AWS re:Invent

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ENT303

Modernize your applications using AWS App2Container

Semih Duru

Specialist Solutions Architect Migration & Modernization
AWS

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Today’s agenda

- Containerization journey
- AWS App2Container overview
- Workshop architecture and flow

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Why our customers adopt containerization?



Agility

Develop and deploy faster to achieve business goals



Portable

Portable, scalable, and isolated application deployment



Efficiency

Reduce IT operational overhead, and achieve optimized computing infrastructure

aws

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Multi-steps for containerization



Discover

Third-party libraries, dependencies, network dependencies . . .



Prepare

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



Build

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



Launch

- Create target infrastructure ECS/EKS
- VPC, security groups, auto scaling, load balancer . . .
- AWS CloudFormation templates

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Challenges of containerization



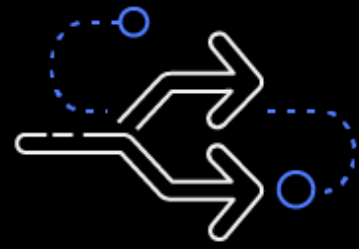
Technology

Legacy OS, platform, applications, and architecture



Staff

Lack of expertise, busy day-to-day, lower priority



Operations

Change in deployment, development and support model

aws

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AWS App2Container – What is it?



Command line tool

Java
.NET



Containerization with minimal efforts



Doesn’t need source code



Portable

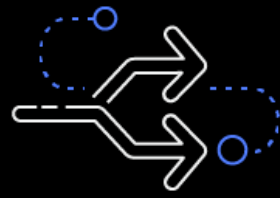
On-premises

AWS



Containerization at scale

Standard steps for all apps



AWS deployment best practices

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AWS App2Container – How does it work?



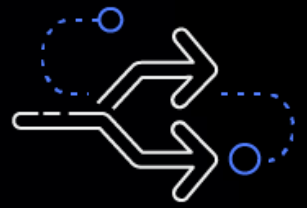
Discover and analyze

Application inventory; analyze dependencies



Extract and containerize

Containerize with Docker



Create deployment artifacts

ECS task definitions, Kubernetes pod definitions, and CI/CD pipelines



Deploy to AWS Cloud

Amazon ECS, Amazon EKS, AWS App Runner, and AWS CodePipeline

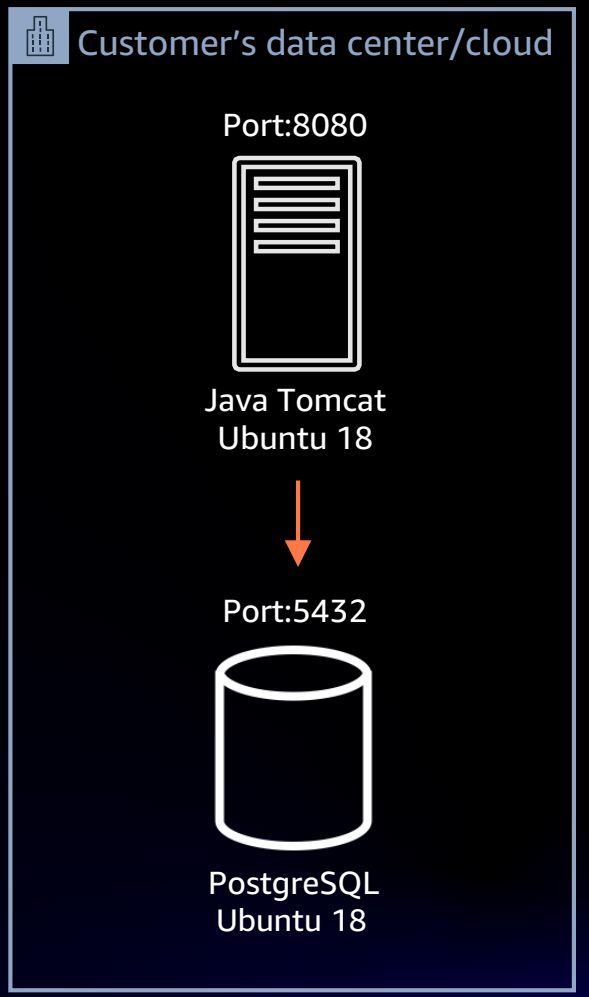
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Workshop architecture and flow

