



Breaking the monolith with microservices

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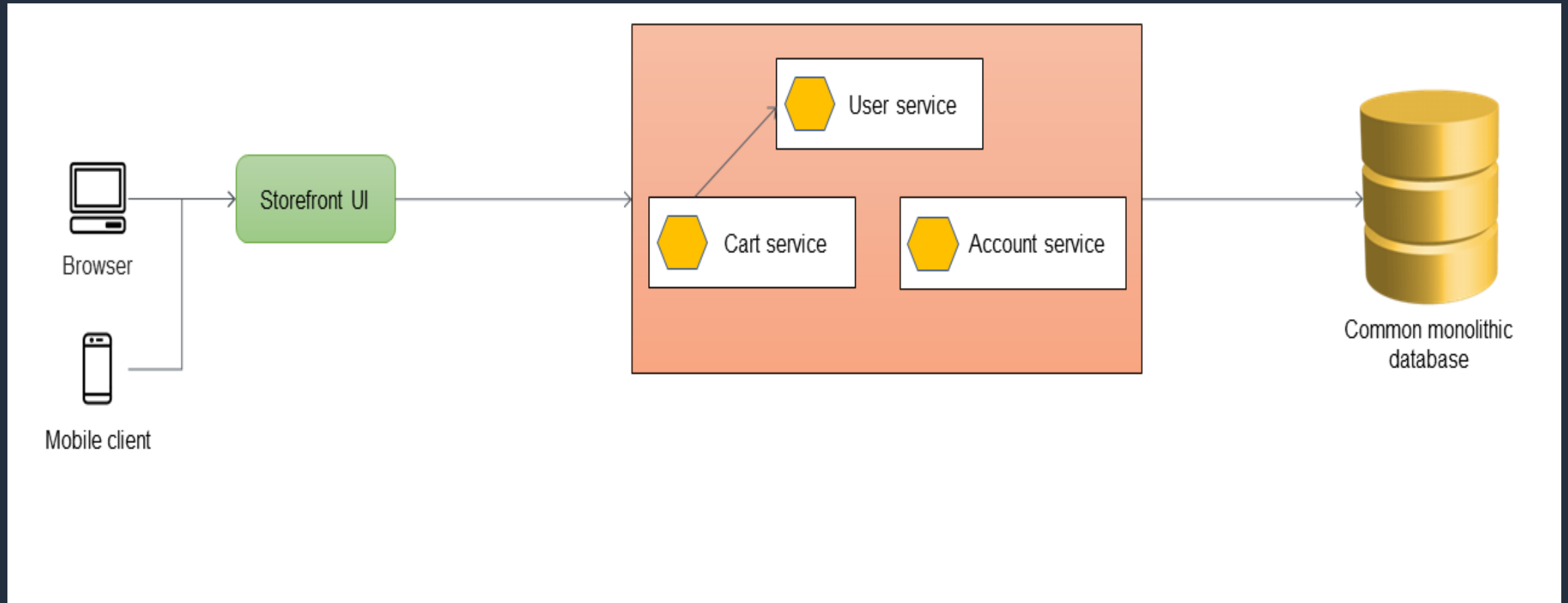
Challenges with monolith applications

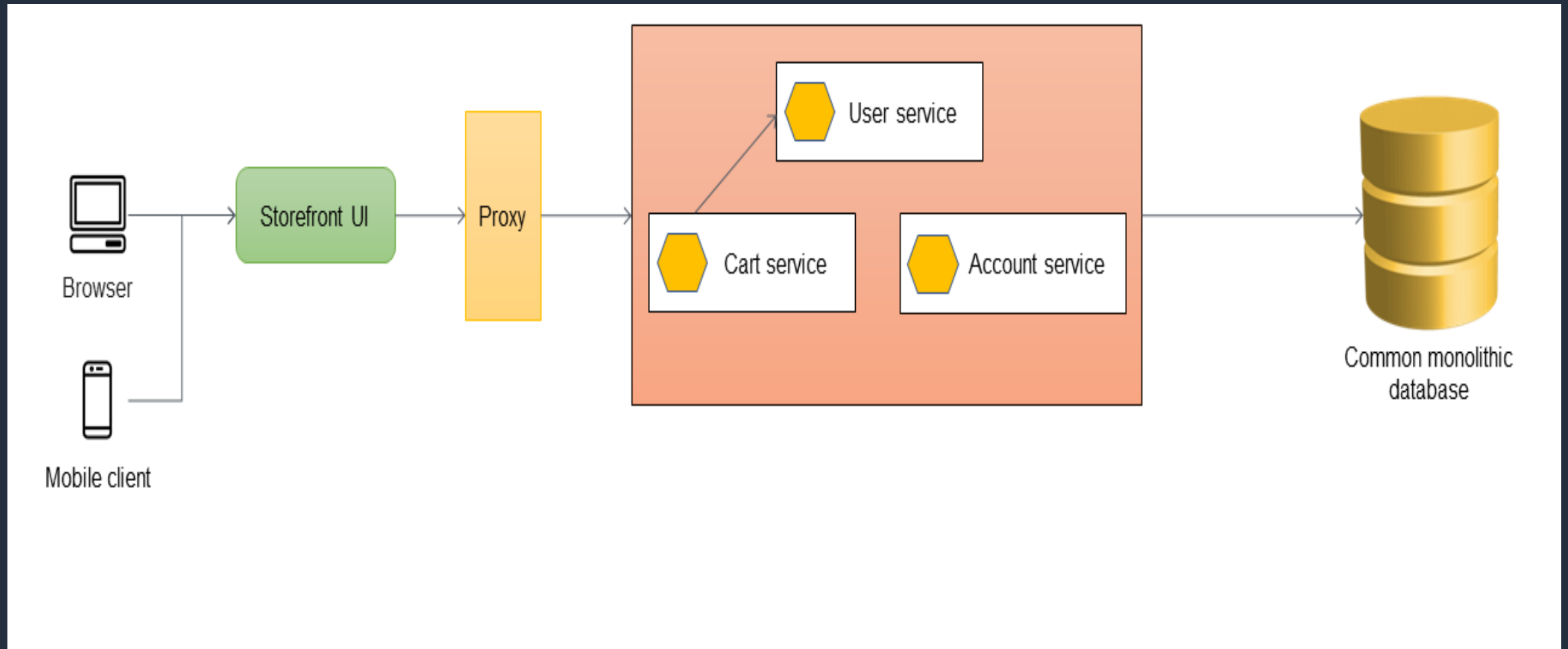
- ***Scalability issues:*** Requires vertical scaling; expensive and complex.
- ***Maintenance overhead:*** High complexity increases maintenance time and costs.
- ***Slowed innovation:*** Tightly coupled components delay new features and updates.
- ***Increased cognitive load:*** Complexity burdens development teams, obscuring ownership.
- ***Technological obsolescence:*** Aging tech stack raises support costs and security risks.

