

1. Insurance Charge Prediction - Sagemaker

27 April 2025 20:20

The screenshot shows the AWS Services page with the search bar set to "aws sagemaker". The "Amazon SageMaker" section is highlighted, showing the "Amazon SageMaker AI" feature, which is described as "The center for data, analytics, and AI". Below it, the "Amazon SageMaker Studio" feature is listed. On the right, there is a "Create bucket" button and a table for "Access Analyzer" with several entries.

The screenshot shows the "Domains" section of the Amazon SageMaker AI page. It displays a table with one row labeled "No domains". A "Create domain" button is visible. The left sidebar includes sections for Applications and IDEs, Admin configurations (with "Domains" selected), and SageMaker AI dashboard.

The screenshot shows the "Domain details" page for the domain "QuickSetupDomain-20250430T163613". The "General settings" section shows the name and creation date. The "Domain ID" is listed as "d-wg9kpo07jsfk". The "Domain rules" section shows "No domain rules". A note in the middle of the screen says "Wait till success message". A handwritten note "check" is written next to the status field in the general settings.

The screenshot shows the same "Domain details" page after the domain has been configured. The "Status" field now shows "Ready". A green message at the top says "The SageMaker Domain is ready. Choose your user name, then choose Launch app to get started." A handwritten note "Wait till success message" is written over the "Domain rules" section.

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T163613

QuickSetupDomain-20250430T163613

Domain details

Configure and manage the domain.

[Domain settings](#) [User profiles](#) [Space management](#) [App Configurations](#) [Environment](#) [Resources](#)

General settings

Name: QuickSetupDomain-20250430T163613 **Status:** Ready **Domain ID:** d-wg9kpx07jsfk

Created: Wed Apr 30 2025 16:36:33 GMT+0530 (India Standard Time) **Last modified:** Wed Apr 30 2025 16:39:26 GMT+0530 (India Standard Time) **VPC:** vpc-00c78f0bd9e55f961

Domain rules

Visibility of instance and image resources for this domain

[Manage rules](#)

Rule type	Application type	Rule action	Resource
No domain rules			
No domain rules to display			

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T163613

QuickSetupDomain-20250430T163613

Domain details

Configure and manage the domain.

[Domain settings](#) [User profiles](#) [Space management](#) [App Configurations](#) [Environment](#) [Resources](#)

User profiles

A user profile represents a single user within a domain. It is the main way to reference a user for the purposes of sharing, reporting, and other user-oriented features.

[Add user](#)

Name	Modified on	Created on	Actions
default-20250430T163613	Apr 30, 2025 11:09 UTC	Apr 30, 2025 11:09 UTC	Launch

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T163613

QuickSetupDomain-20250430T163613

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[Add user](#)

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default-20250430T163613	Apr 30, 2025 11:09 UTC	Apr 30, 2025 11:09 UTC	Launch

AWS Search [Alt+S] ✖️ 🔍

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T163613 > Add user profile

Add user profile

General settings
User profile and details.

User profile

Name: default-1746011775019 Change Name

The name can have up to 63 characters. Valid characters: A-Z, a-z, 0-9, and - (hyphen)

Execution role: AmazonSageMaker-ExecutionRole-20250430T163614 Create role using the role creation wizard

Tags - optional

Add tag You can attach up to 50 tags.

Cancel Next

AWS Search [Alt+S] ✖️ 🔍

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T163613 > Add user profile

Add user profile

General settings
User profile and details.

User profile

Name: insurancetraindeploy Change Name

The name can have up to 63 characters. Valid characters: A-Z, a-z, 0-9, and - (hyphen)

Execution role: AmazonSageMaker-ExecutionRole-20250430T163614 Create role using the role creation wizard

Tags - optional

Add tag You can attach up to 50 tags.

Cancel Next

Note: Make sure this is Execution role

AWS Search [Alt+S] ✖️ 🔍

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T163613 > Add user profile

Add user profile

Configure Applications
Configure your role with the help of available ML activities.

SageMaker Studio Updated Learn more about SageMaker Studio

Our updated version of Amazon SageMaker Studio provides a single interface where you can perform all ML development steps including notebooks, experiment management, automatic model creation, debugging and profiling, and model drift detection. If you would prefer to use our legacy version of Studio you can disable the new version with the toggle below.

No additional configurations needed for SageMaker Studio.

JupyterLab Learn more about JupyterLab

JupyterLab is the latest web-based interactive development environment for notebooks, code, and data.

Idle shutdown settings made at the user profile level will override domain-level idle shutdown settings.

Enable idle shutdown New When you enable idle shutdown, JupyterLab spaces using SageMaker Distribution image 2.0+ in this domain will shut down after being idle for the specified idle shutdown time. If you use custom images please follow the instructions in the SageMaker documentation to enable this capability. Learn more

Canvas Learn more about Canvas

Generate accurate machine learning predictions - no code required.

