AWS re:Invent

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ENT302

Incremental refactoring: Evolve existing apps with microservices

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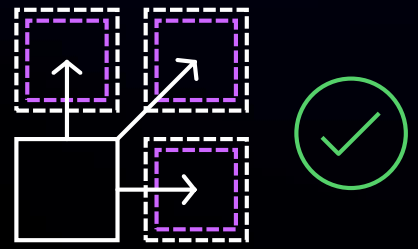
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Agenda

- Modernization on AWS (10m)
- Workshop instructions (5m)
- Lab execution (2h)

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Key pillars of modernization



Technology & Architecture

Independent business functions



People, Process, & Culture

Organized for value



Ops & Governance at Scale

Automate, enable, & self-service

Modernization is the refactoring of legacy technology by combining modern infrastructure, architecture, organization patterns together to maximize resiliency, engineering efficiency, and business agility

aws

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Problem statement

AWS customers have found that refactoring their apps in a **big-bang approach** introduces too many **risks** and takes too much **time** before realizing cloud benefits

Because of this, they prefer to modernize business critical apps not all at once, but **gradually, piece by piece,** and as part of an effort to deliver new capabilities that the business is requesting



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Incremental refactoring

1. Decomposition Strategy based on **customer needs,** application performance, or data domains
2. Introduction of **API contracts** and abstraction of service complexity
3. Agile approach of **microservices** development
4. **Flywheel** driven by decomposition strategy
5. **Graceful decommission** of monolith application



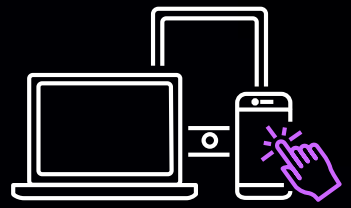
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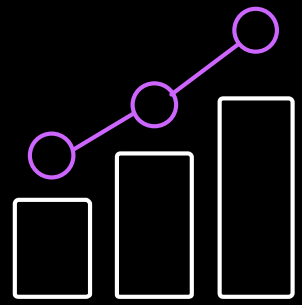
Decomposition strategy



