

This guide demonstrates deploying a containerized Node.js application on AWS ECS Fargate using the AWS Management Console. The deployment follows a multi-tier architecture with an Application Load Balancer distributing traffic to Fargate tasks running in private subnets across two availability zones.

The infrastructure includes a custom VPC with public and private subnets, security groups implementing least-privilege access, and an automated CI/CD pipeline using GitHub Actions with OIDC authentication. Container images are stored in Amazon ECR, and application logs are centralized in CloudWatch Logs.