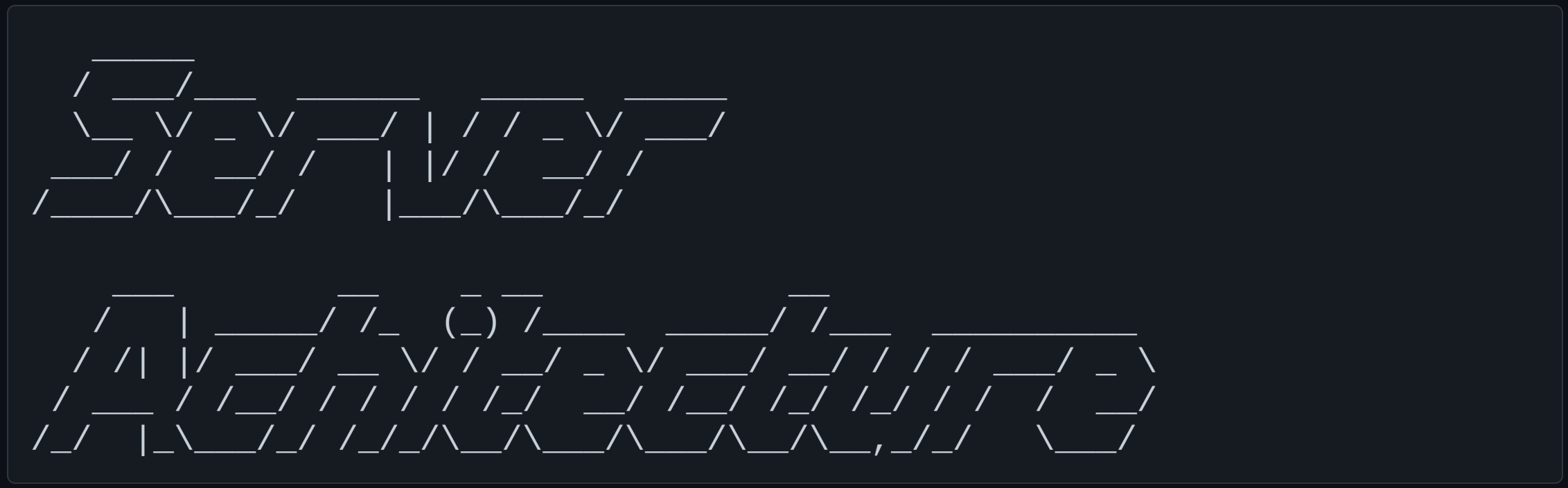


Cloud Server Infrastructure Management and Visualization

The required strategies for managing the resources efficiently

What is covered in the presentation?

- AWS Organization
  - Identity and Access Management (IAM)
  - Single Sign-On (SSO) with Google Workspace
- AWS Resources and Workloads
  - Applications
  - Data Processing
- Infrastructure Team Methodologies and Toolings
  - Graphical and Visualization Exchange
    - Slack
  - Documentation
    - Git Repository
    - Confluence

AWS Organization

The foundation of a well-managed infrastructure

Identity and Access Management (IAM)

Is a web service that helps you securely control access to AWS resources

Managing Organization Units (OUs)

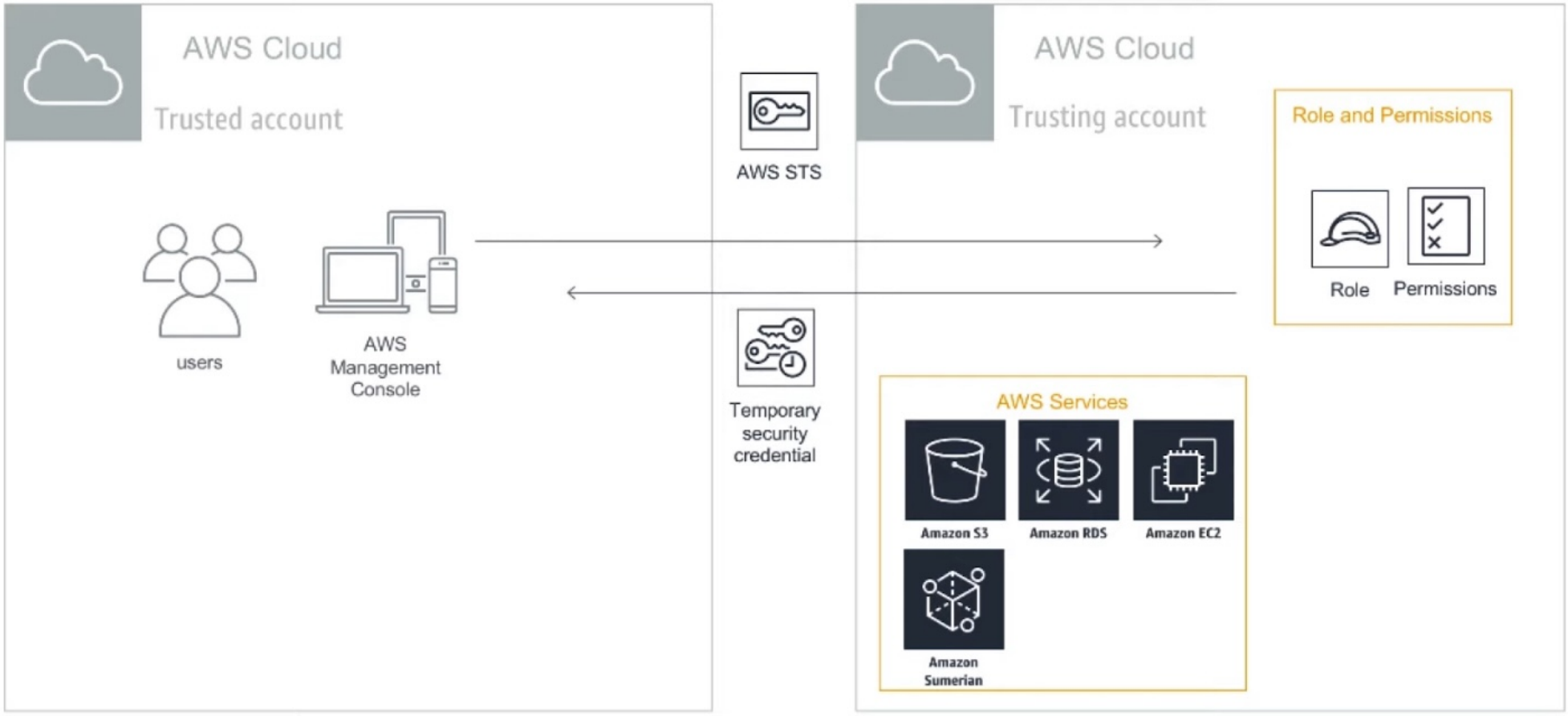
`Scenario 1`

```
Root OUs
├── Operations Management
├── Production
└── Development
```

