

# AWS re:Invent

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# Accelerate your application modernization with containers

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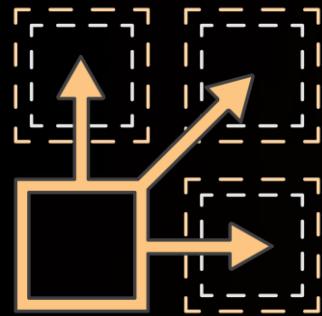
Sr. Specialist Solutions Architect  
Migration & Modernization  
AWS

# Today's agenda

- Modernization overview
- Containerization benefits and challenges
- AWS App2Container (A2C) overview
- Workshop

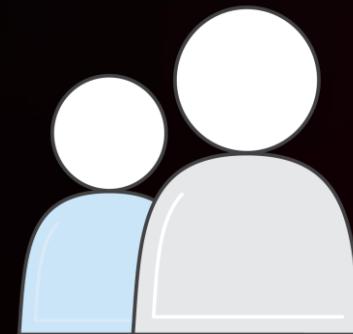
# Pillars of modernization

1



Technology and  
architecture  
Independent business  
functions

2



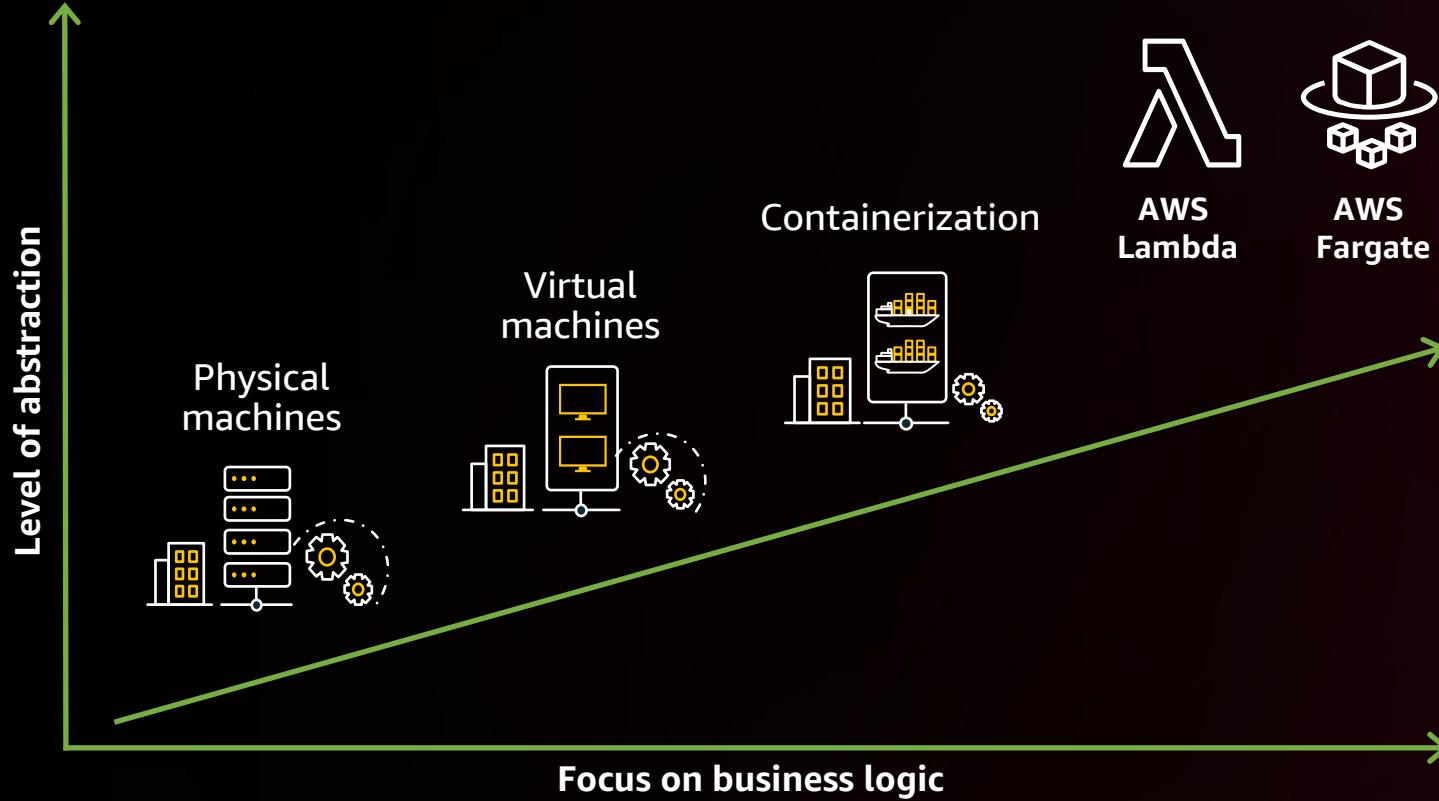
People, process,  
and culture  
Organized for value

