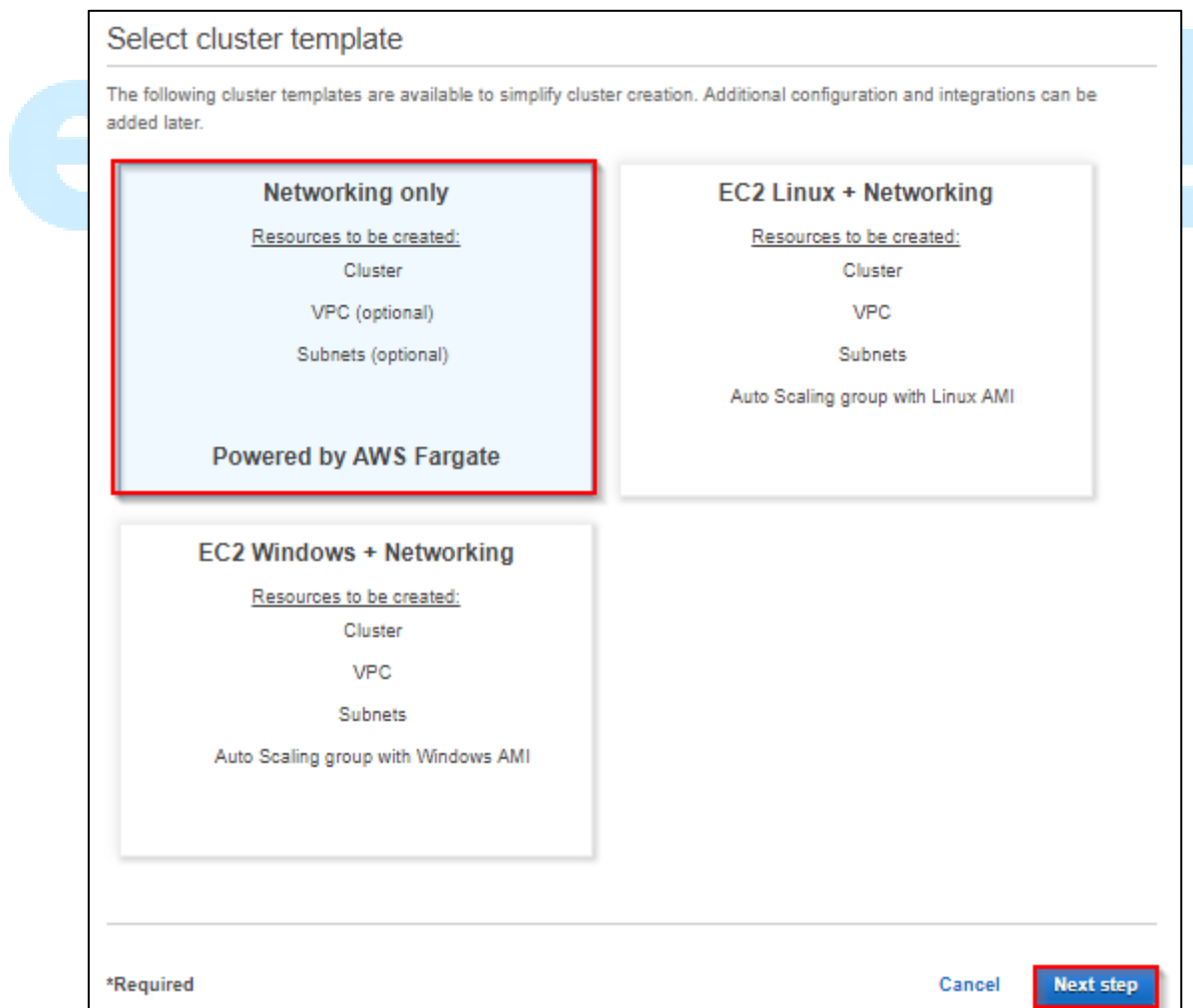
To host a website inside ECS using Fargate launch type

Step 1: Create a Cluster

- Navigate to ECS service in your Console
- In the navigation panel, Select cluster
- Then, Click on Cluster



- Select the Fargate Launch type and click on next



- Give a name for your cluster
- In networking, Click on New VPC
- Then, Click on create to create the 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

CIDR block

Subnet 1

Subnet 2

[Add more subnets.](#)

Tags

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

*Required

[Cancel](#) [Previous](#) [Create](#)

Step 2: Create a Task Definition

- In the navigation panel, now select Task Definition
- Then, click on create Task Definition

Amazon ECS

- Clusters
- Task Definitions**
- Amazon EKS
- Clusters
- Amazon ECR
- Repositories

Task Definitions

Task definitions specify the container information for your application, such as how ports they will use. [Learn more](#)

[Create new Task Definition](#) [Create new revision](#) [Actions](#)

- Select the launch Type to be Fargate and click on next
- At the Bottom of the page, click on configure through JSON and type the below code

```
{
  "family": "fargate",
  "networkMode": "awsvpc",
  "containerDefinitions": [
    {
      "name": "fargate-app",
      "image": "httpd:2.4",
      "portMappings": [
        {
          "containerPort": 80,
          "hostPort": 80,
          "protocol": "tcp"
        }
      ],
      "essential": true,
      "entryPoint": [
        "sh",
        "-c"
      ],
      "command": [
        "/bin/sh -c \"echo '<html> <head> <title>Amazon ECS Sample App</title> <style>body {margin-top: 40px; background-color: #333;} </style> </head><body> <div style=color:white;text-align:center> <h1>Amazon ECS Sample App</h1> <h2>Congratulations!</h2> <p>Your application is now running on a container in Amazon ECS.</p> </div></body></html>' > /usr/local/apache2/htdocs/index.html && httpd-foreground\""
      ]
    }
  ],
  "requiresCompatibilities": [
    "FARGATE"
  ],
  "cpu": "256",
  "memory": "512"
}
```

