DevAx
connect

DevAx::connect Live will begin shortly

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AWS Fargate: Deploying Java Spring Boot Apps on Serverless Containers

with AWS CDK

Eng-Hwa Tan
Developer Specialist SA
https://www.linkedin.com/in/enghwa/
https://twitter.com/code4kopi

Live Streaming @ 27 March (Friday)
5:00 PM (GMT+7)

Intro & Agenda

- Who Am I?
  - AWS Developer Specialist
- AWS Developer Acceleration (DevAx)
  - Accelerate developers' learning and building apps on AWS
  - DevAx::connect LIVE
- **Tonight** Deploy a java Spring Boot Application (API) on AWS
  - Containerize!
  - No servers! No Instances!

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A Simple Note Taking API

REST API :

- Create a ”note” entry with “title” and “content”
- List all ”notes”

Local laptop development:

- Docker container -> java spring boot
- Docker container -> mysql

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A Simple Note Taking API – *to the cloud*

I want to deploy my containerized Spring boot app on AWS.

Requirements:

- Scalable containerize application without managing servers
- Auto Scaling of containers
- Centralized application logging
- Cloudwatch dashboard
- Secure, protect sensitive data eg: database password

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Base Infra and database – No Servers!

VPC
 - NAT gateway
- Subnets

Amazon ECS Fargate Cluster

Amazon RDS – MySQL Engine
        * Amazon Aurora Serverless

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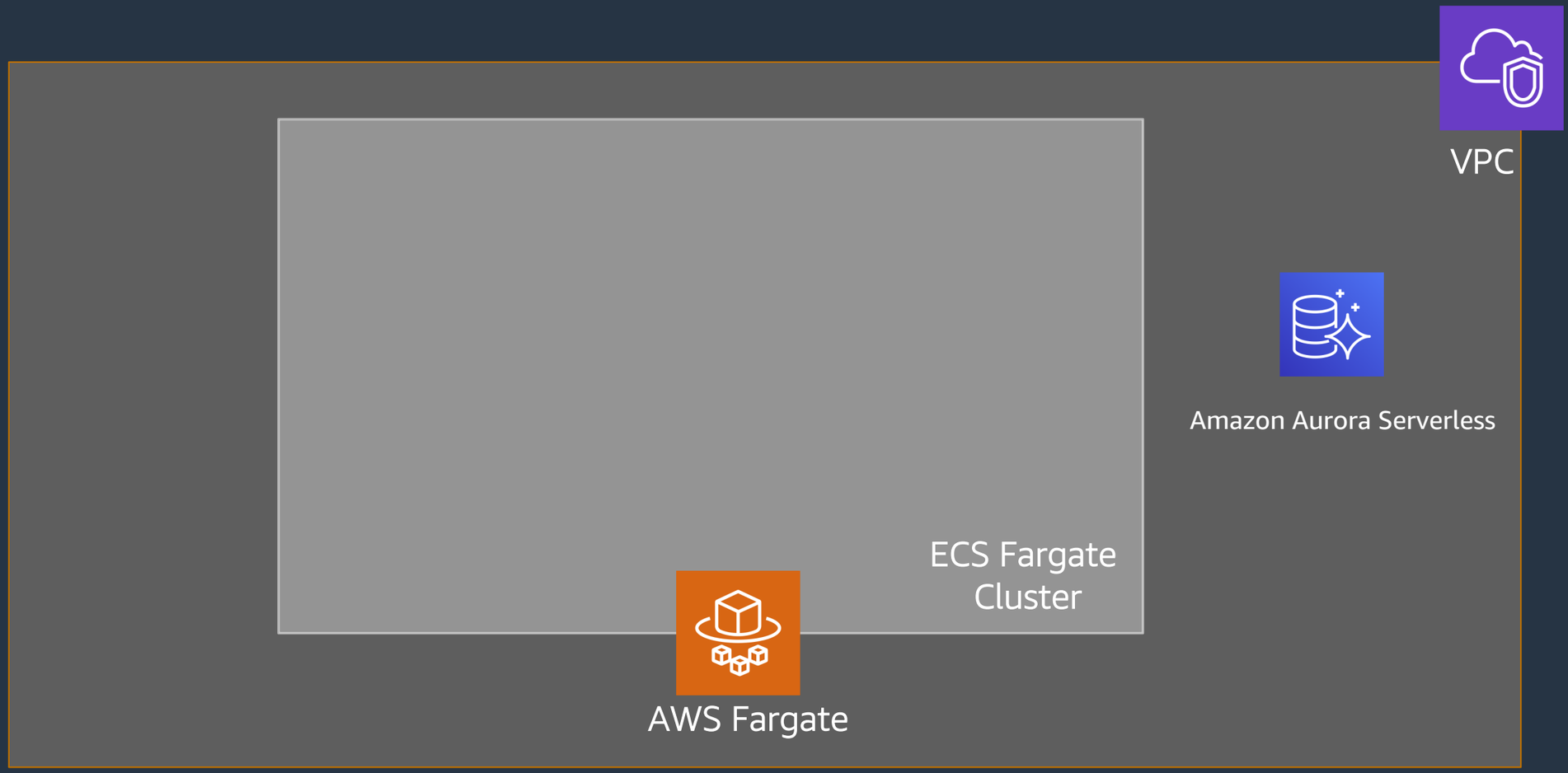
Spring boot with AWS Fargate – Base Infra



