Lab-1: Setup Environment

Introduction

This lab will set up the Cloud Pak for Data environment for subsequent labs. Cloud Pak for Data is an integrated platform of tools, services, data, and meta-data to help companies and agencies accelerate their shift to be data driven organizations. The platform enables data professionals such as data scientists, data engineers, business analysts, and application developers collaboratively work with data to build, train, deploy machine learning and deep learning models at scale to infuse AI into business to drive innovation. Cloud Pak for Data is designed to support the development and deployment of data and analytics assets for the enterprise.

Objectives

The goal of this lab is to create a Cloud Pak for Data project. Projects are a core component of Cloud Pak for Data. Projects enable you to organize your analytic and data assets in one place. Projects are also the home base for collaboration. Colleagues can be added as collaborators on a project with administrator, editor, or viewer access.

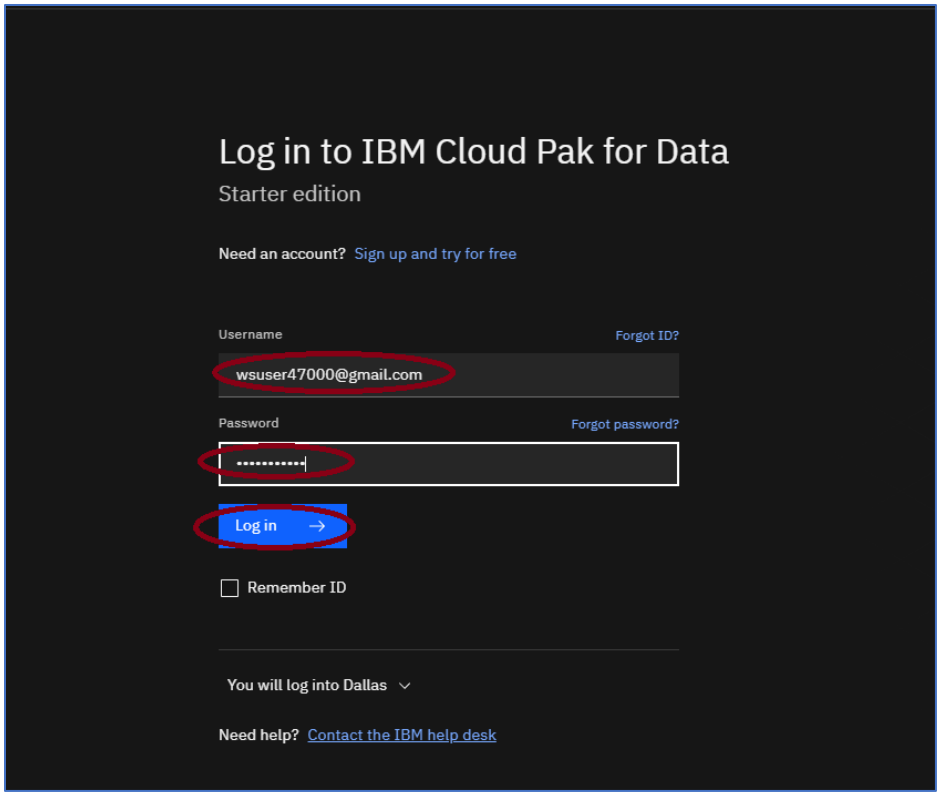
After completing this lab, you will be familiar with these features of Cloud Pak for Data.

1. Create a project
2. Associate a Machine Learning service with the project.
3. Create a Deployment Space
4. Create a Watson OpenScale instance

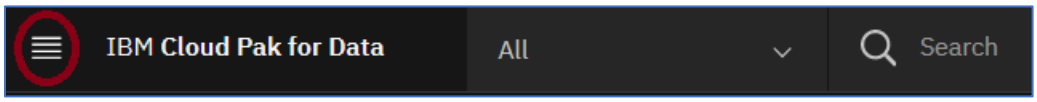
This lab requires that you have a Cloud Pak for Data account. Please follow the signup instructions if you do not have an account.

Create a Project

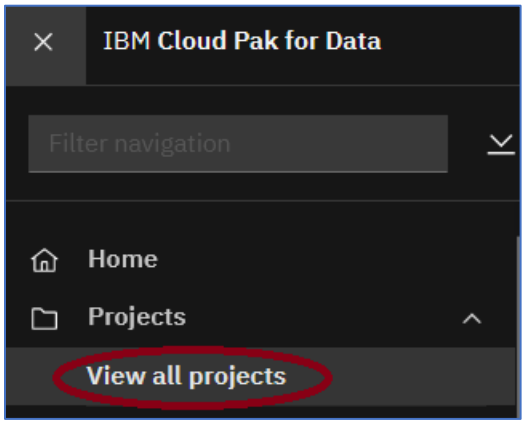
1. Log into your Cloud Pak for Data account by typing in the url **dataplatform.cloud.ibm.com** in your Firefox or Chrome browser.
2. Enter the **Username, Password** and click **Log in.**



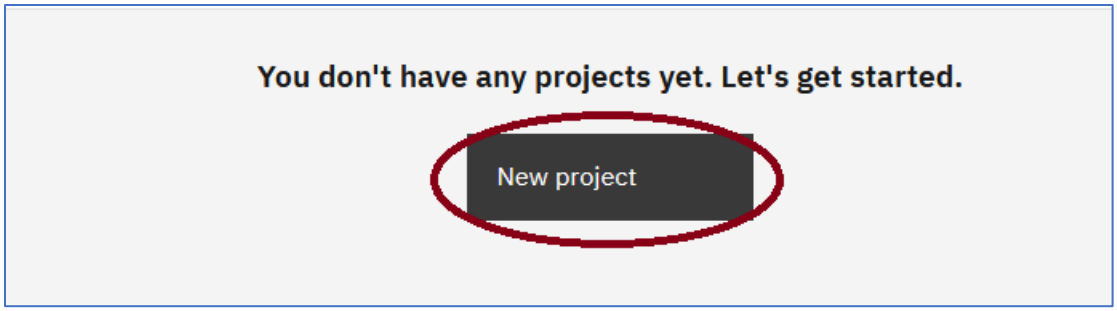
3. Click on the hamburger icon ☰.