3



Ops and governance  
at scale  
Automated, enabled,  
and self-service

# Why our customers adopt containerization



# Multiple steps for containerization



## Discover

Third-party libraries,  
dependencies,  
network dependencies



## Prepare

- Source code prep
- Examples
  - No passwords
  - No database connection strings



## Build

- Create Dockerfile
- Build and upload container image
- Create CI/CD processes



## Launch

- Create target infrastructure Amazon ECS/Amazon EKS
- VPC, security groups, Auto Scaling, load balancer
- AWS CloudFormation templates

# Challenges of containerization



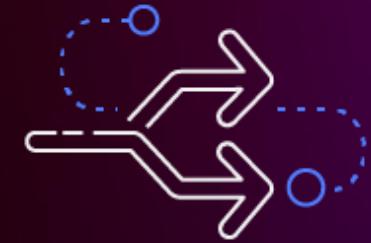
## Technology

Legacy OS,  
platform, applications,  
and architecture



## Staff

Busy day-to-day,  
lower priority



## Operations

Change in deployment,  
development and  
support model

# AWS App2Container (A2C) – What is it?



Command line tool

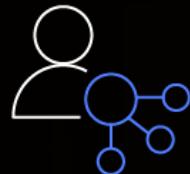
Java  
.NET



Containerization  
with minimal effort



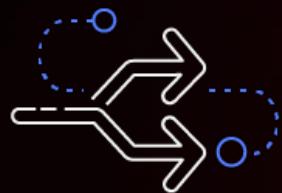
Doesn't need  
source code



Portable

 On-premises

 AWS



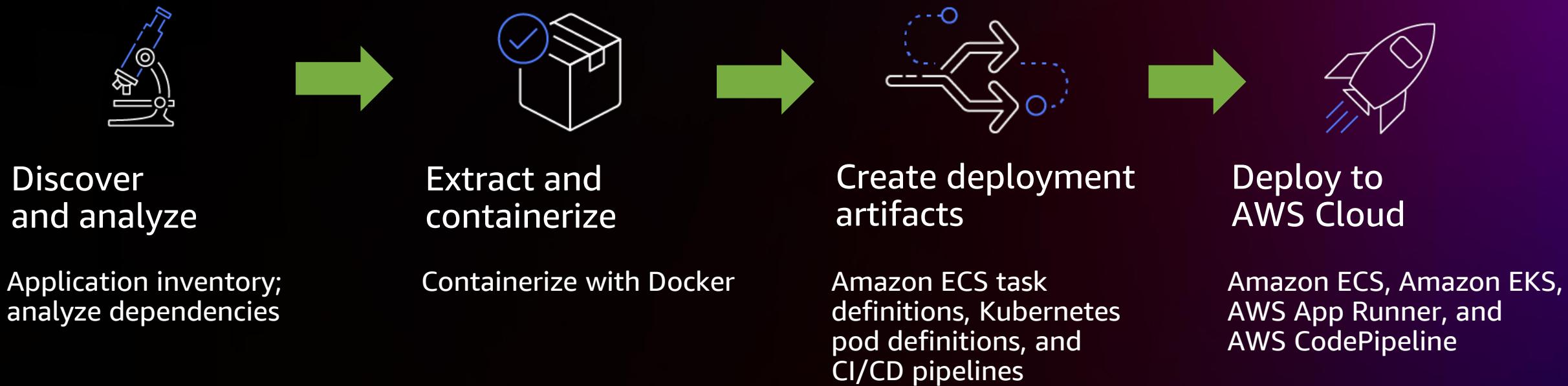
Containerization  
at scale

Standard steps for all apps



AWS  
deployment  
best practices

# AWS App2Container – How does it work?



# Layers of observability in containers

## Full-stack visibility

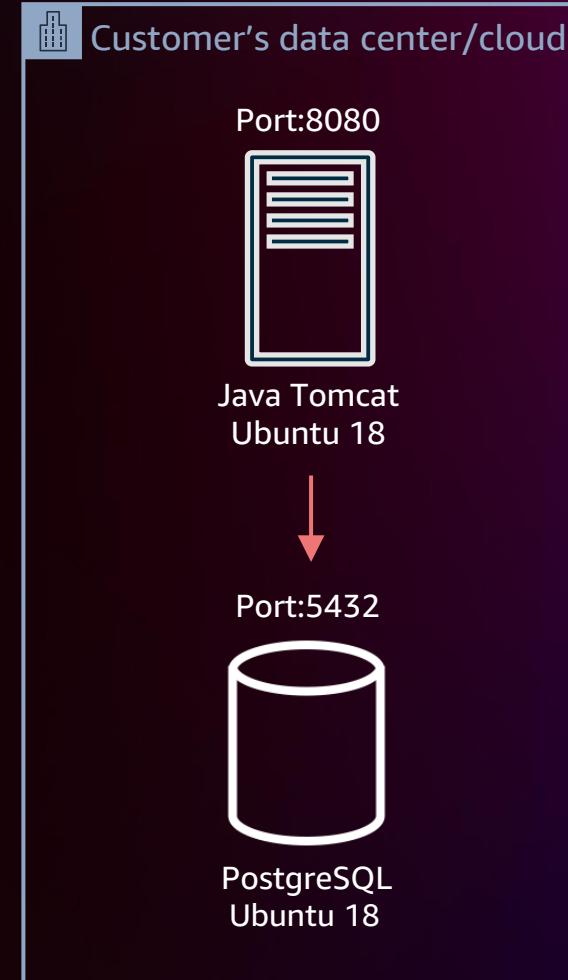
**Application level:** Each service, between services

**Container service level:** Services, tasks, pods

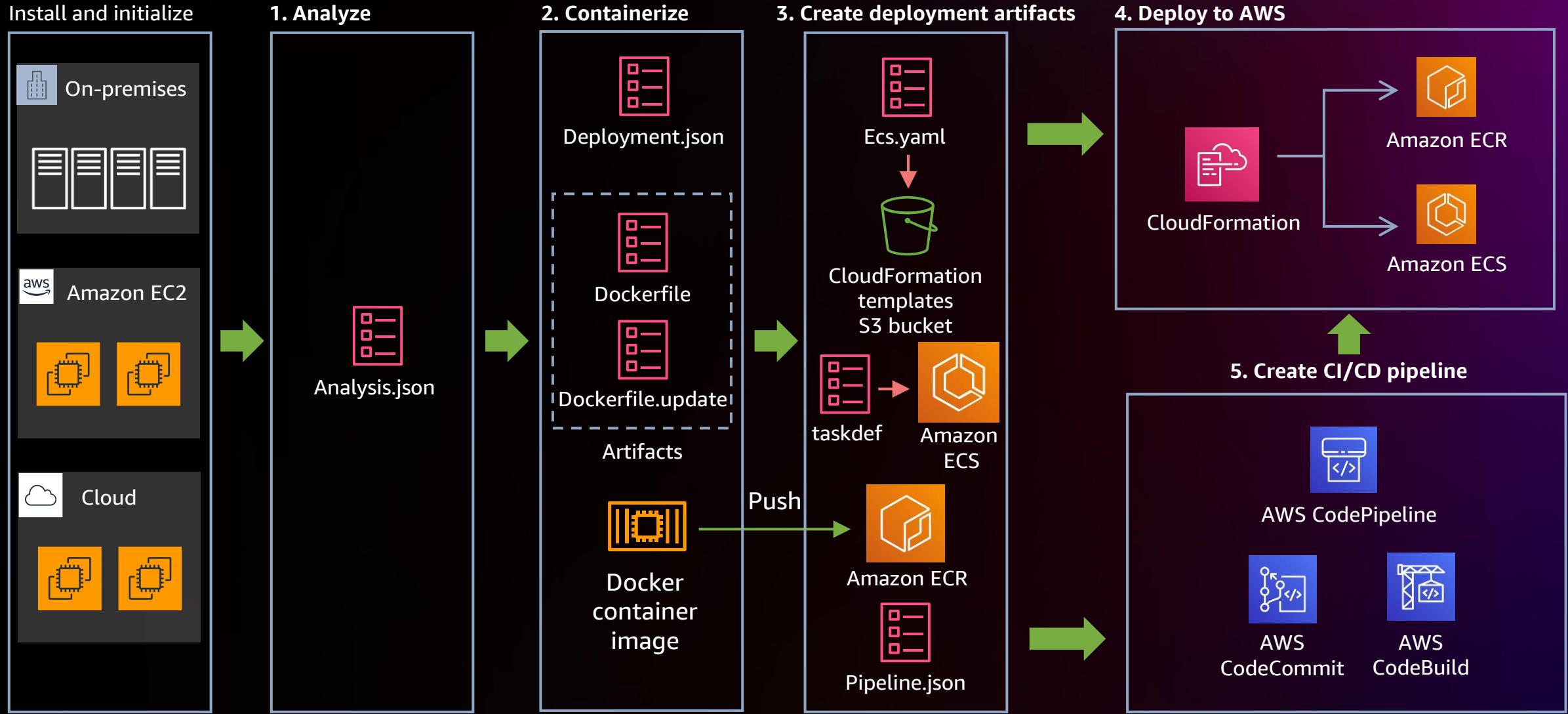
**Compute service level:** Clusters, instances

