

Lab-1: Setup Environment

Introduction

This lab will set up the Watson Studio environment for subsequent labs and introduce you to the Project features of Watson Studio. Watson Studio 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. Watson Studio is designed to support the development and deployment of data and analytics assets for the enterprise.

Objectives

The goal of this lab is to familiarize the user with the Project features of Watson Studio, and to set up the environment for subsequent labs. Projects are a core component of Watson Studio. 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 Watson Studio.

1. Create a project
2. Create an object storage instance and associate it with the project
3. Associate an existing Watson Machine Learning service instance with the project
4. Add a collaborator to the project

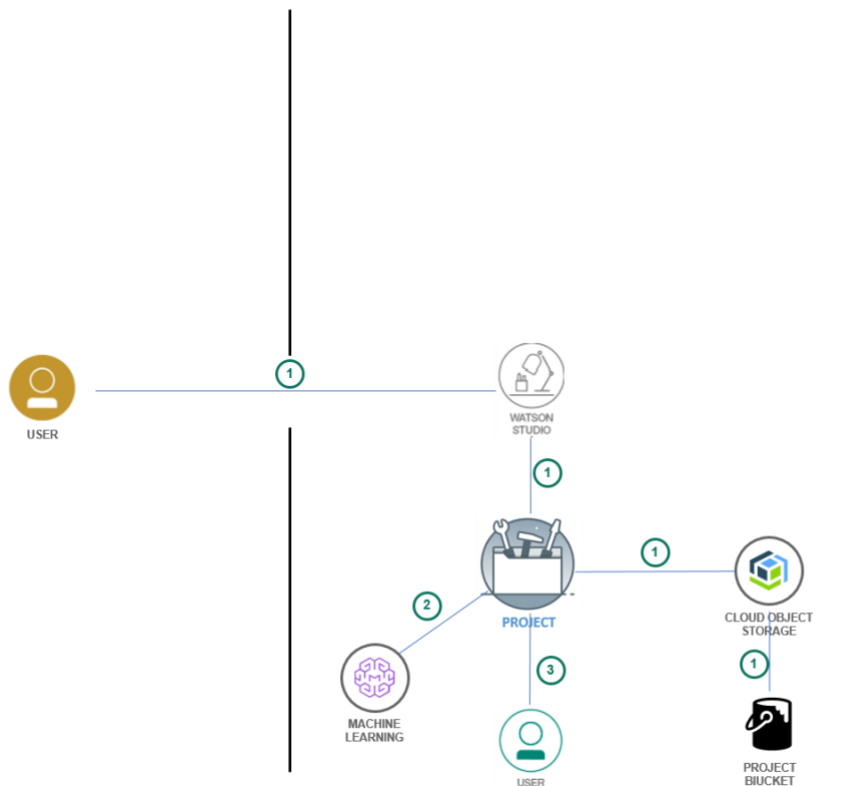
Lab Flow

1. User creates a Watson Studio project. Object storage instance will be created if one does not exist.
2. User associates a Machine Learning service with the Watson Studio project.
3. User adds a collaborator to the project.

User

IBM Cloud

External



Create a Project

1. Log into your Watson Studio account by typing in the url **datascience.ibm.com** in your Firefox or Chrome browser.
2. Click on **Sign into Watson Studio Cloud** (not Cloud sign-up/log-in)

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Watson Studio | Details | Pricing | Watson Studio Premium | Watson Studio Desktop | AutoAI | Sign into IBM Watson Studio Cloud