- Click on Save
- Then click on create, to create the task definition

Step 3: Create a Service

- Select the launch type to be Fargate
- Select the Cluster name
- Give the Service name
- Give the No of Task to be 2

- Specify the Minimum health and Maximum health Percentage
- Click on Next Step

Configure service

A service lets you specify how many copies of your task definition to run and maintain in a cluster. You can optionally use an Elastic Load Balancing load balancer to distribute incoming traffic to containers in your service. Amazon ECS maintains that number of tasks and coordinates task scheduling with the load balancer. You can also optionally use Service Auto Scaling to adjust the number of tasks in your service.

Launch type ☒ FARGATE ☐ EC2 ⓘ

Task Definition Family: ⓘ
 Revision: ⓘ

Platform version ⓘ

Cluster ⓘ

Service name ⓘ

Service type* ⓘ

Number of tasks ⓘ

Minimum healthy percent ⓘ

Maximum percent ⓘ

Deployments

Choose a deployment option for the service.

Deployment type* ☒ Rolling update ⓘ
☐ Blue/green deployment (powered by AWS CodeDeploy) ⓘ
 This sets AWS CodeDeploy as the deployment controller for the service. A CodeDeploy application and deployment group are created automatically with default settings for the service. To change to the rolling update deployment type after the service has been created, you must re-create the service and select the "rolling update" deployment type.

ⓘ Tagging requires that you opt in to the new ARN and resource ID format.
 The IAM user/role has not opted in to the new ARN format. Opt-in to the new format to use this feature. [Manage your opt-in settings.](#)

*Required

- While configuring Network, Choose a Subnet

Configure network

VPC and security groups

VPC and security groups are configurable when your task definition uses the awsvpc network mode.

Cluster VPC* vpc-085e99649a4b819a6 (10.0.0.0/16) ⓘ

Subnets* subnet-0ec281177a1aa9204 (10.0.1.0/24) | ECSCont/Public - us-east-2b ⓘ
assign ipv6 on creation: Disabled

Security groups* Fargat-864 ⓘ [Edit](#)

Auto-assign public IP ENABLED ⓘ

- Click on next step
- In Set Autoscaling, Click on next
- Finally review it and click on create service

Configure service discovery [Edit](#)

Namespace ns-dtlimhkmsmm33bqw

Service discovery name asd

Enable ECS task health propagation true

DNS record type and TTL A 60

Set Auto Scaling (optional) [Edit](#)

not configured

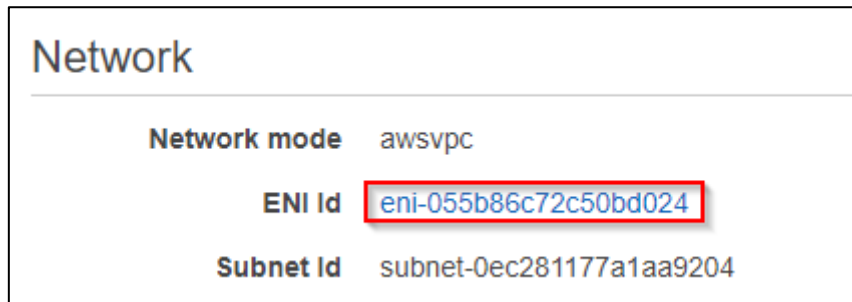
[Cancel](#) [Previous](#) [Create Service](#)

Step 4: Test your application

- Inside your service, if you click on task you can see your task running
- Click on the Task ID to see the details

Task status: Running Stopped						
Filter in this page						
< 1-2 > Page size 50						
Task	Task Definition	Last status	Desired status	Group	Launch type	Platform version
09fef26e-c8c1-45a...	sample-fargate:2	RUNNING	RUNNING	service:Fargate_cont	FARGATE	1.3.0
a0412f5d-be39-45...	sample-fargate:2	RUNNING	RUNNING	service:Fargate_cont	FARGATE	1.3.0

- In Network, click on Elastic Network Interface (ENI)



- Which would get you directed towards the ENI details from which you can get the public IP

Network Interface: eni-055b86c72c50bd024			
Details Flow Logs Tags			
Network interface ID	eni-055b86c72c50bd024	Subnet ID	subnet-0ec281177a1aa9204
VPC ID	vpc-085e99649a4b819a6	Availability Zone	us-east-2b
MAC address	06:ad:2e:f6:6b:b6	Description	arn:aws:ecs:us-east-2:245376966395:attachment/0a616177-f64b-4320-9d89-bc86cfb2607c
Security groups	Fargat-864 . view inbound rules . view outbound rules	Network interface owner	245376966395
Status	in-use	Primary private IPv4 IP	10.0.1.195
Private DNS (IPv4)	ip-10-0-1-195.us-east-2.compute.internal	IPv4 Public IP	3.17.189.248

- Now, if you type that Public IP in the default browser, then you can see the website