# Meet your Java application

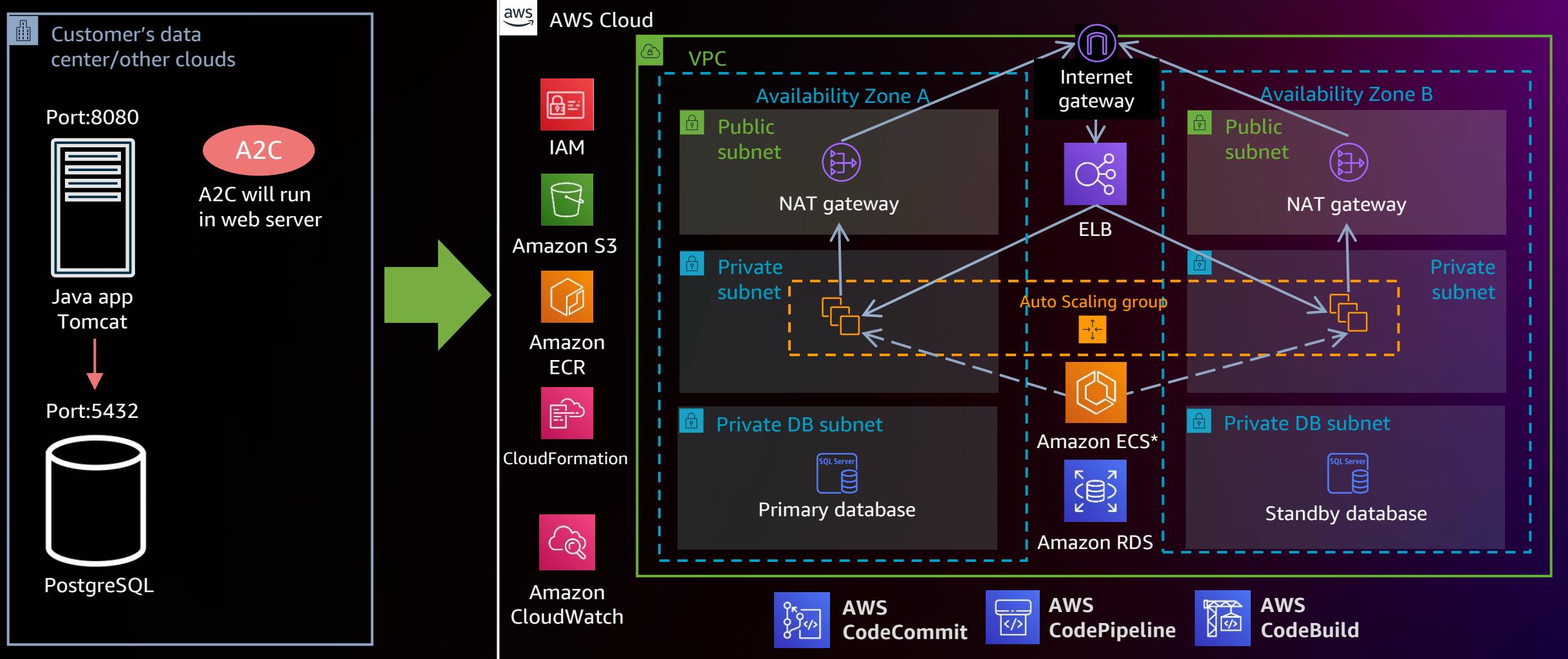
- Developed years ago; no proper documentation
- There is no CI/CD pipeline today
- You are not comfortable with containerization and AWS deployment best practices
- You have questions about how to make changes after containerization
- You don't have time