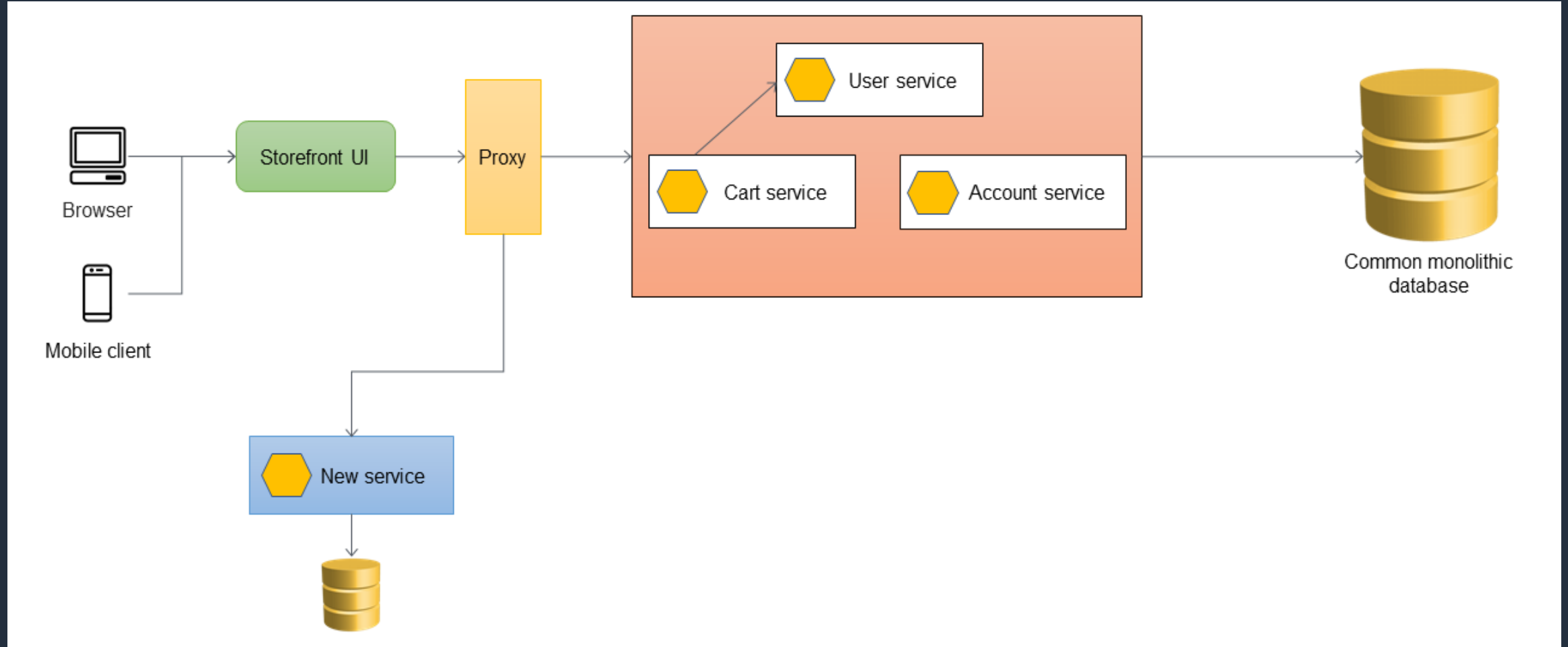
Breaking down the monolith: a path to microservices

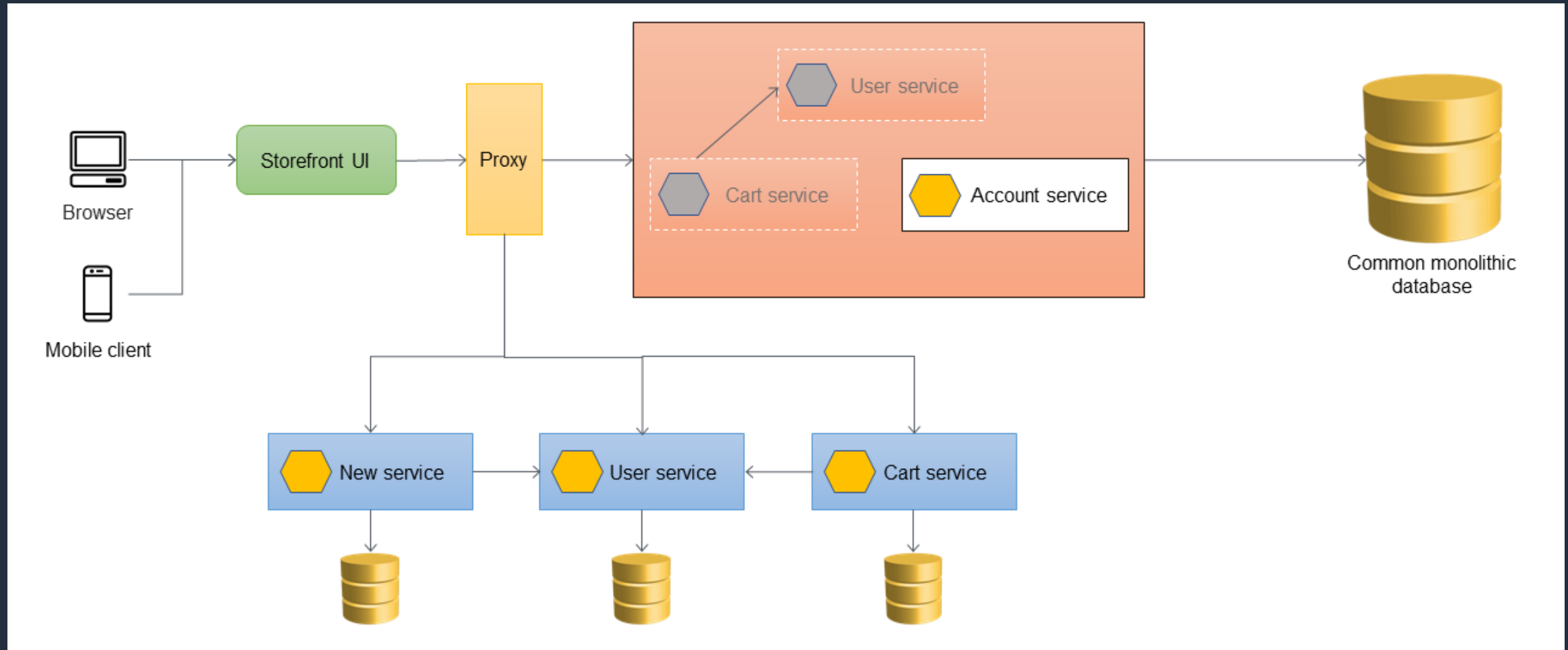
- ***Decomposition strategy:*** Transitioning component by component.
- ***Independence:*** Each microservice operates autonomously
- ***Scalability:*** Enhances ability to scale parts as needed without affecting others
- ***Speed of deployment:*** Faster updates and deployments
- ***Team autonomy:*** Clear ownership, enabling teams to innovate rapidly