IBM Watson Studio

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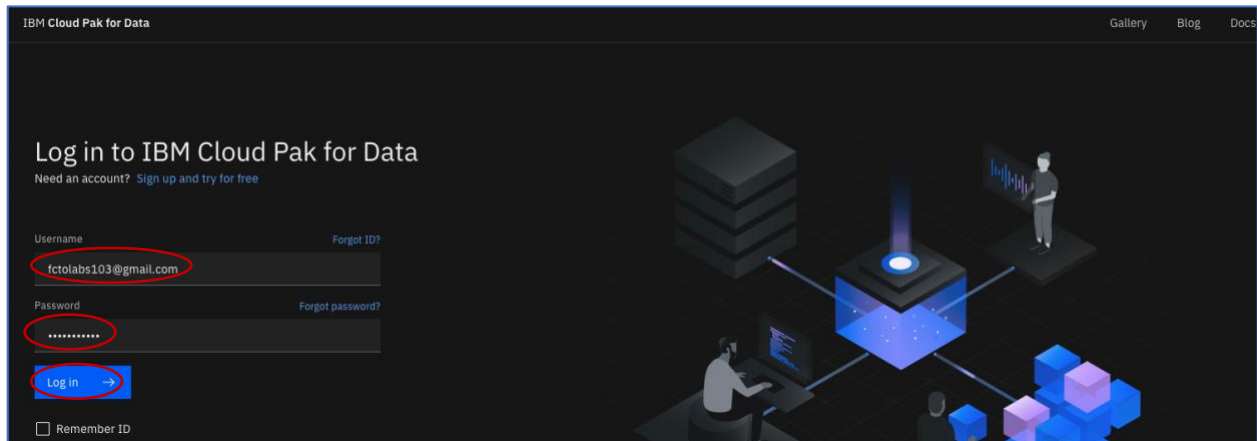
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3. Enter your **Username**, **Password**, and click **Log In**. If you do not have a Watson Studio account, click Sign up and try for free.



4. Complete the acknowledgement by clicking **Proceed**.


Your rights

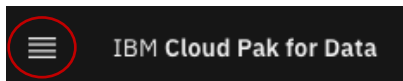
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Acknowledgement

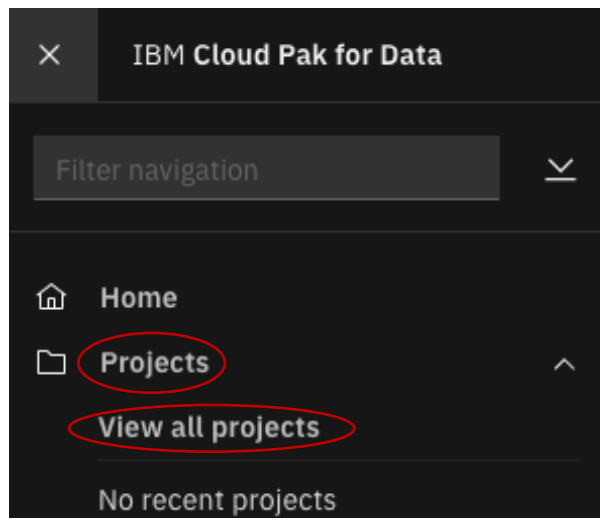
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Proceed

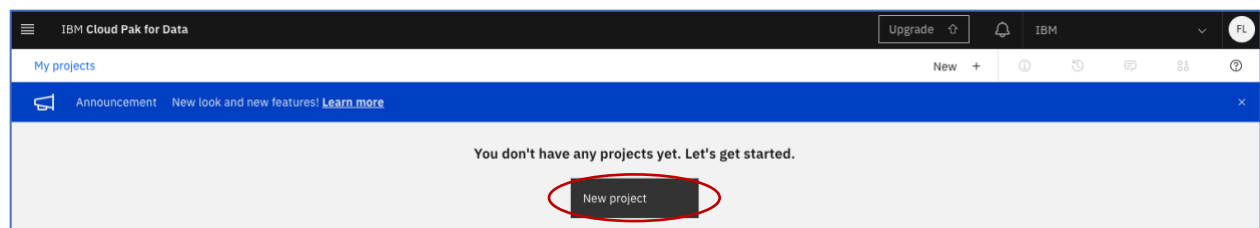
5. Click on the hamburger icon .



