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LESSON : AWS

SUBJECT: ECS-ECR

BATCH : B 303

AWS-DEVOPS



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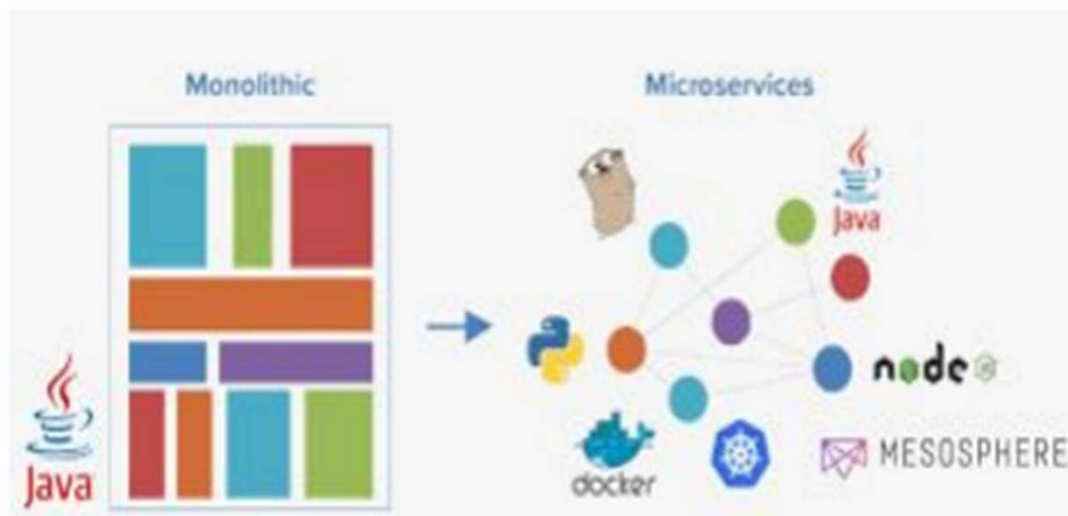
- ▶ AWS Container Orchestration
- ▶ Amazon Elastic Container Service (ECS)
- ▶ Amazon Elastic Container Registry (ECR)



AWS Container Orchestration

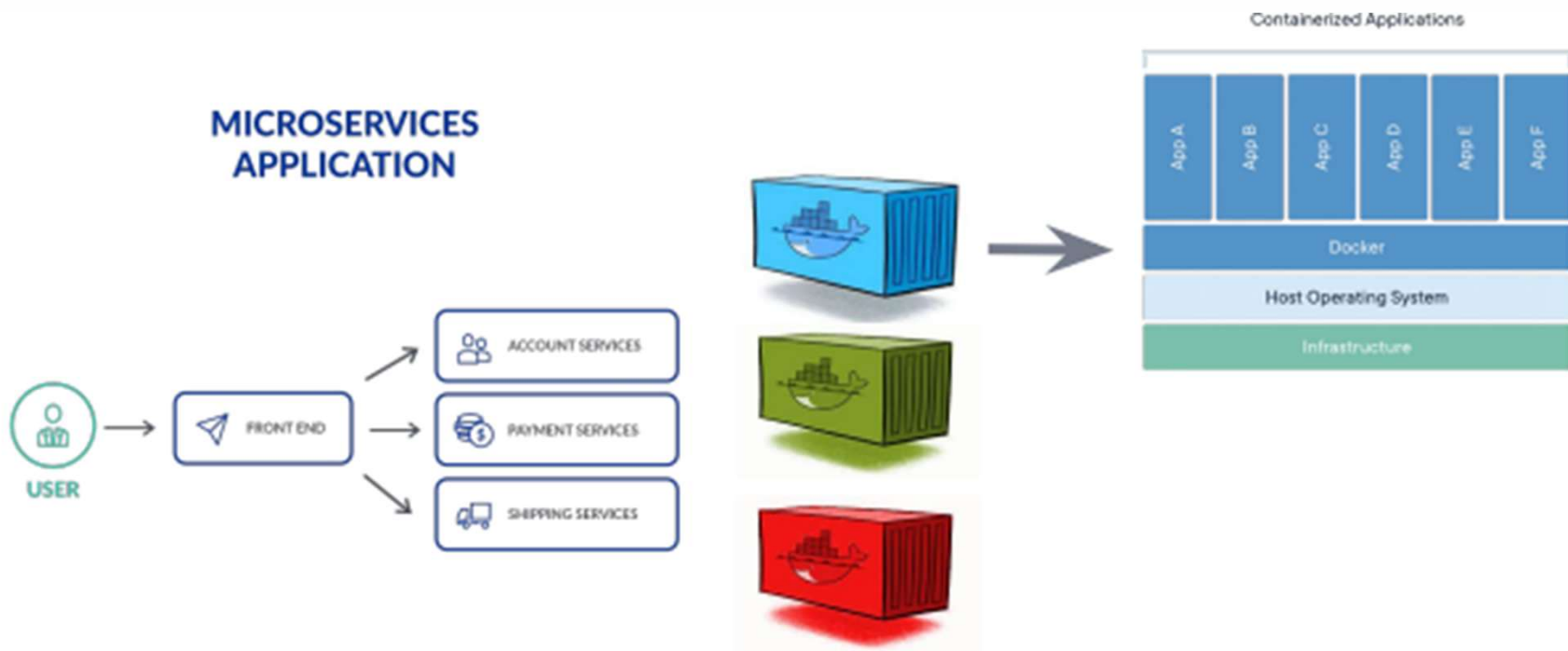
What is Container Orchestration?