Configure Canvas

AWS Search [Alt+S]

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T165613 > Add user profile

No user license found. A license message will be automatically detected once a license has been applied. If no license is not detected, you must add one to AWS License Manager to activate, and use RStudio Workbench, and other RStudio tools.

RStudio Workbench license not detected.

Code Editor Learn more about Code Editor

Code Editor, based on Code-OSS, Visual Studio Code Open Source, enables you to code, test, debug and run your analytics and machine learning code.

Idle shutdown settings made at the user profile level will override domain-level idle shutdown settings.

Enable idle shutdown When you enable idle shutdown, CodeEditor spaces using SageMaker Distribution Image 2.0+ will shut down after being idle for the specified idle shutdown time. If you use custom images please follow the instructions in the SageMaker documentation to enable this capability. [Learn more.](#)

don't change anything

MLflow Learn more about MLflow

MLflow is an ML experimentation tool you can use while training and evaluating models to find the best candidates for your use case. Compare models in MLflow and keep track of the best models in the MLflow Model Registry.

No additional configurations needed for MLflow.

MLflow Tracking Servers use domain network settings by default.

Cancel Back **Next**

AWS Search [Alt+S]

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T165613 > Add user profile

Customize Studio UI

Step 1 General settings

Step 2 Configure Applications

Step 3 Customize Studio UI

Step 4 Data and storage settings

Step 5 Review and create

Personalize the Studio UI's left nav for your users by hiding app, IDEs and ML tooling. Turn off the toggle to hide a left nav item in Studio UI.

Some features may not be available in all regions.

Select the applications that are displayed in Studio to users on this domain.

The selections below will only hide those applications in the navigation. Users could still access these applications through other methods. [Learn how to block full access to applications](#)

Application buttons

	Preview
<input checked="" type="radio"/> JupyterLab	
<input checked="" type="radio"/> Code Editor	
<input checked="" type="radio"/> Canvas	
<input checked="" type="radio"/> RStudio	
<input checked="" type="radio"/> MLflow	
<input checked="" type="radio"/> Comet	
<input checked="" type="radio"/> Deepchecks	
<input checked="" type="radio"/> Fiddler	
<input checked="" type="radio"/> Lakera Guard	

AWS Search [Alt+S]

Amazon SageMaker AI > Domains > Domain: QuickSetupDomain-20250430T165613 > Add user profile

Model evaluations
Evaluate large language models

Inference optimization
Optimize models for cost-performance.

Performance evaluation
Evaluate performance for model latency and throughput.

Pipelines

Models

JumpStart

Deployments

Inference recommender
Optimize cost & performance

Endpoints
Manage deployed models

Projects
Automate model building & deployment

Cancel Back **Next**

Add user profile

Step 1
General settings

Step 2
Configure Applications

Step 3
Customize Studio UI

Step 4
Data and storage settings

Step 5
Review and create

Data and Storage

AutoMountHomeEFS Info

Inherit settings from domain
When enabled, this user profile will dynamically inherit current and future domain EFS settings

Custom user profile AutoMountHomeEFS settings

Customize Studio UI
Automatically mount EFS storage and data

CustomPosixUserConfig Info

Enable custom POSIX user configuration for all users on this domain
Set a custom POSIX configuration for users on this domain.

Cancel

Back

Next

Add user profile

Step 1
General settings

Step 2
Configure Applications

Step 3
Customize Studio UI

Step 4
Data and storage settings

Step 5
Review and create

Review and create

Step 1: General settings

Edit

User profile

Name
insurancetraindeploy

Execution role
arn:aws:iam::253490754689:role/service-role/AmazonSageMaker-ExecutionRole-20250430T163614

Step 2: App Configurations

Edit

Studio configuration

Default Studio application
SageMaker Studio - Updated

Canvas configuration

Canvas storage configuration
Amazon S3 artifacts location
System managed

Encryption key
No custom encryption

ML Ops configuration

Enable direct deployment of Canvas models
Enabled

Enable Model Registry registration permissions for all users
Enabled

Inference optimization	<input checked="" type="radio"/> Visible
Performance evaluation	<input checked="" type="radio"/> Visible
Pipelines	<input checked="" type="radio"/> Visible
Models	<input checked="" type="radio"/> Visible
JumpStart	<input checked="" type="radio"/> Visible
Inference recommender	<input checked="" type="radio"/> Visible
Endpoints	<input checked="" type="radio"/> Visible
Projects	<input checked="" type="radio"/> Visible

Step 4: Data and storage settings

Edit

AutoMountHomeEFS

Inherit settings from domain
Enabled

CustomPosixUserConfig

No value

Cancel

Back

Submit

Domain details

User profiles (selected)

General settings

Domain rules

Authentication and permissions

Domain details

User profiles (selected)

Name	Modified on	Created on
insuranceetraindeploy	Apr 30, 2025 11:33 UTC	Apr 30, 2025 11:33 UTC
default-20250430T163613	Apr 30, 2025 11:09 UTC	Apr 30, 2025 11:09 UTC

Personal apps

- Studio
- Canvas
- TensorBoard
- Profiler
- Collaborative
- Spaces

SageMaker Studio

Applications (5)

- JupyterLab
- RStudio
- Canvas
- Code Editor
- MLflow

Partner AI Apps

Home

Running instances

Compute

Data

Auto ML

Collapse Menu

Welcome to the new SageMaker Studio

We've built a new experience to empower you and your work.