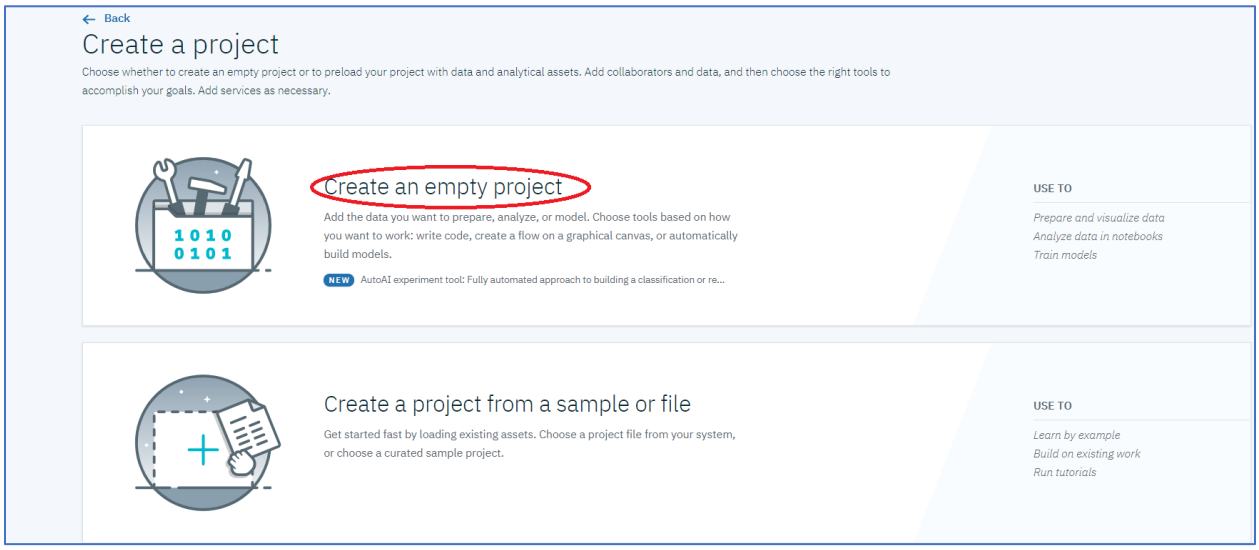
4. Click on **View All Projects**



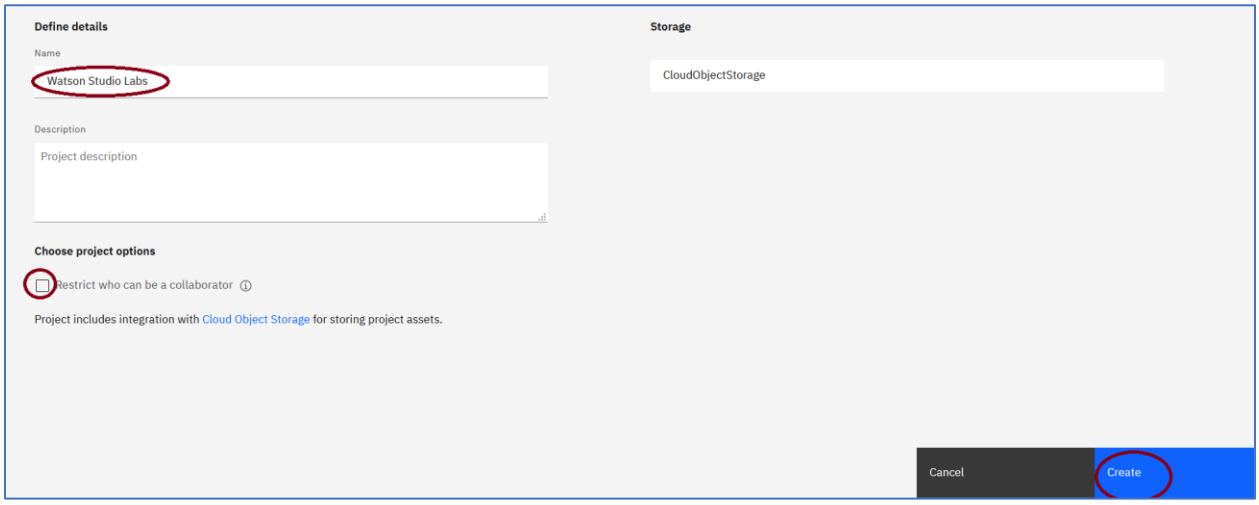
5. Click on **New Project**.



6. Click on Create an empty project.



7. Enter “Watson Studio Labs” for the **Name,** optionally enter a **Description,** make sure to uncheck **Restrict who can be a collaborator** (if it’s checked), and click **Create**.



