

AWS re:Invent

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Modernizing your workload for speed and flexibility

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Agenda

Migrate to modernize (10 minutes)

Workshop instructions (5 minutes)

Lab execution (1 hour 45 minutes)

Our scenario

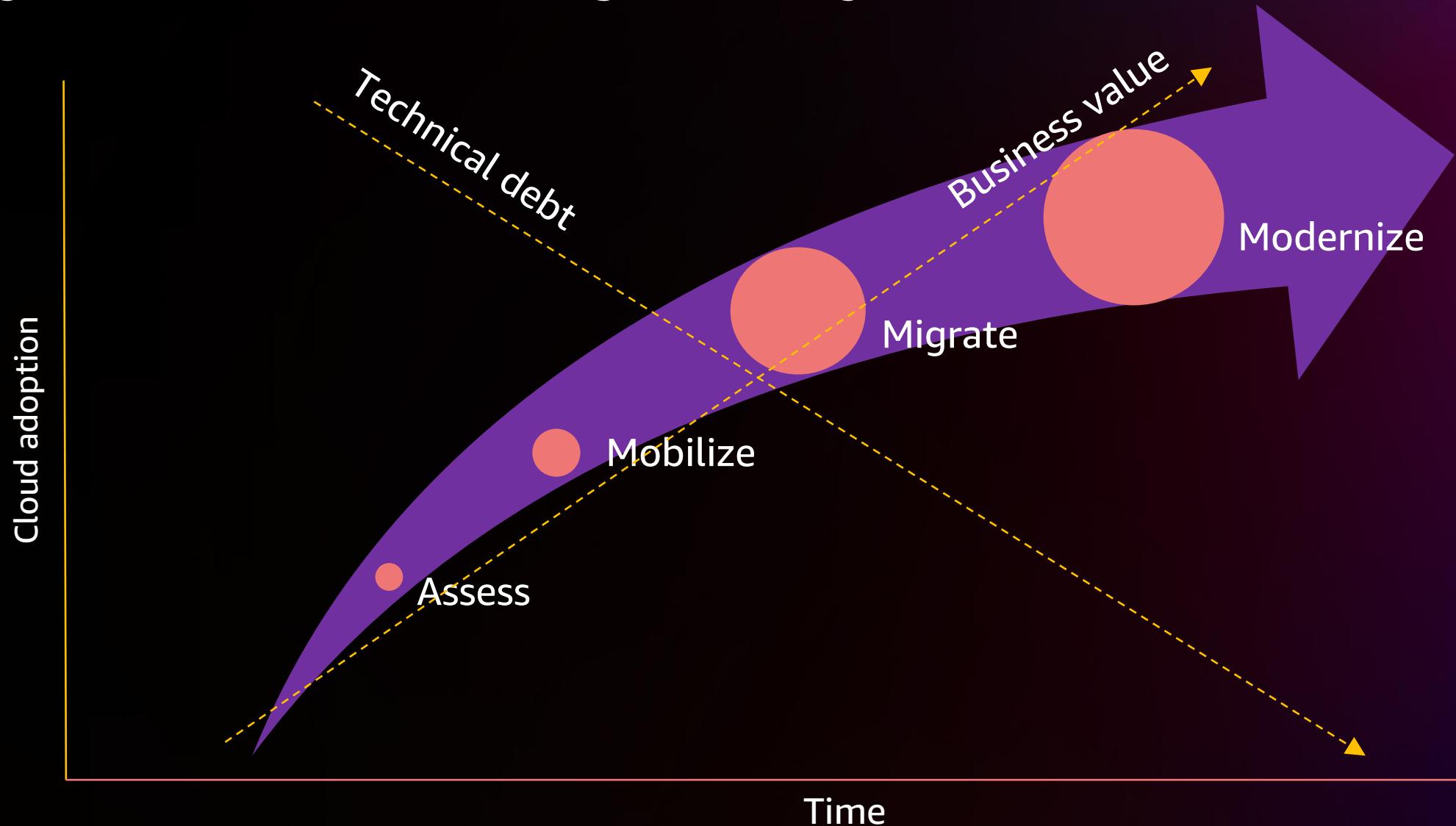
Scenario

- Data center exit goals in <2 years
- Modernization of business-critical apps
- Accelerate benefits of the cloud
- Reduce operational overhead