Microservices vs Monolith



AWS Container Orchestration

What is Container Orchestration?



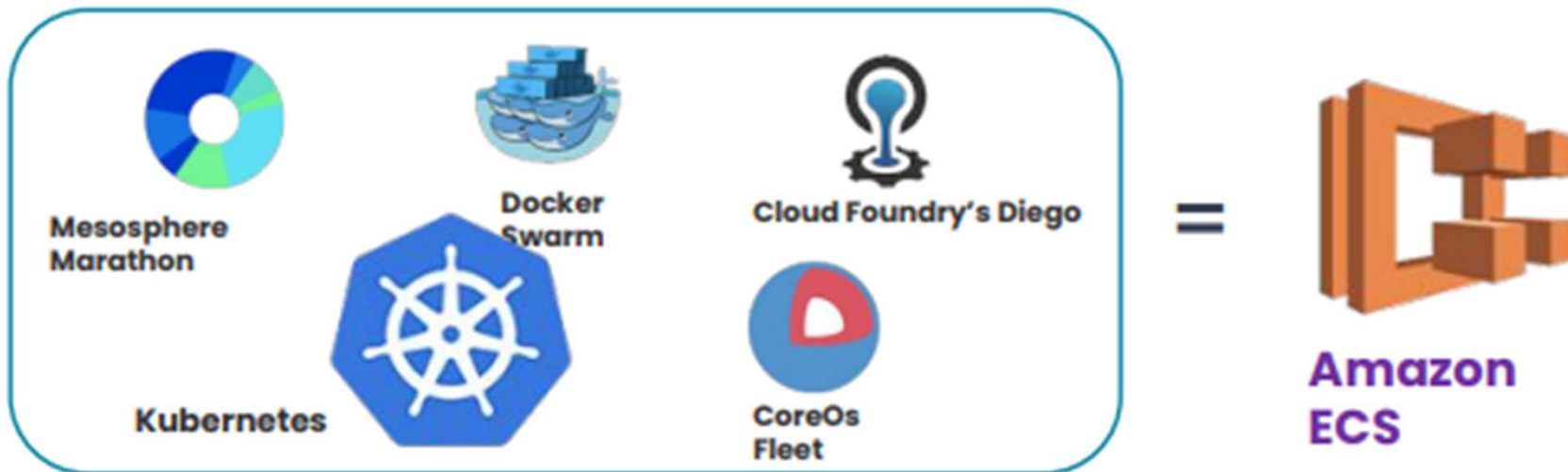
AWS Container Orchestration

What is Container Orchestration?



AWS Container Orchestration

What is Container Orchestration?