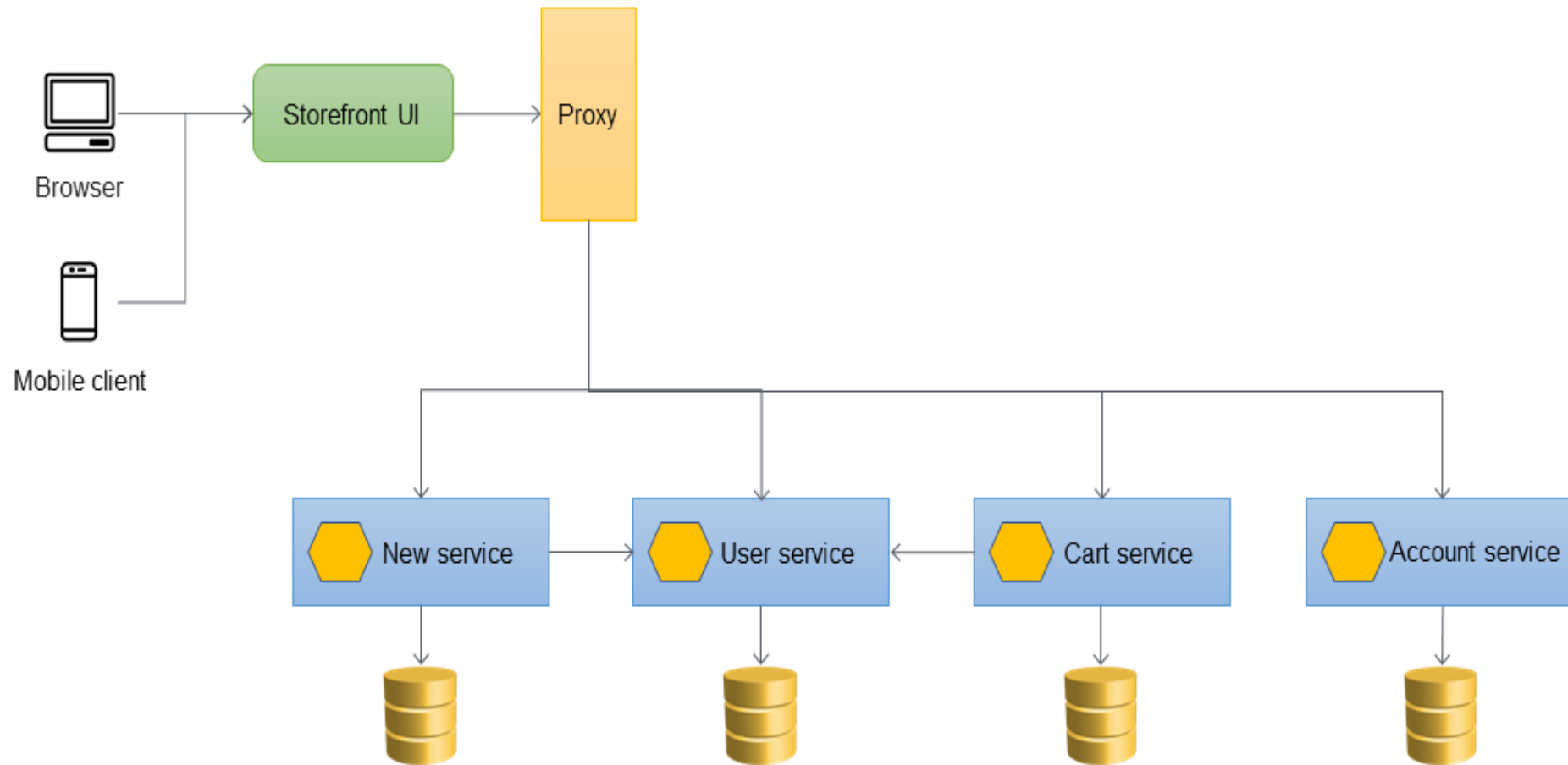
Let's break It down: Transitioning to microservices











Strangler Fig



Incremental Implementation

Gradually replace parts of the monolith to ensure continuous system integrity



Minimized Disruption

Avoids the risks associated with a complete system overhaul by making changes in a controlled manner



Proven Strategy

Adopts Martin Fowler's method for evolving system architecture intelligently and sustainably

AWS Migration Hub Refactor Spaces



Creating a microservice environment with AWS Refactor Spaces

Refactor spaces environment

- Central hub for modernization

Infrastructure setup:

- Provides essential networking and routing

Multi-Account networking:

- Facilitates interactions across AWS accounts

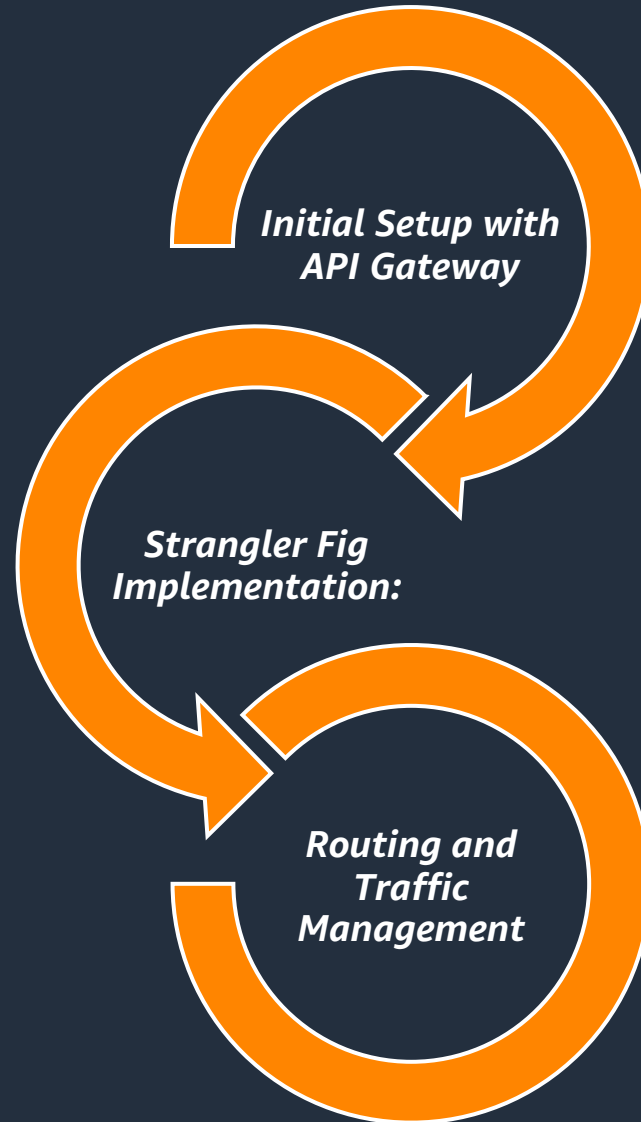
Refactor Spaces application:

- Manages services and orchestrates traffic

Legacy and new services:

- Seamlessly transitions traffic between systems

Workshop flow



Getting started with this workshop



You have access to an AWS account with any optional pre-provisioned infrastructure and IAM policies needed to complete this workshop.



The AWS account is only available for the duration of this workshop. **You will lose access to the account once the workshop is complete.**



Any optional pre-provisioned infrastructure is deployed to a specific AWS Region. Make sure that you are working in this Region; other Regions are blocked.