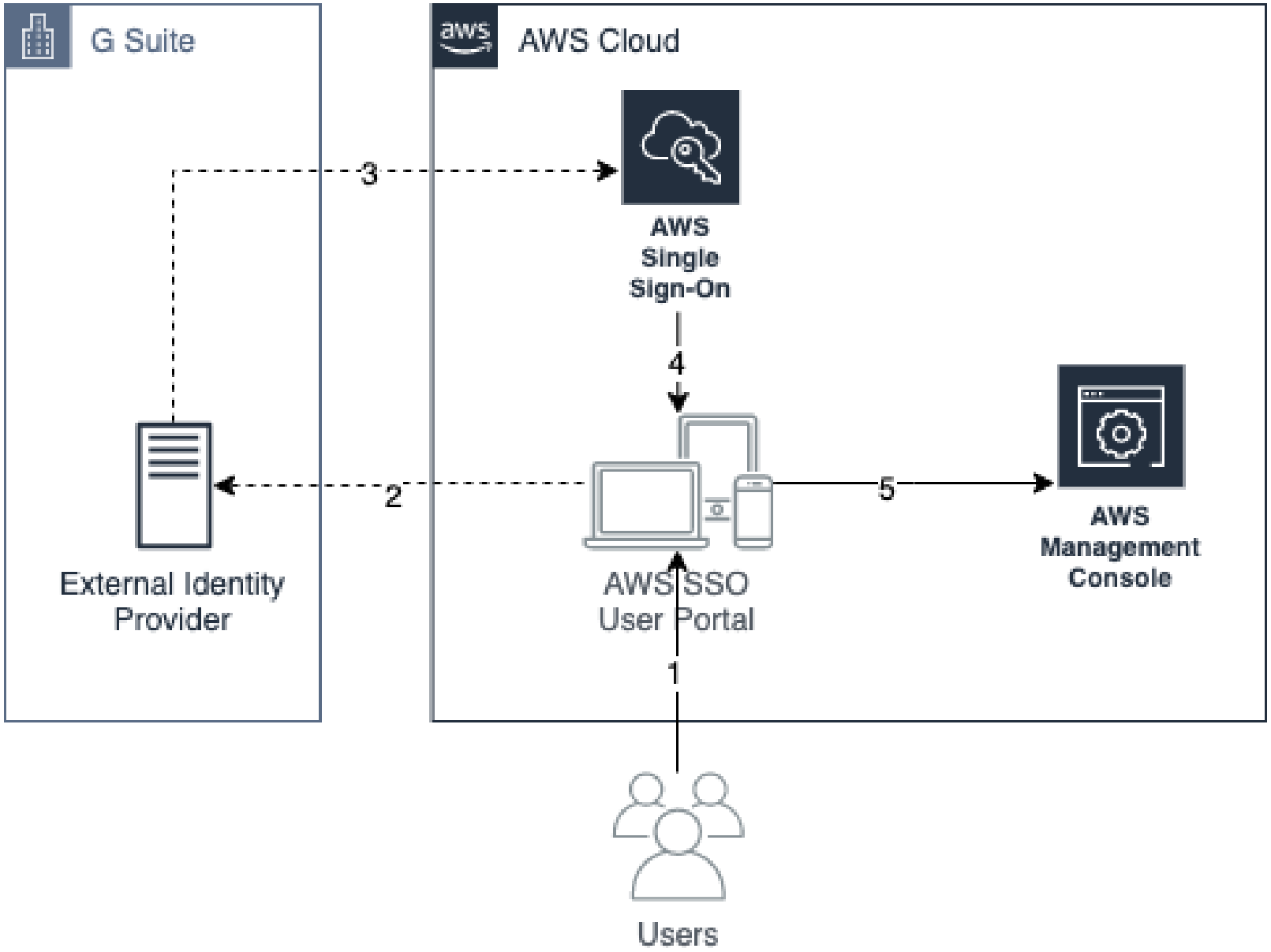
`Scenario 2`

```
Root OUs
├── Main OUs
│   └── Operations Management
├── Workloads OUs
│   ├── Production
│   └── Development
├── Business Intelligence OUs
│   └── Data Pipeline
└── Other Company Accounts OUs
    └── Data Source Account
```