Want to take a quick tour?

Skip Tour for now **Take a quick tour**

Are you an existing Studio Classic user and looking to migrate your data and notebooks? Click here to learn how.

Overview

Start a new ML workflow or jump back into your workflow.

The image shows two screenshots of the SageMaker Studio interface. The top screenshot displays the 'Onboarding plan' modal, which provides introductory steps for the new Studio experience. It includes sections for 'Take the tour', 'Access your EFS data in JupyterLab and CodeEditor', and 'Access your Studio Classic apps'. The 'JupyterLab' icon in the Applications menu is highlighted with a red box. The bottom screenshot shows the 'JupyterLab' application page, featuring a 'Create JupyterLab space' button highlighted with a red box. Both screenshots include a dark sidebar with various navigation options like Home, Running instances, Compute, Data, and Auto ML.

Onboarding plan
To get the most out of the new Studio experience, explore the onboarding steps below.

Take the tour
Quick tour highlights where you can find key features and how to navigate the new experience. See what's new and where to locate the tools you need to be productive.
[Take the tour >](#)

Access your EFS data in JupyterLab and CodeEditor
Automatically available in private spaces.
[Try JupyterLab](#)

Access your Studio Classic apps
Pickup where you left off and access your Studio Classic apps from within the updated Studio experience.
[View Studio Classic](#)

Not ready to use the new experience? Revert to Studio Classic experience in domain settings. Learn more ↗

Overview Getting started What's new

Overview
Start a new ML workflow or jump back into your workflow

JupyterLab

About

JupyterLab is the latest web-based IDE for notebooks, code, and data. You can select your image and instance to harness the power of AWS when running your machine learning applications.

[See features ↗](#) [Quick start guide ↗](#)

