

# Project Environment

## Workspace Instructions

For this project, you will complete the work within the AWS lab provided through the Udacity classroom.

### Sagemaker Studio

You should already have the Sagemaker Studio User created from earlier in the course, so you'll just need to launch the studio.

In case you need a refresher:

- Proceed to open up the AWS console from the AWS Gateway.
- Click through the AWS console to **Amazon Sagemaker**.
- Click through the main **Sagemaker** page to **Amazon Sagemaker Studio** from the left hand toolbar.
- If a user does not exist already in the **Sagemaker Studio Control Panel**, **Add user**.
- Select an execution role that has **full Sagemaker Access**, otherwise you can create a new role.
- Create a role and proceed with creating the user.

### Lambda Functions

You need the Lambda service to complete the project. At this point, you should have already created and deployed a few lambda functions at this point.

In case you want to test it again:

- Proceed to open up the AWS console from the AWS Gateway.
- Click through the AWS console to **Amazon Lambda**.
- Click to create a lambda function.
- Test the lambda function is working

### Step Function Visual Editor

You should have access to the step function visual editor. If you want to double-check:

- Proceed to open up the AWS console from the AWS Gateway.
- Click through the AWS console to **Step Function**.
- Click to create a state machine.
- Choose to design your workflow visually
- Create a simple Step function

### Create a Role Instruction (You can skip this if you have a role created)

- Find the SageMaker service page and click the startup button to start configuring your environment
- Select the Quick Start option.

Amazon SageMaker > SageMaker Studio

## SageMaker Studio

**Get started**

[Learn more about getting started with SageMaker Studio](#)

☒ **Quick start**  
 Let Amazon SageMaker handle configuring account and setting the permissions that you or a team in your organization need to use SageMaker Studio. Choosing this option uses standard encryption, which you can't change. If you need more control over configuration, choose Standard setup.

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

Execution role  
 SageMaker Studio requires permissions to access other AWS services, such as Amazon SageMaker and Amazon S3. The execution role must have the [AmazonSageMakerFullAccess policy](#) attached. If you don't have a role with this policy attached, we can create one for you.

**SageMaker Projects and JumpStart** New  
 Enable access and provisioning of AWS Service Catalog Portfolio of products in Amazon SageMaker Studio for Amazon SageMaker Projects and JumpStart. [Learn more](#)

☒ **Enable Amazon SageMaker project templates and JumpStart for this account and Studio users**  
 If enabled, the administrator can view the Amazon SageMaker provided project templates and JumpStart solutions published in AWS Service Catalog and users who are configured to use the domain execution are allowed to create projects using those templates and solutions with JumpStart. A launch constraint role and a project use role are automatically generated in IAM for your account.

☐ **Standard setup**  
 Control all aspects of account configuration, including permissions and encryption. Choose this option if you are an administrator setting up SageMaker Studio for your organization.

Cancel **Submit**

- For the required IAM role choose to create a new role - note this role name down for later.

Amazon SageMaker > SageMaker Studio

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Execution role  
 SageMaker Studio requires permissions to access other AWS services, such as Amazon SageMaker and Amazon S3. The execution role must have the [AmazonSageMakerFullAccess policy](#) attached. If you don't have a role with this policy attached, we can create one for you.

☒ **Create a new role**  
☐ **Create a new role**  
  
☐ **Use existing role**

If enabled, the administrator can view the Amazon SageMaker provided project templates and JumpStart solutions published in AWS Service Catalog and users who are configured to use the domain execution are allowed to create projects using those templates and solutions with JumpStart. A launch constraint role and a project use role are automatically generated in IAM for your account.

☐ **Standard setup**  
 Control all aspects of account configuration, including permissions and encryption. Choose this option if you are an administrator setting up SageMaker Studio for your organization.

Cancel **Submit**

- Leave all default options and create

## Create an IAM role



Passing an IAM role gives Amazon SageMaker permission to perform actions in other AWS services on your behalf. Creating a role here will grant permissions described by the [AmazonSageMakerFullAccess](#) IAM policy to the role you create.

The IAM role you create will provide access to:

### ✓ S3 buckets you specify - *optional*

☒ Any S3 bucket

Allow users that have access to your notebook instance access to any bucket and its contents in your account.

☐ Specific S3 buckets

*Example: bucket-name-1, bucket-name-2*

Comma delimited. ARNs, "\*" and "/" are not supported.

☐ None

### ✓ Any S3 bucket with "sagemaker" in the name

### ✓ Any S3 object with "sagemaker" in the name

### ✓ Any S3 object with the tag "sagemaker" and value "true"

[See Object tagging](#)

### ✓ S3 bucket with a Bucket Policy allowing access to SageMaker

[See S3 bucket policies](#)

Cancel

Create role

- Hit "Submit" at the bottom of the page to complete your configuration

It may take a few minutes for SageMaker to provision the environment after you complete this workflow.