



AWS San Francisco Learning Days

Intelligent Document Processing Workshop

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Senior Solutions Architect
Amazon Web Services

Agenda

- Intelligent document processing on Amazon Web Services (AWS)
- Architecture overview
- Let's build a solution together!

Intelligent Document Processing on AWS



Speed up business processes



Improve decision quality

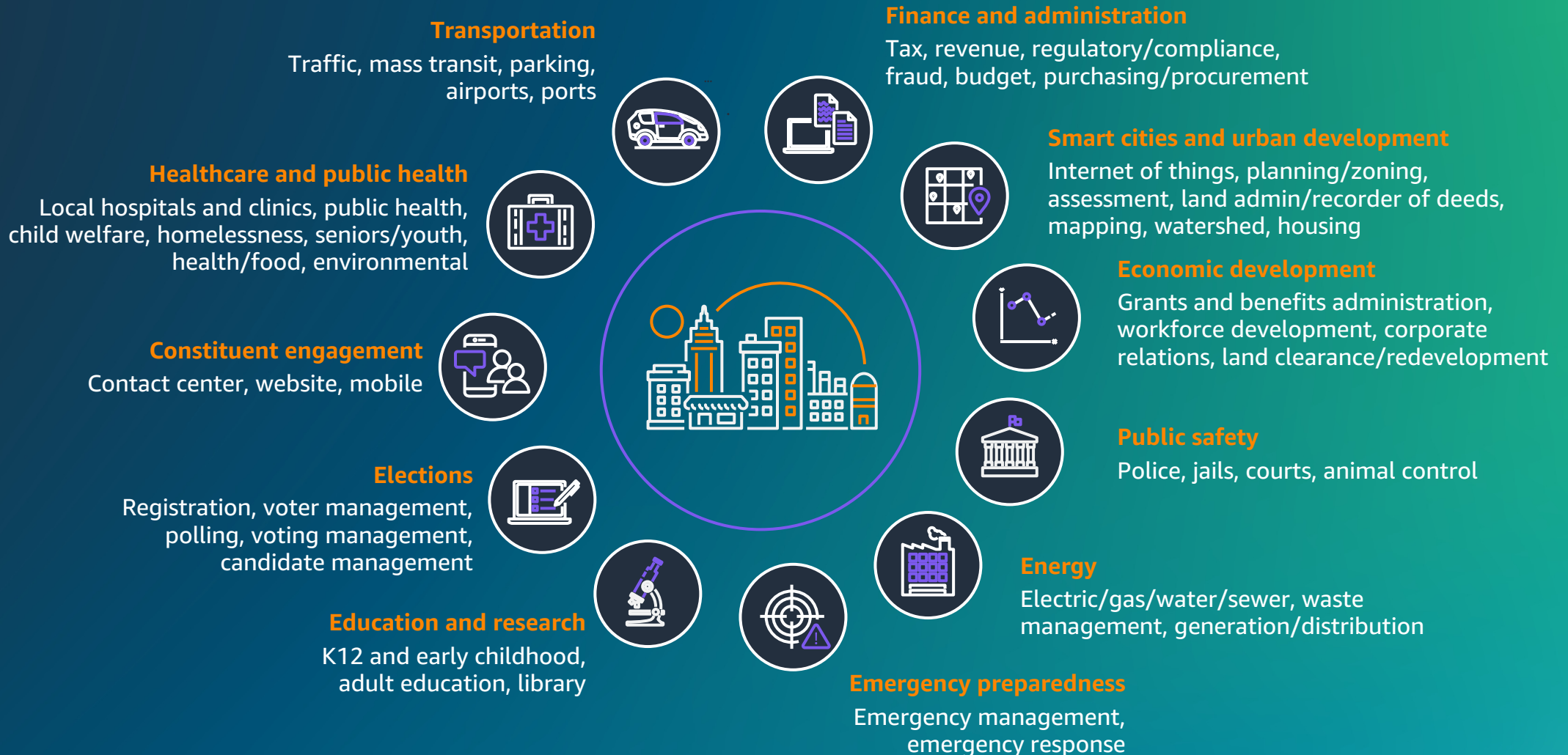


Retain and recall information electronically



Reduce overall costs

Document processing is critical for public sector mission



ML services for IDP Solutions

Amazon Rekognition offers pre-trained and customizable computer vision (CV) capabilities to extract information and insights from your images and videos.