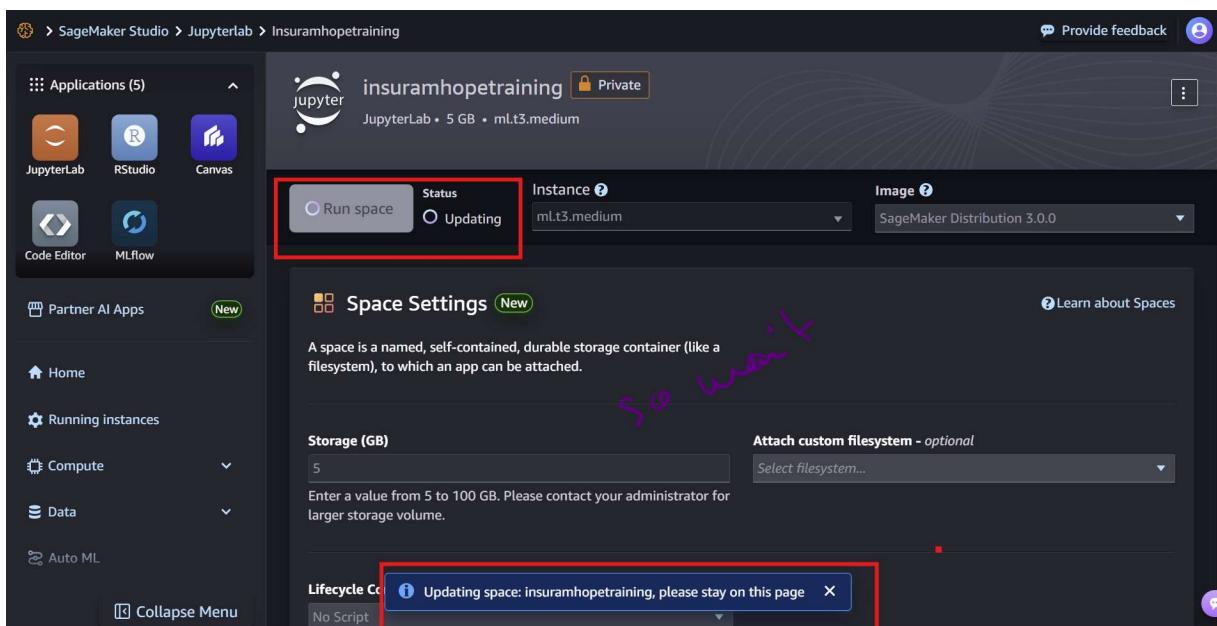
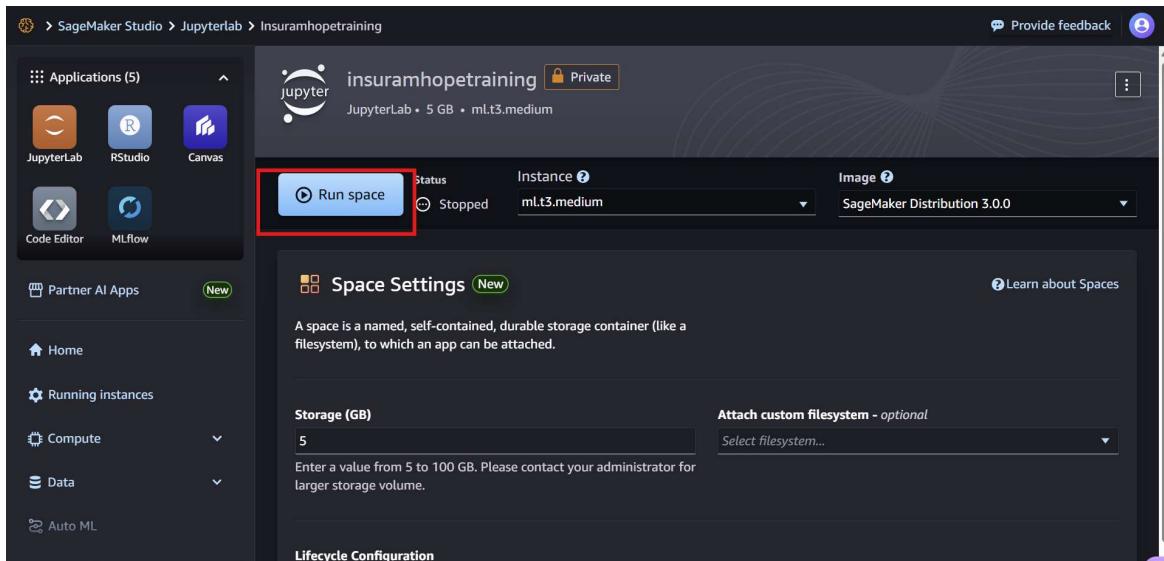
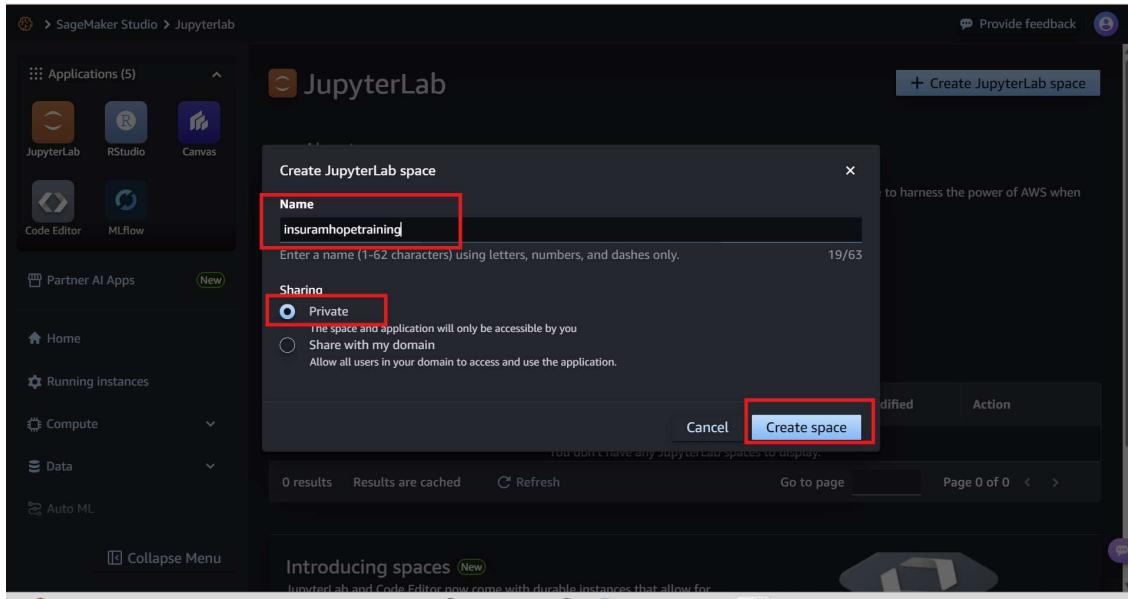
Search...