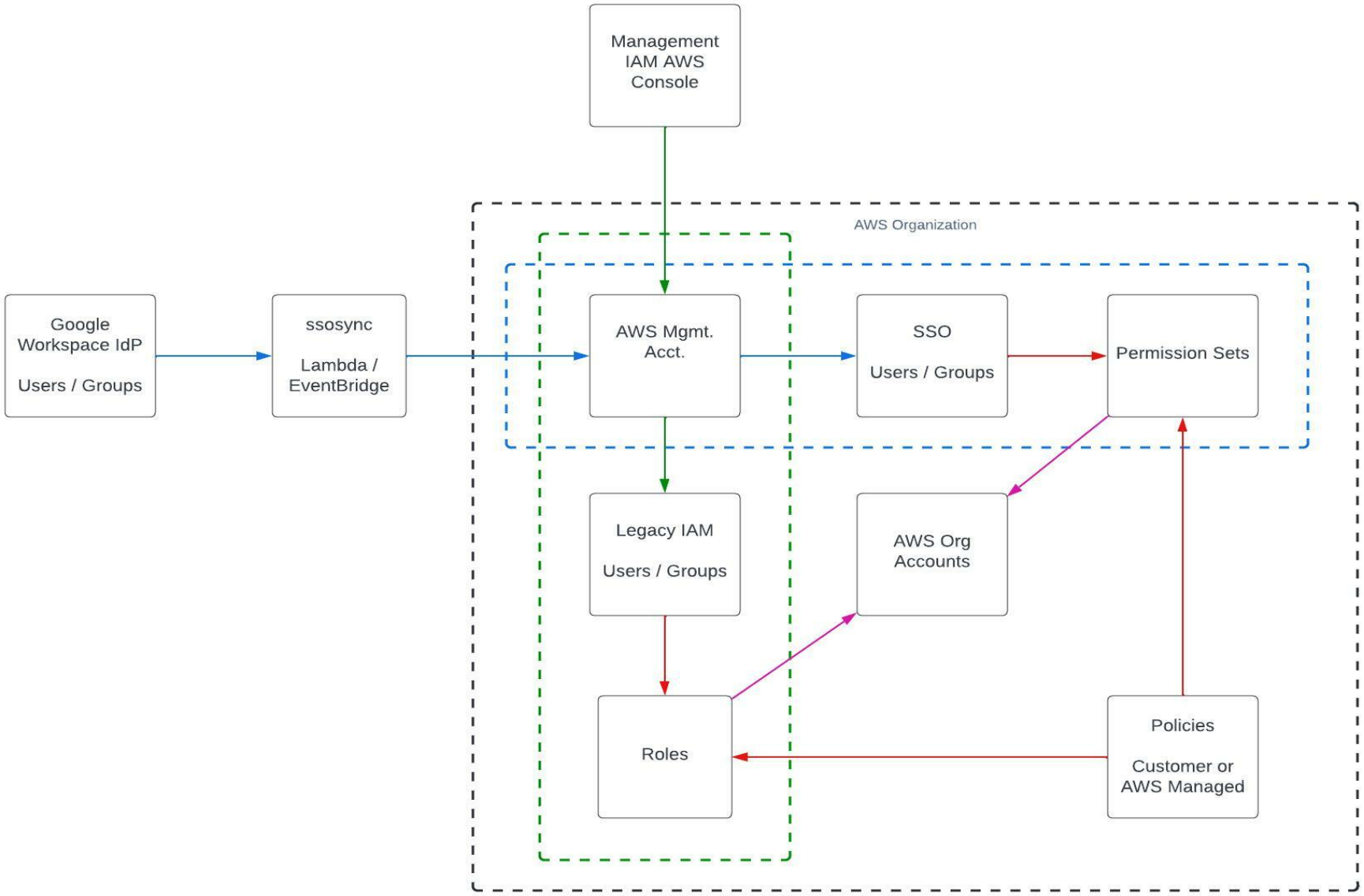
Assume Role Across Organization Units Account