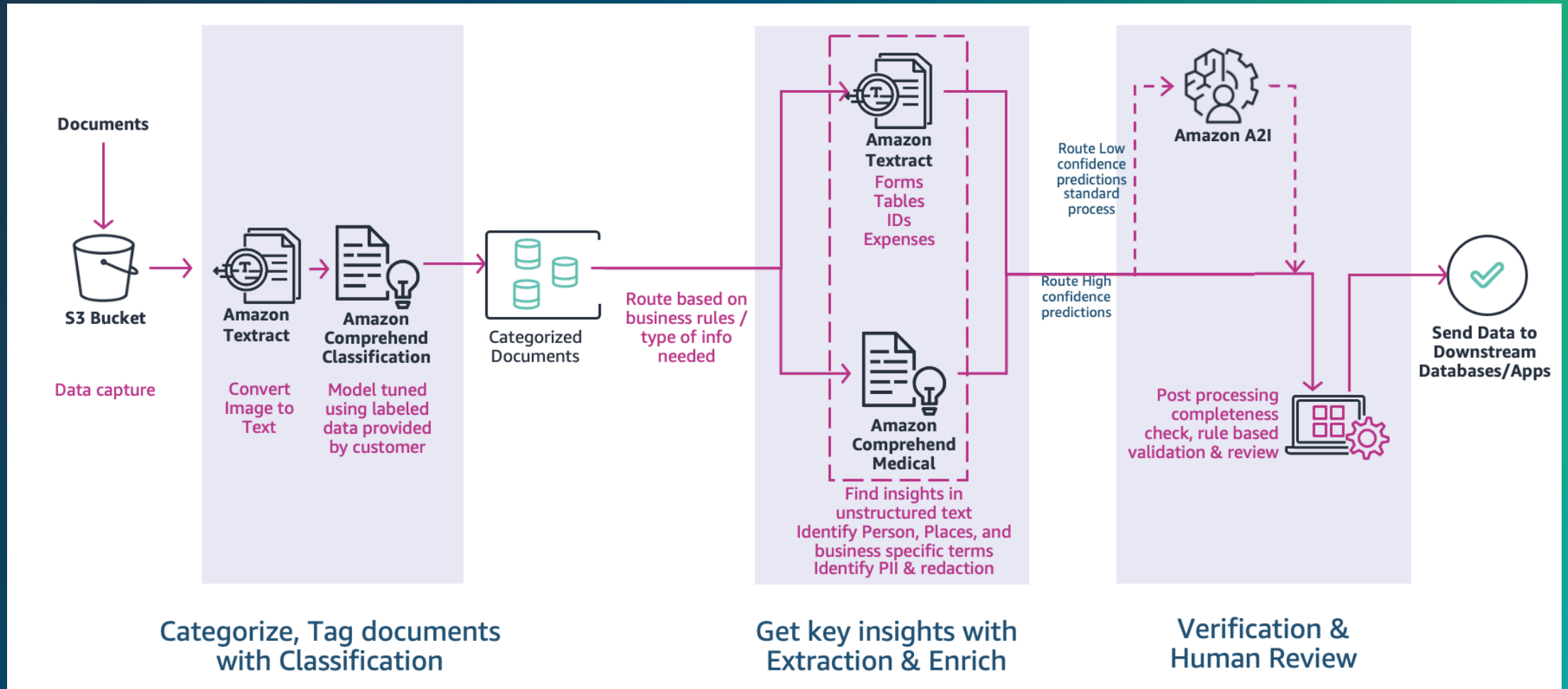
Amazon Textract automatically extracts text, handwriting, and data from scanned documents. It goes beyond simple optical character recognition (OCR) to identify, understand, and extract data from forms and tables.

Amazon Transcribe makes it easy for customers to convert speech-to-text.

Amazon A2I makes it easy to build the workflows required for human review.

Amazon Comprehend is a natural language processing (NLP) service that uses machine learning to find meaning and insights in text.

High level architecture



Let's build a solution



Benefits Application processing

Scenario Description	Outcome
Scenario-1: Standard application processing <ul style="list-style-type: none">• User uploads eligibility documents (SSN, DL, Passport, Utility bill)• System automatically classifies the document• Text automatically extracted and stored in DB• Each document gets a score based on mandatory fields extracted• Overall application gets a score• Auto-adjudication based on a specific application score threshold	Document successfully processed
Scenario-2: Document with low quality text / missing fields	Additional Human in the loop review conducted
Scenario-3: Automated Interview transcription	No manual note taking. Analysis of transcription
Bonus Scenario-5: Text analysis with Natural Language Processing	Sentiment Analysis of the call transcript. Assess if a given customer was happy, positive, negative, etc., with the call

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.