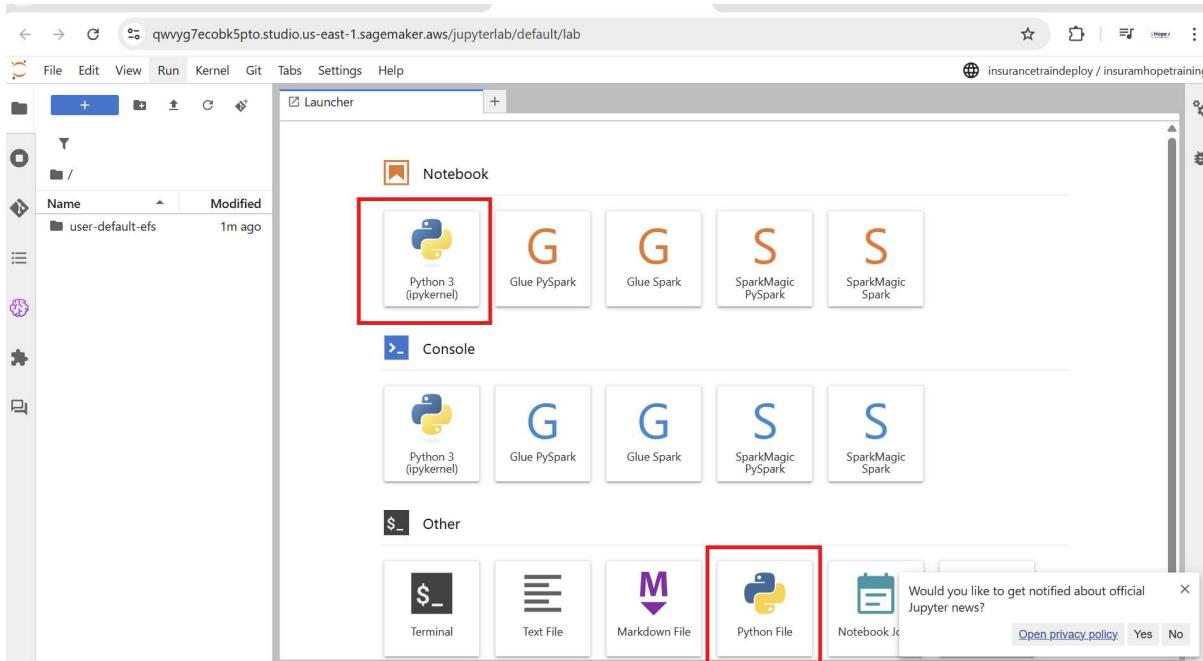
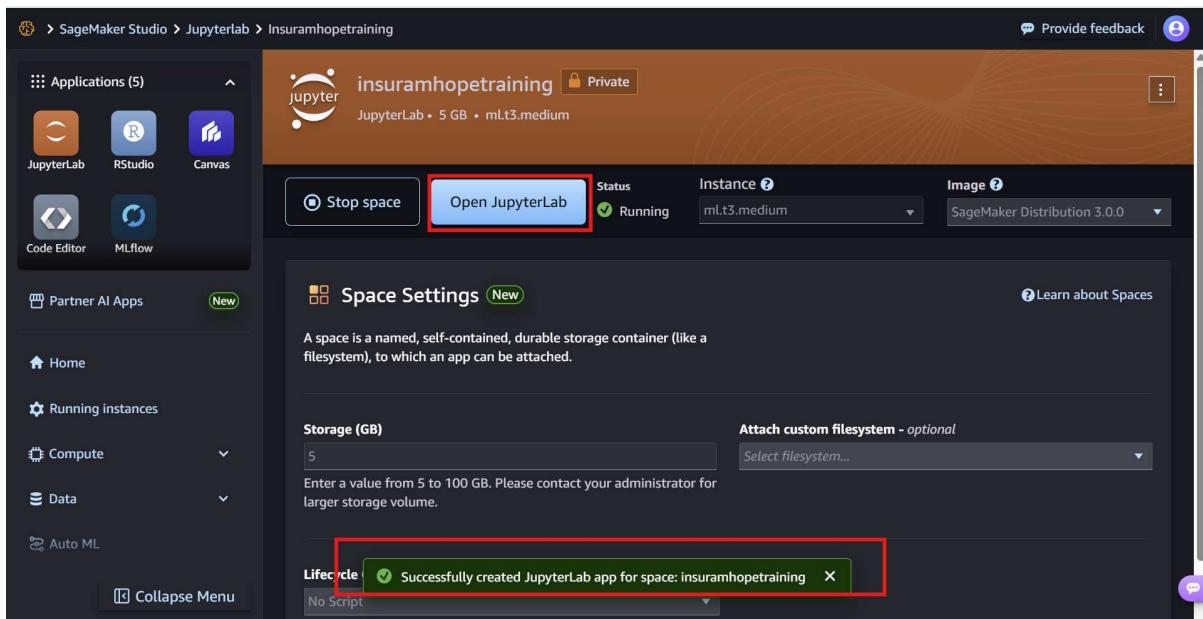
Filter spaces: Running