Google Workspace as an external identity provider for AWS SSO



IAM and SSO in a Whole Picture

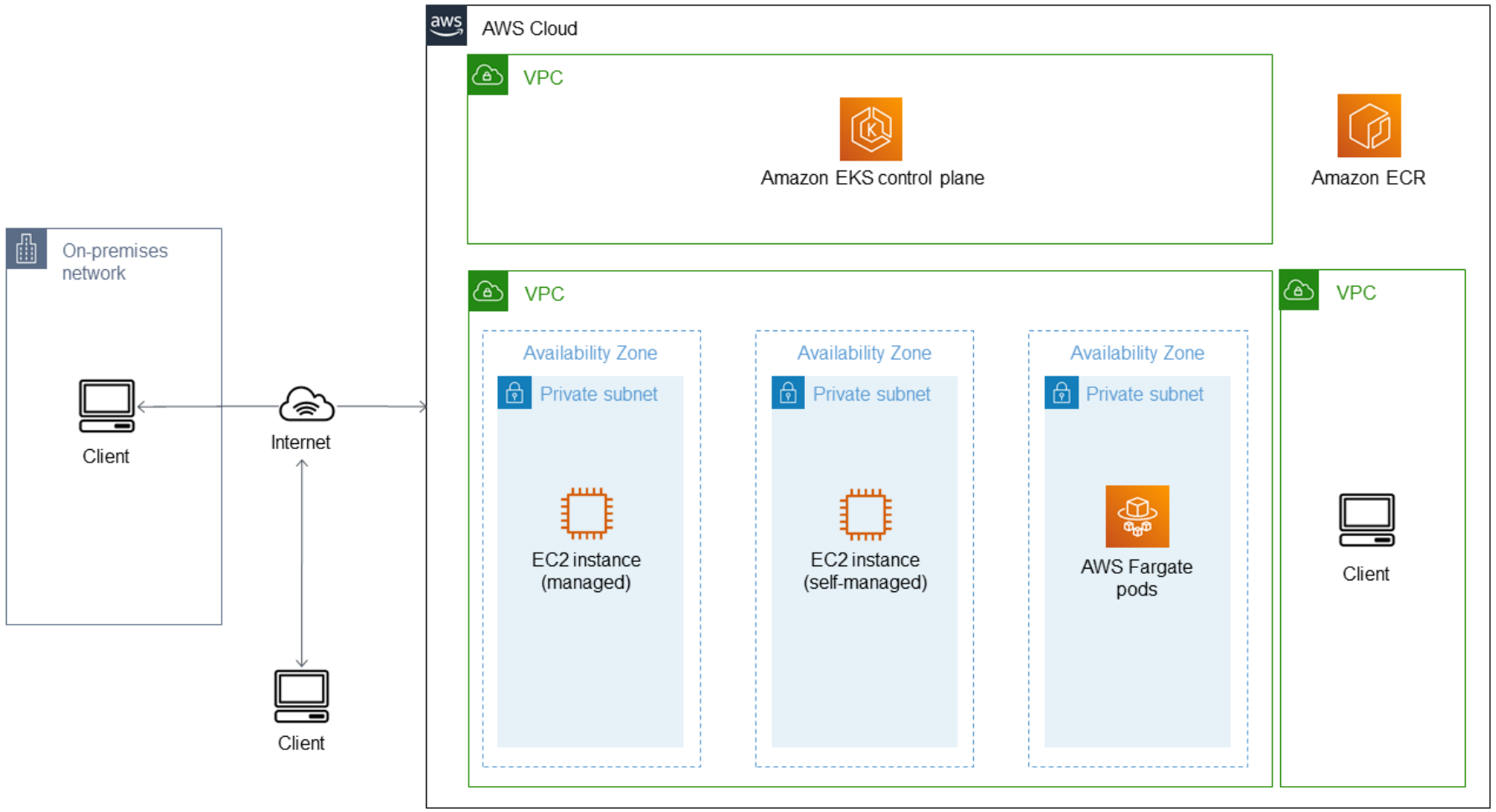


Orchestrated Services

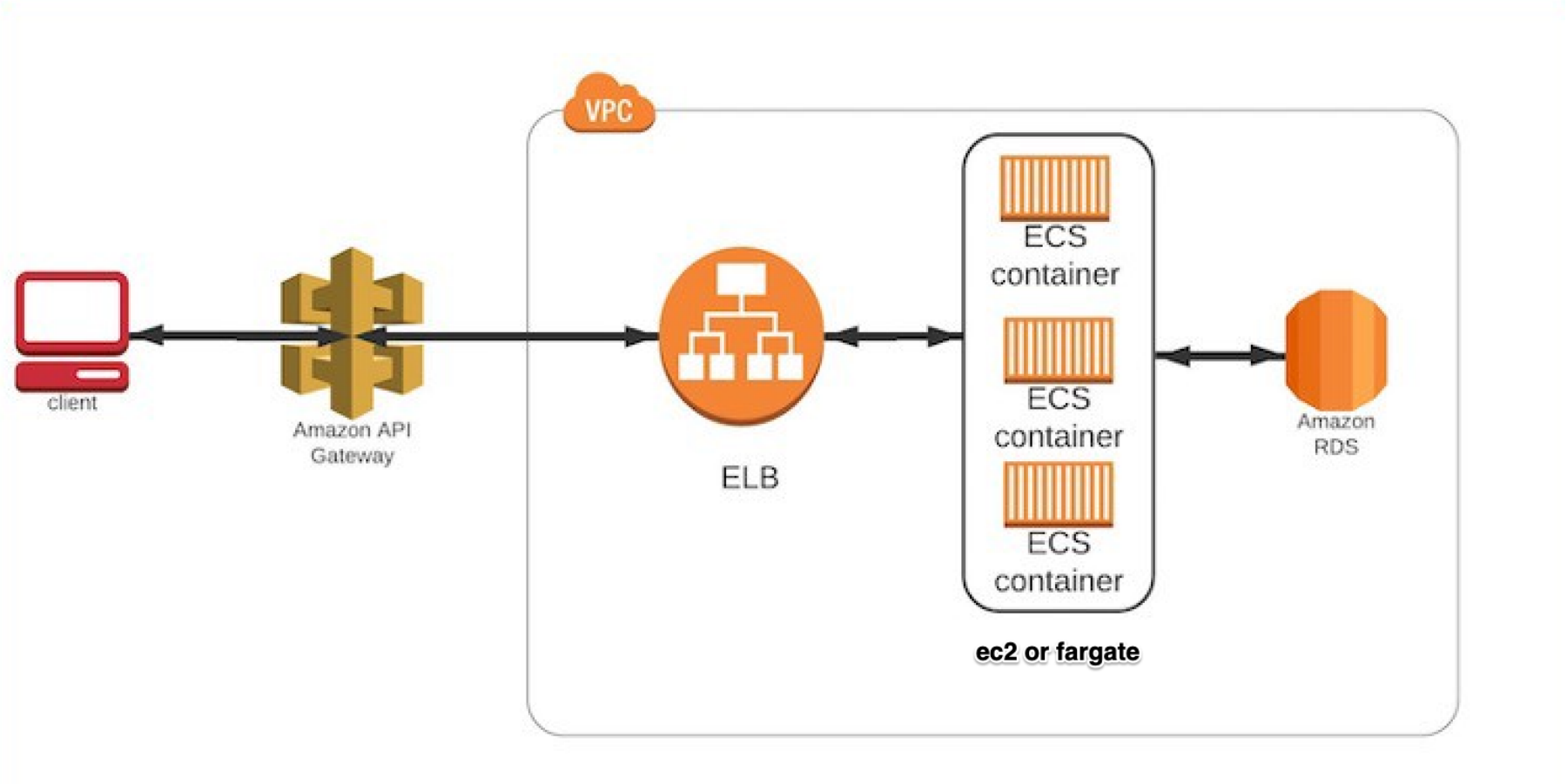
Amazon Kubernetes Service (Amazon EKS)