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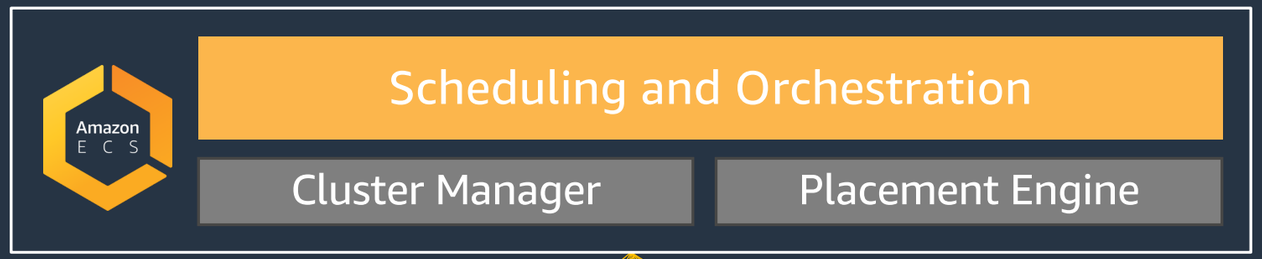
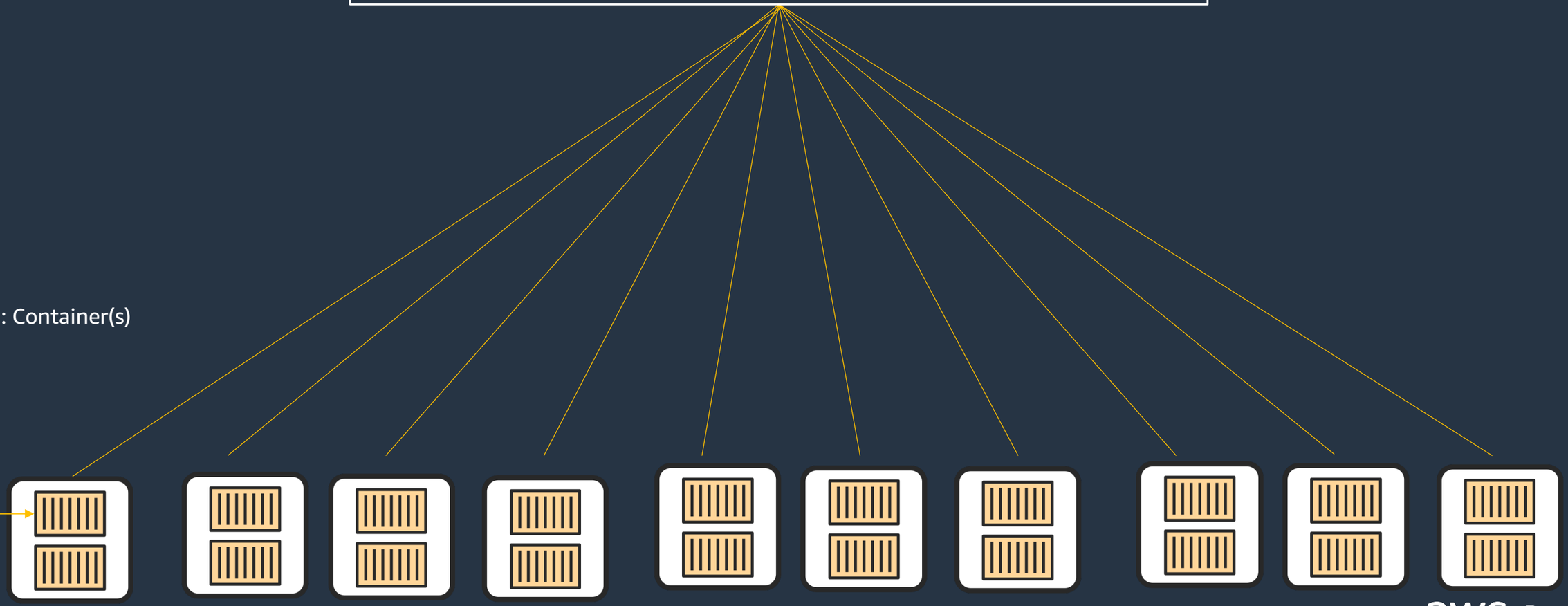
Amazon ECS – using EC2