Customer Needs



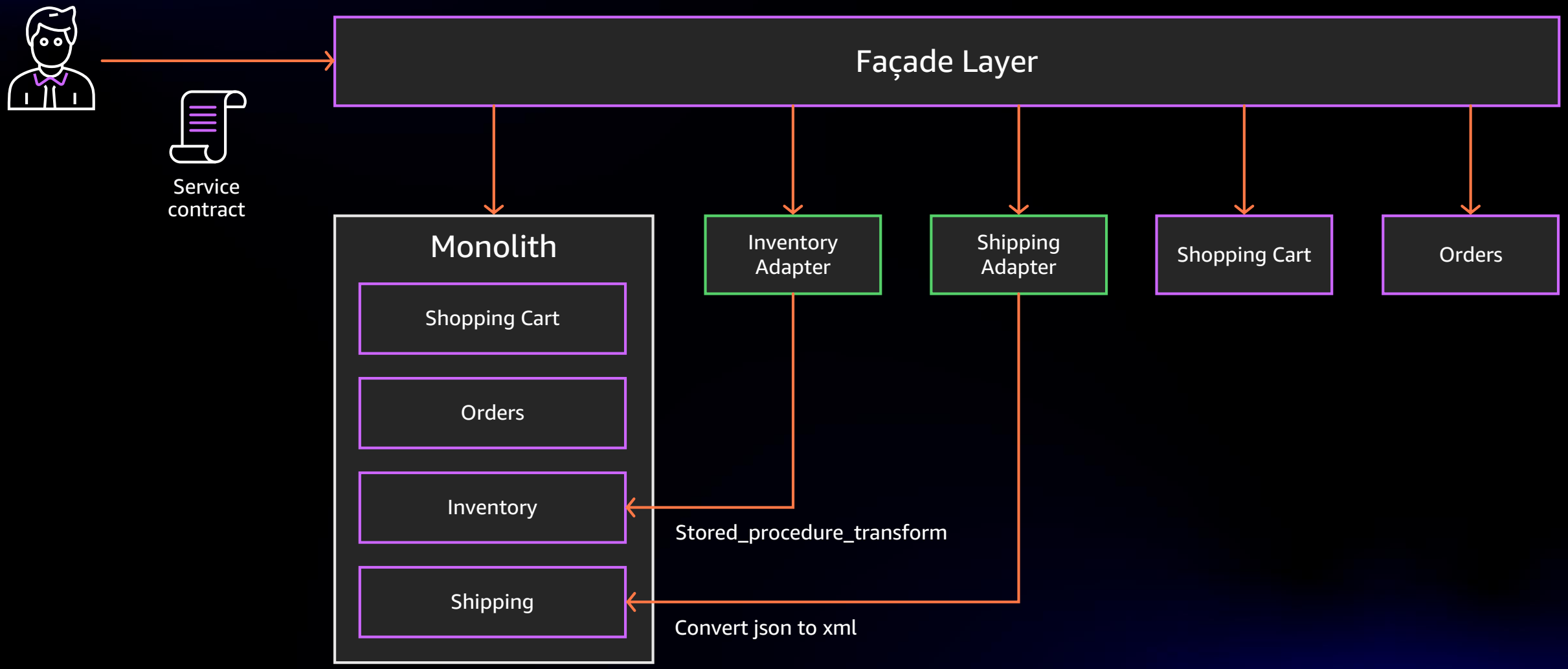
App Hot Spots



Data Domains

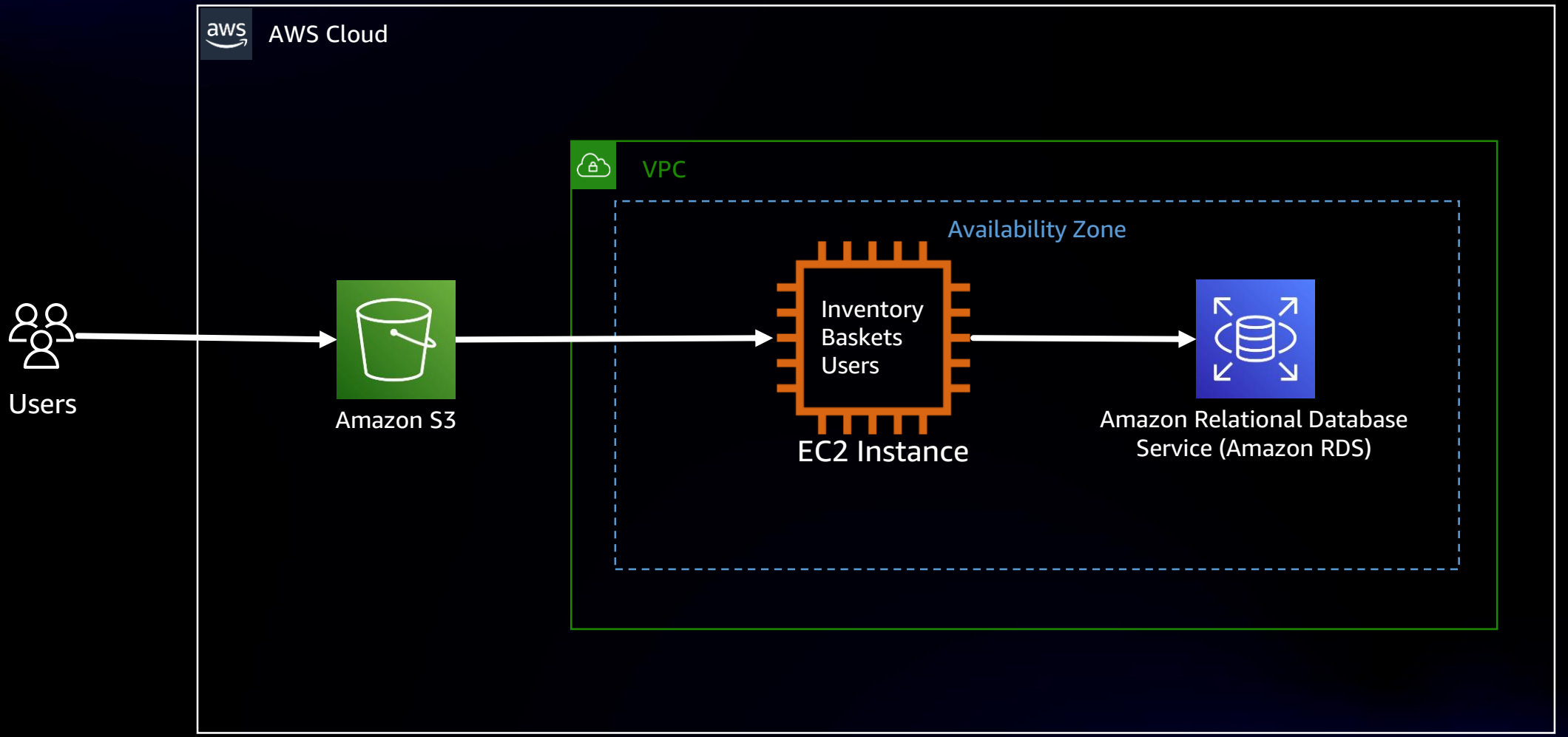
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Transitional architecture