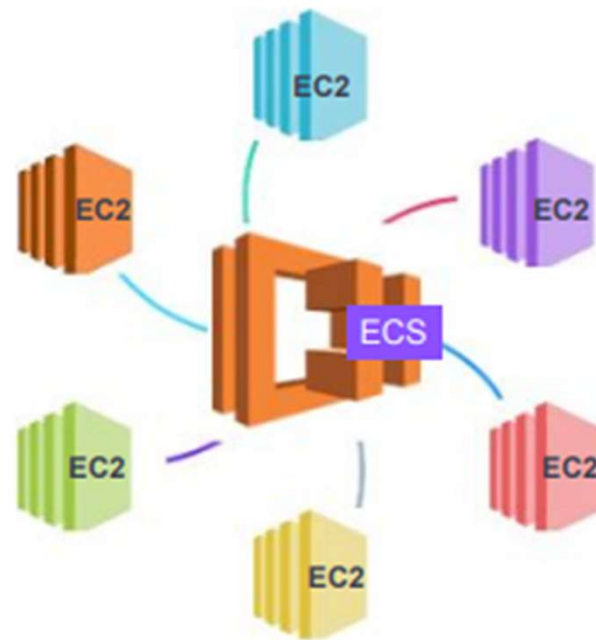




Amazon Elastic Container Service

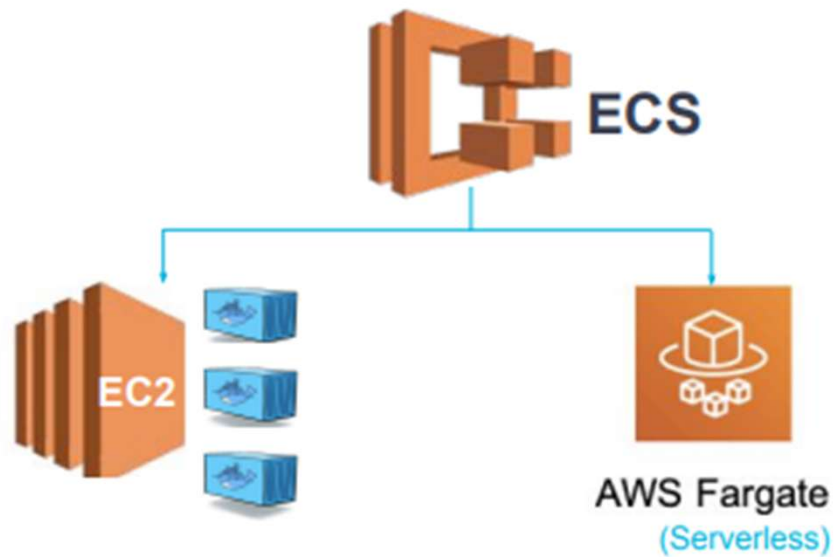
Amazon ECS

What is Amazon ECS?



Amazon ECS

What is Amazon ECS?