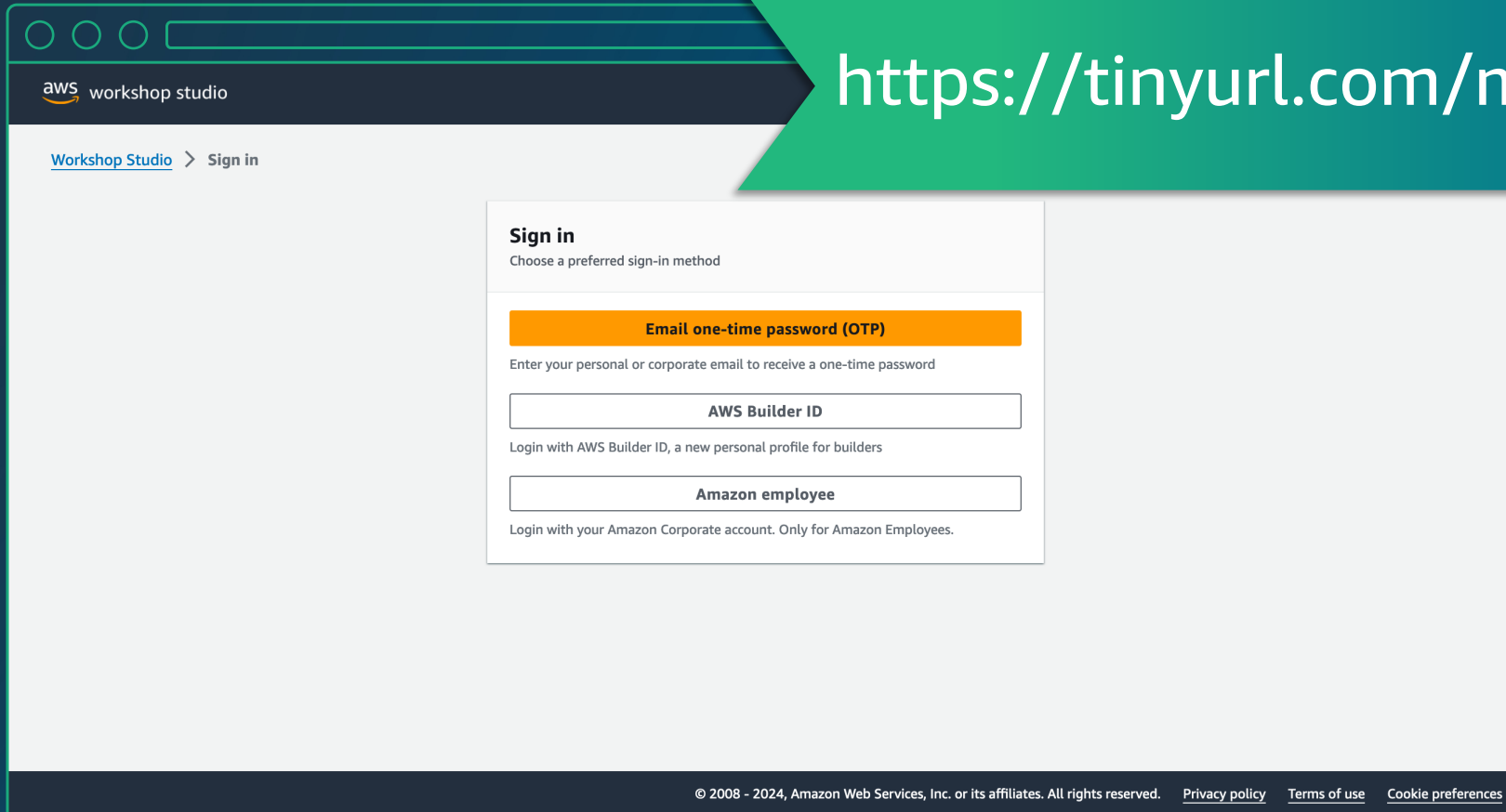


Review the terms and conditions of the event. **Do not upload any personal or confidential information to the account.**

<https://tinyurl.com/microservices-workshop>

Step 1: Sign in using 'Email one-time password (OTP)'

<https://tinyurl.com/microservices-workshop>



The screenshot shows the AWS Workshop Studio sign-in interface. At the top, there's a header with the AWS logo and 'workshop studio'. Below it, a breadcrumb trail shows 'Workshop Studio > Sign in'. The main content area is titled 'Sign in' with the instruction 'Choose a preferred sign-in method'. There are three sign-in options: 'Email one-time password (OTP)' (highlighted in orange), 'AWS Builder ID', and 'Amazon employee'. The 'Email one-time password (OTP)' option includes the text 'Enter your personal or corporate email to receive a one-time password'. The 'AWS Builder ID' option includes the text 'Login with AWS Builder ID, a new personal profile for builders'. The 'Amazon employee' option includes the text 'Login with your Amazon Corporate account. Only for Amazon Employees.' At the bottom of the page, there's a footer with copyright information and links for 'Privacy policy', 'Terms of use', and 'Cookie preferences'.

aws workshop studio

Workshop Studio > Sign in

Sign in
Choose a preferred sign-in method

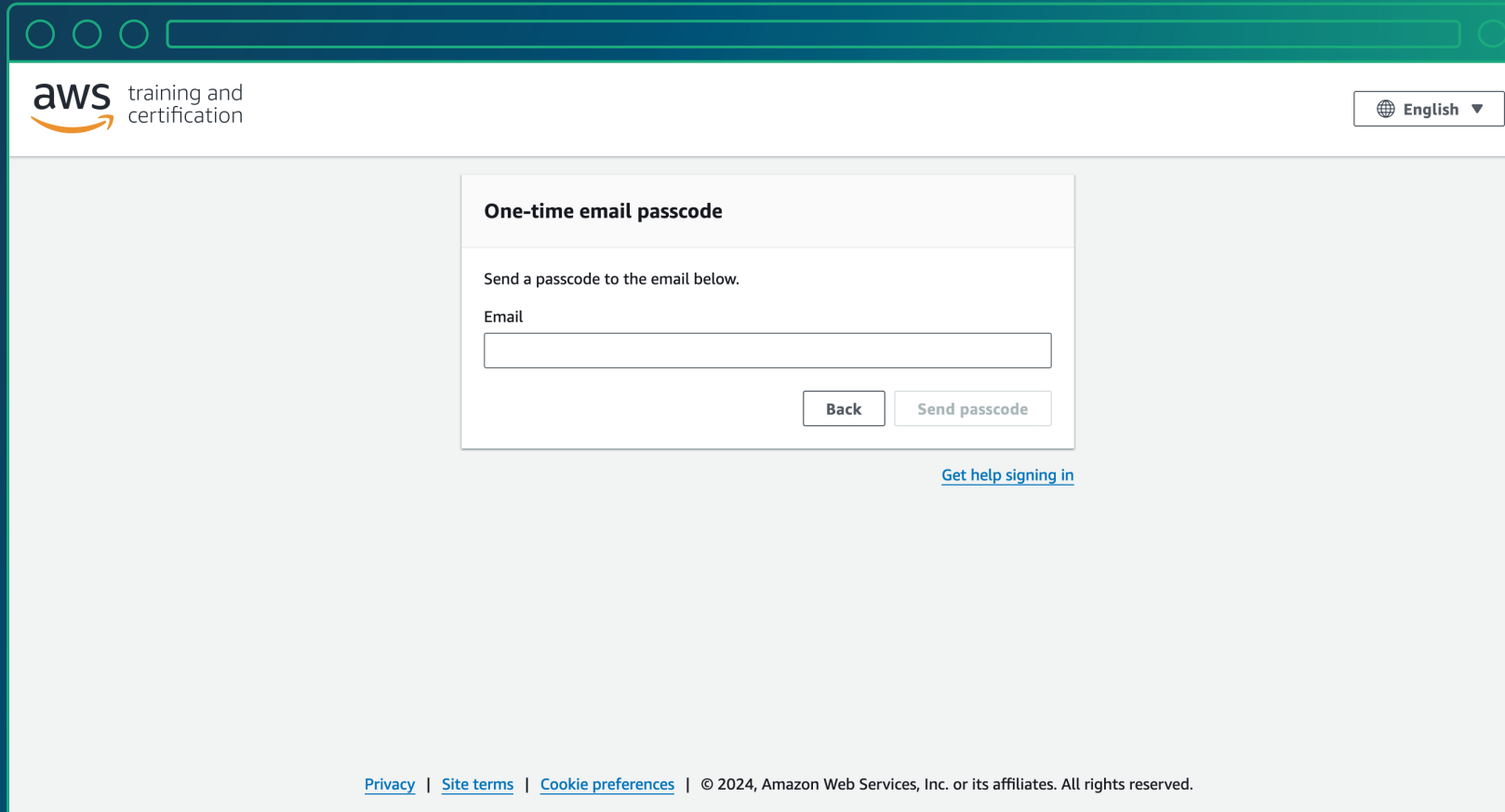
Email one-time password (OTP)
Enter your personal or corporate email to receive a one-time password

AWS Builder ID
Login with AWS Builder ID, a new personal profile for builders

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

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Step 2: Enter your email address



The screenshot shows a web browser window with the AWS Training and Certification logo in the top left and a language dropdown set to 'English' in the top right. The main content area is titled 'One-time email passcode' and contains the instruction 'Send a passcode to the email below.' Below this is an 'Email' label and a text input field. At the bottom of the form are 'Back' and 'Send passcode' buttons. A link for 'Get help signing in' is located below the form. The footer contains links for 'Privacy', 'Site terms', and 'Cookie preferences', followed by the copyright notice: '© 2024, Amazon Web Services, Inc. or its affiliates. All rights reserved.'

aws training and certification

English ▼

One-time email passcode

Send a passcode to the email below.