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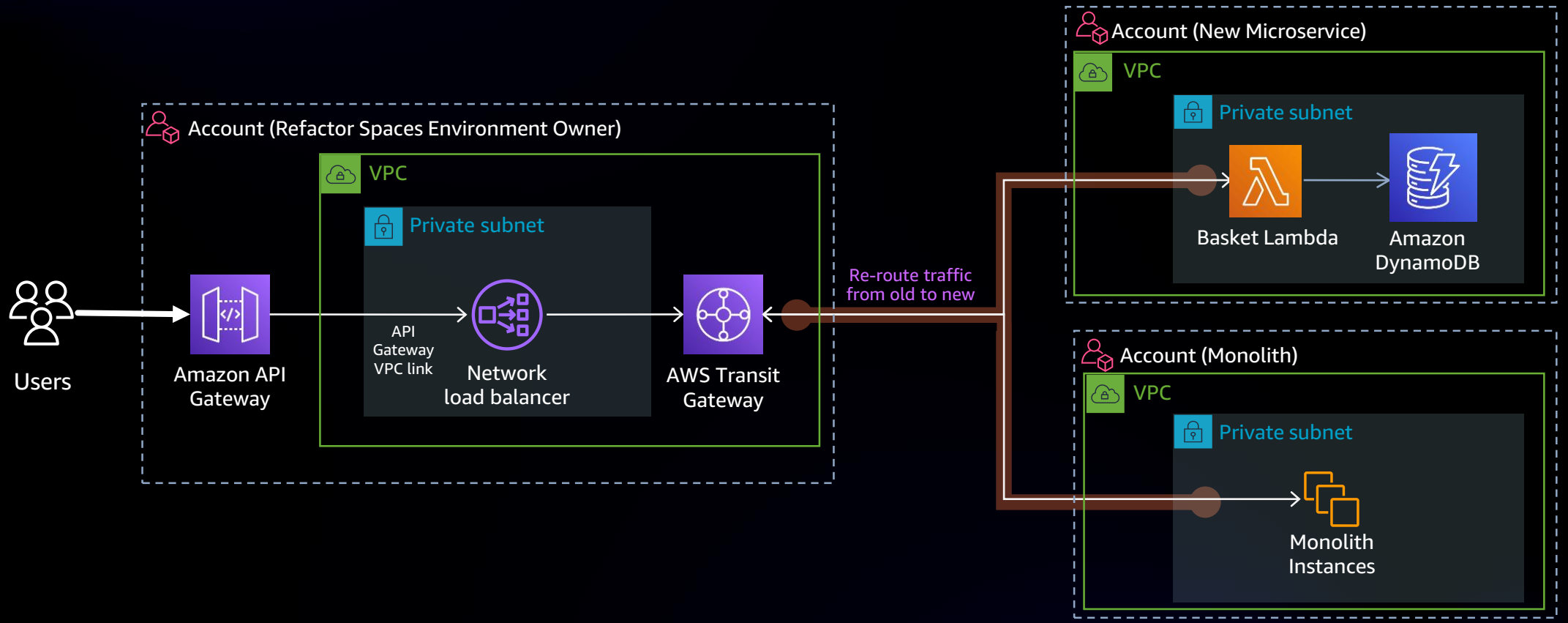
Current state architecture