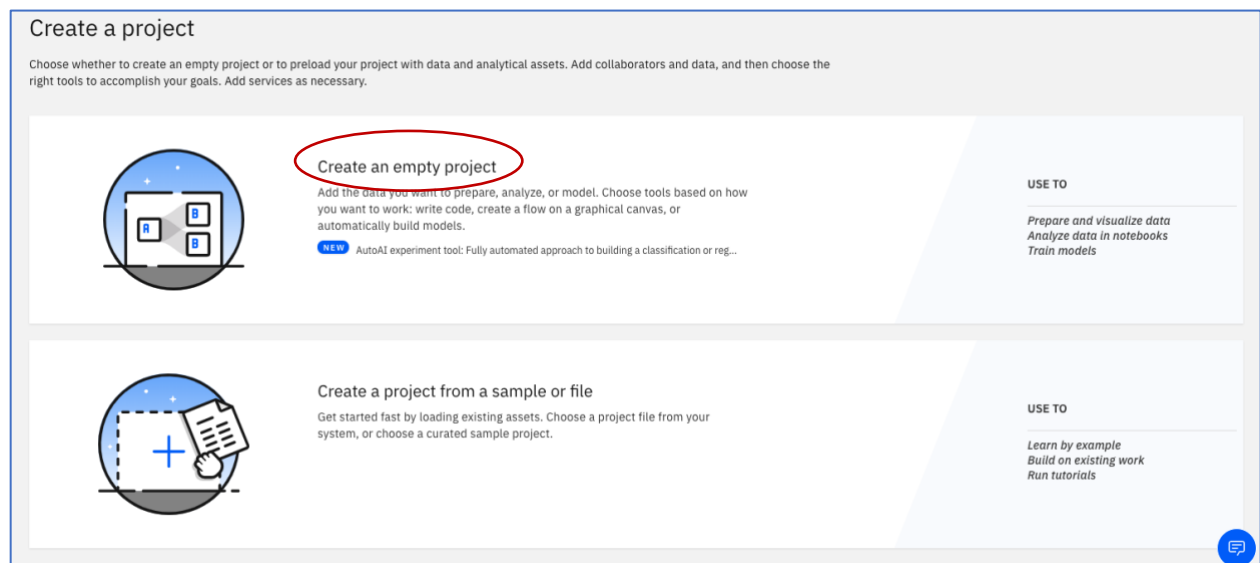
6. Click on **Projects**, and then click on **View All Projects**



7. Click on **New Project**.



8. Click on **Create an empty project**.



9. 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 in **Define Storage** click on **Add** to add an object storage instance.

New project

Define project details

Name

Watson Studio Labs

Description

Project description

Choose project options

☐ Restrict who can be a collaborator ⓘ

Project includes integration with [Cloud Object Storage](#) for storing project assets.

Define storage

1 Select storage service

Add

Add an object storage instance, and then return to this page and click Refresh.

2 Refresh

Cancel

Create

10. Click on **Lite**, and then click on **Create**

Pricing Plan: Monthly Process shown above reflect the: [United States](#)

PLAN	FEATURES	PRICING
<input checked="" type="radio"/> Lite	<p>1 COS Service Instance</p> <p>Storage up to 25 GB/mo.</p> <p>Up to 20,000 GET requests/mo.</p> <p>Up to 2,000 PUT requests/mo.</p> <p>Up to Data Retrieval 10 GB/mo.</p> <p>Up to 5GB Public Outbound</p> <p>Applies to aggregate total across all storage bucket classes</p>	Free
<input type="radio"/> Standard	<p>There is no minimum fee, so you pay only for what you use.</p>	Expand each section to view details

Cancel

Create

11. Click **Confirm**.

Confirm Creation

Plan

Lite

Resource group

Default

Service name

cloud-object-storage-tw

Cancel

Confirm

12. Click **Refresh**.

New project

Define project details

Name

Watson Studio Labs

Description

Project description

Choose project options

☐ Restrict who can be a collaborator ⓘ

Project includes integration with [Cloud Object Storage](#) for storing project assets.

Define storage

1 Select storage service

Add

Add an object storage instance, and then return to this page and click Refresh.