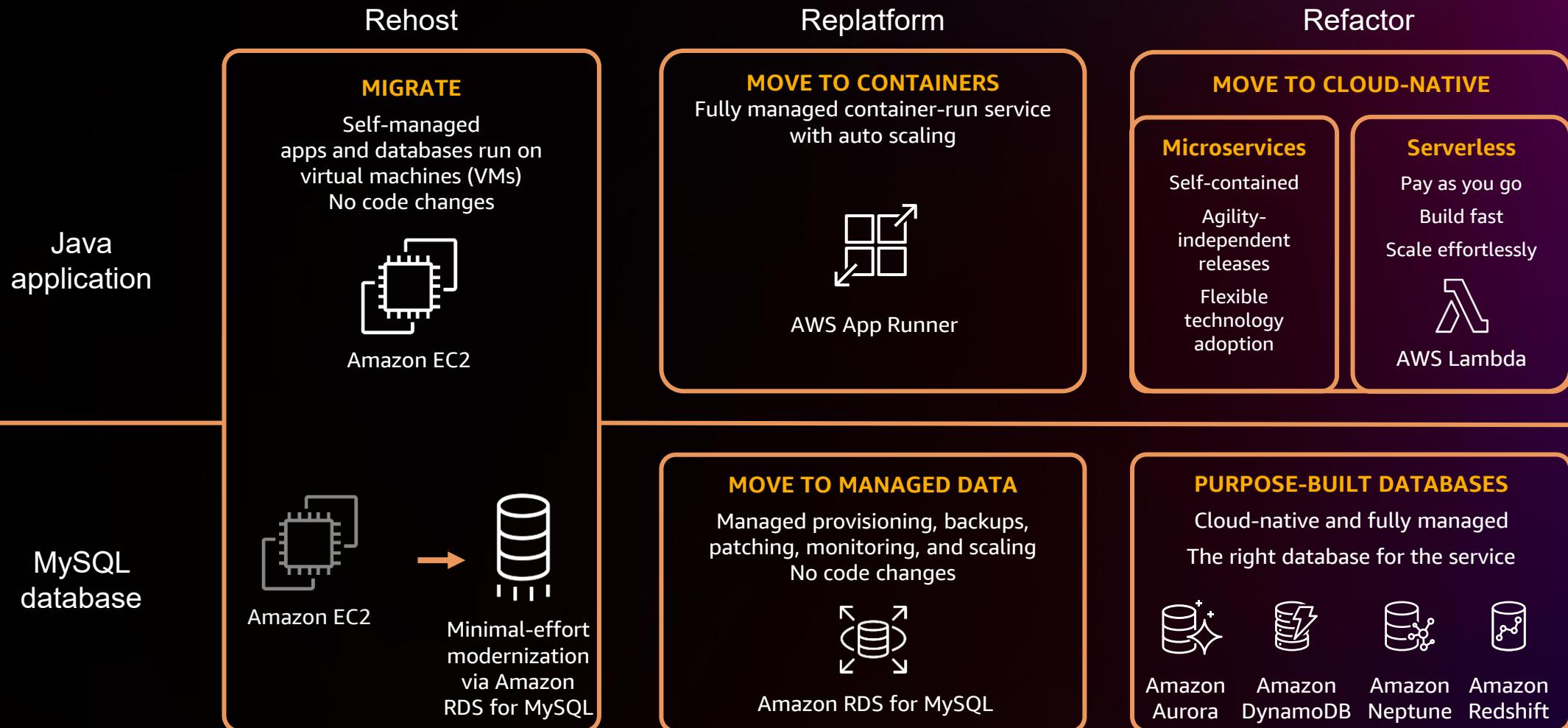
Workload pain points

- Infrastructure provisioned for peak, underutilized hardware outside of peak
- Codebase in the gigs increasing deployment times and downtimes
- Difficult to adopt new technologies

Typical customer journey



Our modernization journey



Why migrate first?

Reap cloud benefits early to free up resources for modernization

Elasticity and scalability

- Right-size instance and elastically scale
- Prevent need to renew hardware purchases

Reduce cost

- Capacity optimization through just-in-time infrastructure
- Pay only for what you use instead of provisioning for peak

Operational overhead

- Eliminate need to manage and operate a data center
- Eliminate need for hardware forecasting and procurement

And then modernize?

Enable focus for incremental modernization

Speed

- Increase speed of deployments
- Minimize/remove dev team dependencies
- Enables rapid experimentation

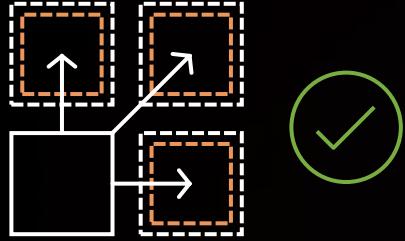
Flexibility

- Enable ability to adopt new technologies
- Use the best tool for the job
- Decoupled architectures improve resilience

Undifferentiated heavy lifting

- Focus on building business capabilities
- Get features to market faster with serverless