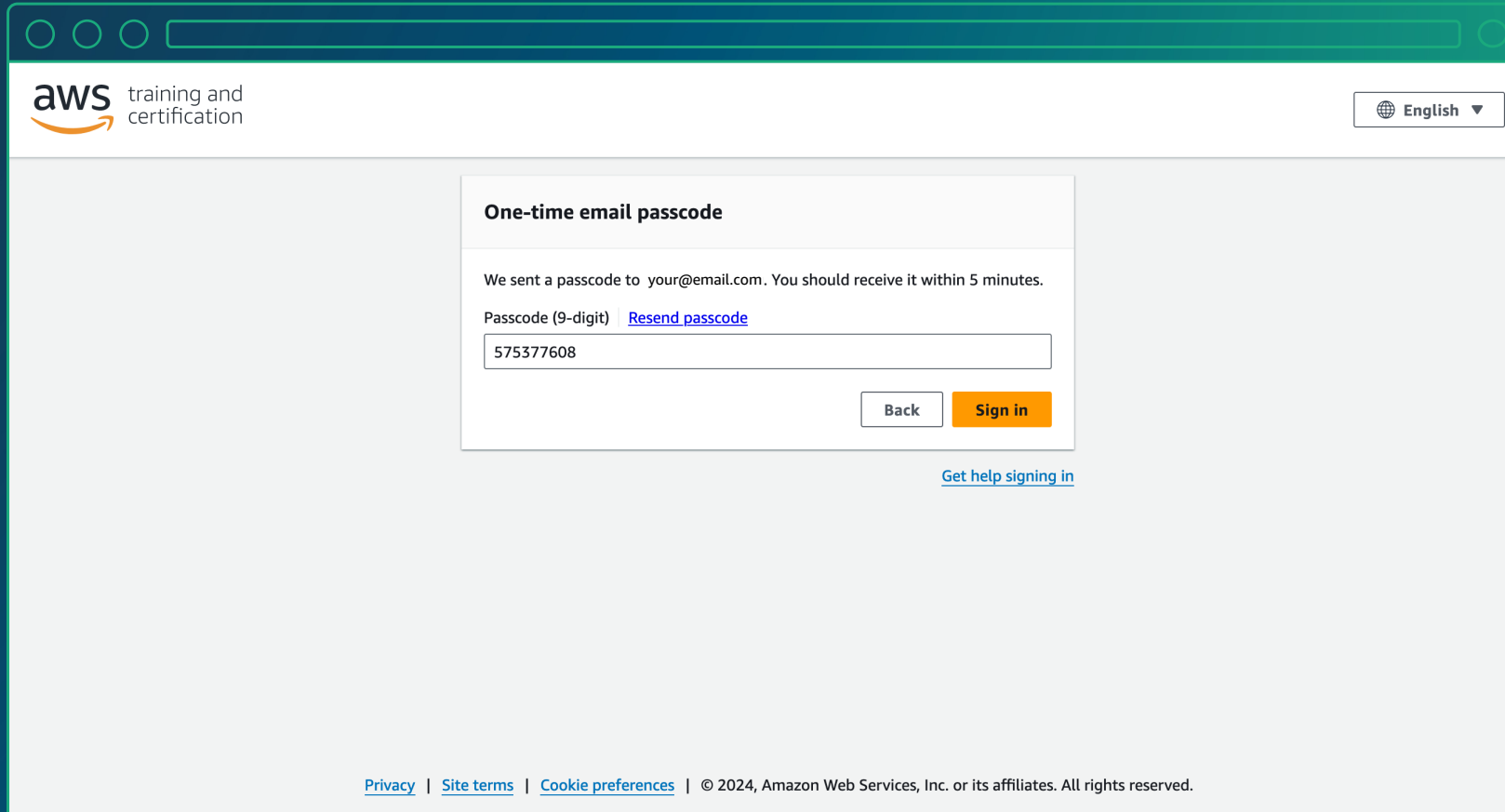
Email

Back Send passcode

[Get help signing in](#)

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Step 3: Enter your one-time email passcode



The screenshot shows a web browser window with the AWS training and certification logo in the top left and a language dropdown set to English in the top right. The main content area is titled "One-time email passcode" and contains the following text: "We sent a passcode to your@email.com. You should receive it within 5 minutes." Below this, it says "Passcode (9-digit)" followed by a blue link "Resend passcode". A text input field contains the passcode "575377608". At the bottom of the form are two buttons: "Back" and "Sign in". Below the form is a blue link "Get help signing in". The footer contains links for "Privacy", "Site terms", and "Cookie preferences", followed by the copyright notice "© 2024, Amazon Web Services, Inc. or its affiliates. All rights reserved."

aws training and certification

English ▼

One-time email passcode

We sent a passcode to your@email.com. You should receive it within 5 minutes.

Passcode (9-digit) [Resend passcode](#)