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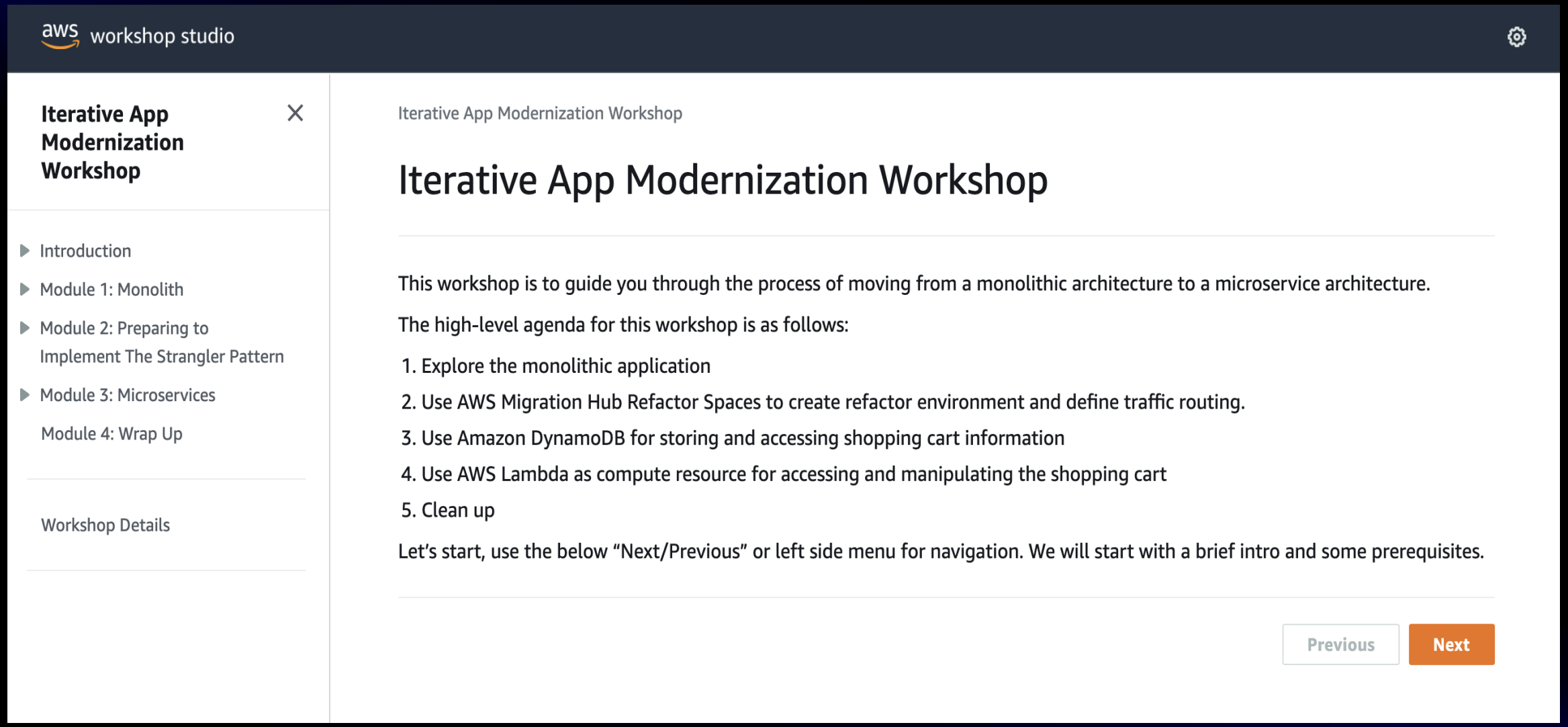
Target architecture using Refactor Spaces