Other pillars of modernization



Technology and architecture

Independent business functions



People, process, and culture

Organized for value



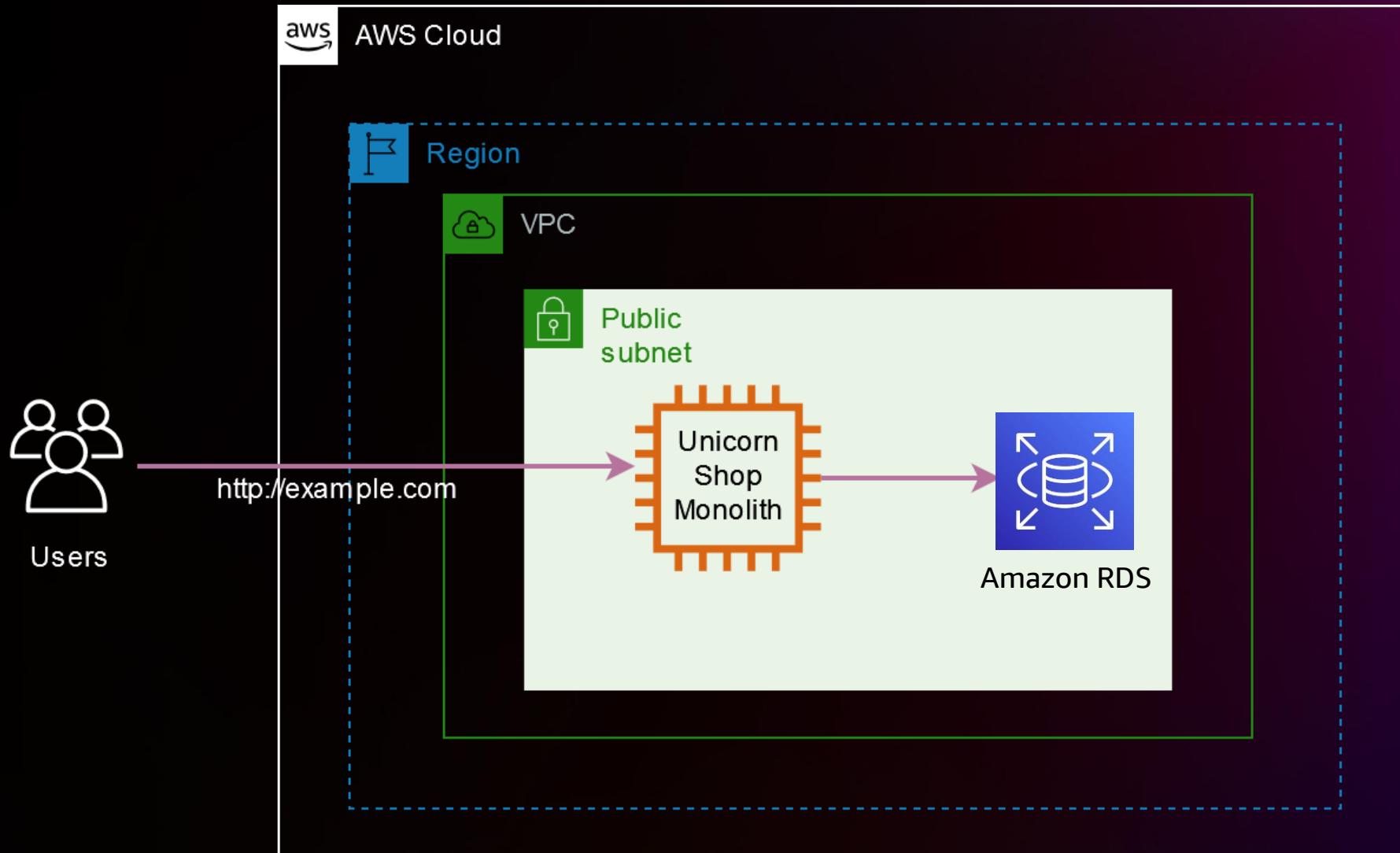
Ops and governance at scale

Automate, enable, and self-serve

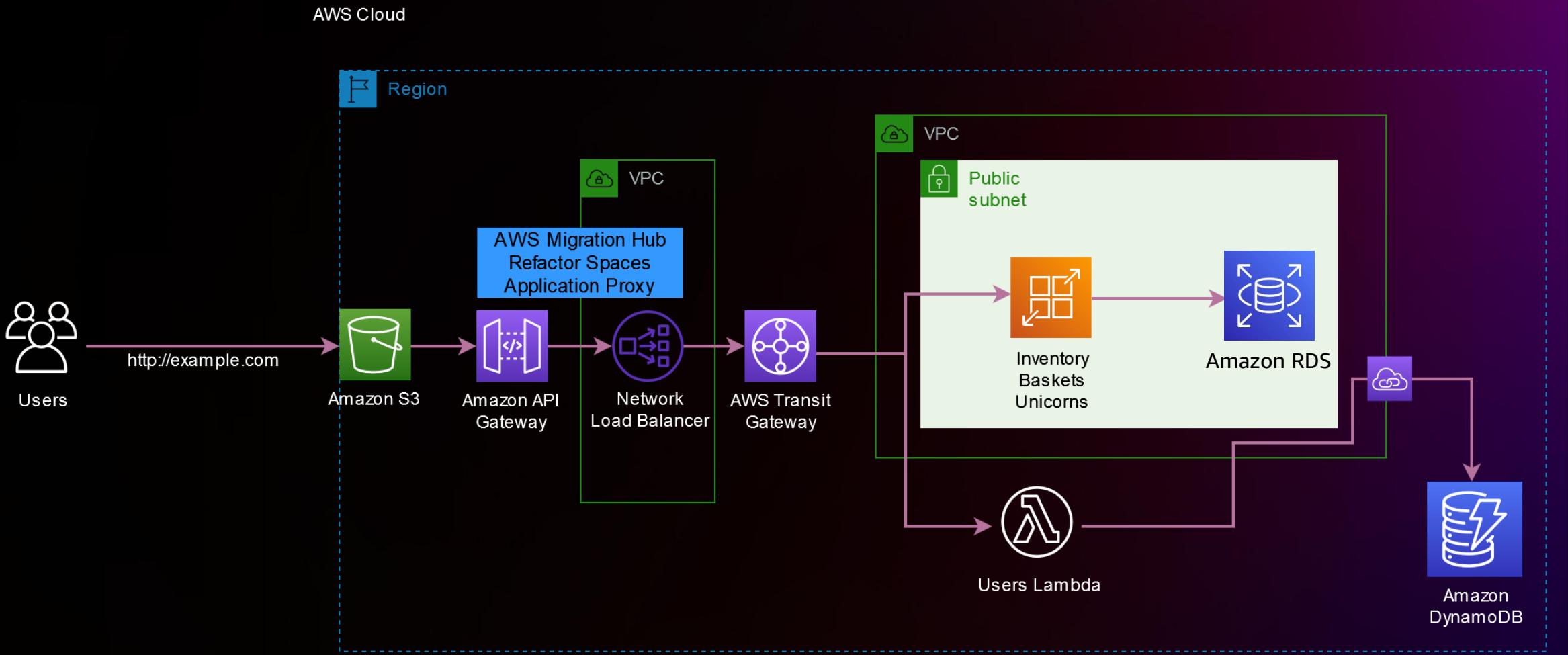
Modernization is the refactoring of legacy technology by combining modern infrastructure, architecture, and organization patterns to maximize resiliency, engineering efficiency, and business agility