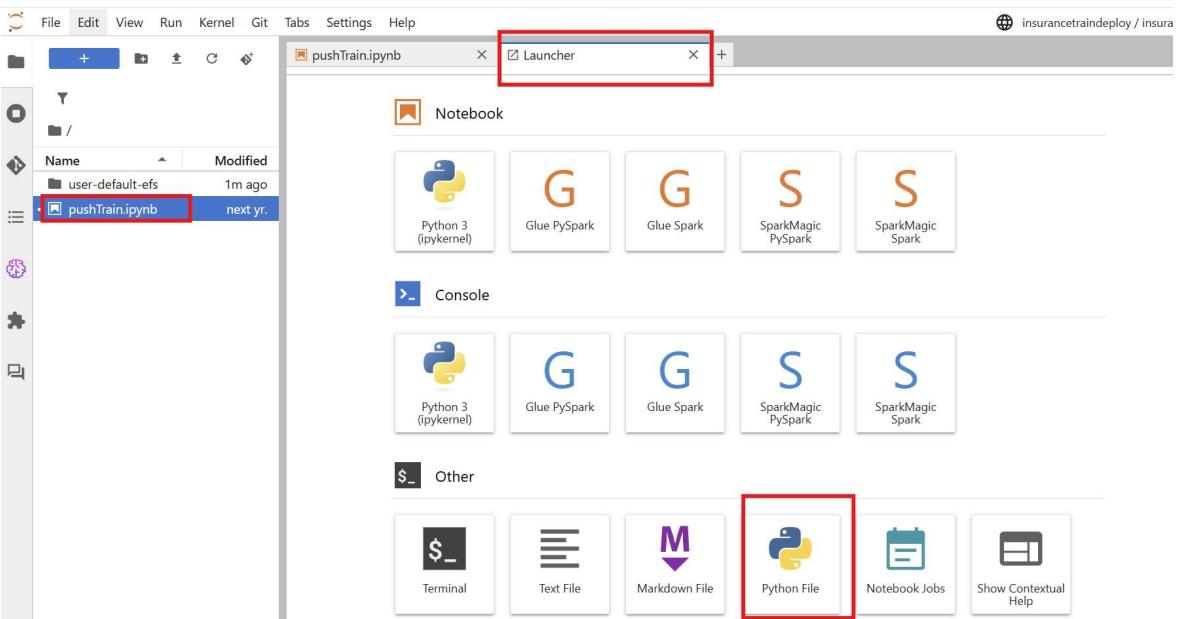
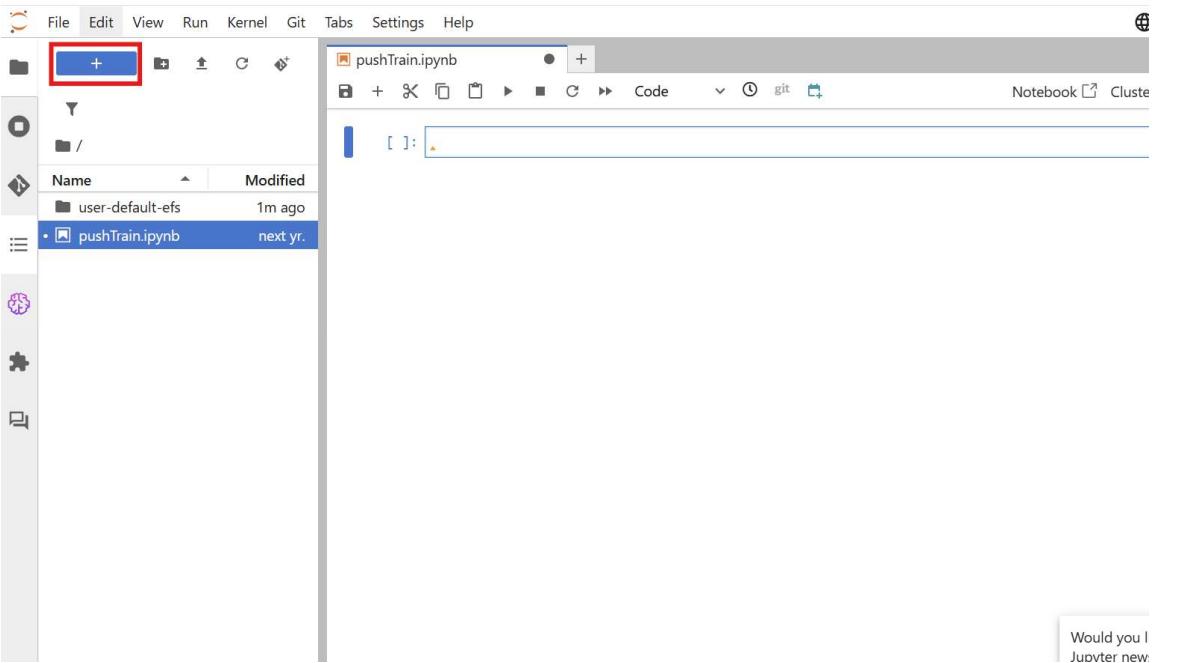
Name	Application	Status	Type	Last modified	Action
No JupyterLab spaces You don't have any JupyterLab spaces to display.					
0 results	Results are cached		Refresh	Go to page	Page 0 of 0 < >

Create JupyterLab space

Introducing spaces [New](#)







Services

- IAM** Manage access to AWS resources
- IAM Identity Center Manage workforce user access to multiple AWS accounts and cloud applications
- Resource Access Manager Share AWS resources with other accounts or AWS Organizations

Features

- Groups
- Roles
- Identity providers

Resources / for a focused search

Were these results helpful?