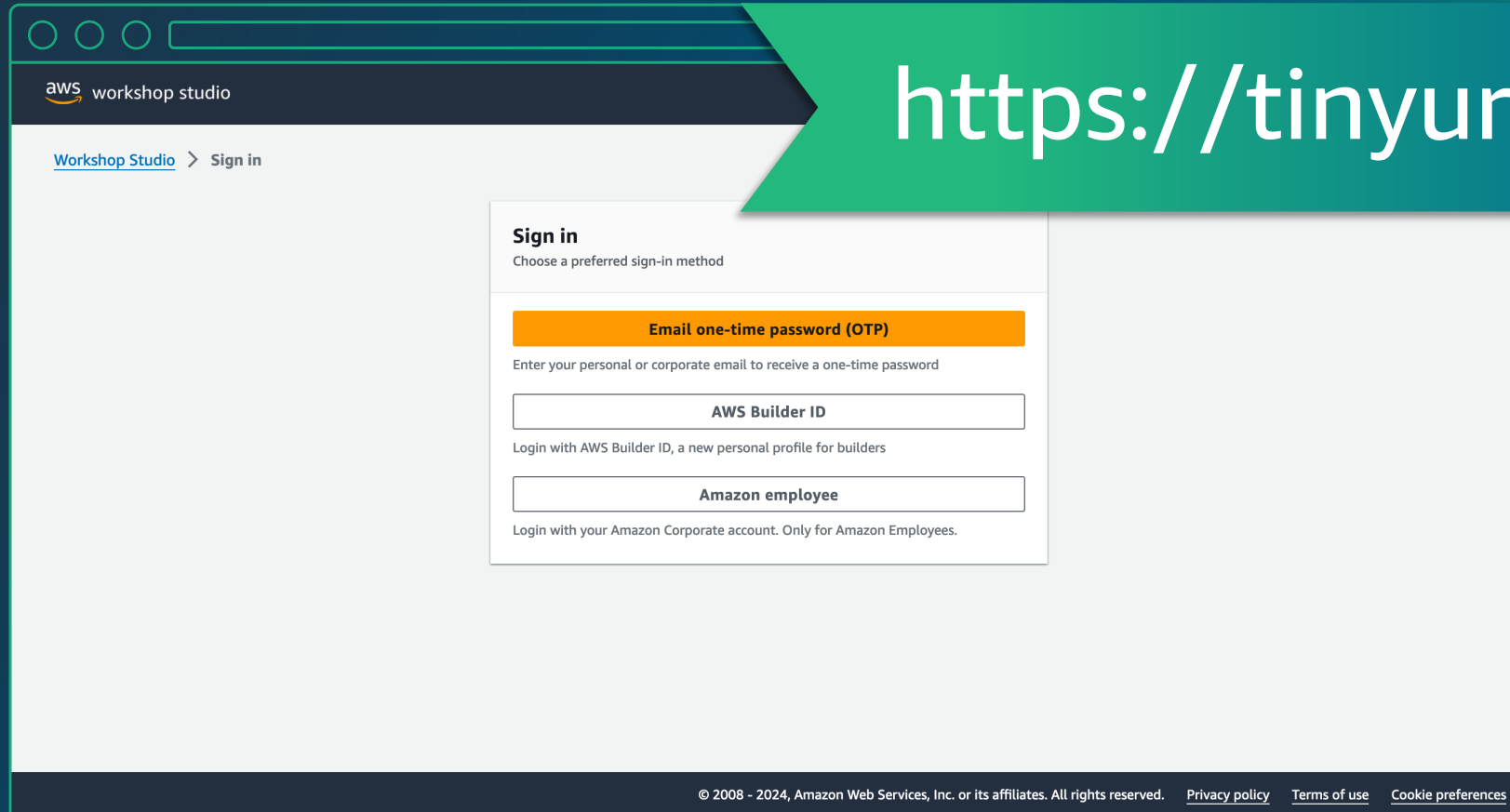


Review the terms and conditions of the event. **Do not upload any personal or confidential information to the account.**