Task : Container(s)



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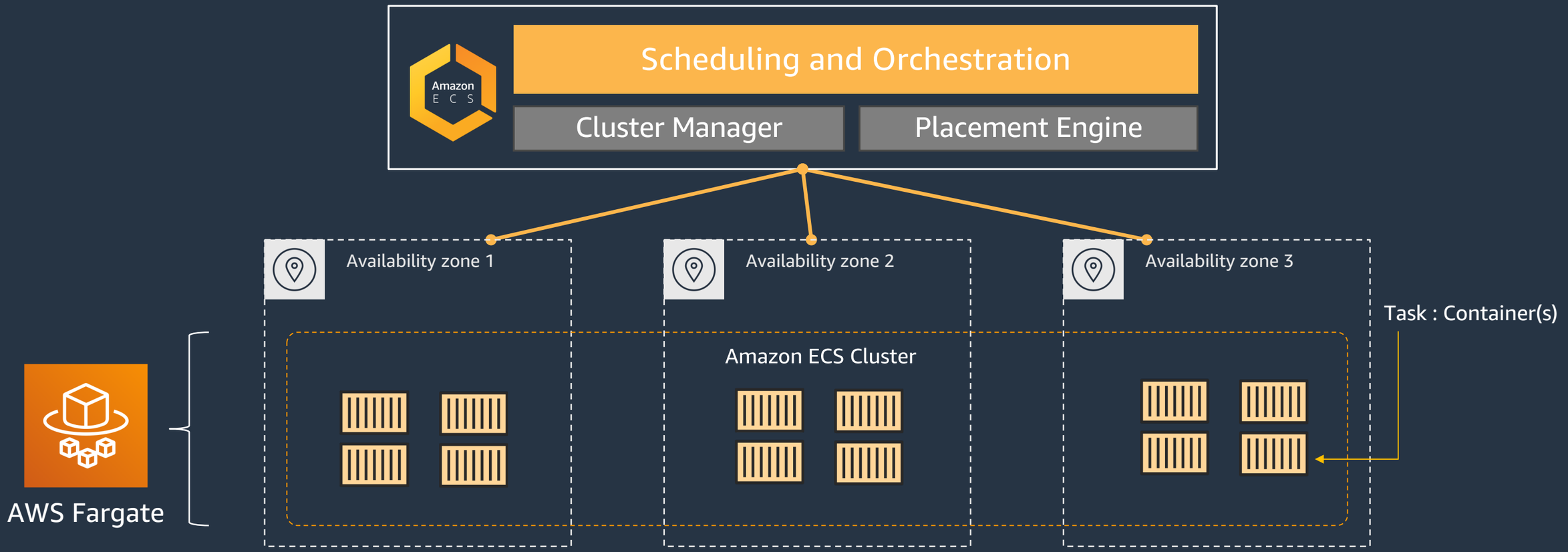
Amazon ECS – using AWS Fargate