Workshop setup

The existing application



What you will build today

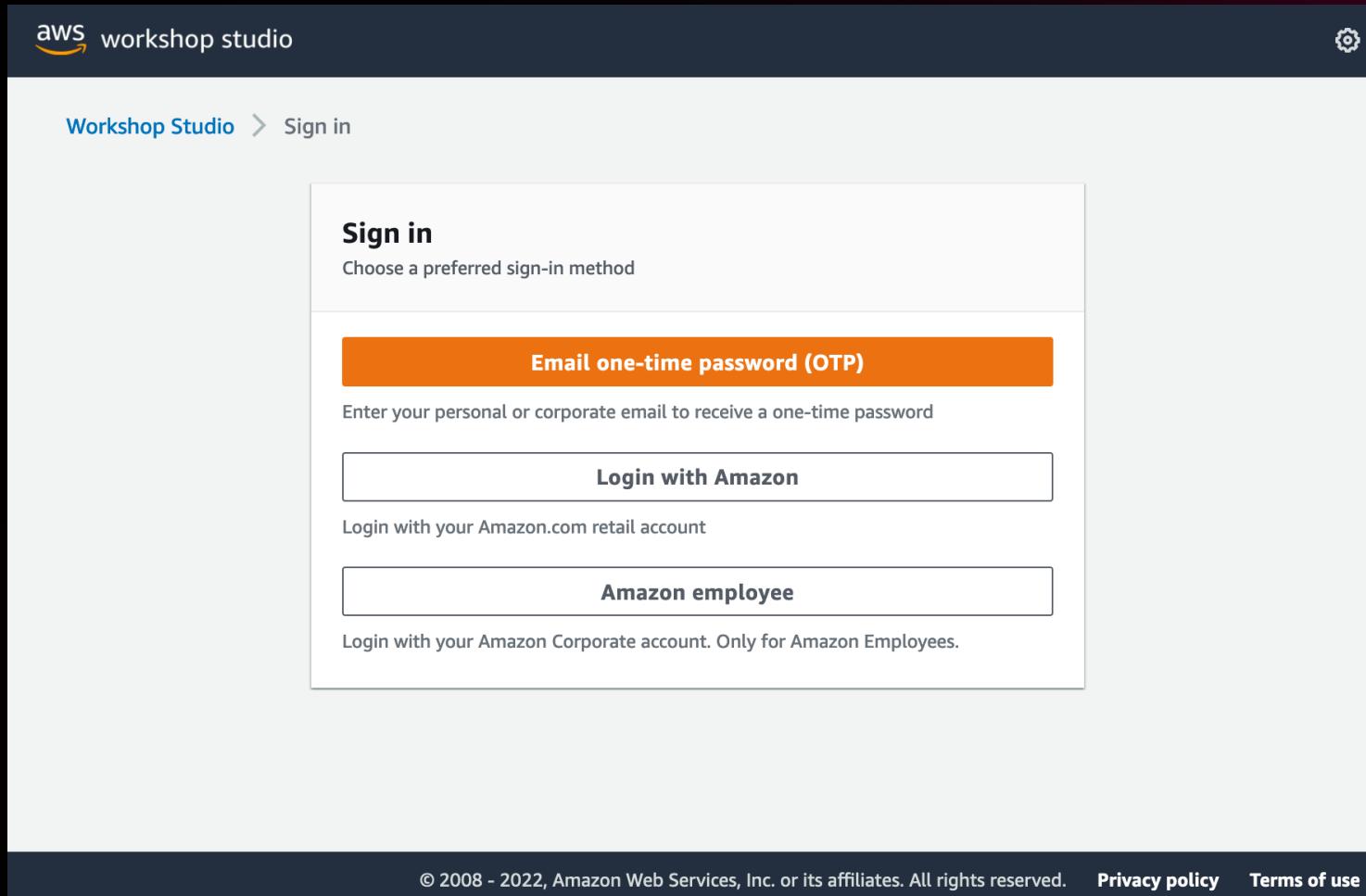


Getting started with this workshop

- As a participant, you will have access to an AWS account with any optional pre-provisioned infrastructure and IAM policies needed to complete this workshop.
- The AWS account will only be available for the duration of this workshop. You will lose access to the account thereafter.
- The optional pre-provisioned infrastructure will be deployed to a specific Region. Check your workshop content to determine whether other Regions will be used.
- Be sure to review the terms and conditions of the event. Do not upload any personal or confidential information in the account.

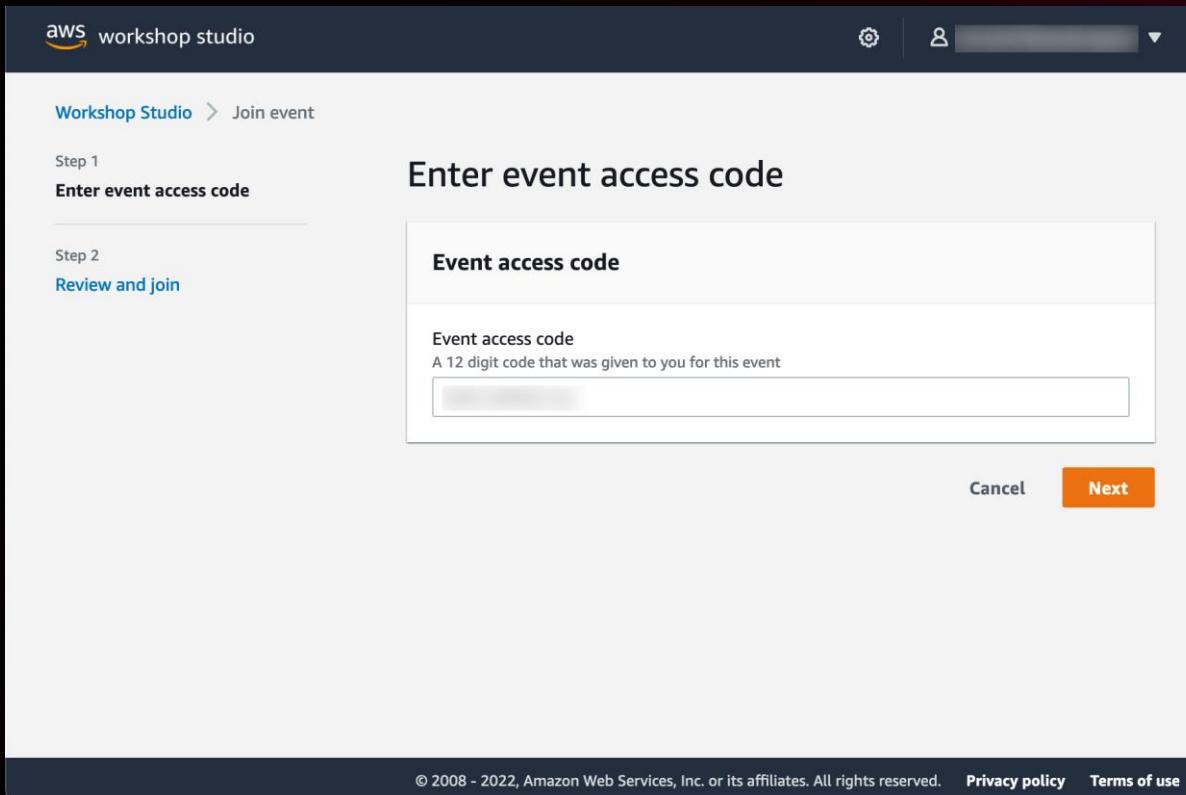
Step 1: Sign-in via your preferred method

Navigate to URL: <https://s12d.com/modernization>



Step 2: Enter event access code

Confirm the 12-digit event access code.



Step 3: Review terms and join event

The screenshot shows the 'Review and join' step in the AWS Workshop Studio. The top navigation bar includes the AWS logo, 'aws workshop studio', and a user profile icon. The left sidebar shows 'Workshop Studio > Join event' with two steps: 'Step 1 Enter event access code' and 'Step 2 Review and join'. The main content area is titled 'Review and join' and contains 'Event details' and 'Terms and Conditions' sections. The 'Event details' section shows a Name (redacted), Start time (9/23/2022 01:13 AM), Duration (12 hours), and Level (-). The 'Terms and Conditions' section contains a list of 4 rules and a checkbox for agreeing to them. At the bottom are 'Cancel', 'Previous', and 'Join event' buttons, and a footer with copyright and legal links.

