

# Cloud Plus Plus Services

## Amazon Elastic Container Service

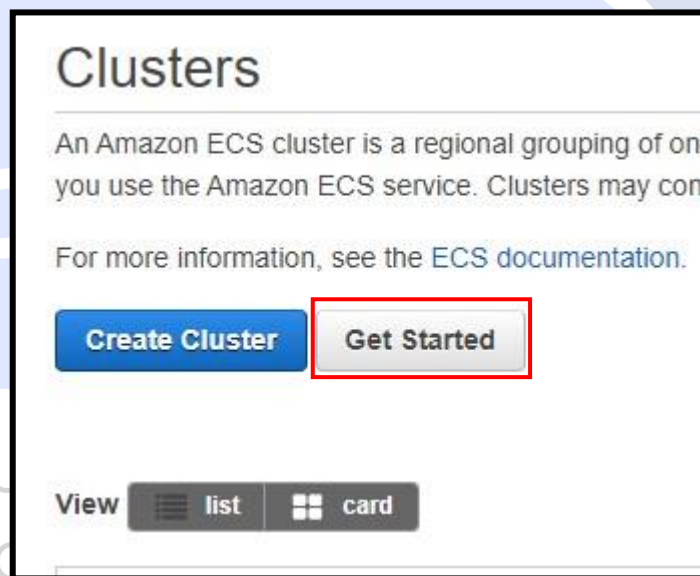
### Deploy a Container Web App on Amazon ECS

Objectives:

1. Learn To deploy a containerized application on Amazon Elastic Container Service (Amazon ECS).
2. Learn Create the infrastructure to run your container with ECS

Step 1: In AWS Management Console, go to **ECS** from search bar.

Step 2: Here, we need to create a **Cluster**. Click on GET STARTED.



Step 3: From Container definition select **sample-app** and click on **Edit**. Scroll down to Advanced container configuration.

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Container definition

Edit

Choose an image for your container below to get started quickly or define the container image to use.

sample-app

image : httpd:2.4  
 memory : 0.5GB (512)  
 cpu : 0.25 vCPU (256)

nginx

image : nginx:latest  
 memory : 0.5GB (512)  
 cpu : 0.25 vCPU (256)

Step 4: Paste the following script in Command section from Environment

```
/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>Welcome to
Cloud-PlusPlus</h1> <h2>Congratulations! This is Amazon ECS</h2> <p>Your
application is now running on a container in Amazon ECS.</p>
</div></body></html>' > /usr/local/apache2/htdocs/index.html &&
httpdforeground"
```

ENVIRONMENT

CPU units

256

GPUs

Essential

☒

Entry point

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>Welcome to Cloud-PlusPlus</h1> <h2>Congratulations! This is Amazon ECS</h2> <p>Your application is now running on a container in Amazon ECS.</p> </div></body></html>' > /usr/local/apache2/htdocs/index.html && httpdforeground"

Keep the rest default and scroll down and click on update.

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Step 5: Select **Application Load Balancer** and keep rest as it is. Click on next.

### Define your service

Edit

A service allows you to run and maintain a specified number (the "desired count") of simultaneous instances of a task definition in an ECS cluster.



Service name	sample-app-service
Number of desired tasks	1
Security group	Automatically create new <small>Two security groups are created to secure your service: An Application Load Balancer security group that allows all traffic on the Application Load Balancer port and an Amazon ECS security group that allows all traffic ONLY from the Application Load Balancer security group. You can further configure security groups and network access outside of this wizard.</small>
Load balancer type	<input type="radio"/> None <input checked="" type="radio"/> Application Load Balancer
Load balancer listener port	80
Load balancer listener protocol	HTTP

Step 6: Name your cluster, in this case **"ECSDemo"** and click next.

### Configure your cluster

The infrastructure in a Fargate cluster is fully managed by AWS. Your containers run without you managing and configuring individual Amazon EC2 instances.

To see key differences between Fargate and standard ECS clusters, see the [Amazon ECS documentation](#).

Cluster name	ECSDemo	
<small>Cluster names are unique per account per region. Up to 255 letters (uppercase and lowercase), numbers, and hyphens are allowed.</small>		
VPC ID	Automatically create new	
Subnets	Automatically create new	

\*Required

Cancel

Previous

Next

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Step 7: Review the configuration and Click on **Create**. Here, the cluster is getting launched. Wait till the services are complete.