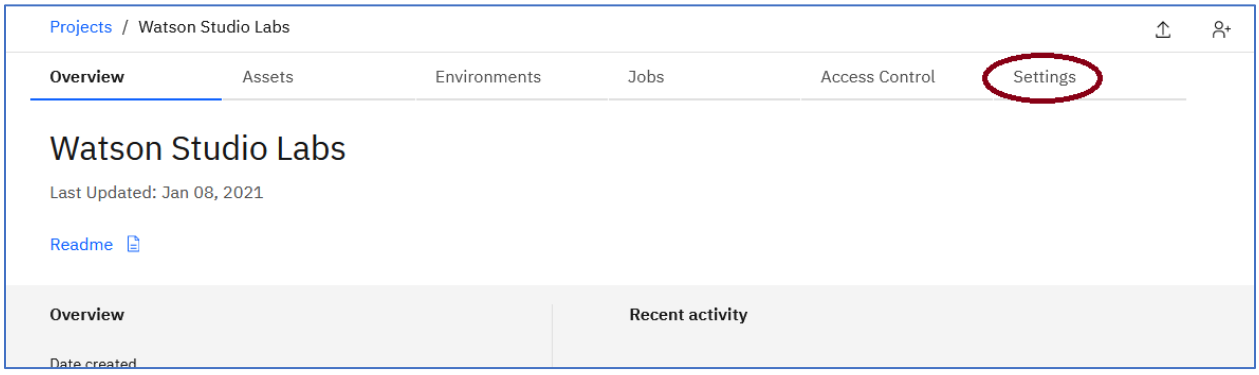
8. The Project **Overview** page is shown. This page provides summarized information about the project. In addition to the Overview page, are five other pages described below.

a. **Assets Page –** Analytics and Data assets can be added to the project from this page.
b. **Environments Page -** Provides information on the current notebook environments that are defined, lists the active notebook environments currently running, and enables users to create custom notebook environments.
c. **Jobs Page –** Provides the interface to the job subsystem.
d. **Access Control –** Lists the project collaborators and enables users to add/remove collaborators.
e. **Settings –** Enables users to view and set project attributes.

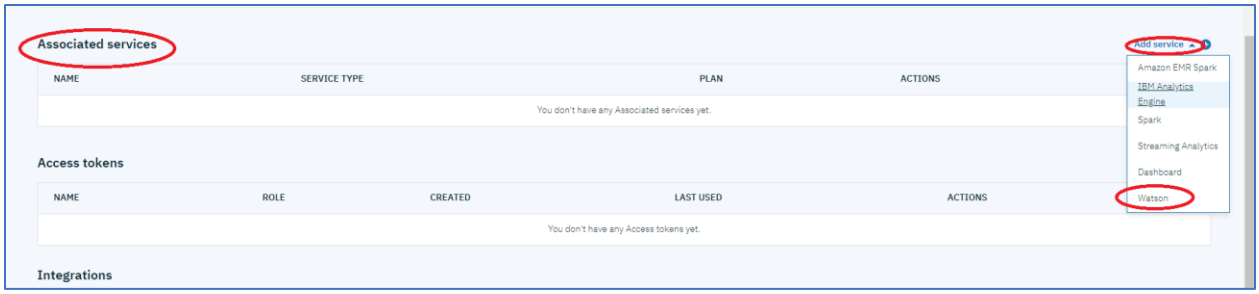
Associate a Watson Machine Learning Service to the Project

To save and deploy machine learning models, a Watson Machine Learning service must be created (if one doesn't exist) and added to our project.

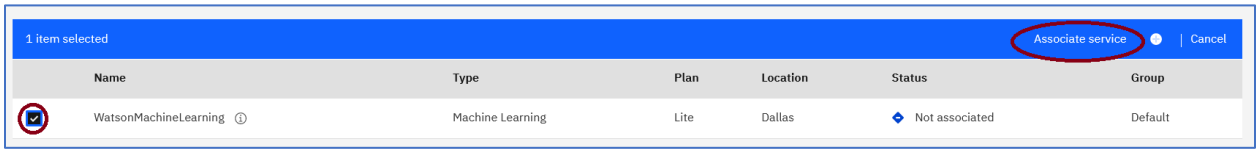
1. Click on **Settings** to navigate to the Project **Settings** page.



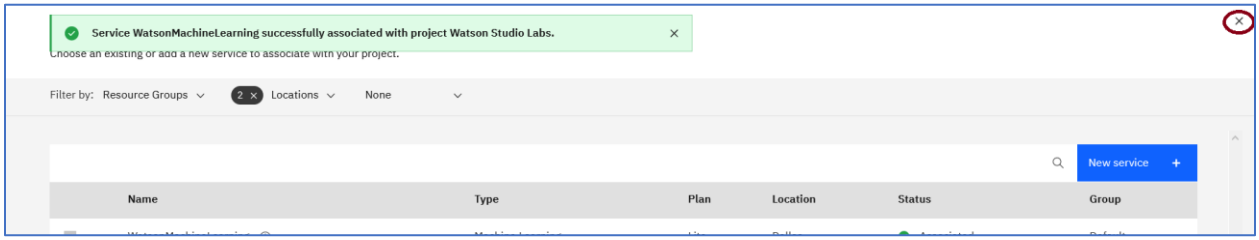
2. Scroll down to **Associated Services,** click on **Add service,** click on **Watson**.