<https://tinyurl.com/awssfidp>



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



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

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

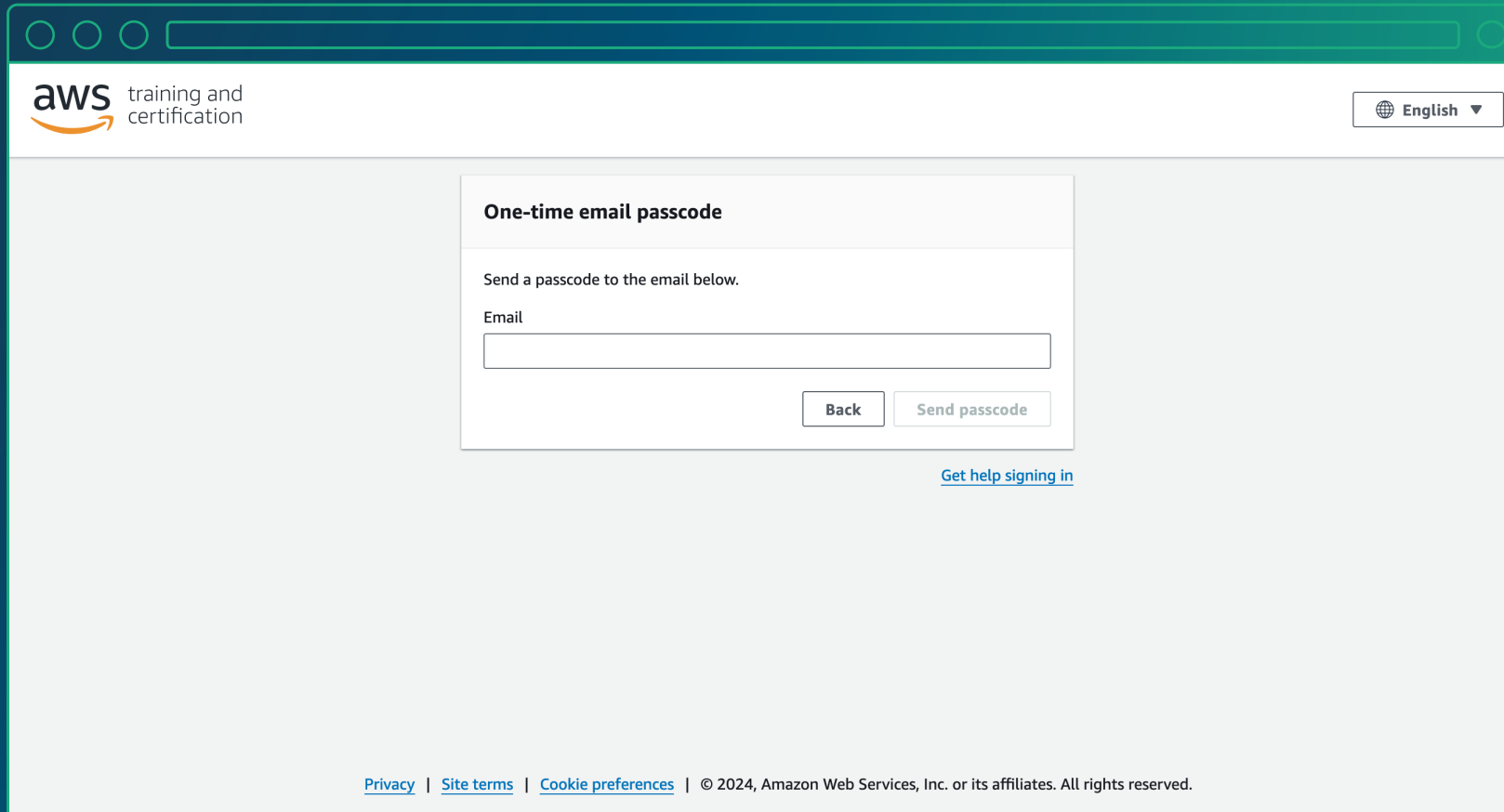
Login with your Amazon Corporate account. Only for Amazon Employees.

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<https://tinyurl.com/awssfidp>



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.