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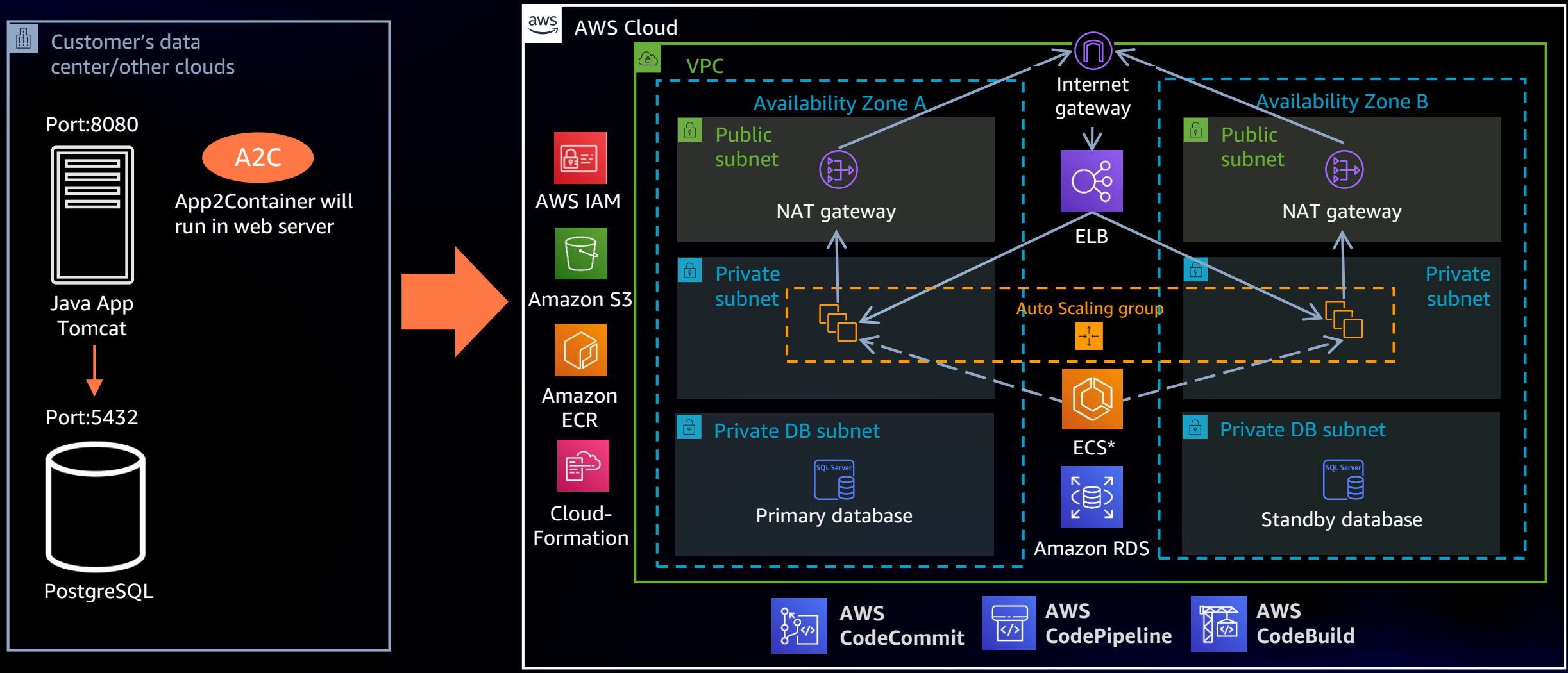
Meet your Java application