Amazon Elastic Container Service (Amazon ECS)

Amazon Kubernetes Service (Amazon EKS)



Amazon Elastic Container Service (Amazon ECS)



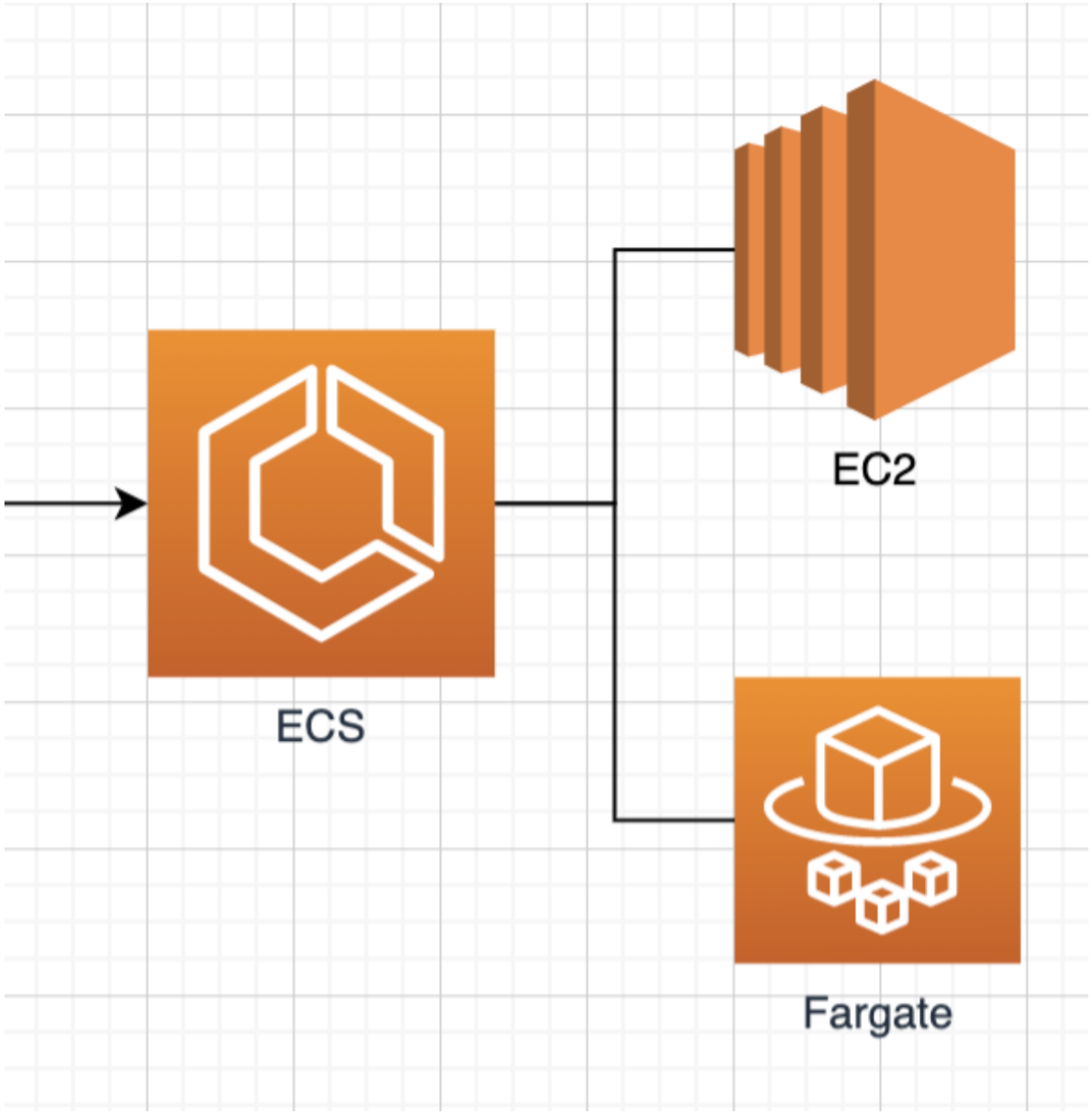