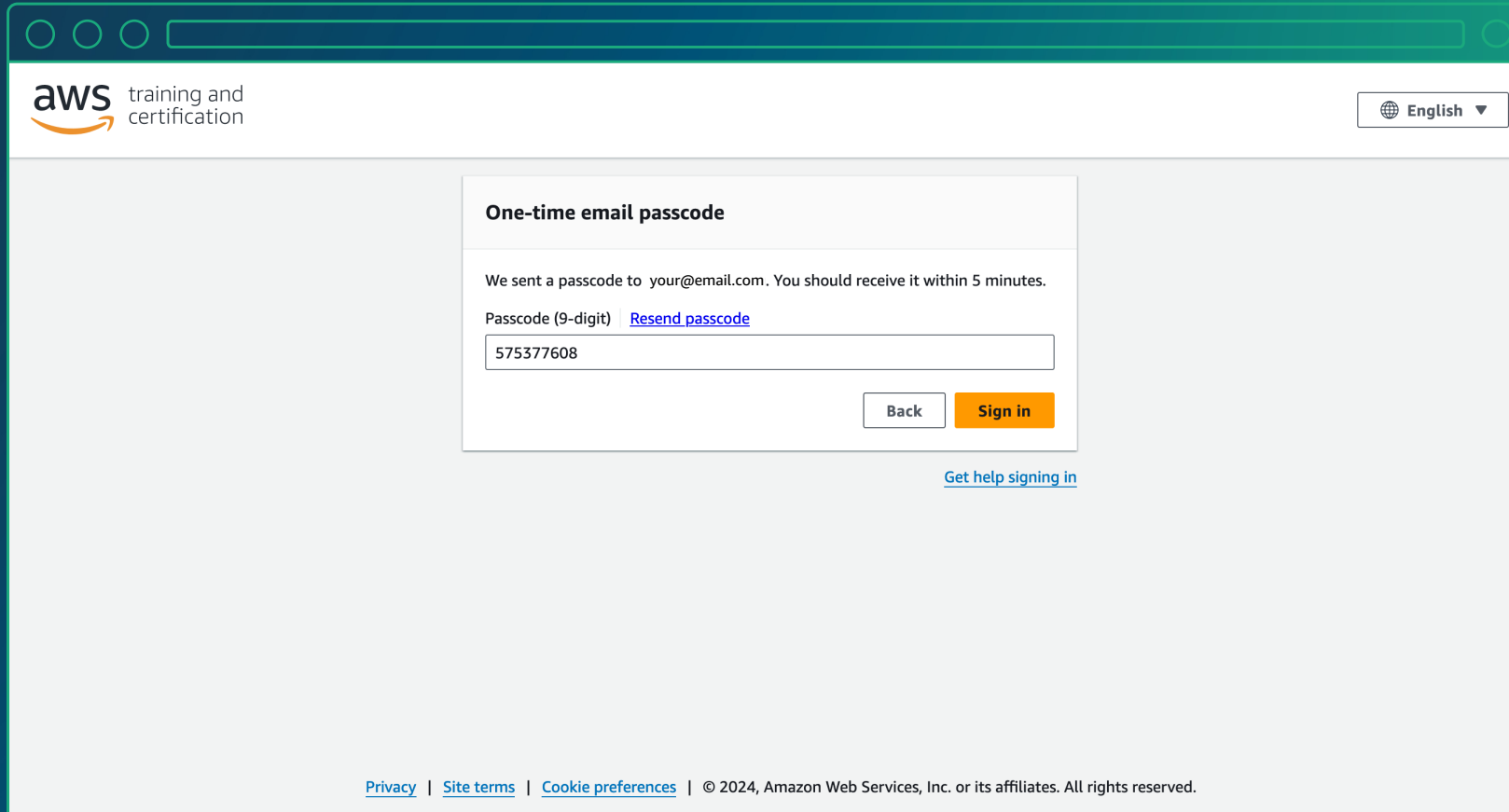
Email

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". Below the title, a message states: "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 right 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](#)

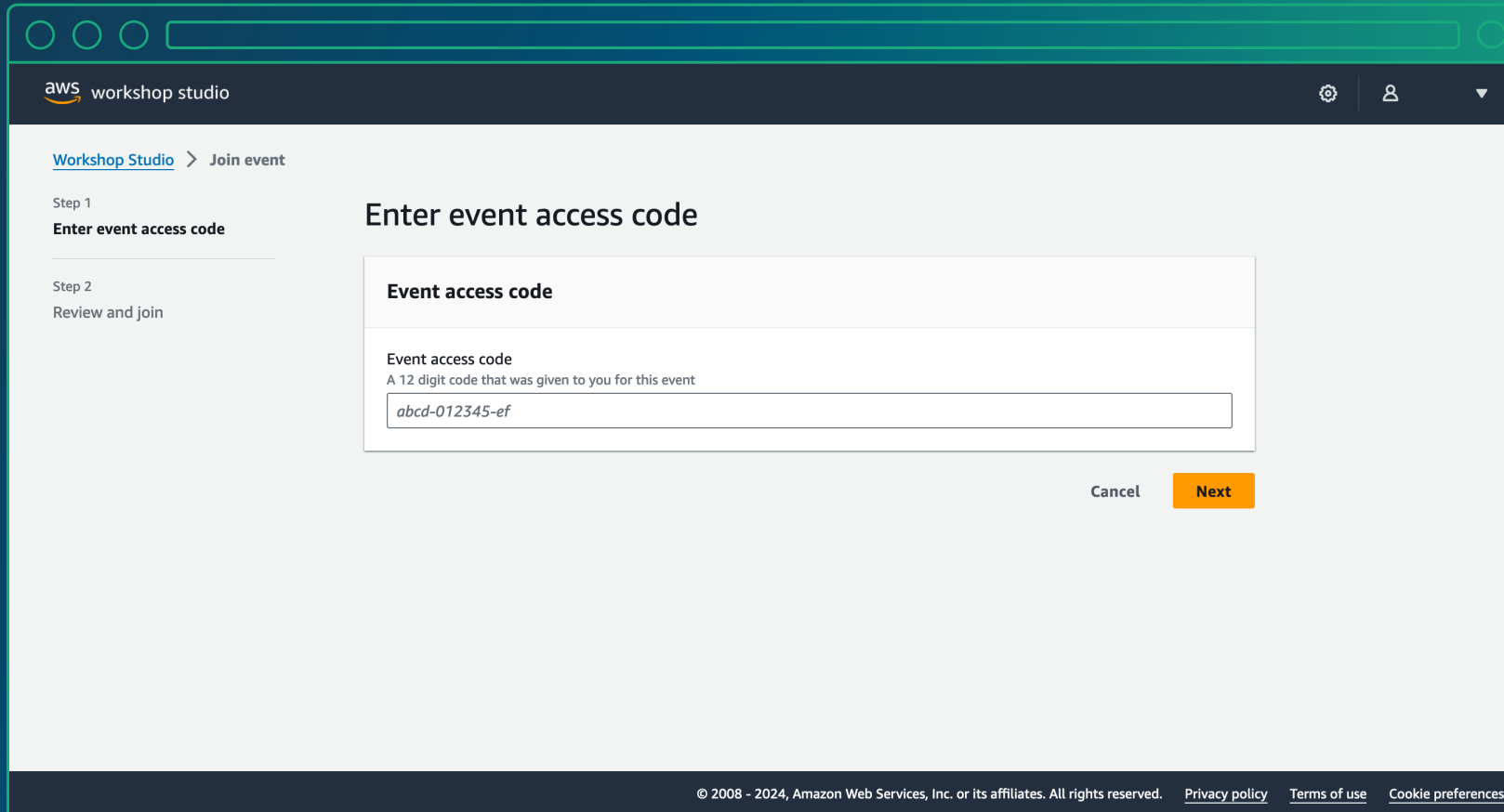
575377608

[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 logo and 'workshop studio' text. Below the header, a breadcrumb trail shows 'Workshop Studio > Join event'. On the left, a sidebar lists 'Step 1: Enter event access code' (which is highlighted) and 'Step 2: Review and join'. The main content area is titled 'Enter event access code'. It contains a form box with the heading 'Event access code' and a sub-label 'Event access code' followed by the instruction 'A 12 digit code that was given to you for this event'. A text input field below this contains the placeholder text 'abcd-012345-ef'. At the bottom right of the form box are two buttons: 'Cancel' and 'Next' (which is highlighted in orange). The footer of the page contains copyright information 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:

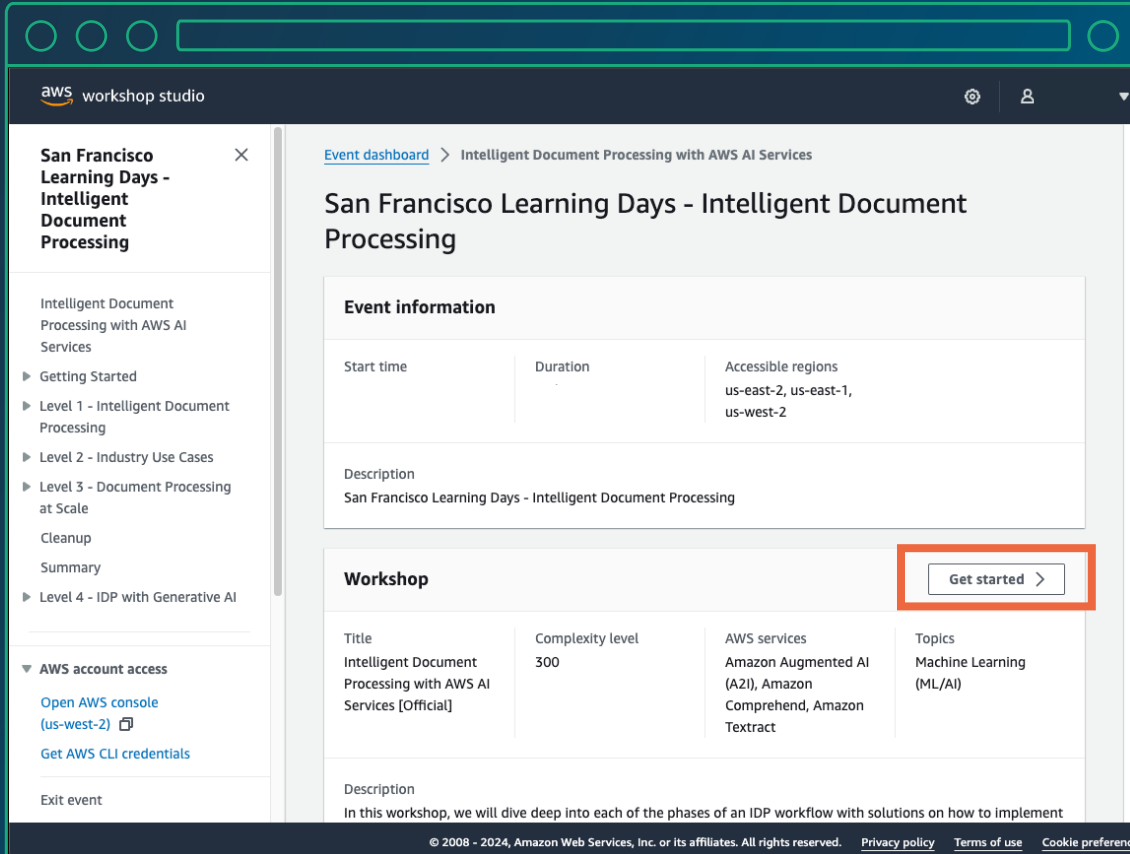
1. By using AWS Workshop Studio for the relevant event, You agree to [the AWS Event Terms and Conditions](#), the [AWS Responsible AI Policy](#), and the [AWS Acceptable Use Policy](#).
2. If You are under 18 years old, you may participate in the relevant event using AWS Workshop Studio: (a) if You are 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 'Workshop' details. The 'Get started' button is highlighted with a red box.