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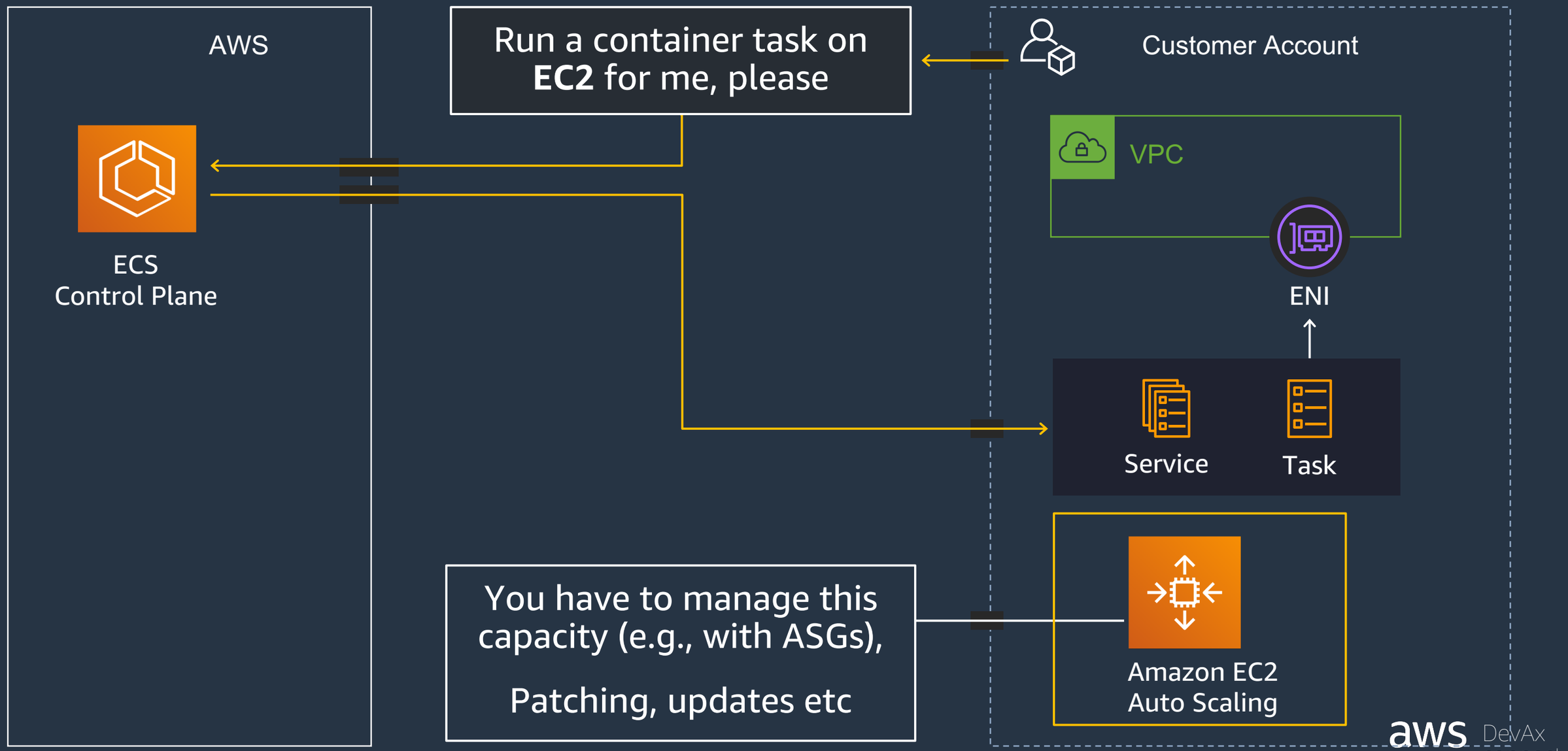
Amazon ECS with EC2 data plane