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



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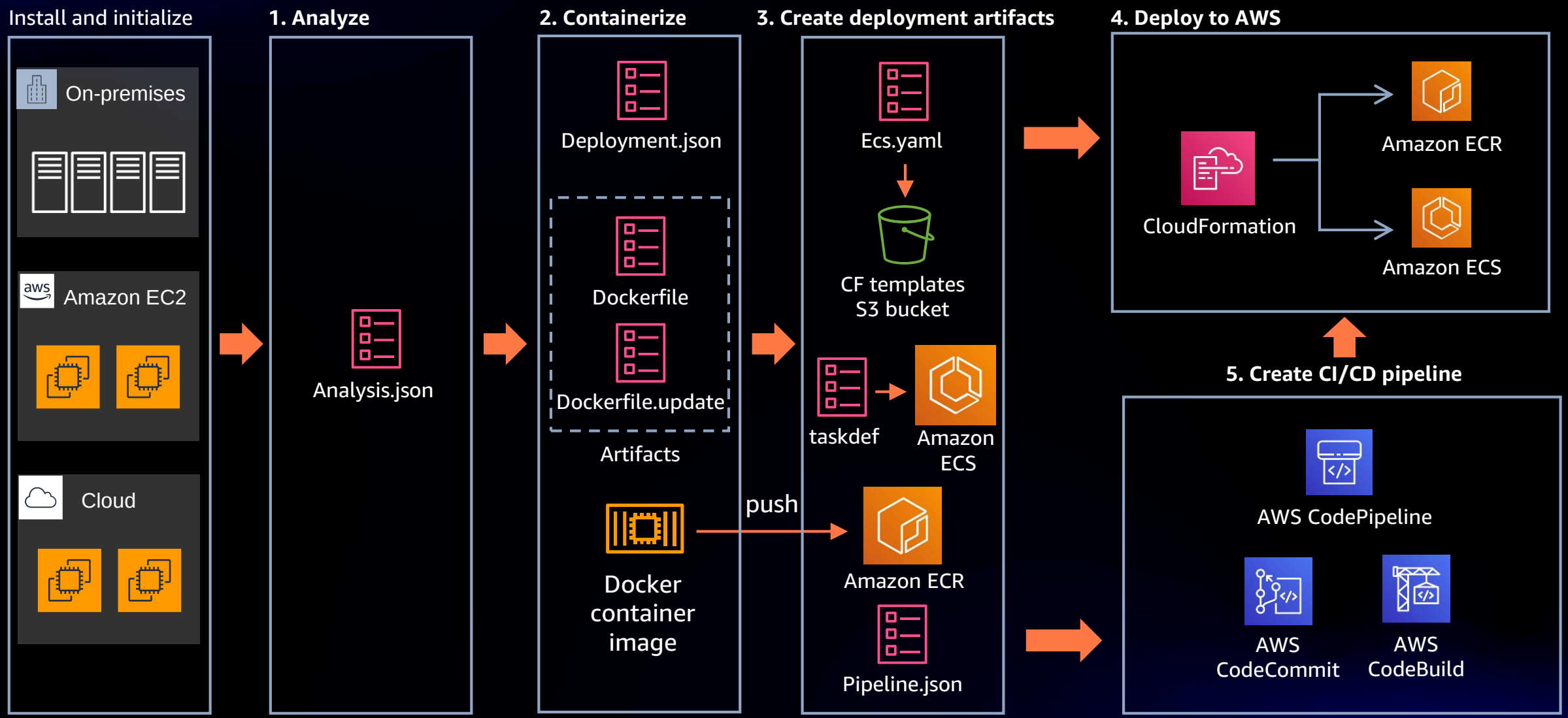
Java app target architecture



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

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Replatforming with App2Container