Click on view services.

Back
View service

Additional features that you can add to your service after creation

**Scale based on metrics**  
You can configure scaling rules based on CloudWatch metrics

Preparing service : 10 of 10 complete

<b>ECS resource creation</b>	complete ✓
Cluster ECSDemo	complete ✓
Task definition first-run-task-definition:1	complete ✓
Service sample-app-service	complete ✓
<b>Additional AWS service integrations</b>	complete ✓
Log group /ecs/first-run-task-definition	complete ✓
CloudFormation stack EC2ContainerService-ECSDemo	complete ✓
VPC vpc-068195dcc049ecdca	complete ✓
Subnet 1 subnet-06f8d7bf8468c3664	complete ✓
Subnet 2 subnet-0854cd3daeafeba8b	complete ✓
Security group sg-037184490a4f25ec5	complete ✓
Load balancer am:aws:elasticloadbalancing:us-east-1:411145326836:loadbalancer/app/EC2Co-EcsEI-1646Q436ZF9CI/8c00232930ba7da3	complete ✓

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Step 8: The Cluster is Created. Now, select **Tasks** and click on the first task i.e. the **Container** from Task status.

Service : sample-app-service

Cluster

ECSDemo

Status

ACTIVE

Task definition

first-run-task-definition:1

Service type

REPLICA

Launch type

FARGATE

Service role

AWSServiceRoleForECS

Created By

arn:aws:iam::411145326836:user/Admin

Details

Tasks

Events

Auto Scaling

Deployments

Metrics

Tags

Logs

Task status:

Running

Stopped

Filter in this page

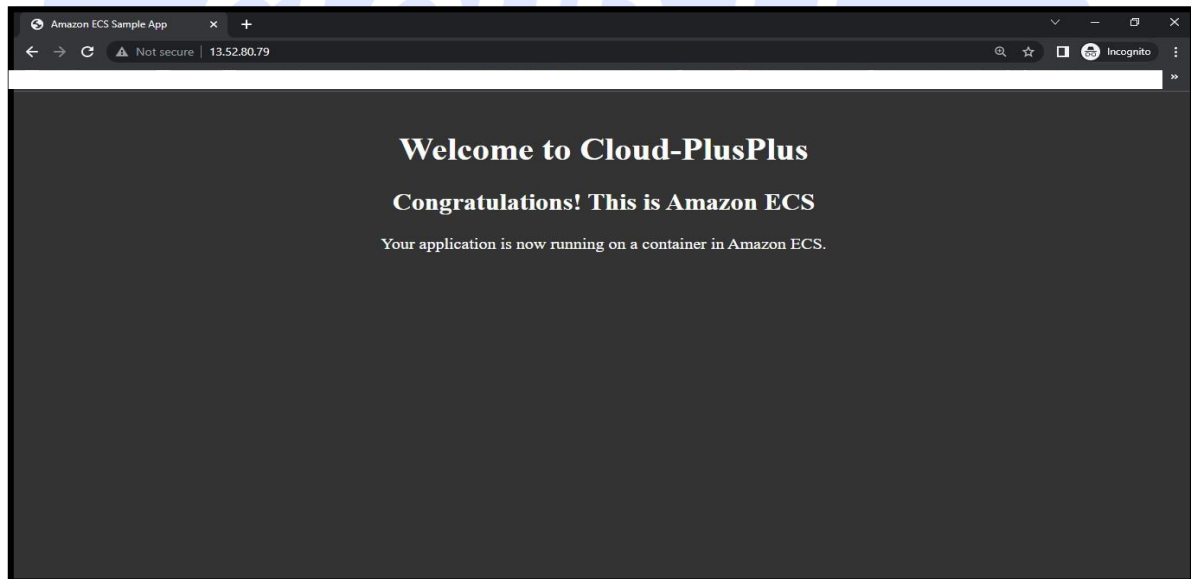
Task	Task Definition	Last status	Desired status
bb29d2b77a2a41928...	first-run-task-definition:1	RUNNING	RUNNING

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Step 9: Here you can review the details of your Container. Scroll down to Network and copy the **Public IP**.



Step 10: Paste the **Public IP** in the new window



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Note: If you no longer need the Cluster, delete the Cluster. Also deregister the task from Task definition at left panel from Amazon ECS.

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