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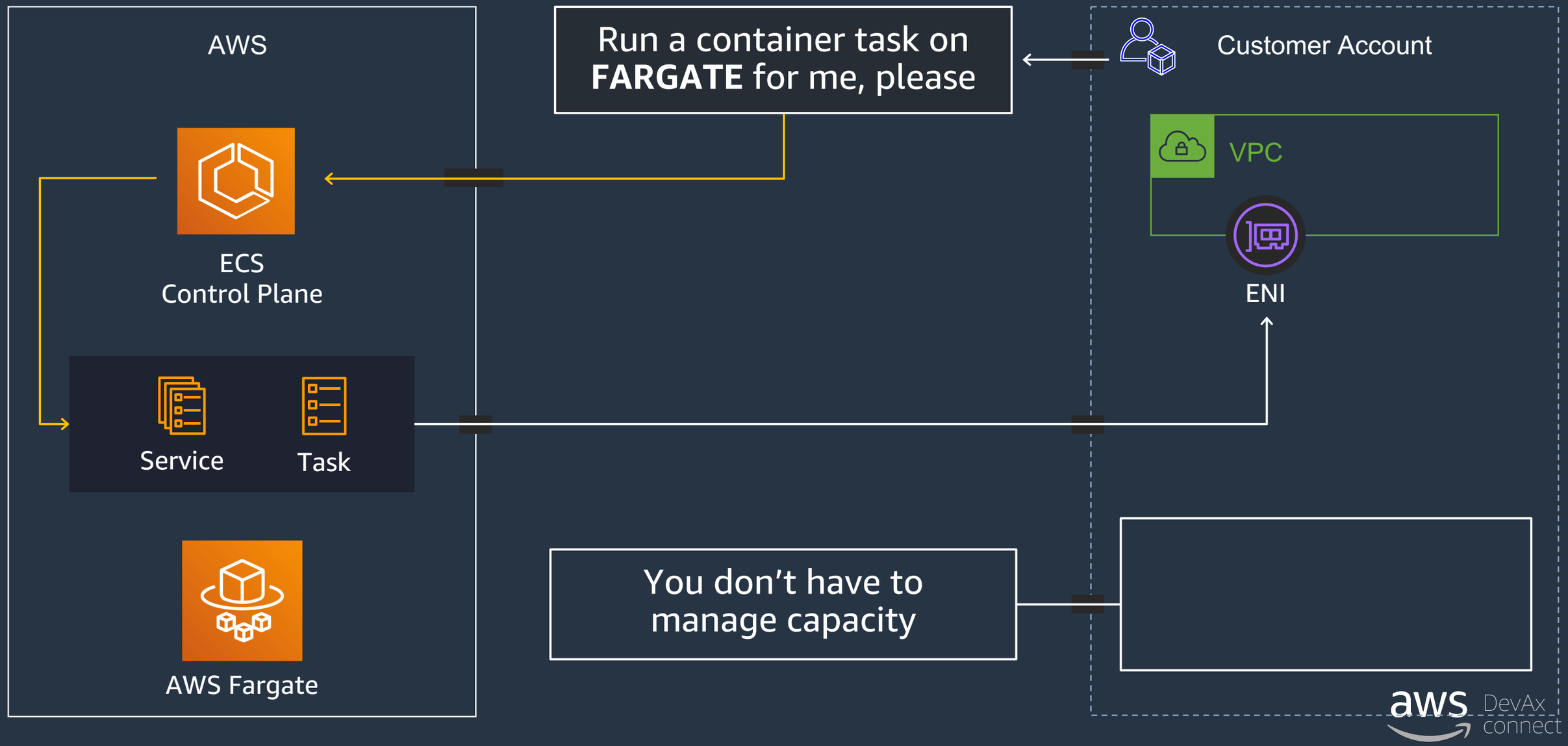
Amazon ECS with Fargate data plane