# Replatforming with A2C



# Java app target architecture



\*Deployment target will be similar for Amazon ECS, Amazon EKS, or AWS App Runner

# How you can accelerate your journey



Jump-start  
containerization



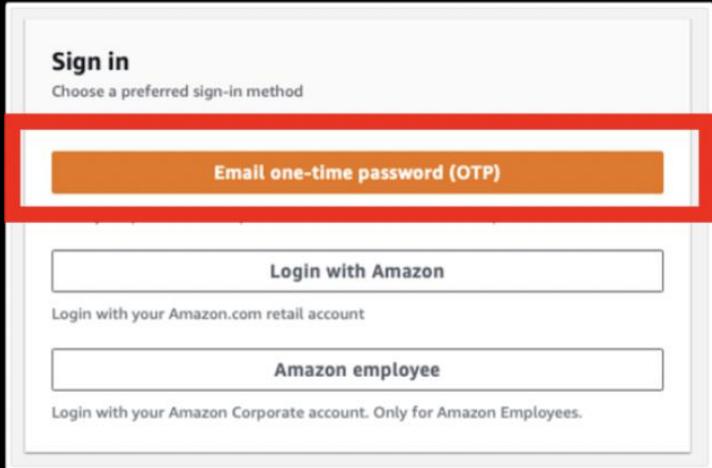
Adopt DevOps  
principles with CI/CD



Operational excellence  
through observability

# Let's get started: <https://s12d.com/ENT314>

## 1. Email one-time password



Sign in  
Choose a preferred sign-in method

Email one-time password (OTP)

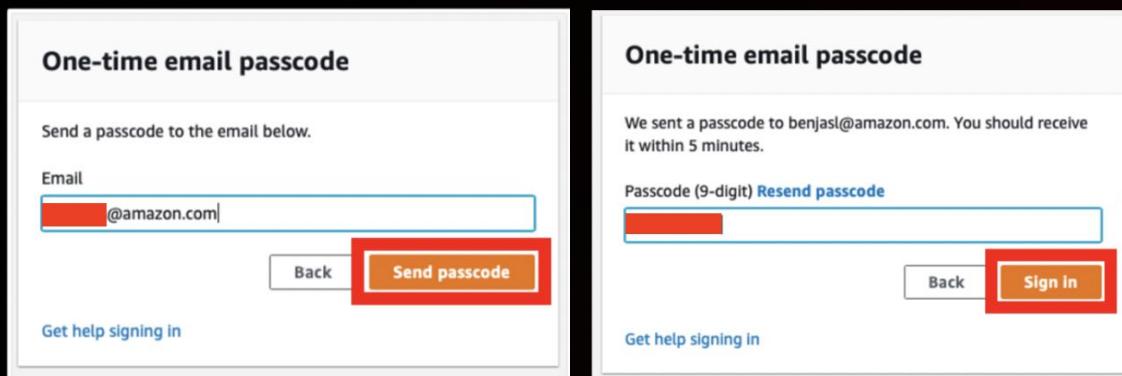
Login with Amazon

Login with your Amazon.com retail account

Amazon employee

Login with your Amazon Corporate account. Only for Amazon Employees.