San Francisco Learning Days - Intelligent Document Processing

[Event dashboard](#) > Intelligent Document Processing with AWS AI Services

Event information

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

Description
San Francisco Learning Days - Intelligent Document Processing

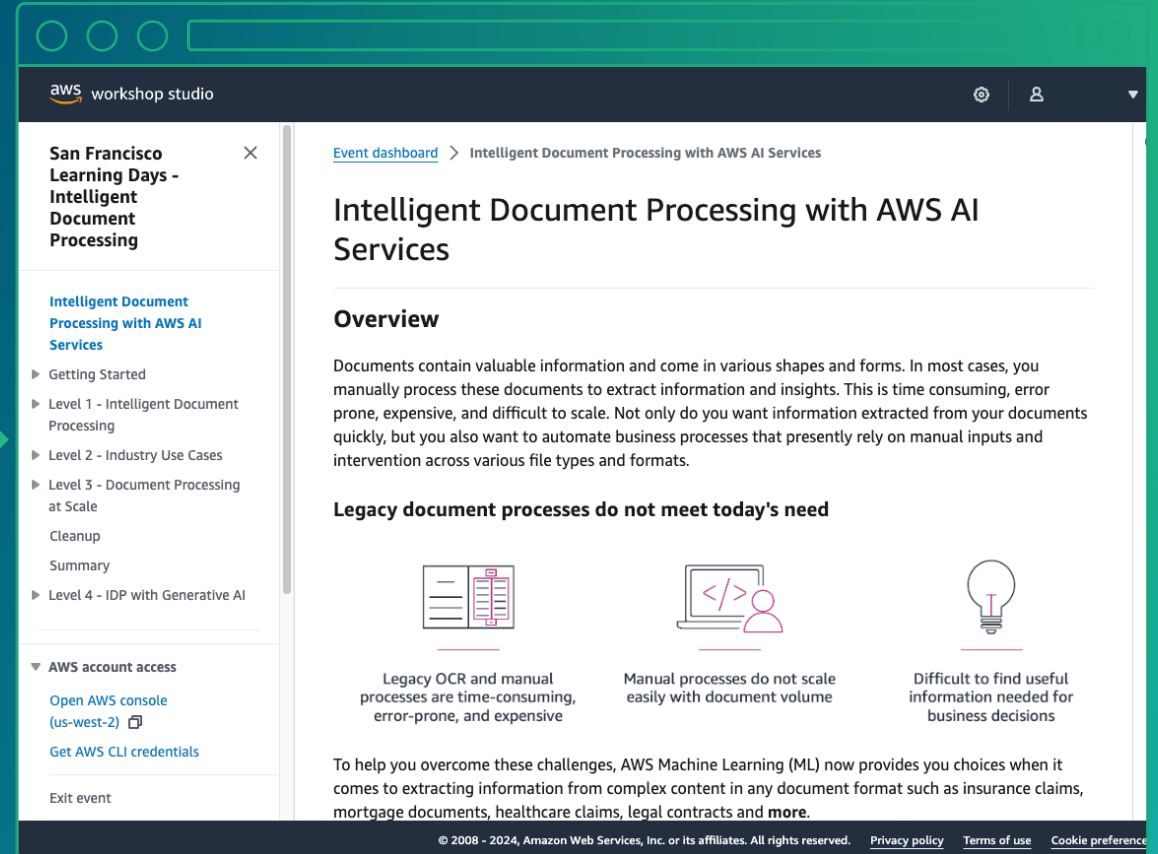
Workshop

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 >](#)

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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' section and a section titled 'Legacy document processes do not meet today's need'.