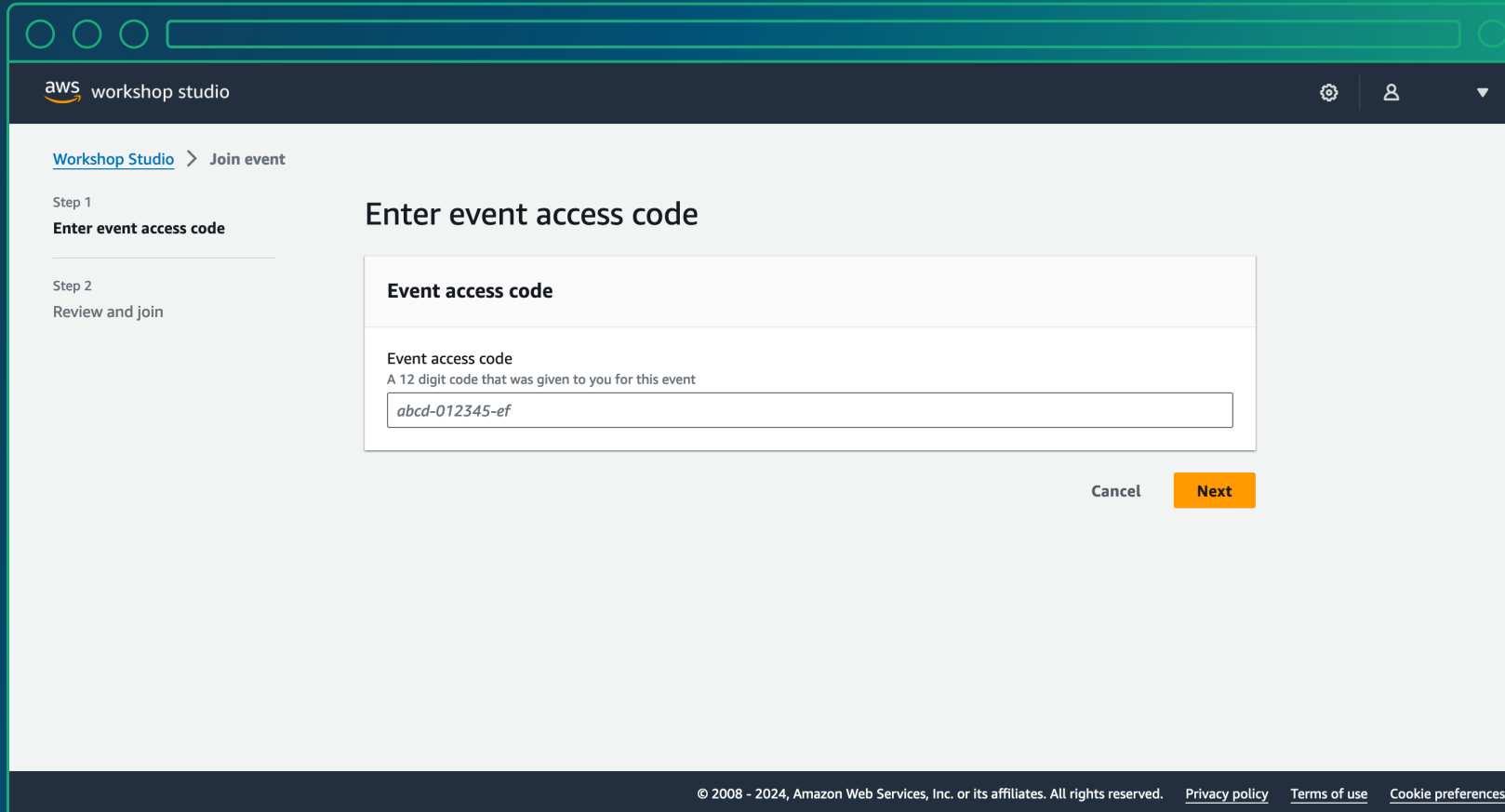
575377608

[Back](#) [Sign in](#)

[Get help signing in](#)

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Step 4: Enter your event access code



The screenshot shows the AWS Workshop Studio interface. At the top, there's a dark header with the 'aws workshop studio' logo on the left and settings, user, and menu icons on the right. Below the header, a breadcrumb trail reads 'Workshop Studio > Join event'. On the left side, a vertical list of steps is shown: 'Step 1 Enter event access code' (which is the current step), 'Step 2 Review and join', and 'Step 3' (partially visible). The main content area is titled 'Enter event access code'. It contains a white box with the heading 'Event access code' and a sub-label 'Event access code' followed by the text 'A 12 digit code that was given to you for this event'. Below this is a text input field containing the code 'abcd-012345-ef'. At the bottom right of the main content area are two buttons: a grey 'Cancel' button and an orange 'Next' button. The footer of the page contains copyright information: '© 2008 - 2024, Amazon Web Services, Inc. or its affiliates. All rights reserved.' and links to 'Privacy policy', 'Terms of use', and 'Cookie preferences'.

aws workshop studio

Workshop Studio > Join event

Step 1
Enter event access code

Step 2
Review and join

Enter event access code

Event access code

Event access code
A 12 digit code that was given to you for this event

Cancel Next

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Step 5: Review and join

aws workshop studio

Terms and Conditions

Read and accept before joining the event

Read and accept before joining the event:

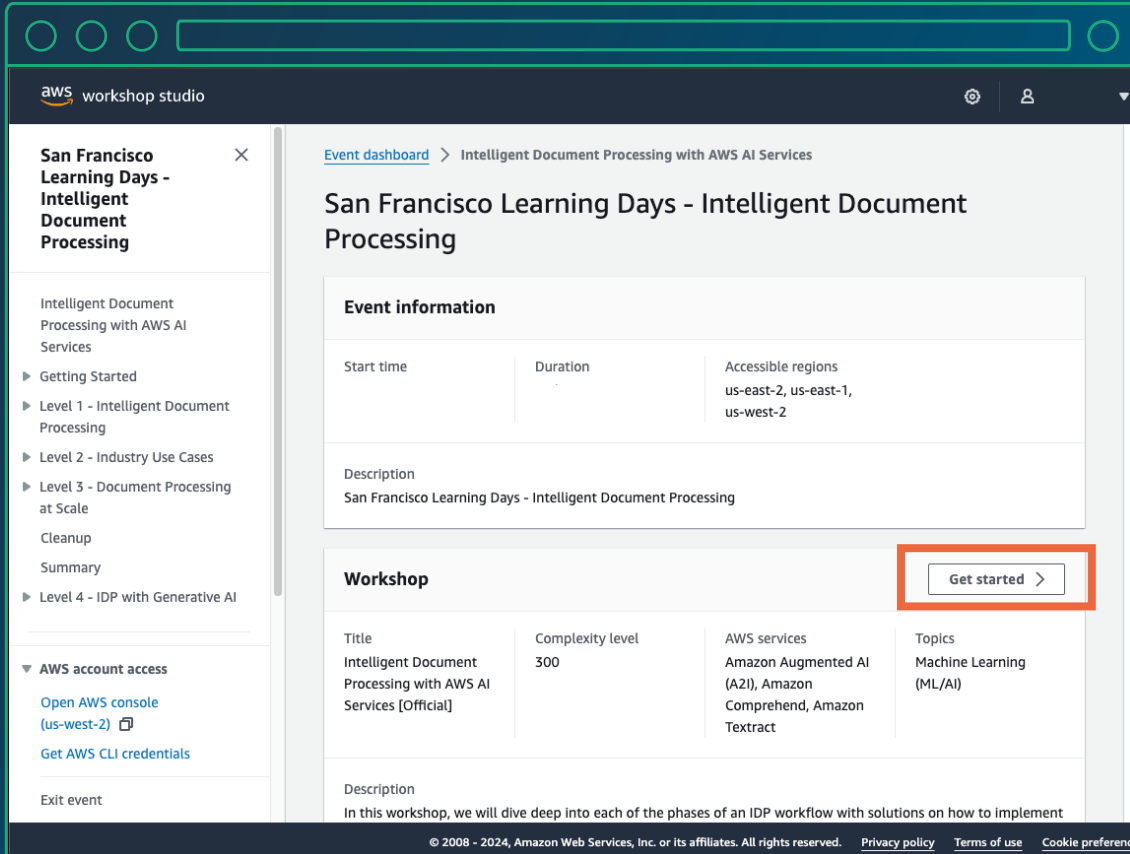
1. By using AWS Workshop Studio for the relevant event, You agree to [the AWS Event Terms and Conditions](#), the [AWS Responsible AI Policy](#), and the [AWS Acceptable Use Policy](#).
2. If You are under 18 years old, you may participate in the relevant event using AWS Workshop Studio: (a) if You are at least the minimum age below based on the country or region in which You reside, and (b) with the involvement of a parent, guardian, or educator.
in the AWS-owned account, You agree to review those terms and comply with them during the event.
11. If You are an AWS Partner using AWS Workshop Studio as part of Your participation in the AWS Partner Network Program, Your use of AWS Workshop Studio is governed by these terms, the AWS Partner Network Terms and Conditions, and the AWS Customer Agreement or other agreement with us governing your use of AWS Services.
12. Your use of AWS Workshop Studio will comply with these terms and all applicable laws. If You fail to comply with any of these terms, Your access to AWS Workshop Studio may be immediately terminated, without notice to You.