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Amazon Aurora Serverless

Fully Managed , no instances to manage

MySQL-compatible and **PostgreSQL**-compatible

No need to provision for peak

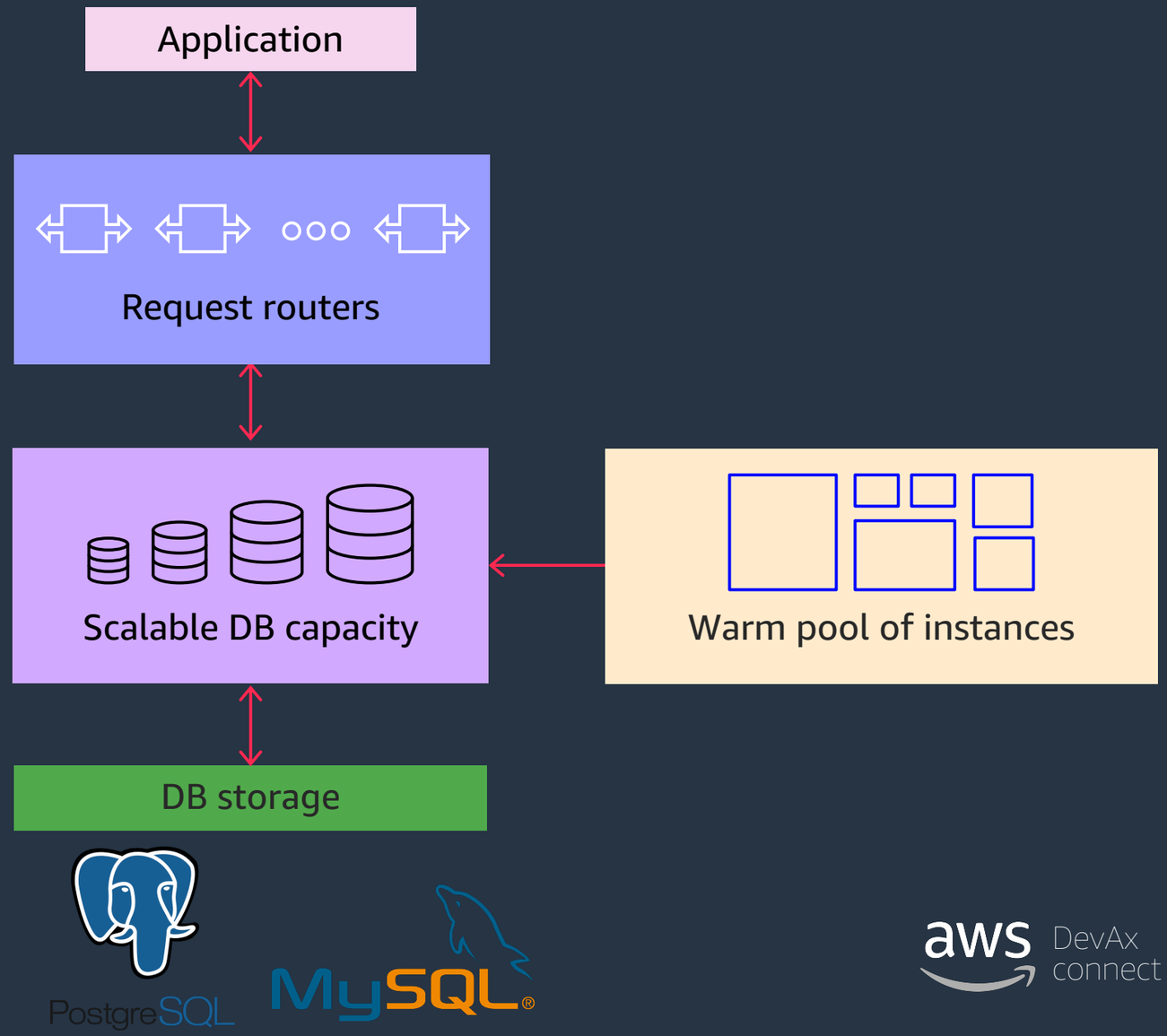
Starts up on demand;
shuts down when not in use