REDUCE THE TIME TO SET UP AND MANAGE A REFACTOR ENVIRONMENT



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What you will build today

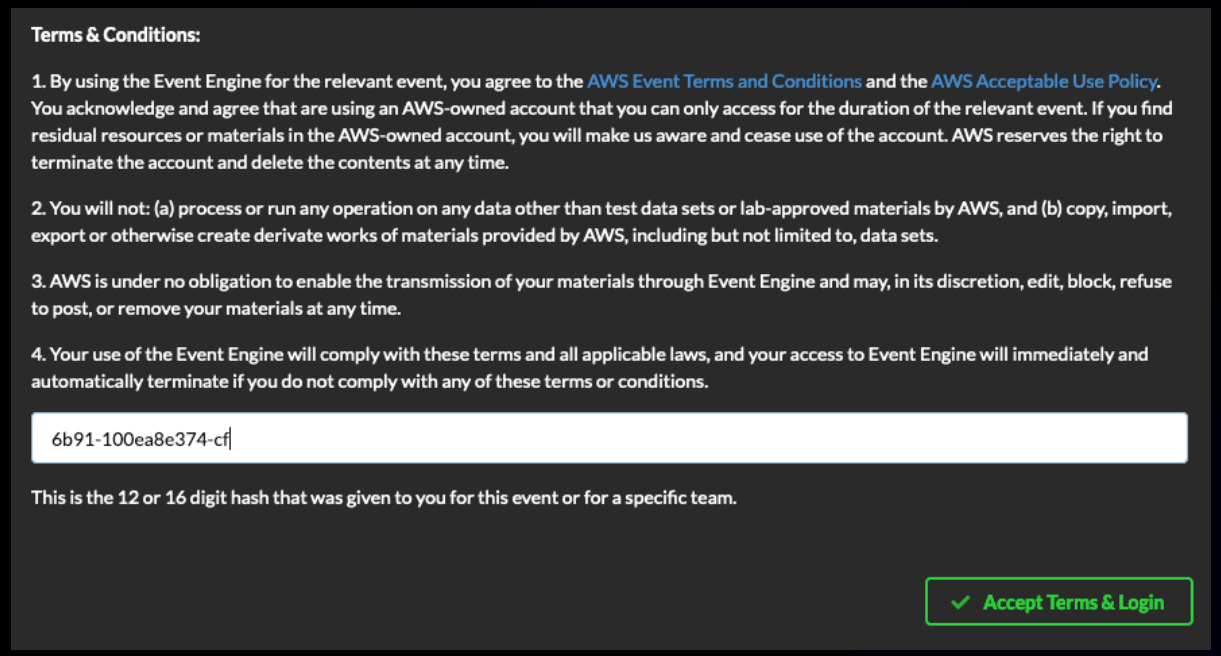


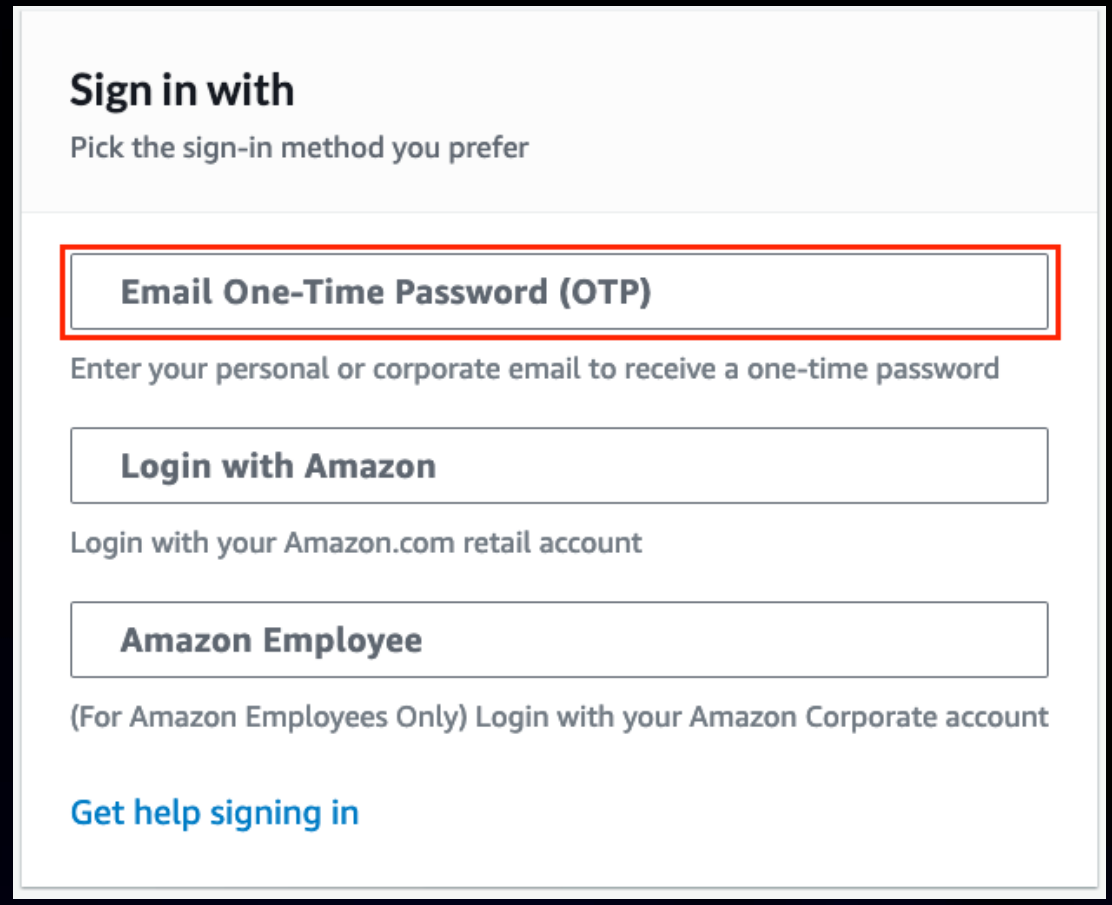
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Lab environment

URL: https://dashboard.eventengine.run

Event code: **b301-1c500e4a84-6c**





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Links for workshop

- AWS Lab Environment
  https://dashboard.eventengine.run
- Workshop Instructions
  https://app-modernization.workshop.aws/
- Event hash key

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Thank you!

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