- EC2 Compute, or
- ECS/Fargate

Microservice and Serverless Architecture

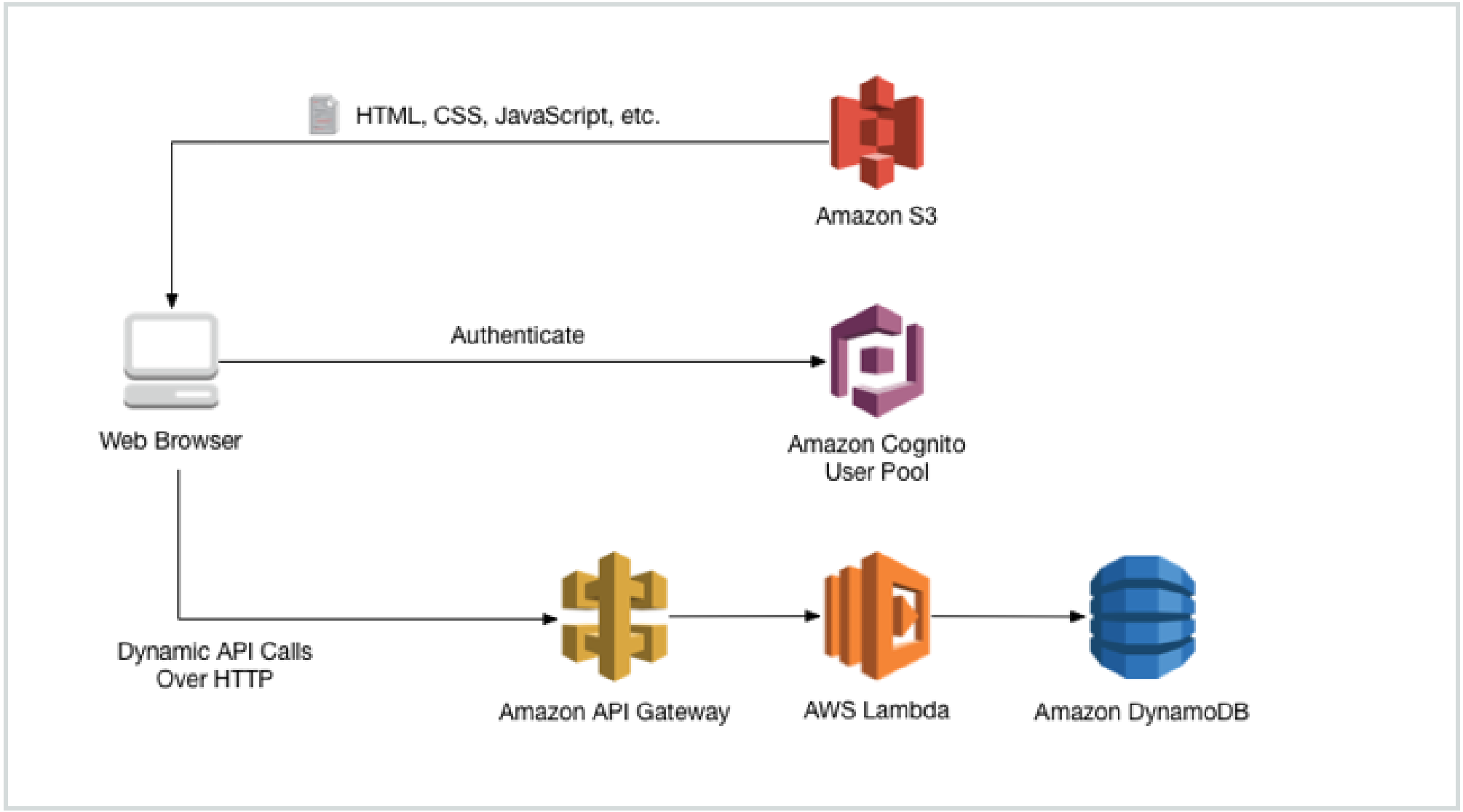
Amazon ECS/Fargate

Amazon Lambda