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
[REDACTED]	9/23/2022 01:13 AM	12 hours	-

Description
[REDACTED]

Terms and Conditions

Read and accept before joining the event

1. By using AWS Workshop Studio for the relevant event, you agree to the AWS Event Terms and Conditions and the AWS Acceptable Use Policy. You acknowledge and agree that are using an AWS-owned account that you can only access for the duration of the relevant event. If you find residual resources or materials in the AWS-owned account, you will make us aware and cease use of the account. AWS reserves the right to terminate the account and delete the contents at any time.
2. You will not: (a) process or run any operation on any data other than test data sets or lab-approved materials by AWS, and (b) copy, import, export or otherwise create derivative works of materials provided by AWS, including but not limited to, data sets.
3. AWS is under no obligation to enable the transmission of your materials through Event Engine and may, in its discretion, edit, block, refuse to post, or remove your materials at any time.
4. Your use of AWS Workshop Studio will comply with these terms and all applicable laws, and your access to AWS Workshop Studio will immediately and automatically terminate if you do not comply with any of these terms or conditions.

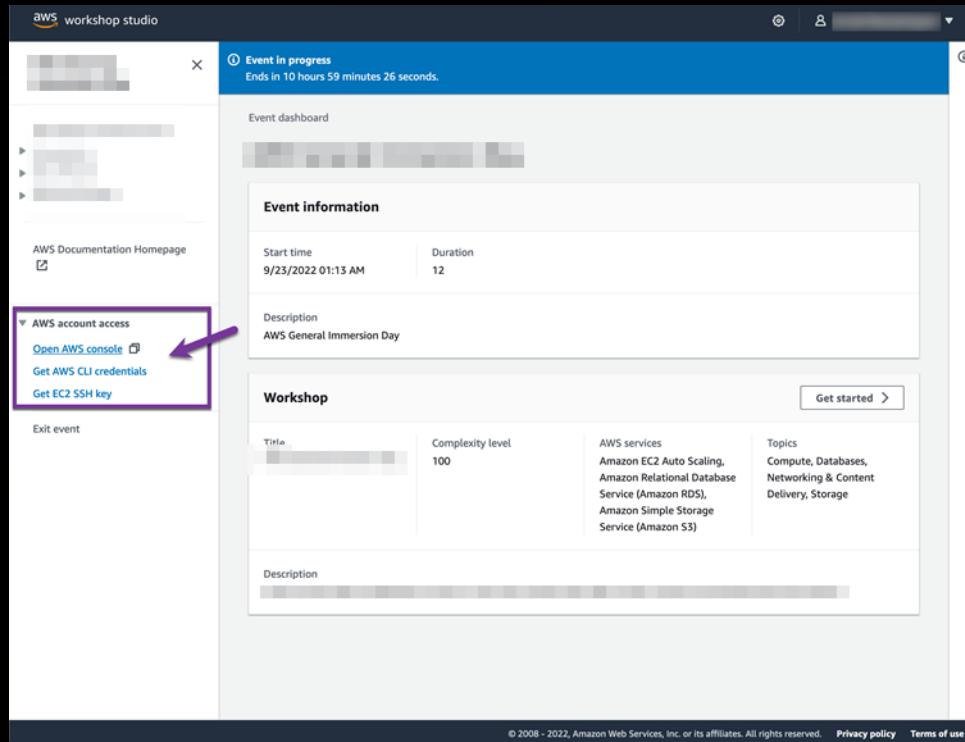
I agree with the Terms and Conditions

Cancel Previous Join event

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Step 4: Access AWS account

Access the AWS console



Event in progress
Ends in 10 hours 59 minutes 26 seconds.

Event dashboard

Event information

Start time	9/23/2022 01:13 AM
Duration	12

Description
AWS General Immersion Day

Workshop

Title	Complexity level
100	AWS services Amazon EC2 Auto Scaling, Amazon Relational Database Service (Amazon RDS), Amazon Simple Storage Service (Amazon S3)
Topics	Compute, Databases, Networking & Content Delivery, Storage