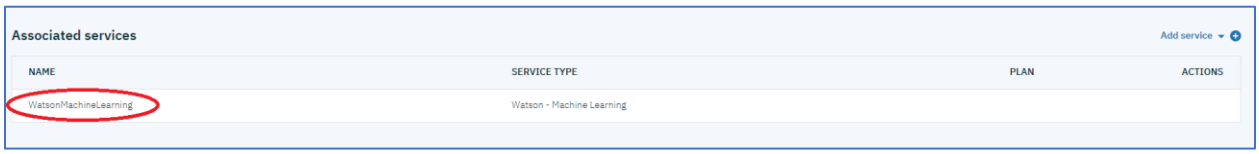
3. Newer Watson Studio accounts come with the WatsonMachineLearning instance already created. Click on the checkbox adjacent to the WatsonMachineLearning (Type-Machine Learning) service and click **Associate service**. Note, if a service of Type **Machine Learning** does not exist, go to step 6.



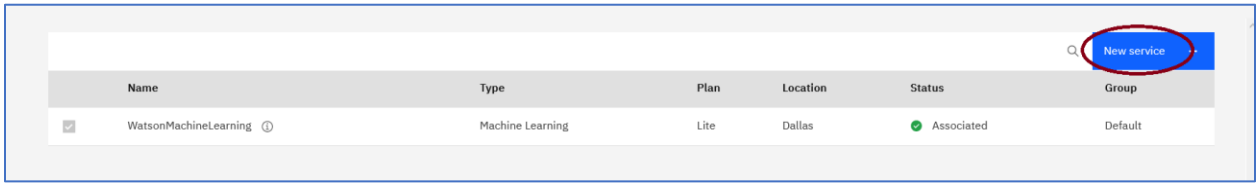
4. Click on **x** to close the window.



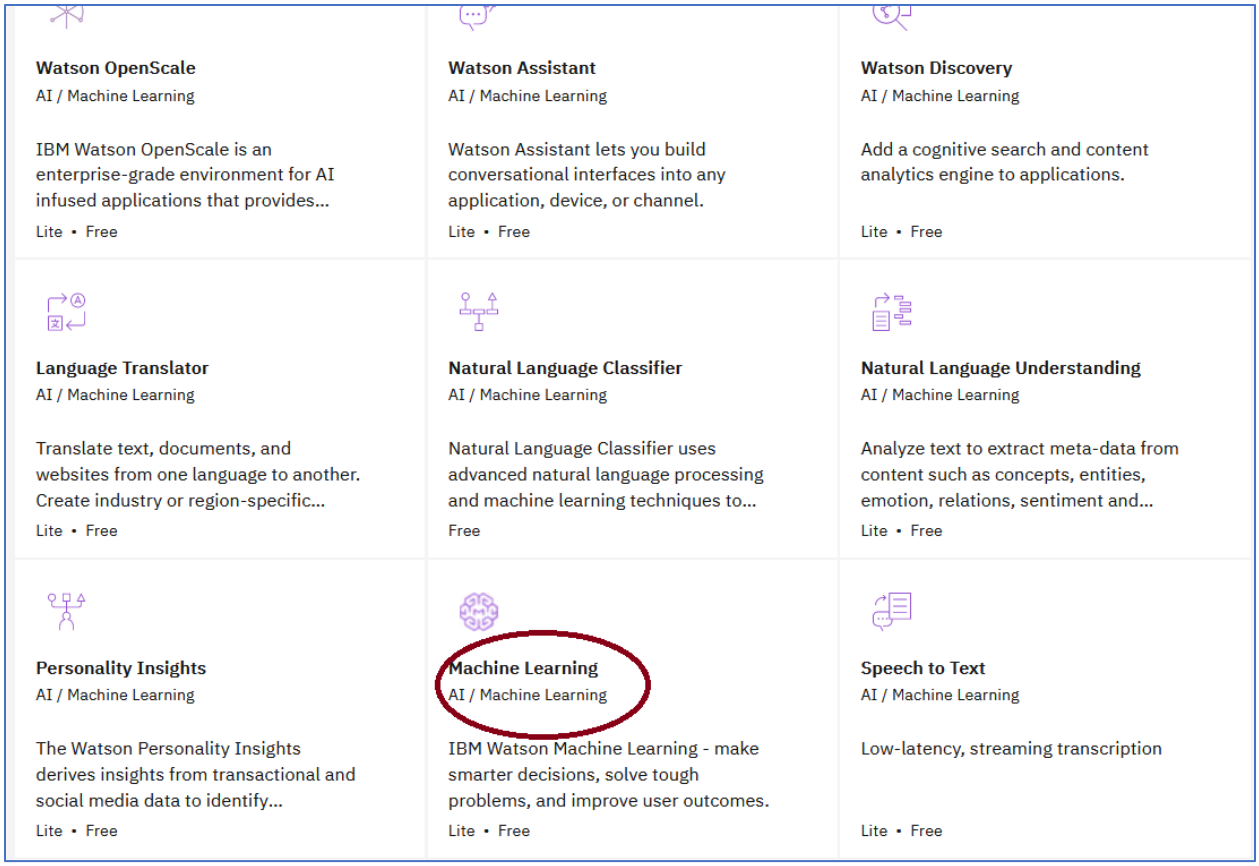
5. The **WatsonMachineLearning** service is associated with the project. Skip to the next section - **Create a Deployment Space**



