

Skills Network

(Optional) Hands-on Lab: Create IBM Cloud account and Watson Studio instance

Estimated time needed: 40 minutes

In this lab you will explore Watson Studio

Objectives -

After completing this lab, you will be able to:

- Use Watson Studio service
- Create project in Watson Studio
- Add an interactive python notebook to a project in Watson Studio

Pre-requisite

You need an IBM Cloud account to create a project in Watson Studio. If you don't have an account created already, click and open this [link](#) and follow the instructions, to create an IBM Cloud account.

Exercise - Create a project on Watson Studio

If you have not created a Watson service before proceed with Task 1, otherwise go to Task 2

Task 1: For New Users (with no Watson service):

1. [Click here](#) to go to the IBM Cloud Watson Studio page. To create a Watson service, choose a plan you want to use, click **Create**. In the image below, the *Lite* plan has been chosen.


IBM Cloud

Search resources and offerings...

Catalog Docs Support Manage

Lavanya Sunde...

Catalog / Services /

 Watson Studio

Author: IBM • Date of last update: 12/06/2020 • Docs

Create

About

Select a region

Select a region

Dallas

Select a pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: [United States](#)

Plan	Features	Pricing
Lite	<div>1 authorized user</div> <div>50 capacity unit-hours monthly limit</div> <div>Environment = # of capacity units required per hour</div> <ul style="list-style-type: none">1 vCPU + 4 GB RAM = 0.52 vCPU + 8 GB RAM = 14 vCPU + 16 GB RAM = 2 <div>Decision Optimization = Environment + 5</div>	Free

The Lite plan for Watson Studio offers everything you need to become a better data scientist or domain expert in a collaborative environment.

Lite plan services are deleted after 30 days of inactivity.

Summary

Watson Studio

Free

Region: Dallas

Plan: Lite

Service name: Watson Studio-go

Resource group: Default

Create

Add to estimate

View terms

FEEDBACK

2. On the Watson Studio page, click on **Launch in IBM Cloud Pak for Data**.

Resource list /

Watson Studio-c6

Active


Add tags

Details

Actions...

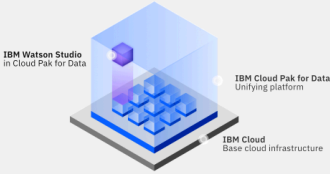
Manage

Plan

 Watson Studio in Cloud Pak for Data

Watson Studio is one of the core services in Cloud Pak for Data as a Service. Build, deploy and manage AI models, and optimize decisions on IBM Cloud Pak for Data.

Launch in IBM Cloud Pak for Data



IBM Watson Studio in Cloud Pak for Data

IBM Cloud Pak for Data Unifying platform

IBM Cloud Base cloud infrastructure

IBM Watson Studio is part of IBM Cloud Pak for Data and serves as the data science capability of the data fabric architecture.

Helpful links

Documentation

Learn about tools, features, and how to perform a wide variety of Data and AI tasks.

Learning path

Start a step-by-step tutorial to get up and running quickly.

Videos

Watch videos to learn about Watson Studio and Cloud Pak for Data as a Service.

Task 2: For Existing Users (who already have Watson Service):

1. Go to the IBM Cloud Dashboard and click Services.

IBM Cloud

Search resources and offerings...

Q

Catalog

Docs

Support

Manage

Lavanya Sunde...

Dashboard

Upgrade account

Create resource

Resource summary

6

Resources

Services

Storage

View all (2)...

Planned maintenance

View all

Clear skies!
You can view your scheduled maintenance events here.

For you

Get started with using AI and Cloud Object Storage in 15 minutes.

Get Started with Watson Studio

Watson Assistant lets you build conversational interfaces into any application, device, or channel.

Use Watson Assistant

Refresh

News

View all

Coca-Cola European Partners Signs a Multiyear Agreement with IBM to Accelerate its Strategic Transformation Journey with...

Daimler Expands Relationship with IBM; Adopts IBM public cloud for its security capabilities

Wipro and IBM Collaborate to Help Clients

Recent support cases

View all

User access

Manage users

Enter email addresses below to jump directly into the invite user setup:

Enter up to 100 email addresses

IBM Cloud status

View all

2. When you click on Services, all your existing services will be shown in the list. Click the Watson Studio service you created:

IBM Cloud

Search resources and offerings...

Q

Catalog

Docs

Support

Manage

Lavanya Sunde...

Resource list

Create resource

Name	Group	Location	Offering	Status	Tags
Filter by name or IP address... Filter by group or org... Filter... Filter... Filter... Filter...					
Devices (0)					
VPC infrastructure (0)					
Clusters (0)					
Cloud Foundry apps (0)					
Cloud Foundry services (0)					
Services (5)					
Analytics Engine-8h	Default	London	Analytics Engine	Active	
Discovery-h0	Default	Dallas	Discovery	Active	
Machine Learning-6r	Default	Dallas	Machine Learning	Active	
Visual Recognition-wm	Default	Dallas	Visual Recognition	Active	
Watson Studio-q0	Default	Dallas	Watson Studio	Active	
Storage (1)					
Network (0)					
Cloud Foundry enterprise environments (0)					

3. On the Watson Studio page, click on **Launch in IBM Cloud Pak for Data**.

Resource list /

Watson Studio-c6

Active

Add tags

Details

Actions...

Manage

Plan

Watson Studio in Cloud Pak for Data

Watson Studio is one of the core services in Cloud Pak for Data as a Service. Build, deploy and manage AI models, and optimize decisions on IBM Cloud Pak for Data.