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Getting started workshop

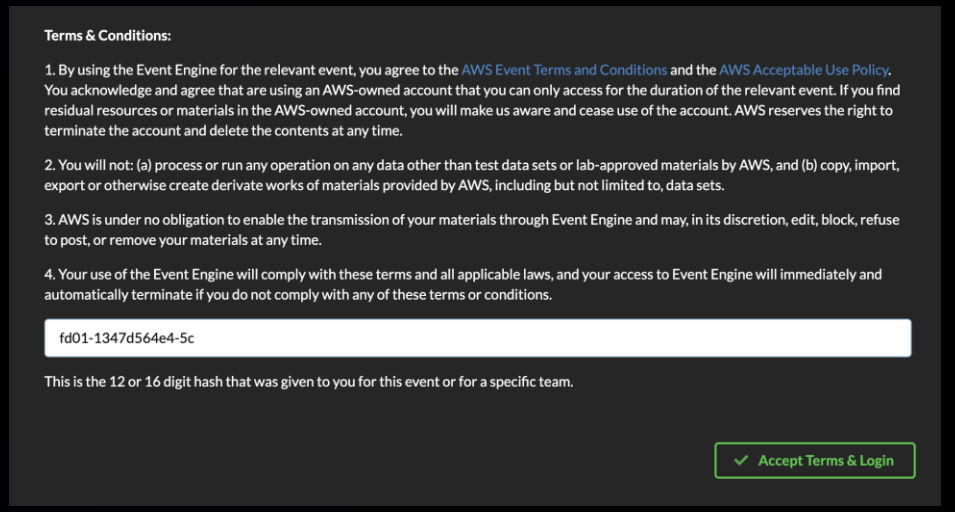
1. Disconnect from VPN
2. Login to your dashboard

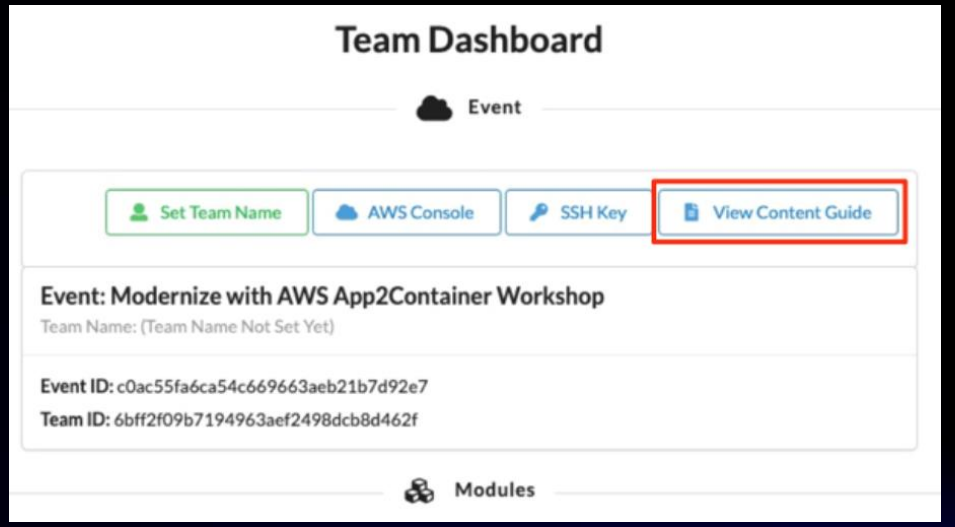
https://dashboard.eventengine.run/

3. Enter Event Hash ID

fd01-1347d564e4-5c

4. Go to workshop content and start modernizing!





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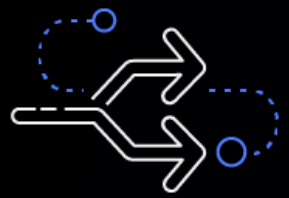
Explore more?

Amazon ECS

Amazon EKS

AWS App Runner

https://app2container.workshop.aws/en/



AWS App2Container follows standard process for all deployment targets

*Available in **Spanish** and **Korean**

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Thank you!

Semih Duru

semid@amazon.com



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