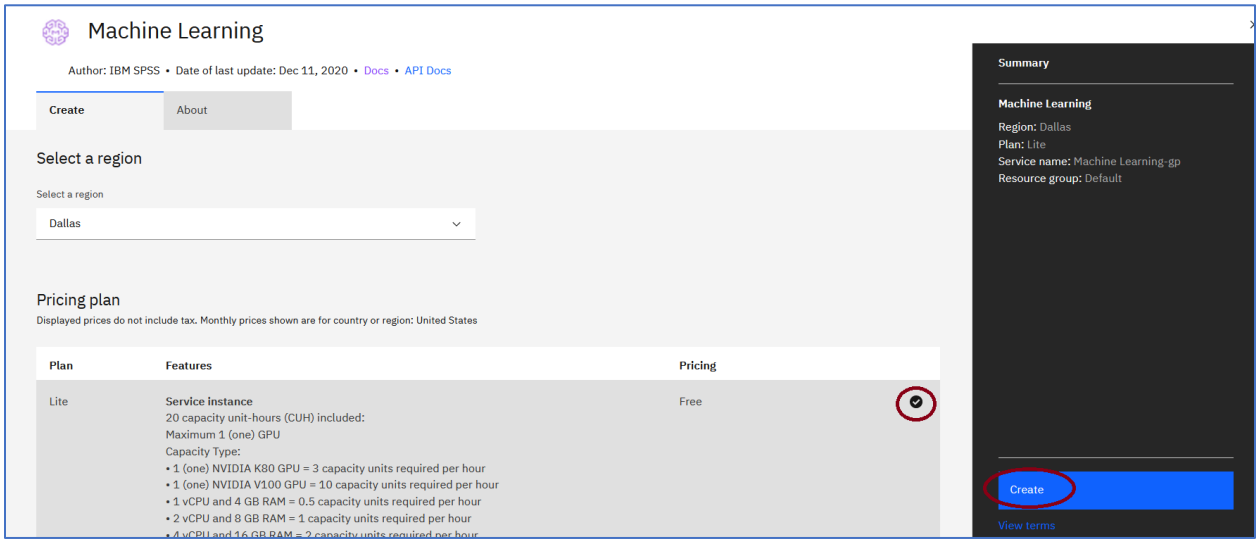
6. If a service of type Machine Learning does not exist, you will need to create the service. Click on **New service**.



7. Click on **Machine Learning**.



8. Make sure the Lite service is selected and click **Create**.

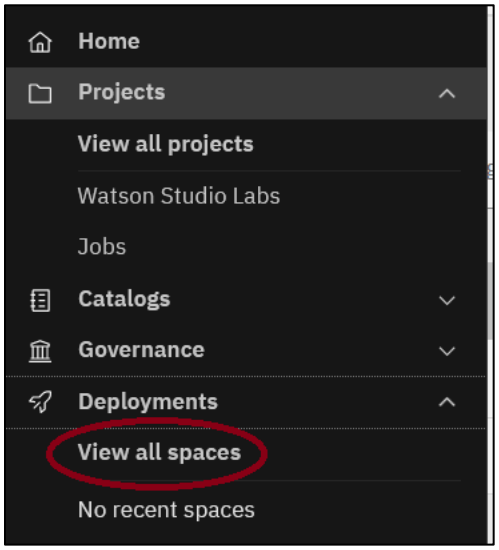


Create a Deployment Space

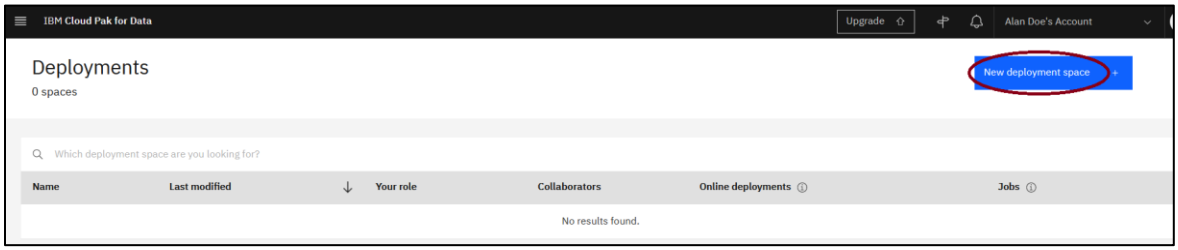
Deployment spaces are used to deploy models and manage deployments. A project is associated with one and only one deployment space. In this section, we will create a deployment space.

1. Click on the hamburger icon ☰.

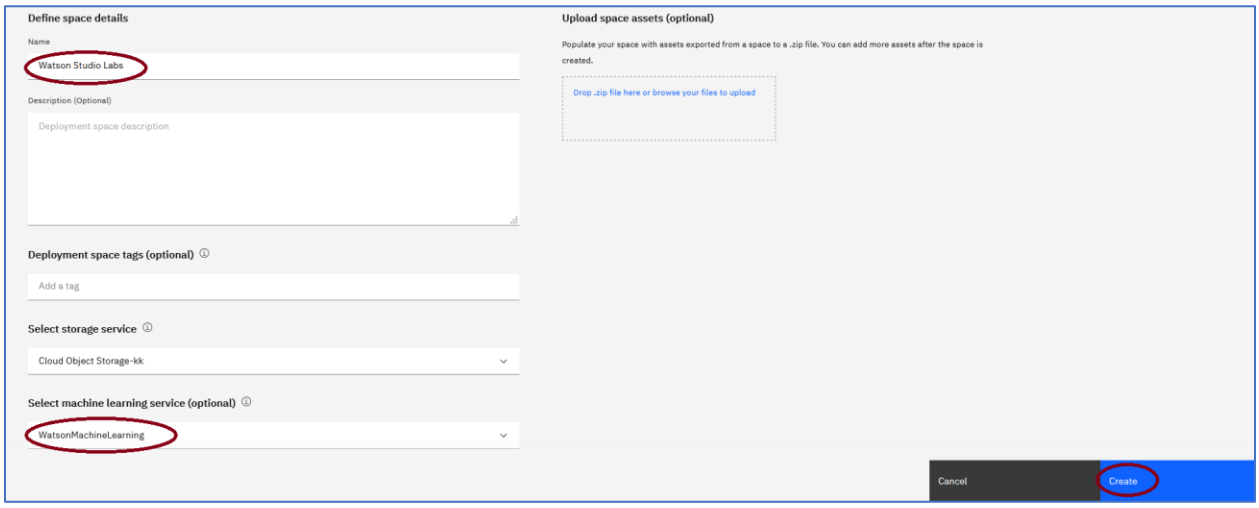
2. Click on **View all spaces** under **Deployments**