EC2 - your own car



Fargate



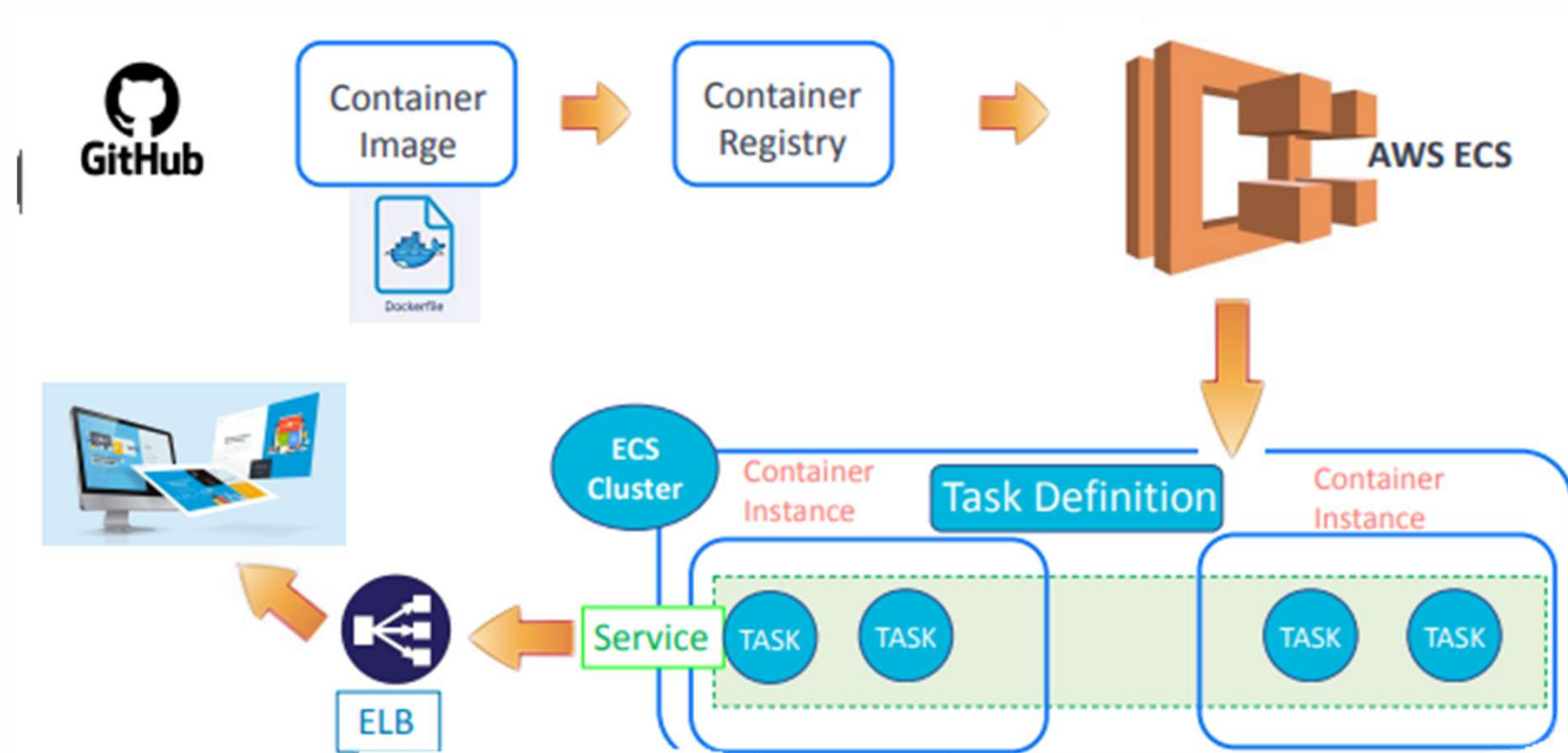
Amazon ECS

Key Components of ECS

ECS	Description
Cluster	A logical grouping of tasks or services.
Task Definition	The blueprint that describes how a Docker container launch
Task	A running container of a task definition within a cluster
Service	It allows us to run and maintain our desired number of tasks simultaneously in an Amazon ECS cluster.