## 2. Enter email and wait for passcode



One-time email passcode

Send a passcode to the email below.

Email

Back **Send passcode**

Get help signing in

One-time email passcode

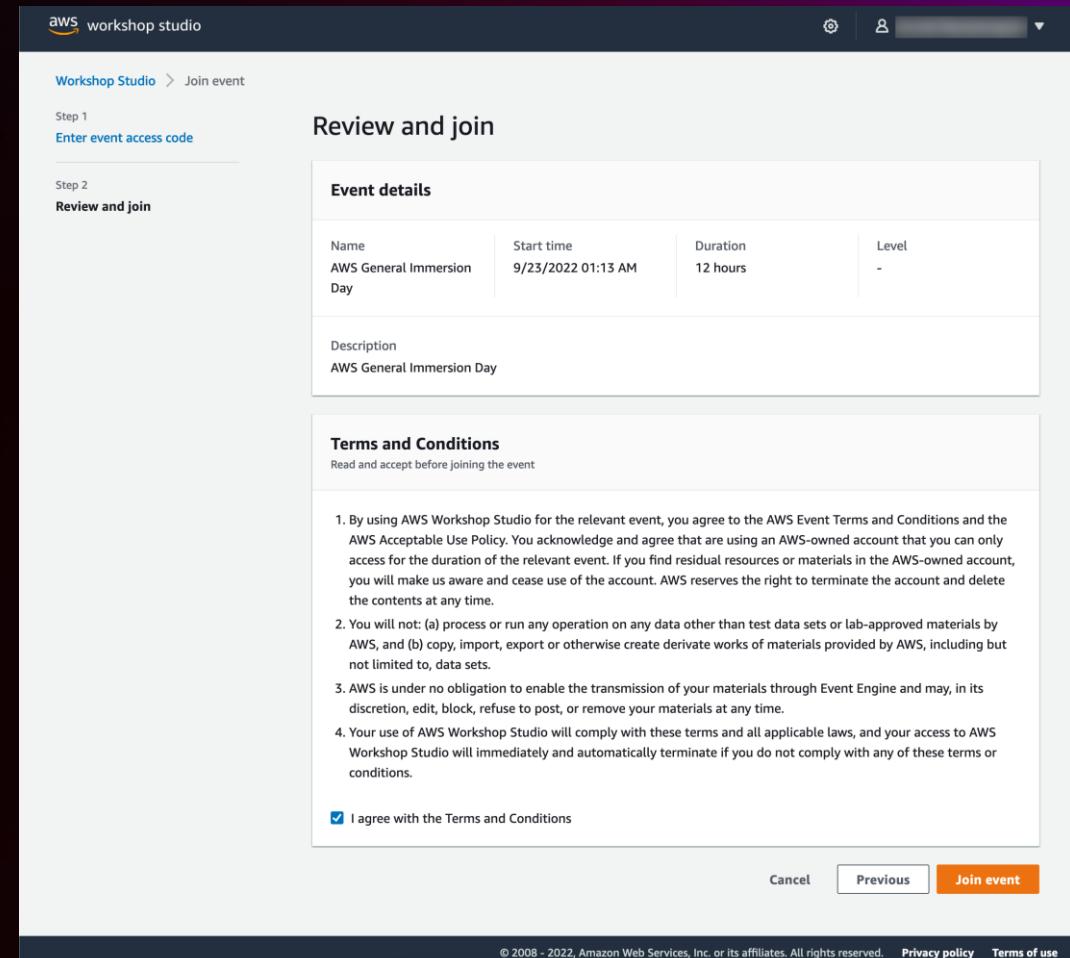
We sent a passcode to benjasl@amazon.com. You should receive it within 5 minutes.

Passcode (9-digit) **Resend passcode**

Back **Sign in**

Get help signing in

## 3. Review terms and join event



aws workshop studio

Workshop Studio > Join event

Step 1 Enter event access code

Step 2 Review and join

**Review and join**

**Event details**

Name	Start time	Duration	Level
AWS General Immersion Day	9/23/2022 01:13 AM	12 hours	-

Description  
AWS General Immersion Day

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# Thank you!

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