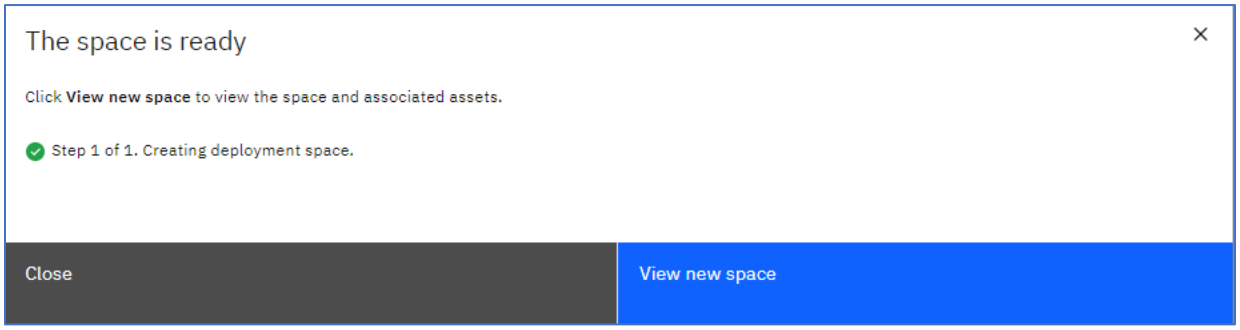
3. Click on **New deployment space**.



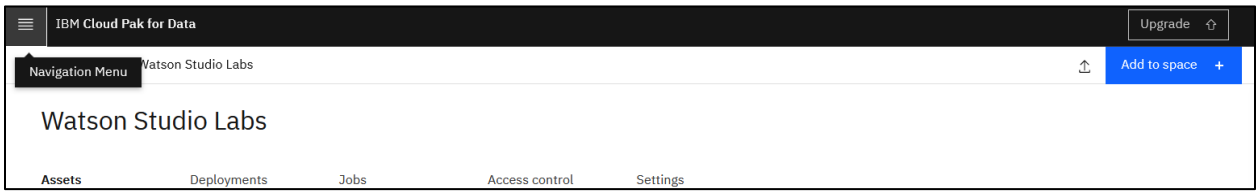
4. Enter **WatsonStudioLabs** for the **Name,** scroll down if necessary and click on **WatsonMachineLearning** for the **machine learning service** (you may need to scroll down) and click **Create.**



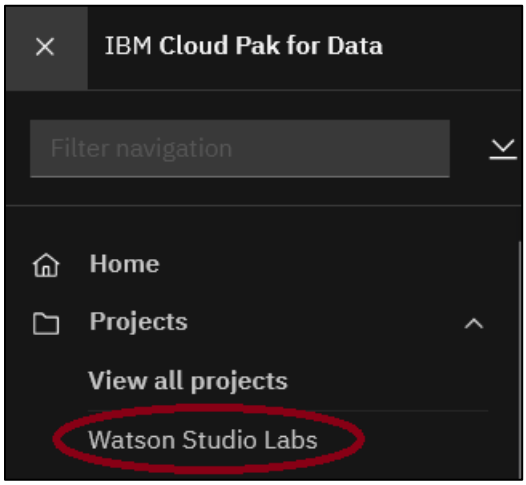
5. Click **Close.**



6. Return to the Watson Studio project by clicking on the hamburger icon ☰



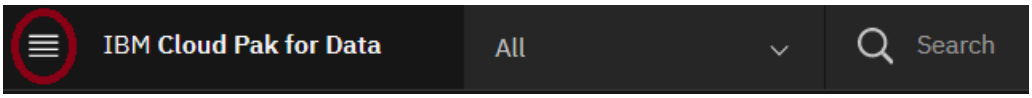
7. Click on **Watson Studio Labs** under **Projects**.



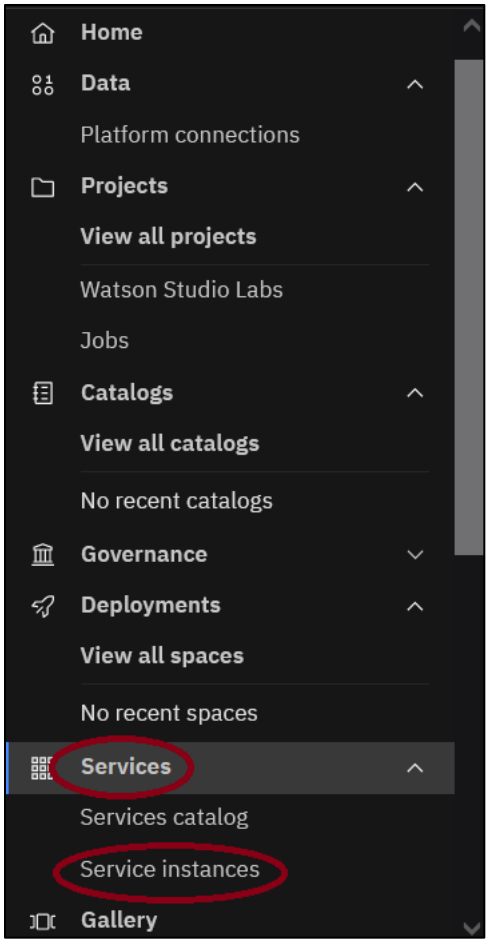
Provision Watson OpenScale

Newer Cloud Pak for Data accounts come with Watson OpenScale provisioned. In this section, we will check if Watson OpenScale has been provisioned for your account. If not, we will provision a Watson OpenScale service for use in a later lab.

