

ECS (Elastic Container Service)

Duration: 2 Days (8Hours Per Day)

Hands-On Format: This hands-on class is approximately 80/20 lab to lecture ratio, combining engaging lecture, demos, group activities and discussions with comprehensive machine-based practical programming labs and project work.

Module 1 – Containers Basics - Docker

Introduction to Container
Docker Concepts
Docker Architecture
Creating and Running Container with Docker
Building Image with Dockerfile

Module 2 – Understand Clusters, Task Definitions, Tasks and Services

ECS and Fargate Introduction
Pre-requisites – Create a VPC
Create ECS EC2 Linux and Fargate Clusters
Cluster Features
Task Definition – Introduction
Create Task Definition
Create Service
Run a New Task
Revise ECS Objects

Module 3 – Elastic Container Registry (ECR) - Integration

Elastic Container Registry Introduction
Understand ECR Terminology
ECR Repository Creation – AWS Management Console and Command Line
Docker Build Container and Push to AWS ECR Repository
Create ECS Task Definition, Service using Image Push to ECR

Module 4 – Load Balancing and Autoscaling

Load Balancing and Autoscaling – Introduction
Create Docker Images
Create Application Load Balancer
Create Task Definitions for Fargate and EC2 ECS Launch Types
Create Application ECS Service with LaunchType as EC2 as Fargate
Autoscaling – Implement Target Tracking policy

Module 5 – AWS ECS – Monitoring and Logging

Monitor Cluster, Service
Logs – Capture Application/Container Logs using CloudWatch