CloudShell Feedback

IAM > Dashboard

IAM Dashboard

Security recommendations

- Root user has MFA
- Root user has no active access keys

IAM resources

User groups	Users	Roles	Policies	Identity providers
0	0	32	8	0

What's new

- AWS IAM announces support for encrypted SAML assertions.
- AWS CodeBuild announces support for project ARN and build ARN IAM condition keys.
- IAM Roles Anywhere credential helper now supports TPM 2.0.
- Announcing AWS STS support for ECDSA-based signatures of OIDC tokens.

AWS Account

Quick Links

Tools

IAM > Policies

Policies (1354)

A policy is an object in AWS that defines permissions.

Policy name	Type	Used as	Description
AccessAnalyzerServiceRolePolicy	AWS managed	None	Allow Access Analyzer to analyze resou...
AdministratorAccess	AWS managed - job function	None	Provides full access to AWS services an...
AdministratorAccess-Amplify	AWS managed	None	Grants account administrative permissi...
AdministratorAccess-AWSElasticBe...	AWS managed	None	Grants account administrative permissi...
AIOpsAssistantPolicy	AWS managed	None	Provides ReadOnly permissions requir...
AIOpsConsoleAdminPolicy	AWS managed	None	Grants full access to Amazon AI Oper...
AIOpsOperatorAccess	AWS managed	None	Grants access to the Amazon AI Opera...
AIOpsReadOnlyAccess	AWS managed	None	Grants ReadOnly permissions to the A...
AlexaForBusinessDeviceSetup	AWS managed	None	Provide device setup access to AlexaFo...
AlexaForBusinessFullAccess	AWS managed	None	Grants full access to AlexaForBusiness ...

Screenshot of the AWS IAM 'Create policy' wizard Step 1: Specify permissions. The 'JSON' tab is selected. A red box highlights the 'JSON' tab in the top navigation bar.

Specify permissions Info

Add permissions by selecting services, actions, resources, and conditions. Build permission statements using the JSON editor.

Policy editor

Select a service
Specify what actions can be performed on specific resources in a service.

Service
Choose a service

+ Add more permissions

Cancel Next

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "s3:PutObject",
        "s3:GetObject",
        "s3>ListBucket"
      ],
      "Resource": [
        "arn:aws:s3:::insurancemlhope",
        "arn:aws:s3:::insurancemlhope/*"
      ]
    }
  ]
}
```

Screenshot of the AWS IAM 'Create policy' wizard Step 1: Specify permissions. The 'Visual' tab is selected. A red box highlights the 'Visual' tab in the top navigation bar. Handwritten purple notes on the right side of the screen say: 'Replace old content with this given content'.

Specify permissions Info

Add permissions by selecting services, actions, resources, and conditions. Build permission statements using the JSON editor.

Policy editor

```

1 « {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Effect": "Allow",
6       "Action": [
7         "s3:PutObject",
8         "s3:GetObject",
9         "s3>ListBucket"
10      ],
11      "Resource": [
12        "arn:aws:s3:::insurancemlhope",
13        "arn:aws:s3:::insurancemlhope/*"
14      ]
15    }
16  ]
17 }
18
19

```

→ Replace old content with this given content

Visual **JSON** Actions

Edit statement

Select a statement

Select an existing statement in the policy or add a new statement.

+ Add new statement

aws IAM Policies Create policy [Alt+S]