Intelligent Document Processing with AWS AI Services

[Event dashboard](#) > 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

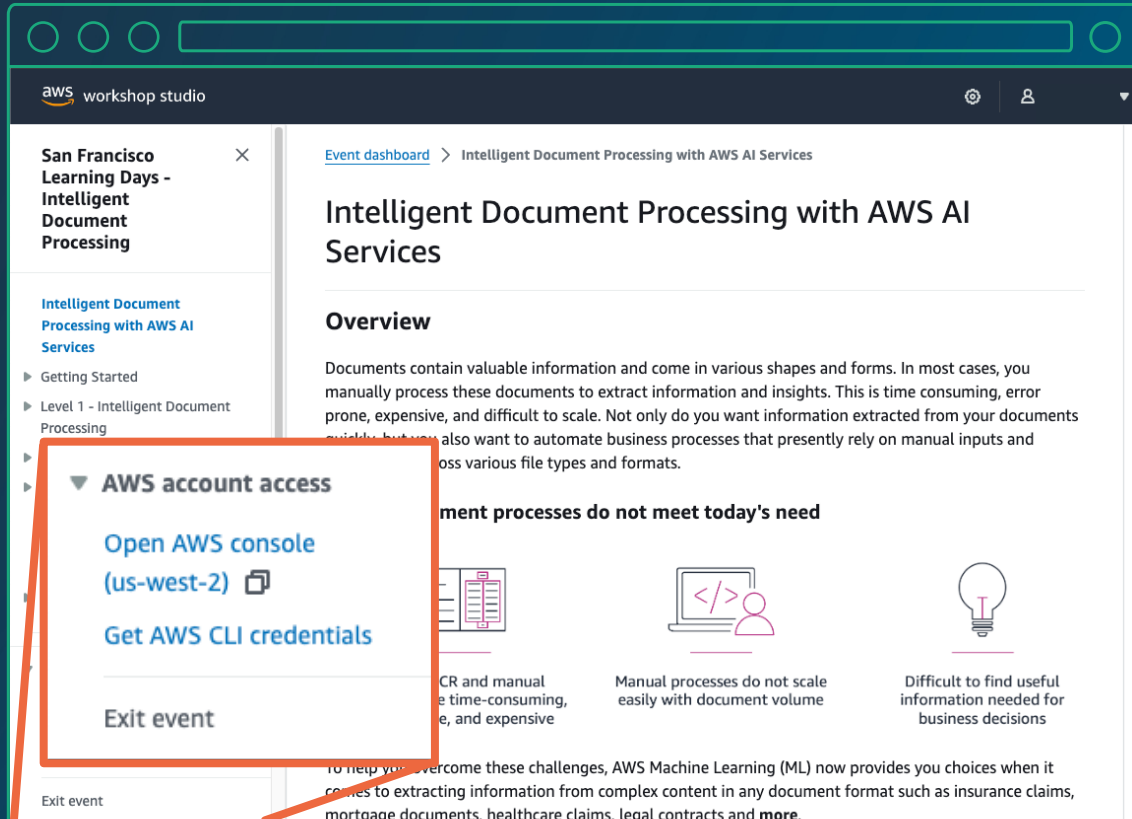


Difficult to find useful information needed for business decisions

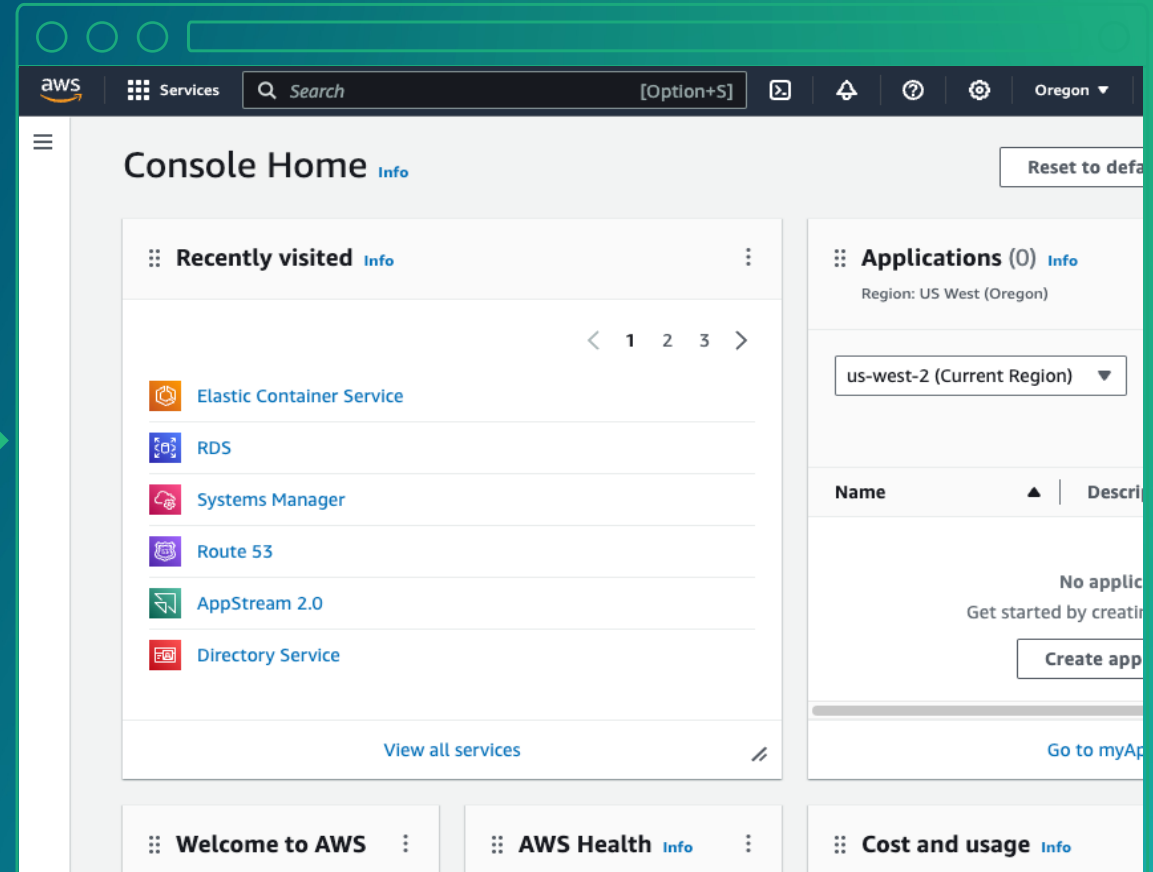
To help you overcome these challenges, AWS Machine Learning (ML) now provides you choices when it comes to extracting information from complex content in any document format such as insurance claims, mortgage documents, healthcare claims, legal contracts and **more**.

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Step 7: Access AWS Account



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




Event access code: c333-0a3d72-d1

Prerequisites

Sample Benefits website

Sign In

Create Account



Sign in

[Forgot your password?](#)



Thank you!

Please Provide Your Feedback



Step 1: Select Artificial intelligence and machine learning
Step 2: Intelligent document processing

Learning Day Content

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