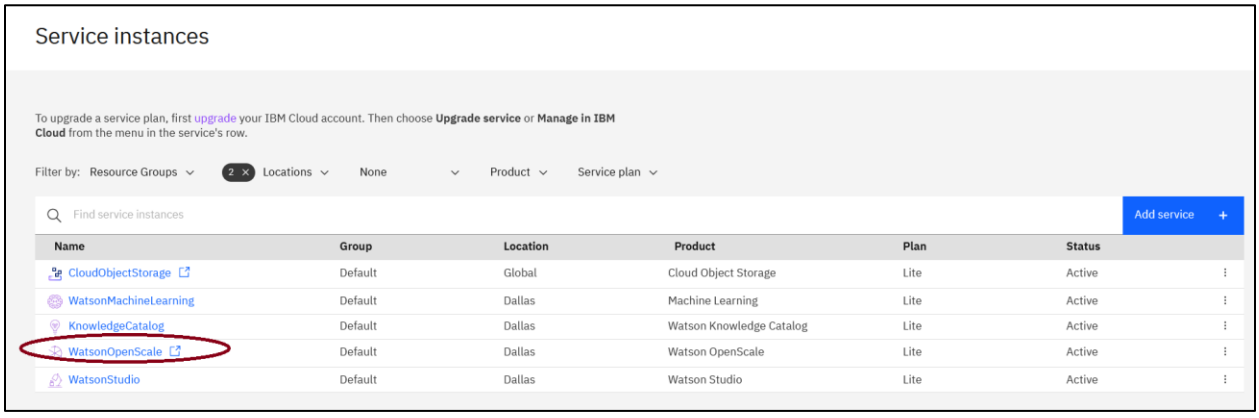
1. Click on the ☰ icon.



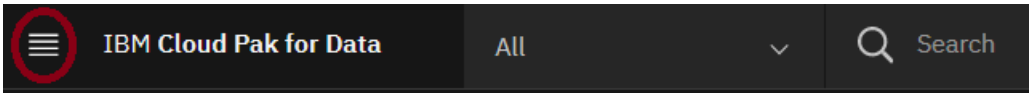
2. Click on **Services** and then **Service instances**.



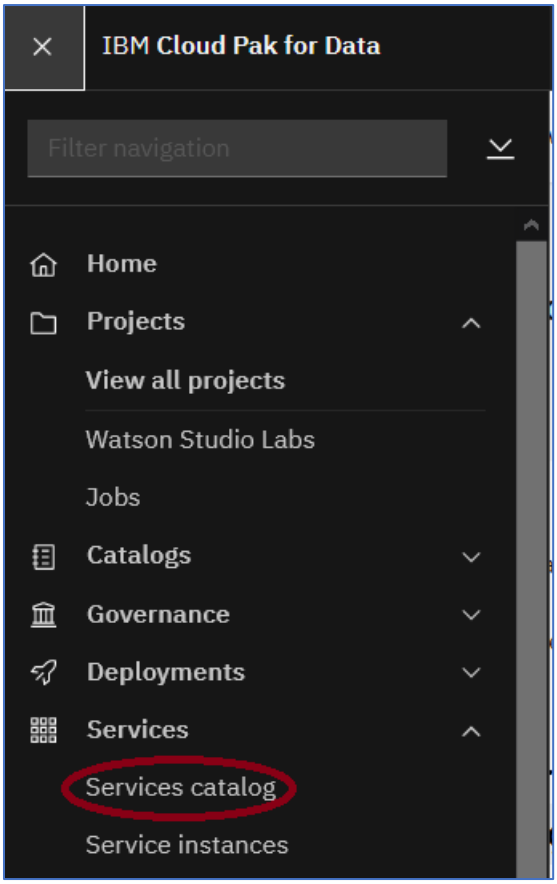
3. Check if Watson OpenScale is in the list of services.



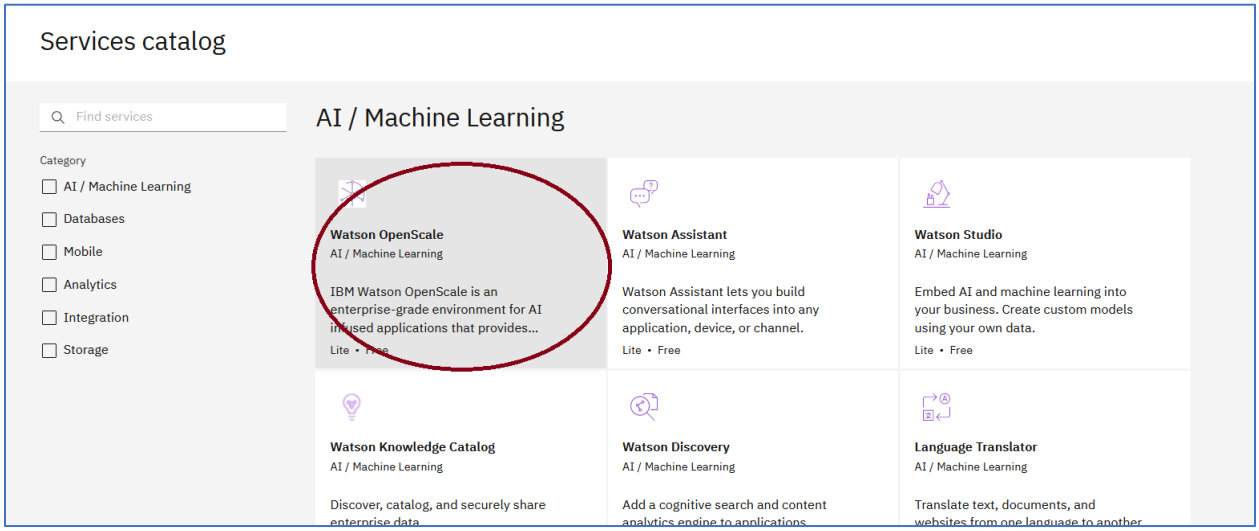
4. If Watson OpenScale is listed, skip to step 9. Otherwise, click on the ☰ icon.