Scales up/down automatically

No application impact when scaling

Pay per second, one-minute minimum

Great for infrequently used,
unpredictable, or cyclical workloads



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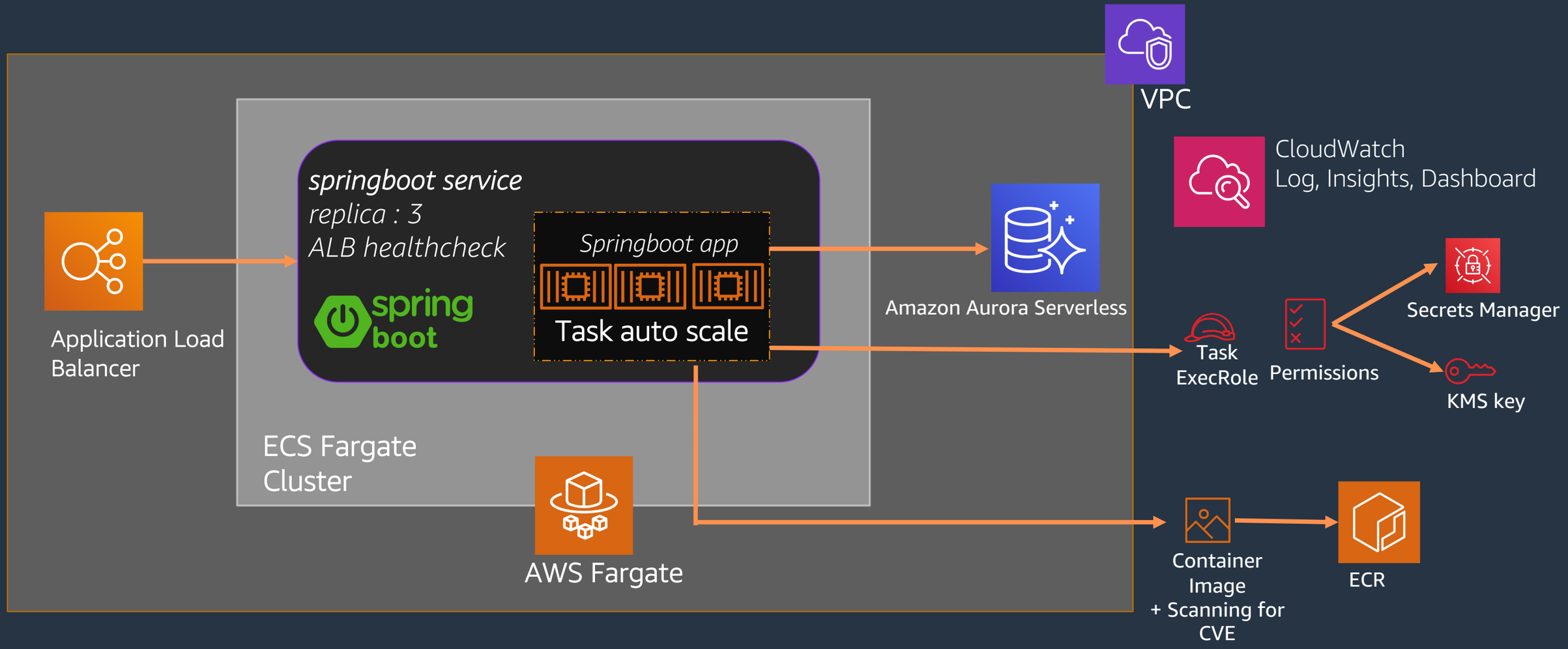
Spring boot Applications with AWS Fargate



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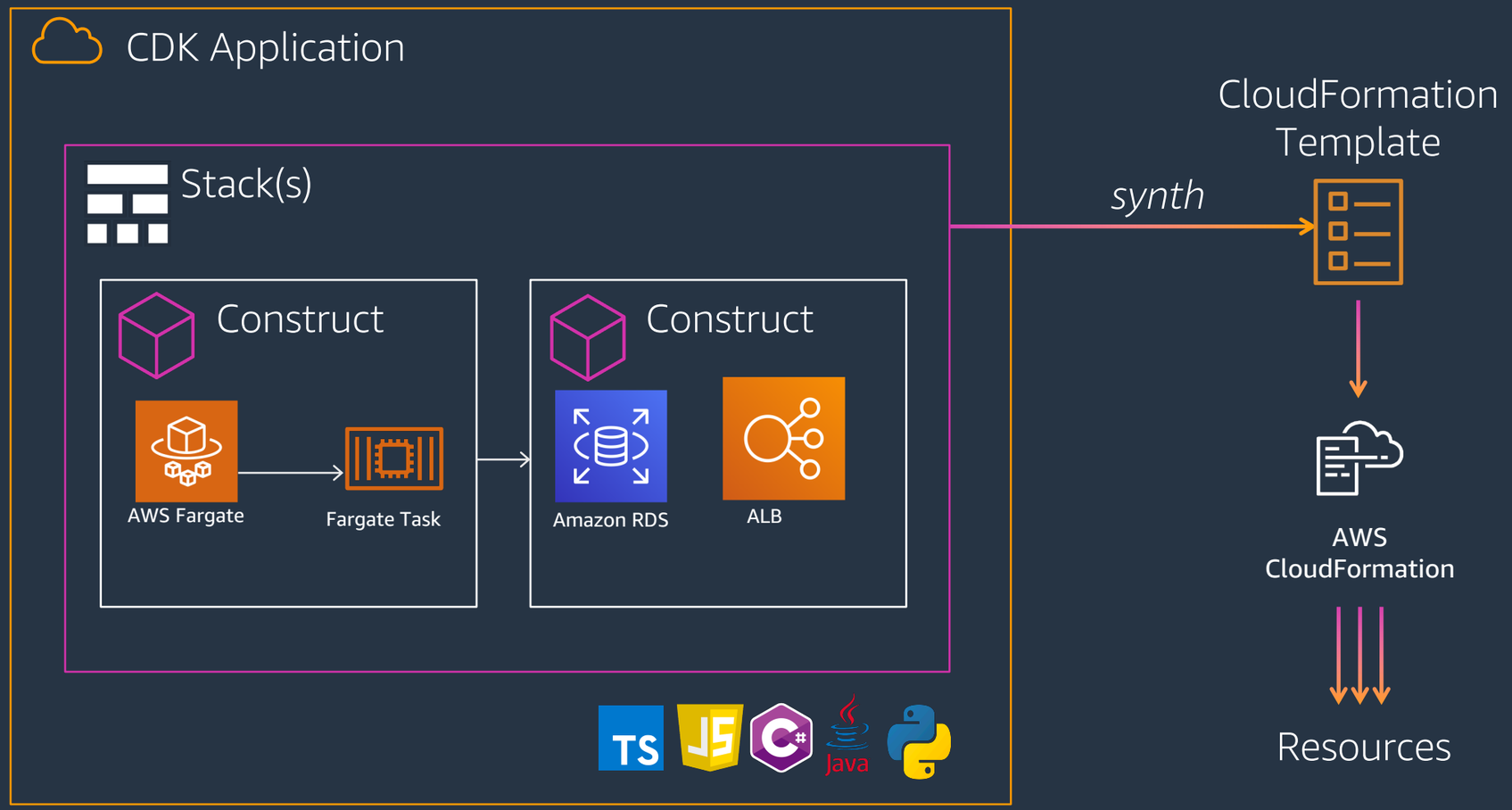
AWS Cloud Development Kit



