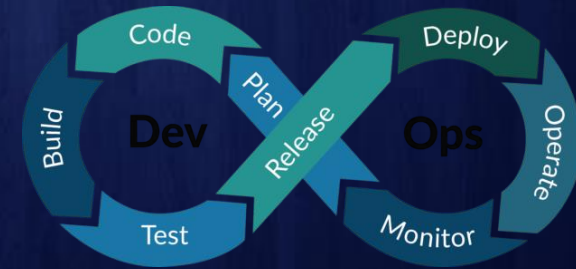


AWS SAA + SysOps + Developer + DevOps Course #Day-59

We will start at **8 AM**,
Stay tuned



RAKESH TANINKI

LEARN TO UNLEARN





Recap:

- **Docker & Containers**
 - Virtualization problems
 - Containerization
 - Container Registry
- **Demos**
 - **Docker**
- **ECR – Elastic Container Registry**
- **Docker Desktop**

Today's topics:



- Docker Desktop (local)
- Task Definition
- ECS – Elastic Container Service
 - Demo –Launch a container on EC2 mode
- ECS – Fargate mode
 - Demo –Launch a container on Fargate mode



ECR – Elastic Container Registry

ECR – Elastic Container Registry

- Managed **container image registry** service
- ..like **Docker hub**.. But for **AWS**
- Each AWS account has a **public** and **private** registry by default
- Each **registry** can have multiple **image repositories**
- Each **repository** can have multiple **images**
- Images can have several tags
- Integrated with **IAM service** – for permissions management
- Images replication - cross region – cross account

Demo – ECR – Elastic Container Registry

- Create an image repository
- Push the image from EC2 to ECR



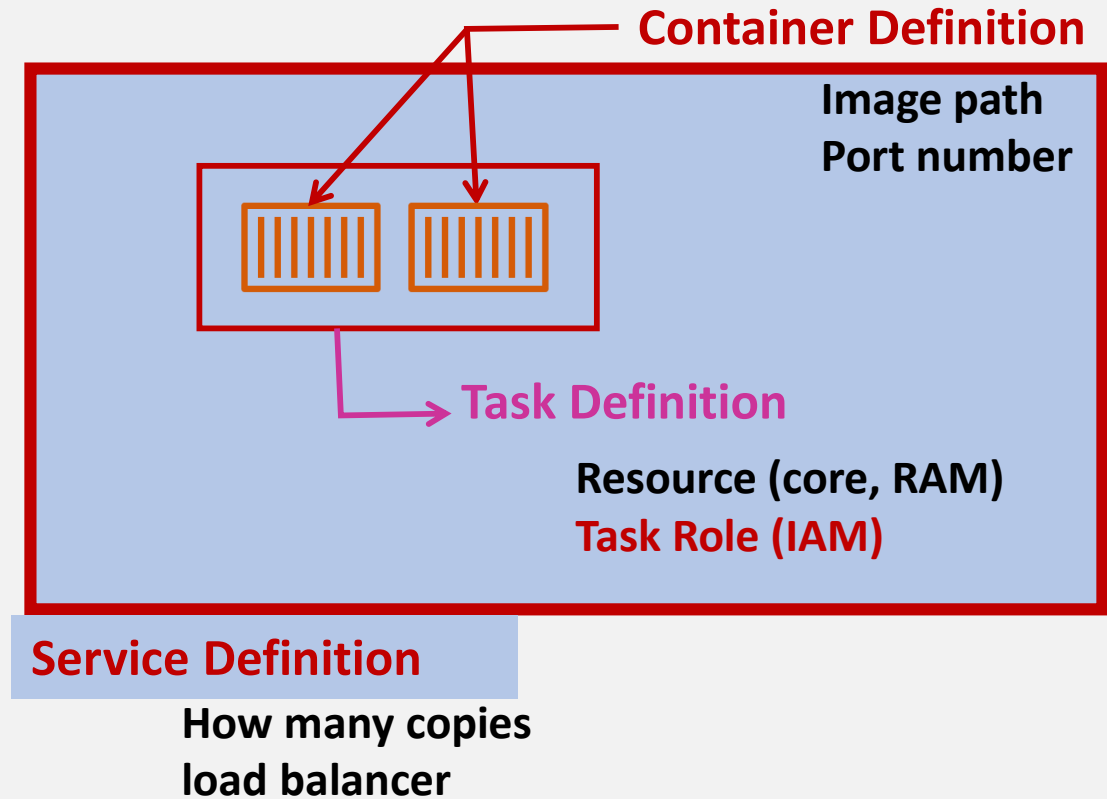
AWS Managed **Container Service**

EC2 Mode

Fargate (serverless)



Registry





- Container definition – image & ports
- Task definition – Security (Task role), containers, resources
- Task Role – IAM role which the task assumes
- Service – how many copies, HA, load balancer



ECS – Cluster modes

- **EC2 mode**
- **Fargate mode**
- .. Both varies in
- Cost difference
- What you manage and what AWS manage
- More admin work and less admin work



ECS – EC2 mode



Scheduling and Orchestration

ClusterManager | PlacementEngine



Service



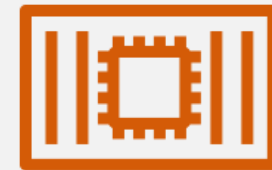
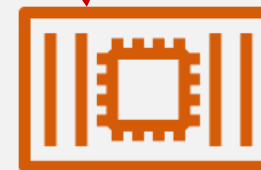
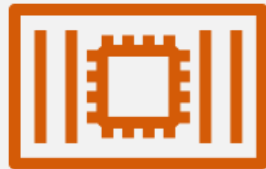
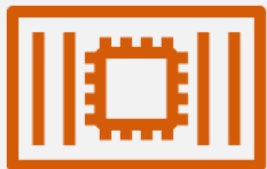
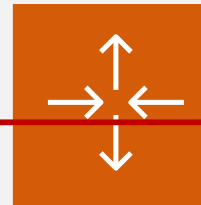
Task



Registry



EC2 Mode



AZ A

AZ B



ECS – Fargate



Scheduling and Orchestration
ClusterManager | PlacementEngine



Service



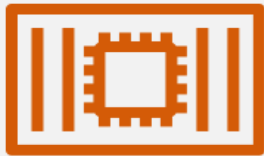
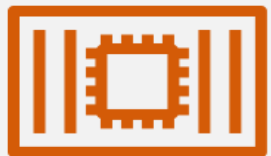
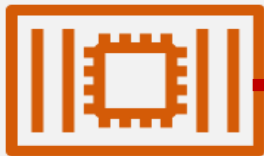
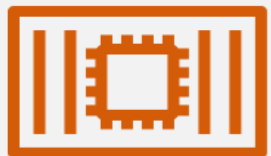
Task



Registry



ECS Fargate Mode



Elastic network
interface

Shared infra

VPC



EC2 vs ECS vs Fargate

- If you use containers ... choose ECS (EC2 / Fargate)
- Large workload – **Price conscious** – EC2 mode
- Large workload – **Overhead conscious** – Fargate mode
- Small / burst workloads – Fargate
- Batch / periodic operations – Fargate

Demo – ECS - Fargate





Thank you, will meet in tomorrow's session