```

2 "Version": "2012-10-17",
3 "Statement": [
4     {
5         "Effect": "Allow",
6         "Action": [
7             "s3:PutObject",
8             "s3:GetObject",
9             "s3>ListBucket"
10        ],
11        "Resource": [
12            "arn:aws:s3:::insurancehope",
13            "arn:aws:s3:::insurancehope/*"
14        ]
15    }
16]
17
18
19

```

+ Add new statement

JSON Ln 19, Col 0 5953 of 6144 characters remaining

Security: 0 Errors: 0 Warnings: 0 Suggestions: 0

Cancel Next

aws IAM Policies Create policy [Alt+S]

Step 1 Specify permissions

Step 2 Review and create

Review and create Info

Review the permissions, specify details, and tags.

Policy details

Policy name
Enter a meaningful name to identify this policy.
insurancectrain

Maximum 128 characters. Use alphanumeric and "+-,@_." characters.

Description - optional
Add a short explanation for this policy.

Maximum 1,000 characters. Use alphanumeric and "+-,@_." characters.

Permissions defined in this policy Info

Permissions defined in this policy document specify which actions are allowed or denied. To define permissions for an IAM identity (user, user group, or role), attach a policy to it.

Search

Show remaining 438 services

Allow (1 of 439 services)

Service	Access level	Resource	Request condition
S3	Limited: List, Read, Write	Multiple	None

Add tags - optional Info

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

aws IAM Policies Create policy [Alt+S]

Step 1 Specify permissions

Step 2 Review and create

Review and create Info

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Show remaining 438 services

Allow (1 of 439 services)

Service	Access level	Resource	Request condition
S3	Limited: List, Read, Write	Multiple	None

Add tags - optional Info

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags.

Cancel Previous Create policy

Policies (1355) Info

A policy is an object in AWS that defines permissions.

Policy name	Type	Used as	Description
AccessAnalyzerServiceRolePolicy	AWS managed	None	Allow Access Analyzer to analyze resou...
AdministratorAccess	AWS managed - job function	None	Provides full access to AWS services an...
AdministratorAccess-Amplify	AWS managed	None	Grants account administrative permis...
AdministratorAccess-AWSElasticBea...	AWS managed	None	Grants account administrative permis...
AIOpsAssistantPolicy	AWS managed	None	Provides ReadOnly permissions requir...
AIOpsConsoleAdminPolicy	AWS managed	None	Grants full access to Amazon AI Opera...
AIOpsOperatorAccess	AWS managed	None	Grants access to the Amazon AI Opera...
AIOpsReadOnlyAccess	AWS managed	None	Grants ReadOnly permissions to the A...
AlexaForBusinessDeviceSetup	AWS managed	None	Provide device setup access to AlexaFo...
AlexaForBusinessFullAccess	AWS managed	None	Grants full access to AlexaForBusiness ...
AlexaForBusinessGatewayExecution	AWS managed	None	Provide gateway execution access to A...
AlexaForBusinessLifesizeDelegatedA...	AWS managed	None	Provide access to Lifesize AVS devices
AlexaForBusinessNetworkProfileSer...	AWS managed	None	This policy enables Alexa for Business ...

Roles (32) Info

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Role name	Trusted entities	Last activity
AmazonSageMaker-ExecutionRole-20250424T124146	AWS Service: sagemaker	6 days ago
AmazonSageMaker-ExecutionRole-20250424T150151	AWS Service: sagemaker	6 days ago
AmazonSageMaker-ExecutionRole-20250424T154700	AWS Service: sagemaker	5 days ago
AmazonSageMaker-ExecutionRole-20250425T13642	AWS Service: sagemaker	3 days ago
AmazonSageMaker-ExecutionRole-20250430T163614	AWS Service: sagemaker	8 minutes ago
AmazonSageMakerCanvasBedrockRole-20250424T154700	AWS Service: bedrock	-
AmazonSageMakerCanvasBedrockRole-20250425T113641	AWS Service: bedrock	-
AmazonSageMakerCanvasBedrockRole-20250430T163613	AWS Service: bedrock	-
AmazonSageMakerCanvasEMRSExecutionAccess-20250424T124145	AWS Service: emr-serverless	-
AmazonSageMakerCanvasEMRSExecutionAccess-20250424T150151	AWS Service: emr-serverless	-
AmazonSageMakerCanvasEMRSExecutionAccess-20250424T154700	AWS Service: emr-serverless	-

AmazonSageMaker-ExecutionRole-20250430T163614 Info

SageMaker execution role created from the SageMaker AWS Management Console.

Summary

Creation date
April 30, 2025, 16:36 (UTC+0:30)

Last activity
14 minutes ago

ARN
arnawsiam:253490754689:role/service-role/AmazonSageMaker-ExecutionRole-20250430T163614

Maximum session duration
1 hour

Permissions **Trust relationships** **Tags** **Last Accessed** **Revoke sessions**

Permissions policies (6) Info

You can attach up to 10 managed policies.

Policy name	Type	Attached entities
AmazonSageMaker-ExecutionPolicy-20250430T163...	Customer managed	1
AmazonSageMakerCanvasAISServicesAccess	AWS managed	5
AmazonSageMakerCanvasDataPrepFullAccess	AWS managed	5
AmazonSageMakerCanvasFullAccess	AWS managed	5

Attach policy to AmazonSageMaker-ExecutionRole-20250430T163614

▶ Current permissions policies (6)

Other permissions policies (1/1048)

Filter by Type: All types | 2 matches

Policy name	Type	Description
ExecutionSagemakerInsuranceEast	Customer managed	-
insurancetrain	Customer managed	-

Add permissions



Identity and Access Management (IAM)

Policy was successfully attached to role.

Summary

Creation date: April 30, 2025, 16:36 (UTC+05:30)

Last activity: 16 minutes ago

ARN: arn:aws:iam::253490754689:role/service-role/AmazonSageMaker-ExecutionRole-20250430T163614

Maximum session duration: 1 hour

Permissions | Trust relationships | Tags | Last Accessed | Revoke sessions

Permissions policies (7) Info

You can attach up to 10 managed policies.

Filter by Type: All types

Policy name	Type	Attached entities
AmazonSageMaker-ExecutionPolicy-20250430T163...	Customer managed	1
AmazonSageMakerCanvasAI/ServicesAccess	AWS managed	5
AmazonSageMakerCanvasDataPrepFullAccess	AWS managed	5
AmazonSageMakerCanvasFullAccess	AWS managed	5
AmazonSageMakerCanvasSMDatascienceAssistan...	AWS managed	4
AmazonSageMakerFullAccess	AWS managed	6