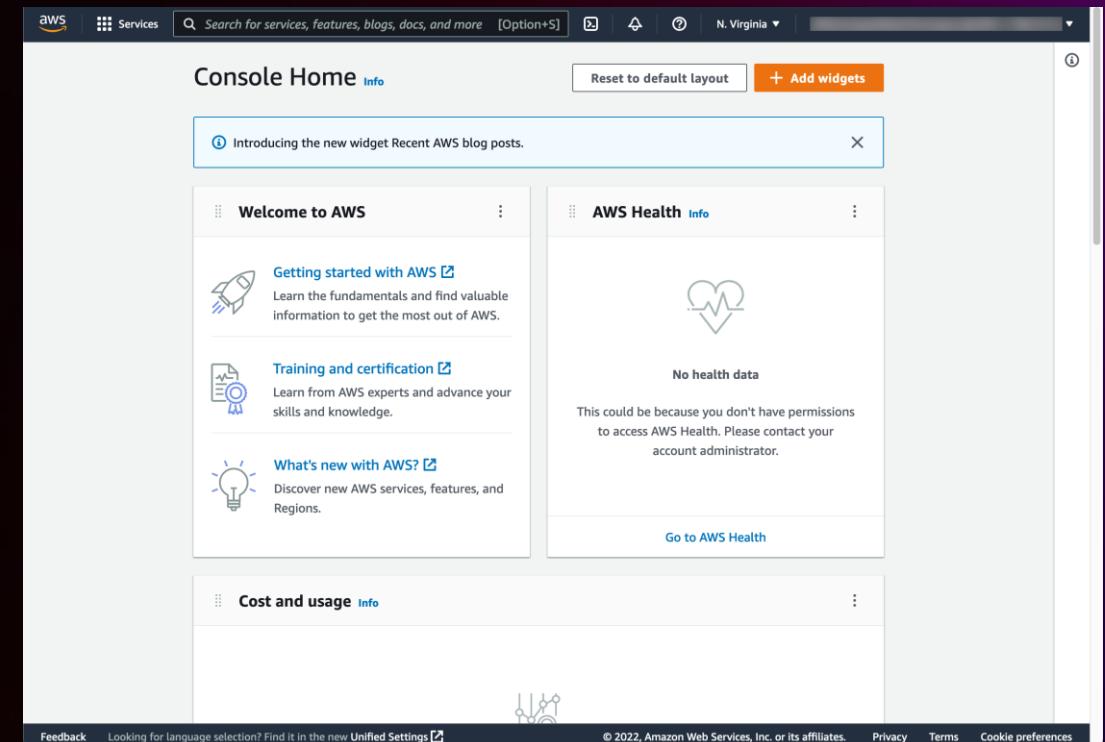
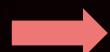
[Get started >](#)

AWS account access

- [Open AWS console](#) (highlighted with a purple box and arrow)
- [Get AWS CLI credentials](#)
- [Get EC2 SSH key](#)

[Exit event](#)

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Console Home [Info](#)

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Introducing the new widget Recent AWS blog posts.

Welcome to AWS

- [Getting started with AWS](#)
- [Training and certification](#)
- [What's new with AWS?](#)

AWS Health [Info](#)

No health data

This could be because you don't have permissions to access AWS Health. Please contact your account administrator.

[Go to AWS Health](#)

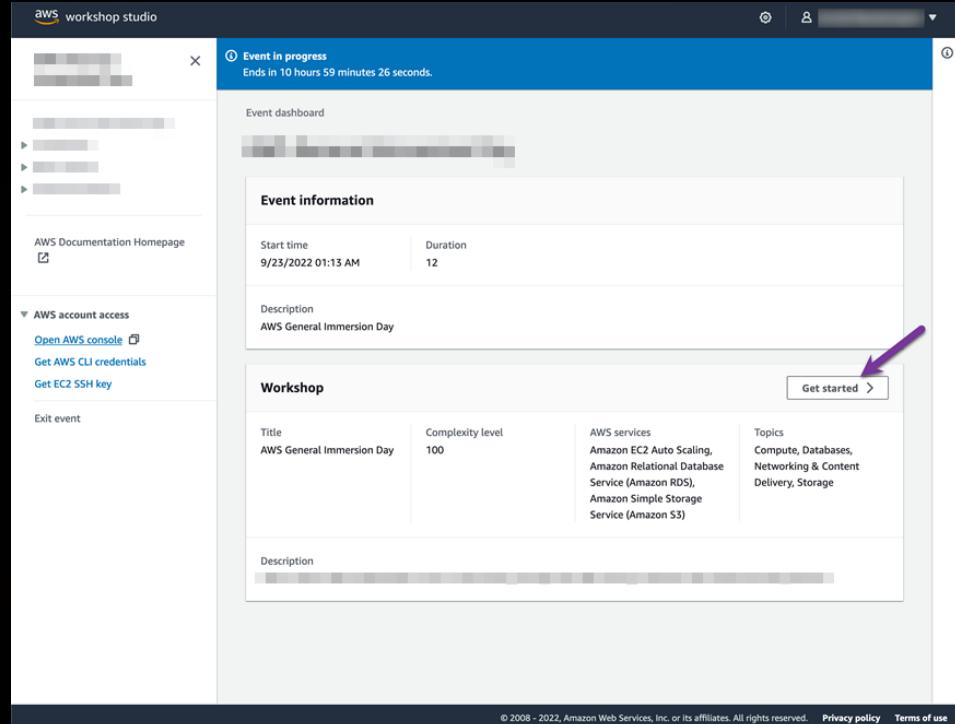
Cost and usage [Info](#)

Feedback Looking for language selection? Find it in the new [Unified Settings](#)

