AWS Fargate

A serverless compute technology to run containers

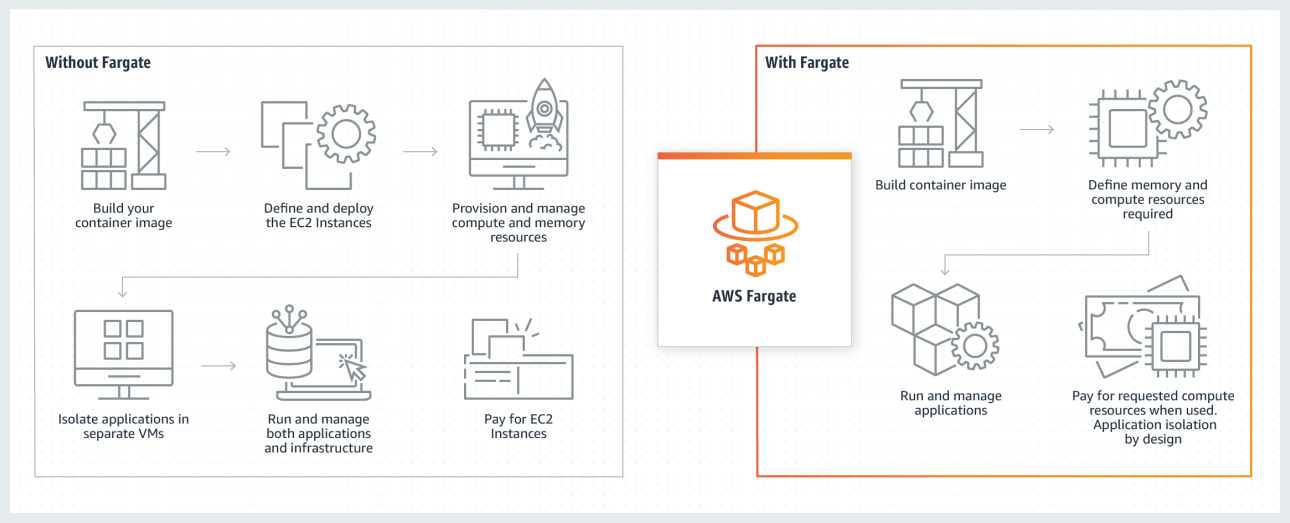
AWS Fargate simplifies deployment and management of containerized applications on AWS. Because of serverless capabilities, AWS Fargate removes the need to provision, scale, and manage the underlying infrastructure for containers. AWS Fargate integrates with container orchestration services such as Amazon Elastic Container Service (ECS) and Amazon Elastic Kubernetes Service (EKS).

Concepts

- **Docker:** A platform for developing, shipping, and running applications in containers.
- **Docker container:** A software package that includes everything needed to run a piece of software.
- **Container image:** A blueprint that is used to create containers. An image contains the application code, runtime, libraries, and dependencies required to run the application.

Benefits

When you run your tasks and services with the Fargate launch type, you package your application in containers, specify the CPU and memory requirements, define networking and IAM policies, and launch the application. Each Fargate task has its own isolation boundary and does not share the underlying kernel, CPU resources, memory resources, or elastic network interface with another task.



Use Cases

Microservices Applications

Deploy and manage individual microservices (such as backend, database, and more) as containers.

Machine Learning model deployment

Deploy machine learning models in containers to simplify scaling and management of inference services.

CI/CD pipeline integrations

Enable automated deploymet and delivery of containerized applications.

Batch Processing

Complete containerized batch processing tasks without the need for persistent infrastructure.