☒ I agree with the Terms and Conditions

Cancel Previous **Join event**

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Step 6: Get started with the workshop



The screenshot shows the AWS Workshop Studio interface for the 'San Francisco Learning Days - Intelligent Document Processing' event. The left sidebar contains a navigation menu with options like 'Getting Started', 'Level 1 - Intelligent Document Processing', 'Level 2 - Industry Use Cases', 'Level 3 - Document Processing at Scale', 'Cleanup', 'Summary', and 'Level 4 - IDP with Generative AI'. The main content area displays event information and a workshop table. The 'Get started' button is highlighted with a red box.

Event information

Start time	Duration	Accessible regions
		us-east-2, us-east-1, us-west-2

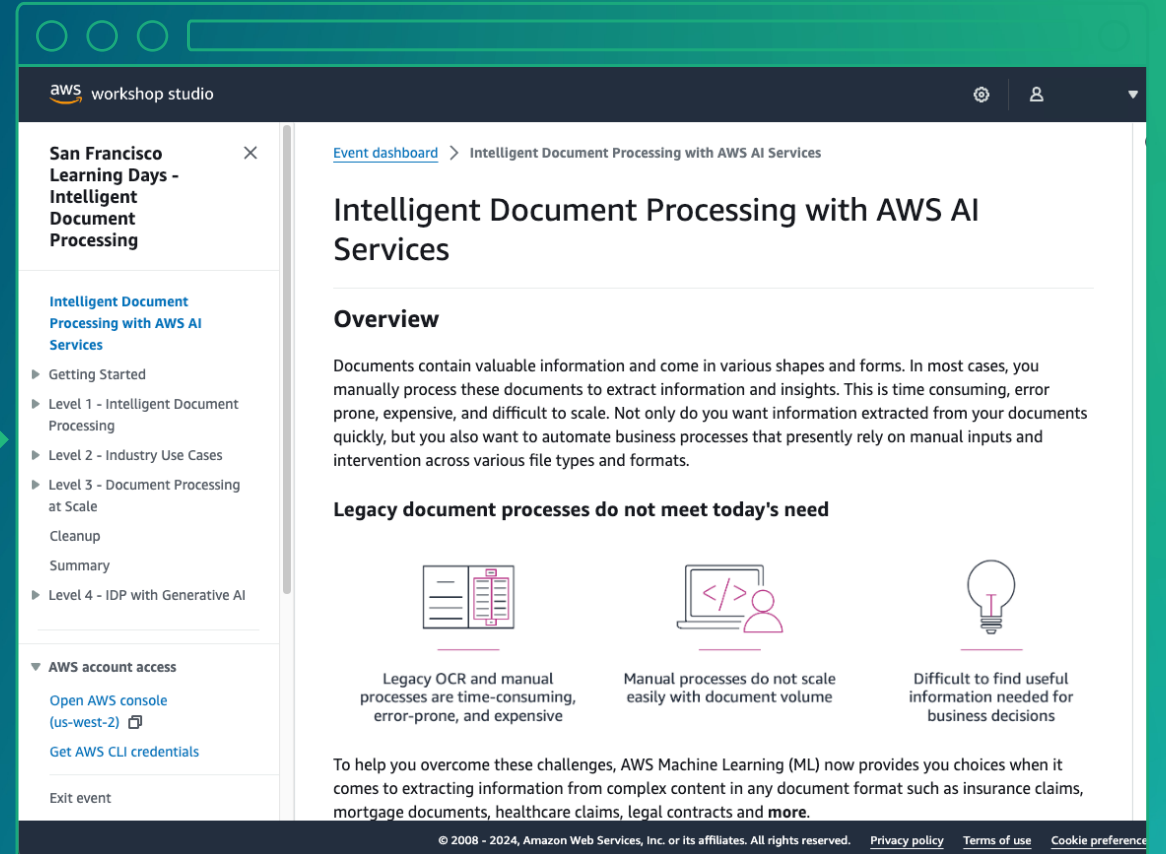
Description
San Francisco Learning Days - Intelligent Document Processing

Workshop

Title	Complexity level	AWS services	Topics
Intelligent Document Processing with AWS AI Services [Official]	300	Amazon Augmented AI (A2I), Amazon Comprehend, Amazon Textract	Machine Learning (ML/AI)

Description
In this workshop, we will dive deep into each of the phases of an IDP workflow with solutions on how to implement

[Get started >](#)






The screenshot shows the AWS Workshop Studio interface for the 'Intelligent Document Processing with AWS AI Services' event. The left sidebar contains a navigation menu with options like 'Getting Started', 'Level 1 - Intelligent Document Processing', 'Level 2 - Industry Use Cases', 'Level 3 - Document Processing at Scale', 'Cleanup', 'Summary', and 'Level 4 - IDP with Generative AI'. The main content area displays an overview of the event and a table of legacy document processes. The 'Get started' button is highlighted with a red box.

Intelligent Document Processing with AWS AI Services

Overview

Documents contain valuable information and come in various shapes and forms. In most cases, you manually process these documents to extract information and insights. This is time consuming, error prone, expensive, and difficult to scale. Not only do you want information extracted from your documents quickly, but you also want to automate business processes that presently rely on manual inputs and intervention across various file types and formats.

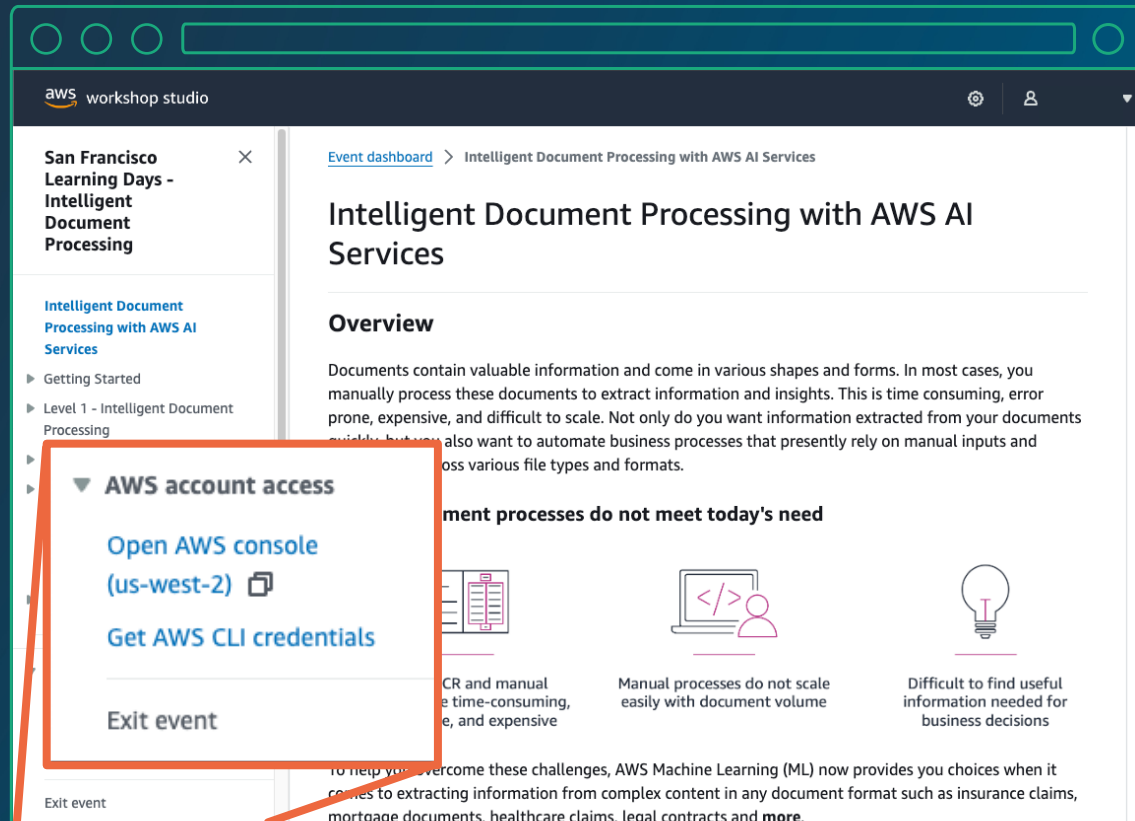
Legacy document processes do not meet today's need