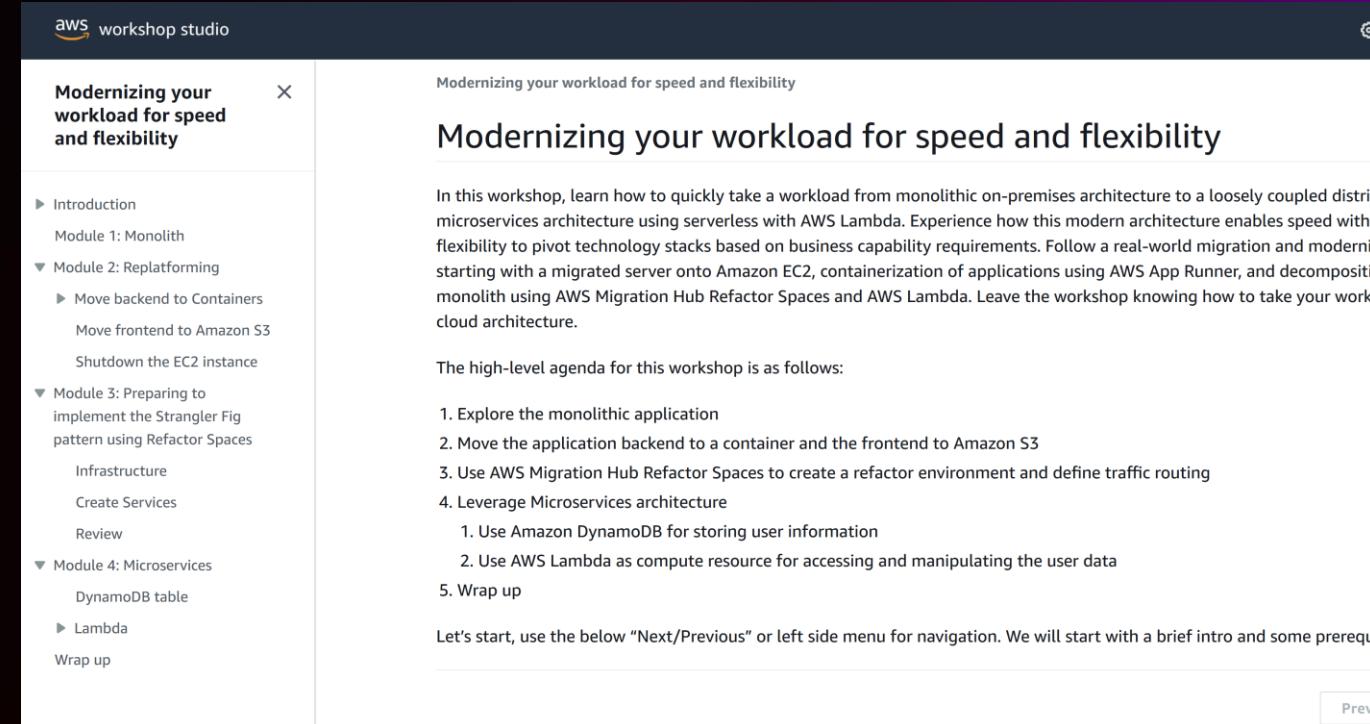
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Step 5: Get started with the workshop



The screenshot shows the AWS Workshop Studio interface. At the top, a blue header bar indicates an 'Event in progress' with 10 hours 59 minutes 26 seconds remaining. Below this is the 'Event dashboard' section. In the 'Event information' box, the start time is 9/23/2022 01:13 AM and the duration is 12 hours. The 'Description' is 'AWS General Immersion Day'. The 'Workshop' section shows the title 'AWS General Immersion Day', complexity level 100, and a list of AWS services: Amazon EC2 Auto Scaling, Amazon Relational Database Service (Amazon RDS), and Amazon Simple Storage Service (Amazon S3). It also lists topics: Compute, Databases, Networking & Content Delivery, Storage. A 'Get started >' button is located in the bottom right of this section. A purple arrow points to this button. The sidebar on the left includes links for AWS Documentation Homepage, AWS account access (with 'Open AWS console' and 'Get AWS CLI credentials' options), and 'Exit event'.



The screenshot shows the 'Modernizing your workload for speed and flexibility' workshop page. The title is 'Modernizing your workload for speed and flexibility'. The content is organized into four main modules: 'Introduction', 'Module 1: Monolith' (with sub-points 'Move backend to Containers', 'Move frontend to Amazon S3', and 'Shutdown the EC2 instance'), 'Module 2: Replatforming' (with sub-points 'Move backend to Containers', 'Move frontend to Amazon S3', and 'Shutdown the EC2 instance'), 'Module 3: Preparing to implement the Strangler Fig pattern using Refactor Spaces' (with sub-points 'Infrastructure', 'Create Services', and 'Review'), and 'Module 4: Microservices' (with sub-points 'DynamoDB table', 'Lambda', and 'Wrap up'). A red arrow points from the 'Get started >' button in the first screenshot to the 'Introduction' section of the second screenshot. The sidebar on the left is identical to the one in the first screenshot.

Thank you!

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Consider visiting session
ENT324 *How Georgia-Pacific is accelerating modernization & improving resilience* to see a real customer example.



Please complete the session survey in the **mobile app**