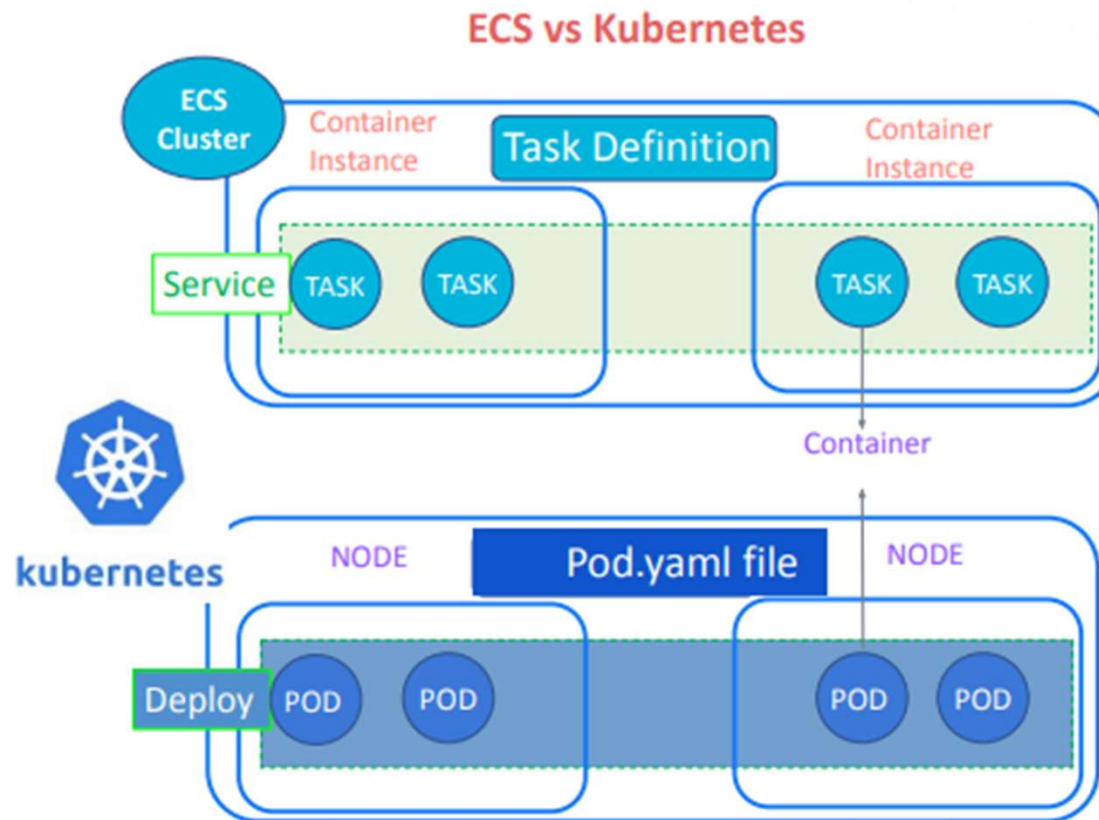
Amazon ECS

Key Components of ECS



Amazon ECS

Key Components of ECS





Amazon ECS

Manage Amazon ECS

Interface	Description
AWS Management Console	Provides a web interface that you can use to access your Amazon ECS resources.
AWS Command Line Interface	Provides commands for a broad set of AWS services, including Amazon ECS.
AWS Copilot	Provides an open-source tool for developers to build, release, and operate production ready containerized applications on Amazon ECS.
Amazon ECS CLI	Provides a command line interface for you to run your applications on Amazon ECS and AWS Fargate using the Docker Compose file format.

Amazon ECS

ECS vs EKS

	 ECS	 Amazon EKS
Simplicity /Flexibility	Simple	Flexible
Pricing	Free of charge	\$0.10 per hour for using EKS service equals \$72 per month for each cluster
Security	Deeply integrated with IAM	Requires add-ons to enable IAM functionality
Portability	Only available in AWS env.	You can run clusters in any other Kubernetes environment even on-premises
Community Support	No	Yes

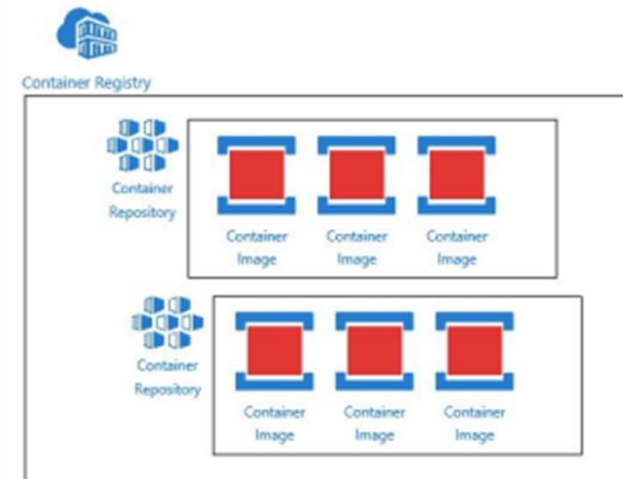


Amazon ECR

Amazon ECR

Registry vs. Repository

- Container registries store multiple repositories of container images, as well as storing API paths and access control rules just like Docker Hub.
- A repository is a place for you to publish and access your Docker images. It stores actual images.
- You may assume that the registry consists of repositories and the repository contains multiple copies of the same image that are uniquely versioned with tags.
- Docker Hub and other third party repository hosting services are called “registries”.



Amazon ECR

What is Amazon ECR?