2 Refresh

Cancel

Create

13. Click **Create**.

New project

Define project details

Name
Watson Studio Labs

Description
Project description

Choose project options

☐ Restrict who can be a collaborator ⓘ

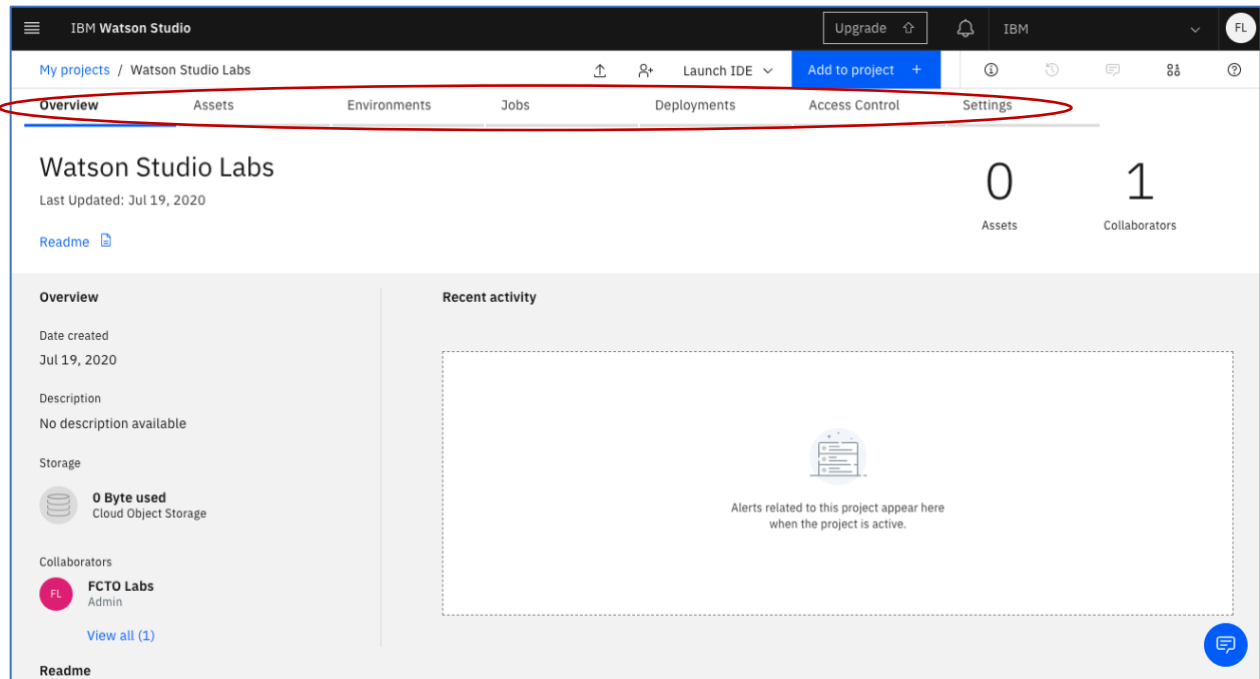
Project includes integration with [Cloud Object Storage](#) for storing project assets.

Storage
cloud-object-storage-tw

Cancel Create

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

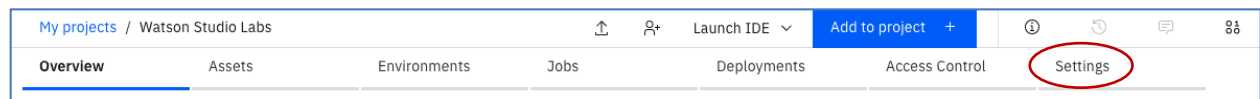
- a. **Assets Page** – Analytics and Data assets can be added to the project from this page.
- b. **Environments Page** - Provides information on the current notebook environments that are defined, lists the active notebook environments currently running, and enables users to create custom notebook environments.
- c. **Jobs Page** – Provides the interface to the job subsystem. This replaces the separate UIs to set up and run jobs for Notebooks and the Data Refinery. This is a new feature in Watson Studio Cloud version.
- d. **Bookmarks Page** - Lists artifacts from the Community that are bookmarked in this project.
- e. **Deployments Page** – Lists the deployed models
- f. **Access Control** – Lists the project collaborators and enables users to add/remove collaborators.
- g. **Settings** – Enables users to view and set project attributes.



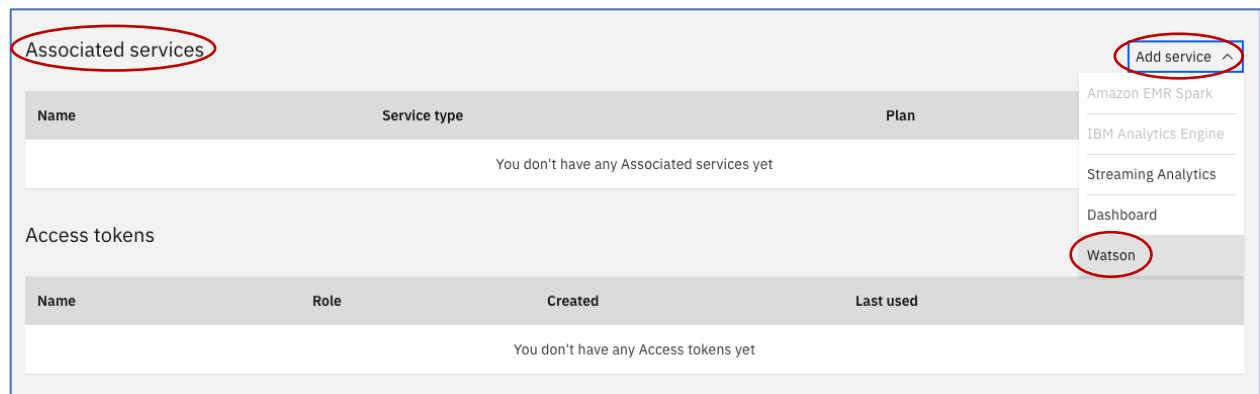
Associate a Watson Machine Learning Service to the Project

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**.