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Learning path

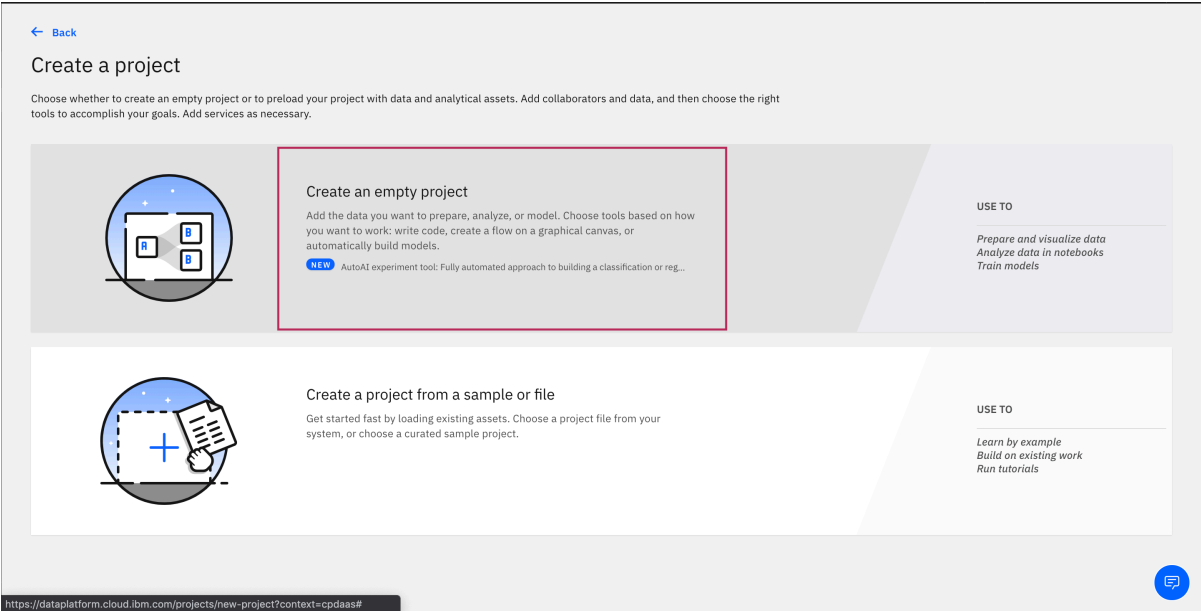
Start a step-by-step tutorial to get up and running quickly.

Videos

Watch videos to learn about Watson Studio and Cloud Pak for Data as a Service.

Task 3: Creating a Project

1. Click on **Create a project**
2. On the Create a project page, click **Create an empty project**



3. Provide a **Project Name** and **Description**, as shown below:

New project

Define project details

Name

Python Basics for Data Science Project

Description

This is the Python Basics for Data Science Project.

Choose project options

☐ Restrict who can be a collaborator

Project will include 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

4. You must also create storage for the project. Click **Add**

New project

Define project details

Name

Project name

Description

Project description

Choose project options

☐ Restrict who can be a collaborator

Project will include 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

5. On the Cloud Object Storage page, scroll down and then click **Create**.

6. In the Confirm Creation box, click **Confirm**.



Confirm Creation

Plan

Lite



Resource group

Default



Service name

cloud-object-storage-ai

Cancel

Confirm

7. On the New project page, note that the storage has been added, and then click Create.

IBM Watson Studio

Upgrade

New project

Define project details

Name

Python Basics for Data Science Project

Description

This is the Python Basics for Data Science Project.

Choose project options

☐ Restrict who can be a collaborator

Project will include integration with Cloud Object Storage for storing project assets.

Storage

cloud-object-storage-1c

Cancel Create

Task4: Adding a Notebook to the Project:

1. You need to add a Notebook to your project. Click on **Assets > New asset**.

Projects / IBM_Project

Assets

Jobs Manage

Find assets

Add asset

New asset

0 asset

All assets

Asset types

Start adding assets

To get started with project assets, click **New asset** to create them, or **Add asset** to add existing ones.

2. Scroll down and select **Jupyter Notebook Editor**:

Add to project

Select the tool to create an operational or configuration asset.

Tool type

All typesAutomatic buildersGraphical canvasCode editorsOther

Find tools by name or purpose

Code editors

Jupyter notebook editor

Other

Connected data

Connection

Model

Show descriptions ⓘ

3. On the New Notebook page, enter a name for the notebook, and then click **From URL**. Copy this [link](#).
4. Paste it into the **Notebook URL** box, and then click **Create Notebook**.

New notebook

BlankFrom fileFrom URL

Name

Final_Assignment

Description (optional)

Type your description here

Select runtime

IBM Runtime 22.1 on Python 3.9 XXS (1 vCPU 4 GB RAM)

The selected runtime has 1 vCPU and 4 GB RAM. It consumes 0.5 capacity units per hour. [Learn more](#) about capacity unit hours and Watson Studio pricing plans.

Notebook URL

https://cf-courses-data.s3.us.cloud-object-storage.appdomain.cloud/IBM-DI/

Cancel

Create

You will see this Notebook:



Introduction to Pandas in Python

Estaimted time needed: 15 minutes

Objectives

After compilting this lab you will be able to:

- Use Pandas to access and view data

Table of Contents

- [About the Dataset](#)
- [Introduction of Pandas](#)
- [Viewing Data and Accessing Data](#)
- [Quiz on DataFrame](#)

Estimated time needed: 15 min

Author(s)

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Changelog

Date	Version	Changed by	Change Description
2023-05-10	2.4	Eric Hao & Vladislav Boyko	Updated Page Frames
2022-04-04	2.3	Malika	Updated screenshot
2022-02-22	2.2	Hema	Updated screenshots
2020-11-18	2.1	Malika Singla	Updated the screenshot
2020-08-25	2.0	Lavanya	Migrated Lab to Markdown and added to course repo in GitLab

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