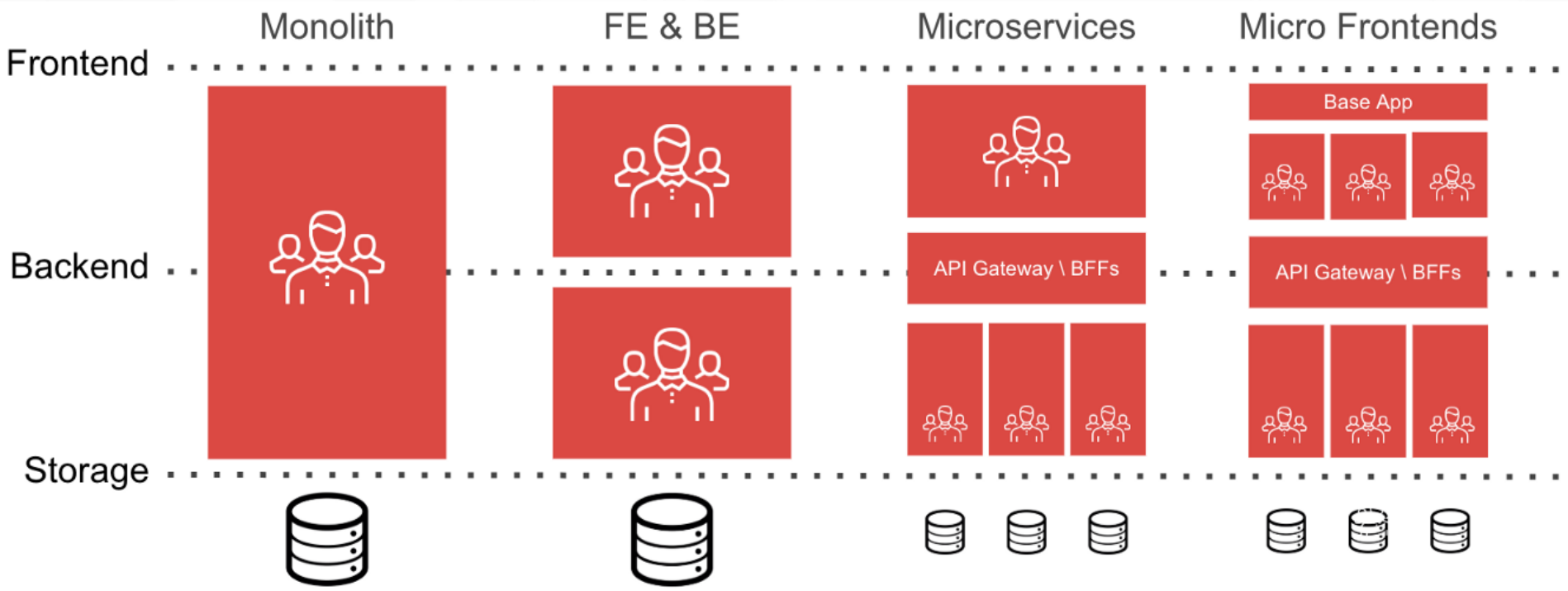
Amazon ECS/Fargate



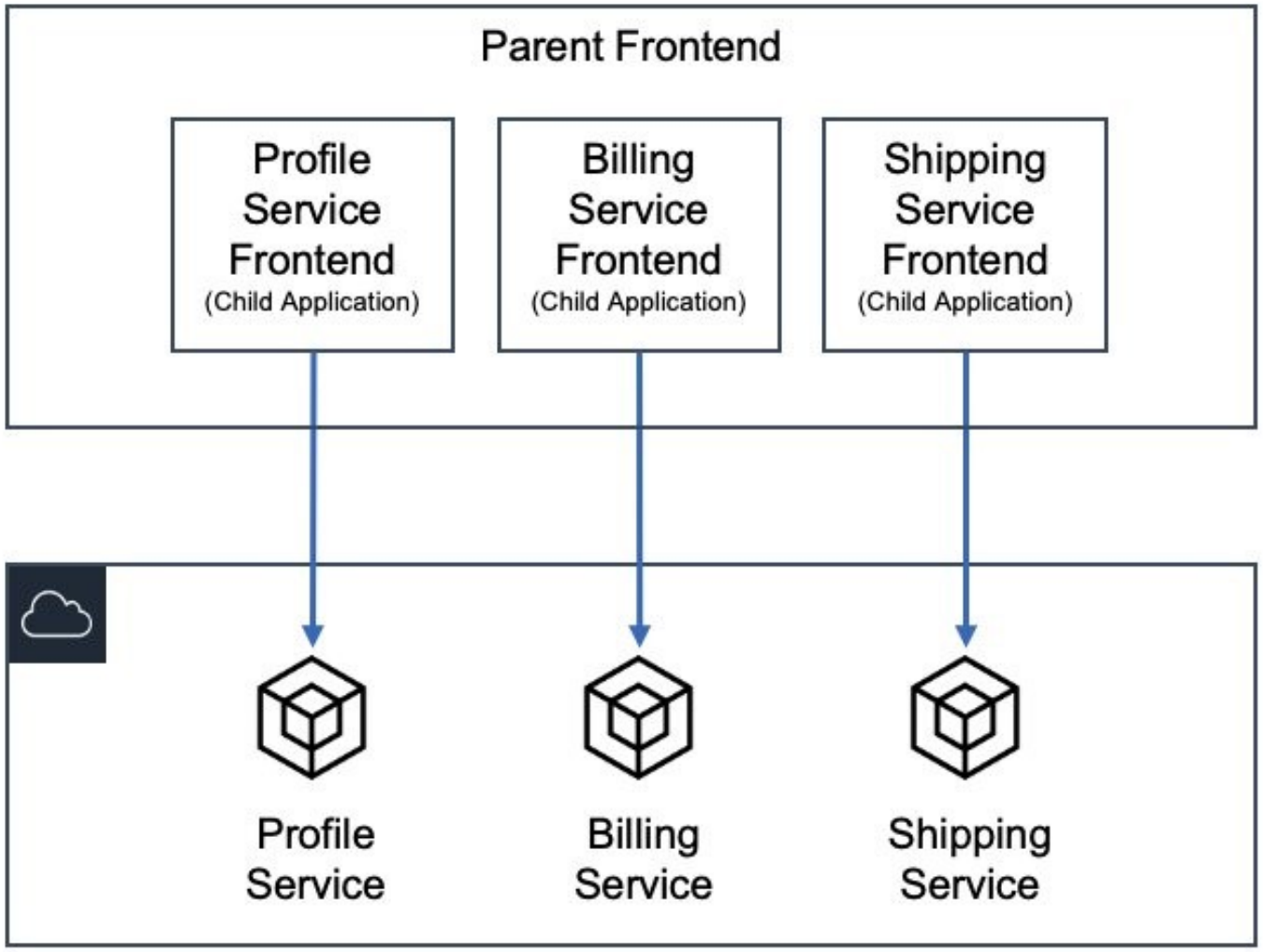
Amazon Lambda



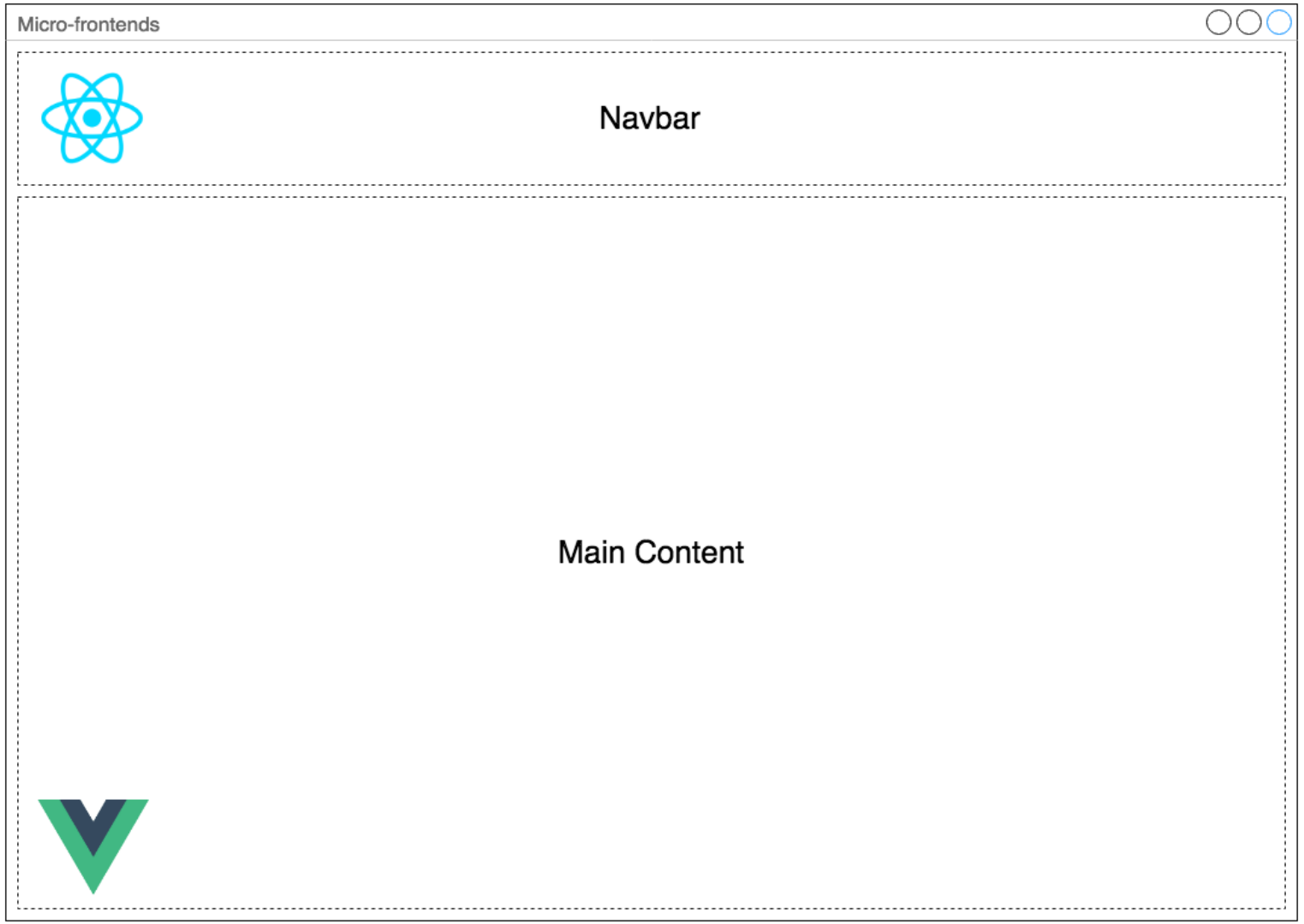
Evolution of Software Architecture



Example: Micro-Frontend Architecture



Example: Micro-Frontend UIs



Infrastructure Team Methodologies and Toolings

DEMO