- Click on **Add** in the **Machine Learning** tile.

The screenshot shows the IBM Watson Studio dashboard with four service tiles arranged in a 2x2 grid. Each tile has an icon, a title, a description, and an 'Add' button. The 'Machine Learning' tile is circled in red.

- Discovery**: Add a cognitive search and content analytics engine to applications. [Add](#)
- Language Translator**: Translate text, documents, and websites from one language to another. Create industry or region-specific models. [Add](#)
- Machine Learning**: IBM Watson Machine Learning - make smarter decisions, solve tough problems, and improve user outcomes. [Add](#)
- Natural Language Classifier**: Natural Language Classifier uses advanced natural language processing and machine learning techniques to create custom models. [Add](#)

- Newer Watson Studio accounts come with the WatsonMachineLearning instance already created. Select **Existing**, select **WatsonMachineLearning** for the **Existing Service Instance**, and click on **Select**. If you don't have an existing service, click on New and follow the instructions to create a **Lite** Watson Machine Learning service.

The screenshot shows the 'Machine Learning' configuration page. The 'Existing' tab is selected and circled in red. Below the tabs, there are filters for 'Filter by: 1 x Default', '1 x Dallas', and 'None'. Under the 'Existing Service Instance' section, the dropdown menu is set to 'WatsonMachineLearning' and circled in red. At the bottom, there is a blue 'Select' button circled in red and a 'Cancel' button.

- The **WatsonMachineLearning** service is associated with the project.

The screenshot shows the 'Associated services' section with a table listing the services associated with the project. The 'WatsonMachineLearning' service is listed in the first row, with its name circled in red.

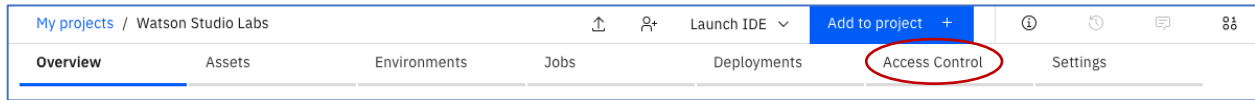
Name	Service type	Plan
WatsonMachineLearning	Watson - Machine Learning	

Add a Project Collaborator

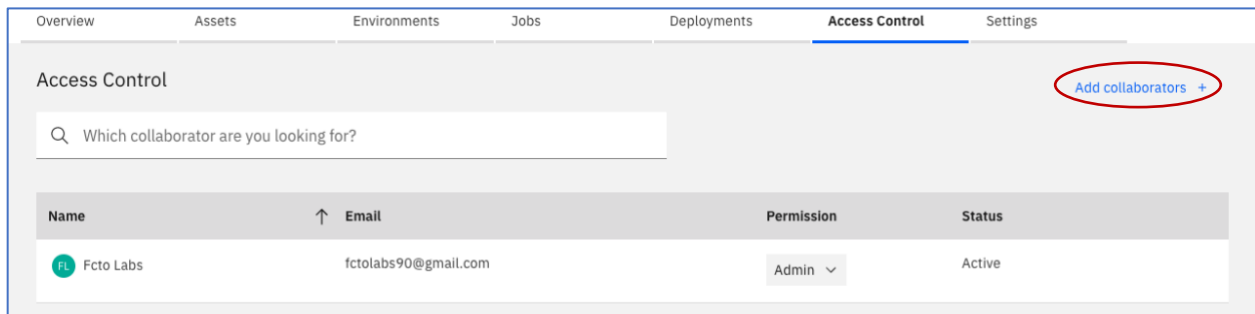
Colleagues can gain access to a project's data and analytic assets by being made a collaborator. Permissions are based on the assigned role. The roles are administrator, editor, and viewer.

We will add a collaborator with a role of **Editor**.