amazon
ECR

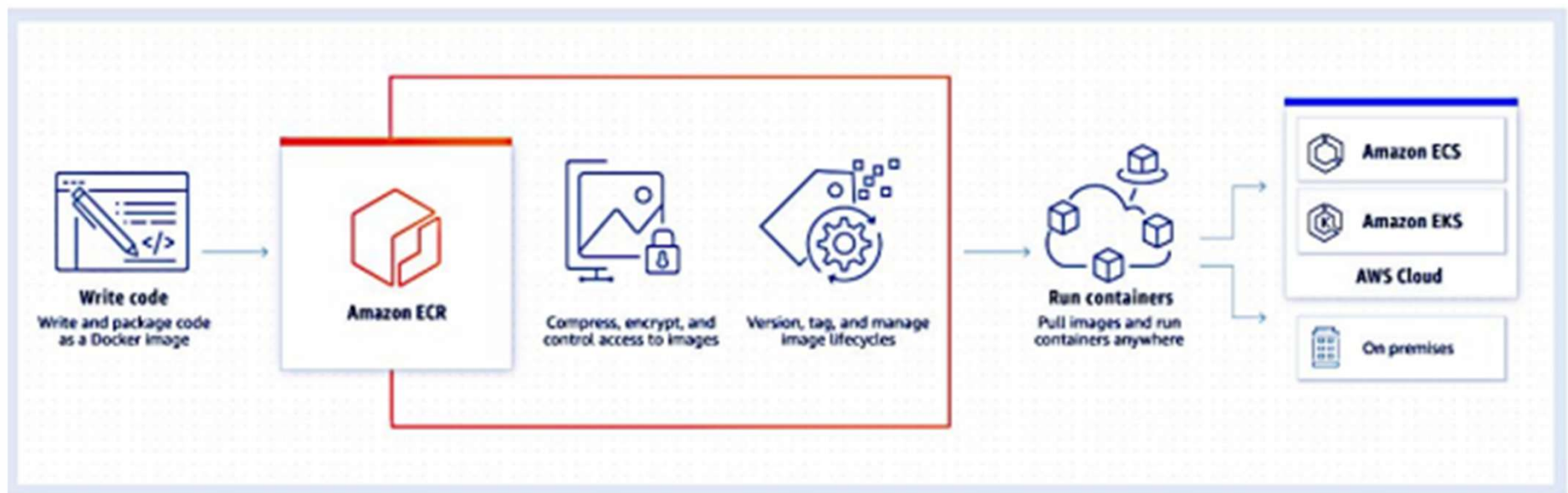


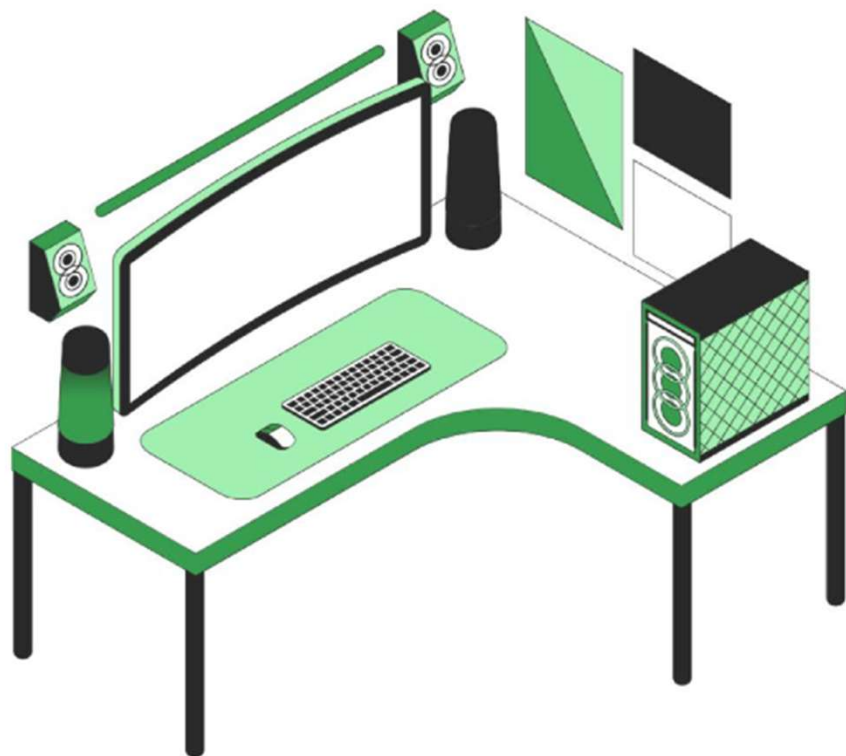
- Amazon Elastic Container Registry (ECR) service is a container registry solution of AWS.
- It is a collection of repositories made to store Docker container images.
- It is also integrated with Amazon Elastic Container Service (ECS).

Amazon ECR



Amazon ECR





Do you have any questions?

Send it to us! We hope you learned something new.