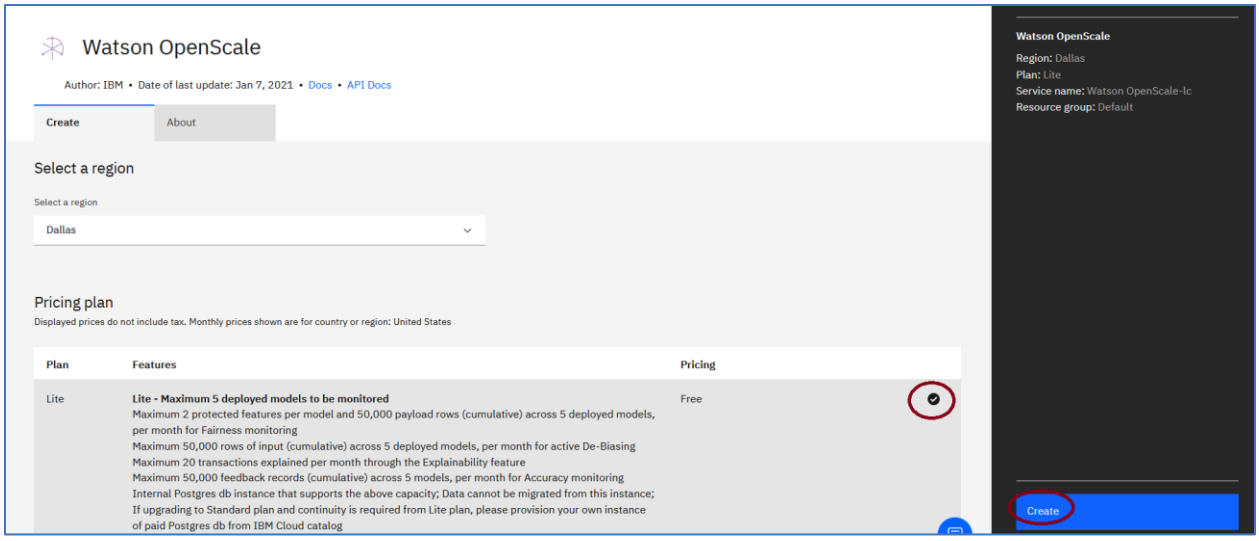
5. Click on **Services**, and then **Service catalog**.



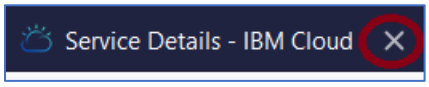
6. Click on **Watson OpenScale**



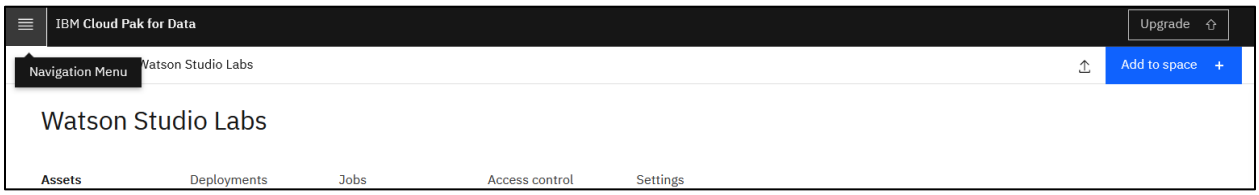
7. Make sure the Lite plan is selected and click **Create**.



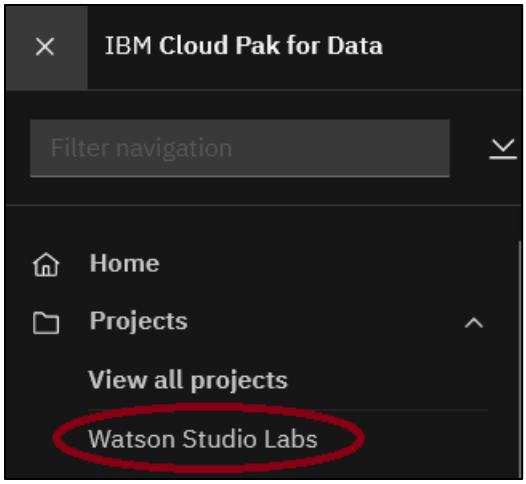
8. You can close the Service Details – IBM Cloud



9. Return to the Watson Studio project by clicking on the hamburger icon



10. Click on **Watson Studio Labs** under **Projects**.



You have completed Lab-1!

- ✓ Created a project
- ✓ Associated an existing Watson Machine Learning service instance with the project
- ✓ Created a Deployment space
- ✓ Created an instance of Watson OpenScale if required.