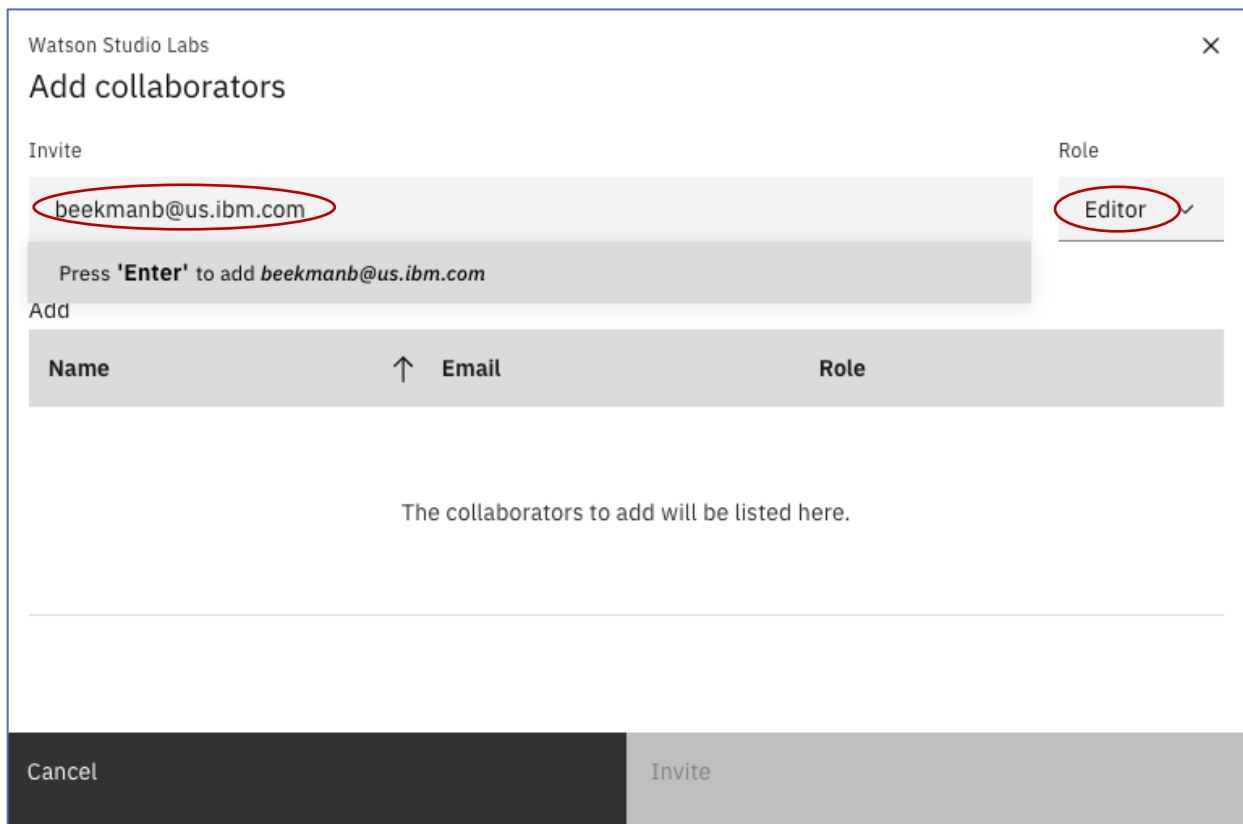
1. Click on the **Access Control** tab.



2. Click on **Add collaborators**.



3. For **Invite**, enter **beekmanb@us.ibm.com**, press the <Enter> key, select Editor from the **Access Level** dropdown, and click on **Invite**.



- The collaborator is added to the list of Collaborators on the right-hand side. Click on **Invite**.

Watson Studio Labs

Add collaborators


Invite

Add more people...

Role

Editor ▾

Add 1

Name	↑ Email	Role	
 Bernard Beekman	beekmanb@us.ibm.com	Editor ▾	✕

Cancel



Invite

- The collaborator is added.

Access Control

[Add collaborators +](#)

Q Which collaborator are you looking for?

Name	↑ Email	Permission	Status
 Bernard Beekman	beekmanb@us.ibm.com	Editor ▾	Active
 Fcto Labs	fctolabs90@gmail.com	Admin ▾	Active

You have completed Lab-1!

- ✓ Created a project
- ✓ Created an object storage instance and associated it with the project
- ✓ Associated an existing Watson Machine Learning service instance with the project or created a new service instance and associated it with the project.
- ✓ Added a collaborator to the project