		
Legacy OCR and manual processes are time-consuming, error-prone, and expensive	Manual processes do not scale easily with document volume	Difficult to find useful information needed for business decisions

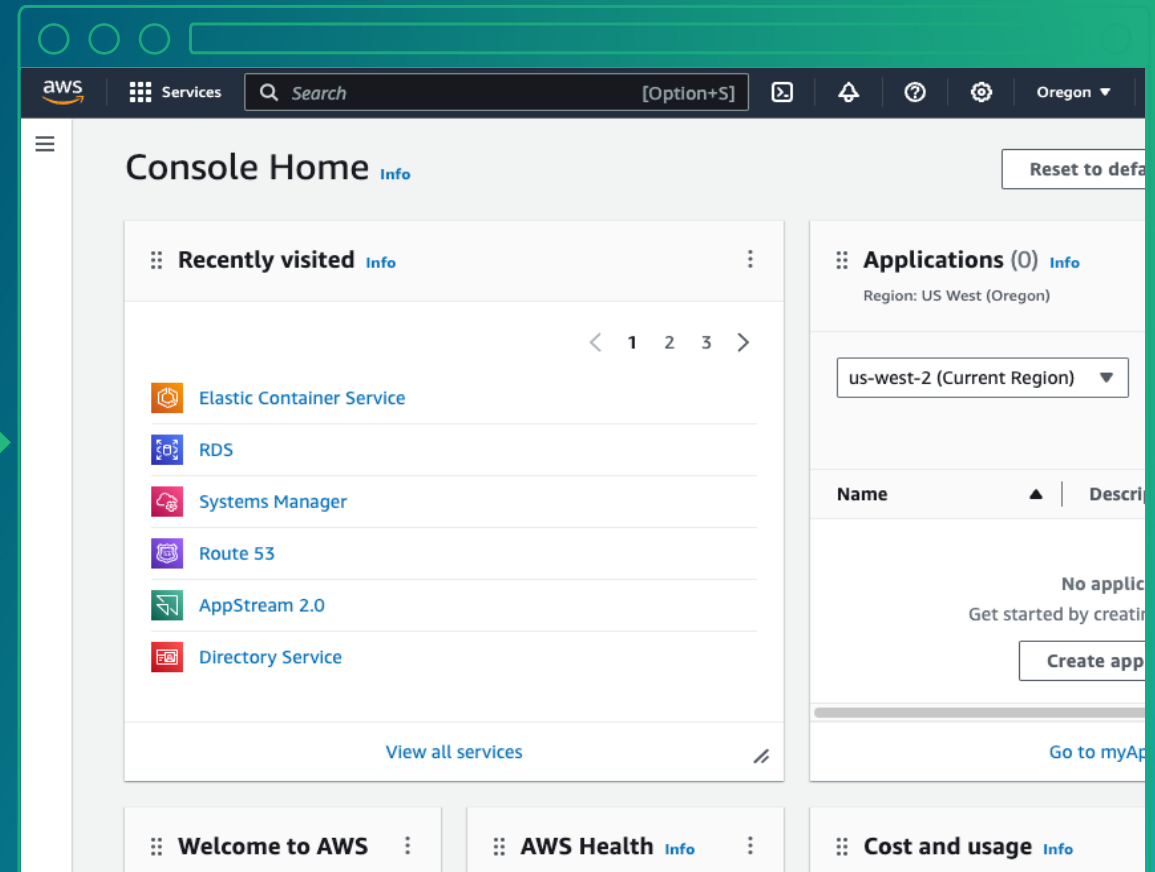
To help you overcome these challenges, AWS Machine Learning (ML) now provides you choices when it comes to extracting information from complex content in any document format such as insurance claims, mortgage documents, healthcare claims, legal contracts and more.

[Get started >](#)

Step 7: Access AWS Account



Access the AWS Management Console or generate AWS CLI credentials as needed



Event access code: ae21-084a12-4d

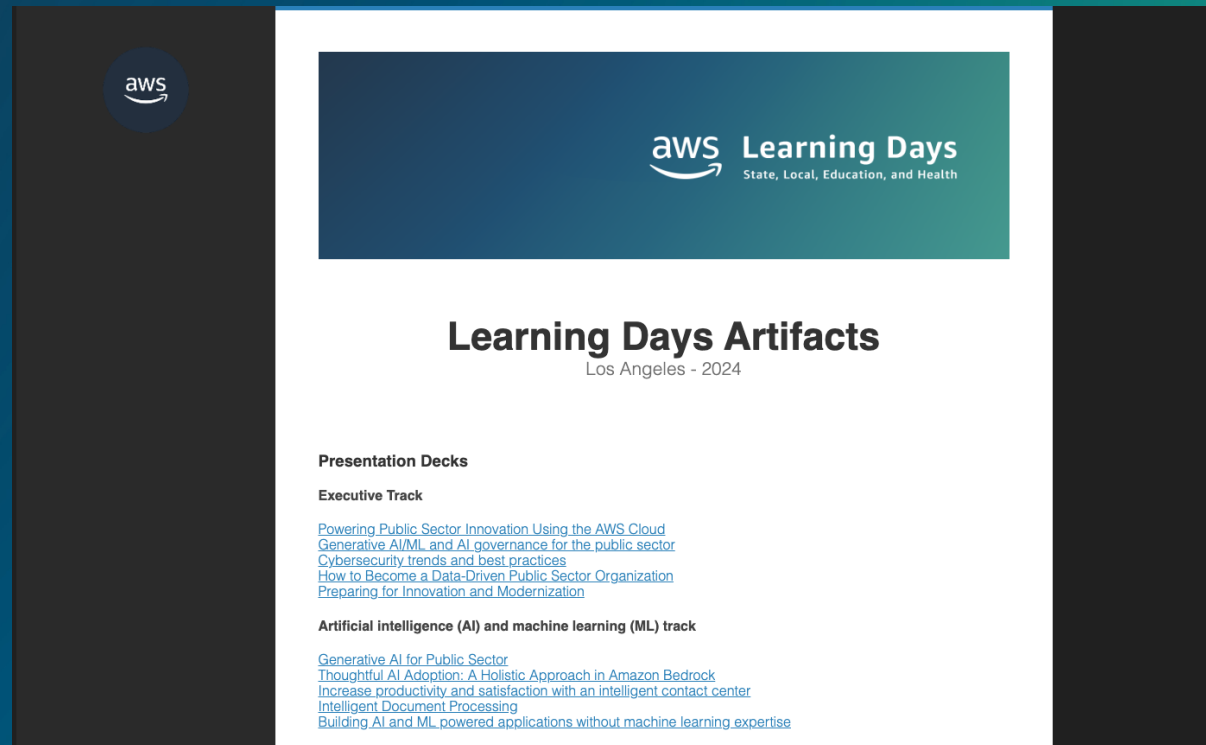
Please Provide Your Feedback



Step 1: Select **Security and Application Modernization Track**
Step 2: Select **Breaking the monolith with microservices**

Learning Day Content

<https://sanfrancisco2024.awslearningday.com/>





Thank you!

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