



Module 11 – ECR & ECS

ECR (Elastic Container Registry)

ECR is a fully managed Docker container registry service provided by Amazon Web Services (AWS). It enables developers to store, manage, and deploy Docker container images within the AWS ecosystem. ECR integrates seamlessly with other AWS services like Amazon Elastic Container Service (ECS), Amazon Elastic Kubernetes Service (EKS), and AWS Fargate, making it easy to deploy containerized applications.

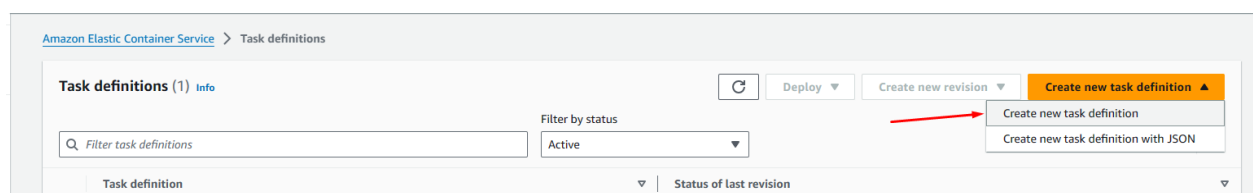
Let create the Private repositories and to upload the image, we have to click on view Push command.

Connect to AWS through CLI and paste the commands one by one.

ECS (Amazon Elastic Container Service)

Amazon Elastic Container Service (ECS) is a highly scalable, high-performance container orchestration service provided by Amazon Web Services (AWS). It allows you to run, stop, and manage Docker containers on a cluster of EC2 instances. ECS abstracts away much of the complexity involved in managing containerized applications, providing a simple API and command-line interface to interact with container instances.

- Click on Create Cluster and then click on Create. We will be using fargate Serverless.
- Once Cluster is created, we need to create the Task Definition where we will specify our Docker image and its Network part.
- So let create the task Definition.



- Next, we will specify how much CPU we want and how much RAM will be needed for the application. And which OS do we want this application to be deployed.
- Next, Docker Image URL, which we will take from ECR, then how much CPU and Memory is needed for this container. And what will be the container port.
- Then click on Create. If we want the logs to go CloudWatch then we can enable this feature.
- Now let go back to the cluster and create the service and make sure we are defining this task definition in the service.
- Click on Create service.

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 the revision manually

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

Family

Demo-123-TaskDefination

Revision

1 (LATEST)

Service name

Assign a unique name for this service.

Demo-123Service

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.

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► Deployment options

- Next, Select the VPC and security Group.
- wait it will take some time to create the service and then we will see if we can browse the application or not.
- Get the IP address and browse the application.