Demo

https://github.com/enghwa/springboot-fargate-cdk

Thank you!

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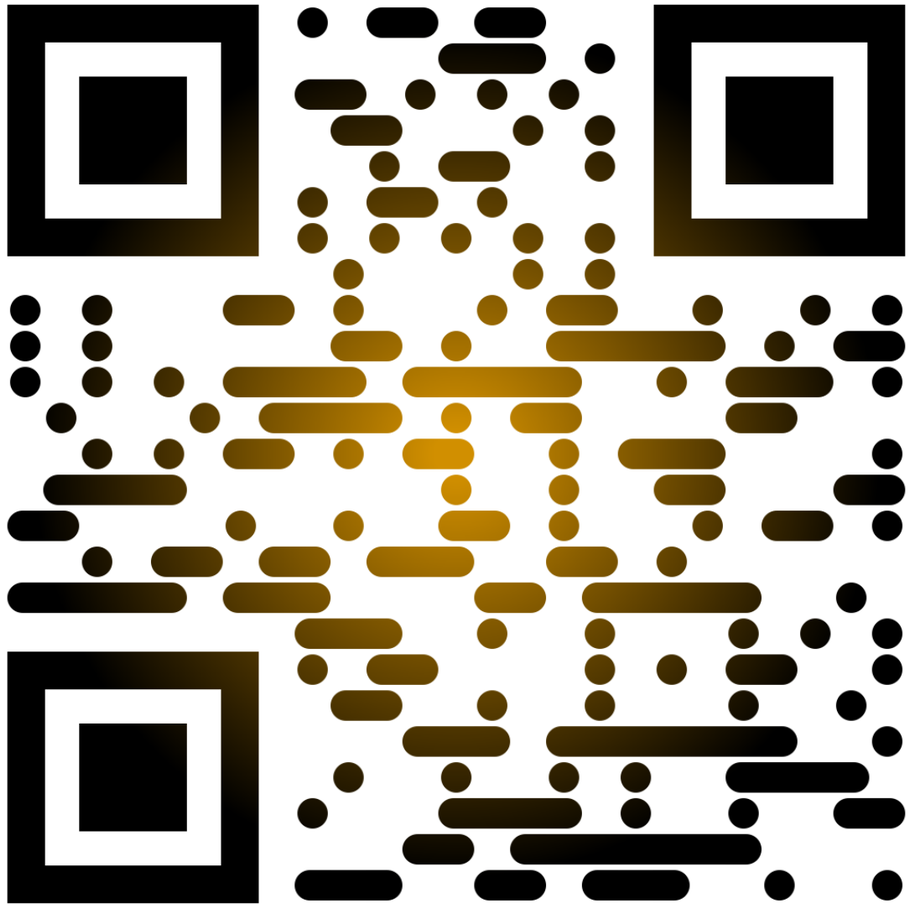

Feedback & Survey:

http://bit.ly/3d5gSAd

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