

**Effort: 20 mins**

## Objective

After completing this lab, you will be able to:

1. Use Watson Studio to work on the notebook

## Pre-requisite

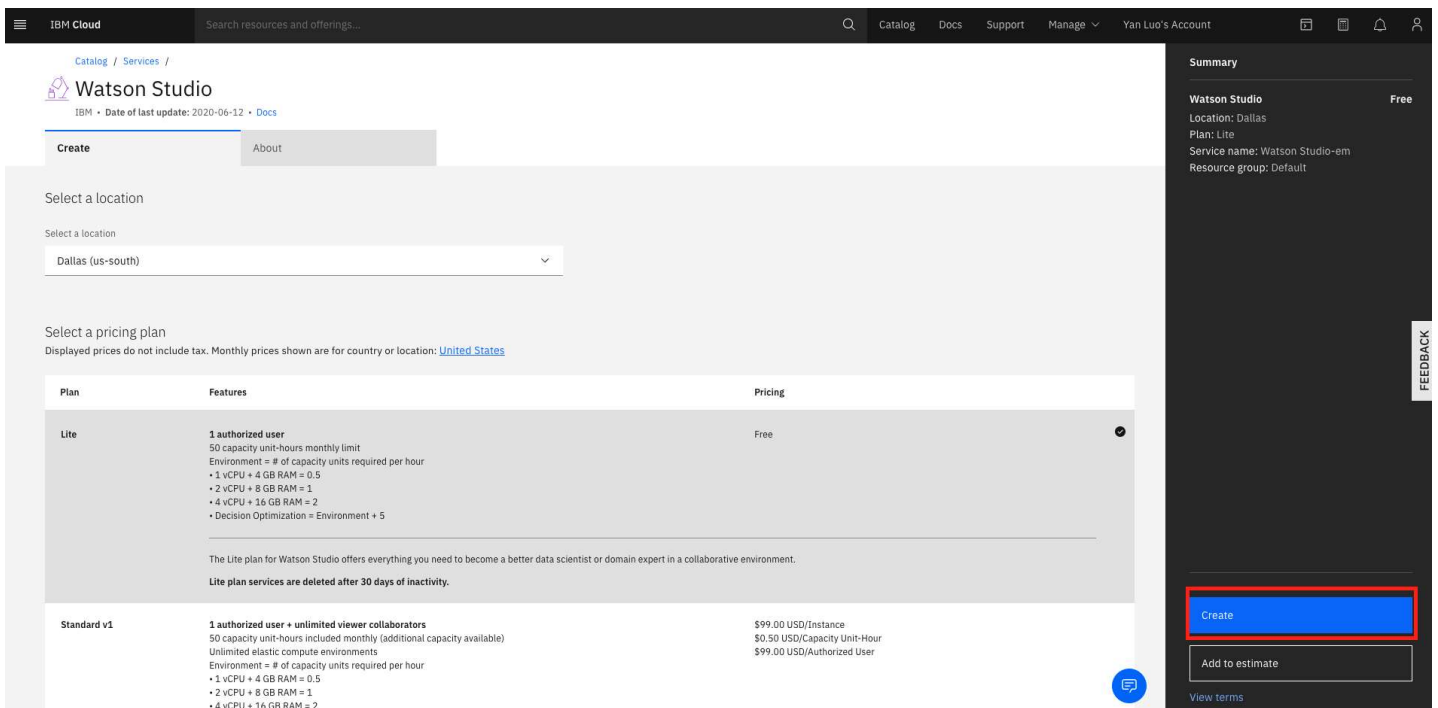
You need an IBM Cloud account to create a project in Watson Studio. If you don't have an account created already, click and open this [link](#) and follow the instructions, to create an IBM Cloud account.

## IBM Watson Setup

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

*If you have created a Watson service before, proceed to Task 2:*

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



The screenshot shows the IBM Cloud Watson Studio 'Create' page. The page has a dark header with the IBM Cloud logo and a search bar. Below the header, there's a breadcrumb trail: 'Catalog / Services / Watson Studio'. The main content area is titled 'Create' and 'About'. Under 'Create', there's a section 'Select a location' with a dropdown menu showing 'Dallas (us-south)'. Below that, there's a section 'Select a pricing plan' with a note: 'Displayed prices do not include tax. Monthly prices shown are for country or location: [United States](#)'. A table of pricing plans is shown below. The 'Lite' plan is selected, which is a free tier. The 'Standard v1' plan is also visible. A red box highlights the 'Create' button on the right side of the page.

Plan	Features	Pricing
Lite	<b>1 authorized user</b> 50 capacity unit-hours monthly limit Environment = # of capacity units required per hour • 1 vCPU + 4 GB RAM = 0.5 • 2 vCPU + 8 GB RAM = 1 • 4 vCPU + 16 GB RAM = 2 • Decision Optimization = Environment + 5  The Lite plan for Watson Studio offers everything you need to become a better data scientist or domain expert in a collaborative environment. <b>Lite plan services are deleted after 30 days of inactivity.</b>	Free
Standard v1	<b>1 authorized user + unlimited viewer collaborators</b> 50 capacity unit-hours included monthly (additional capacity available) Unlimited elastic compute environments Environment = # of capacity units required per hour • 1 vCPU + 4 GB RAM = 0.5 • 2 vCPU + 8 GB RAM = 1 • 4 vCPU + 16 GB RAM = 2	\$99.00 USD/Instance \$0.50 USD/Capacity Unit-Hour \$99.00 USD/Authorized User

**Create**

Add to estimate

View terms

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

Resource list /
Watson Studio-c6
Active
Add tags

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 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):

- Go to the IBM Resources List

[Resources List](#)

- 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...
Catalog Docs Support Manage

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)					
> <b>Services (1)</b>					
Watson Studio-0a	Default	Dallas	Watson Studio	Provisioned	...
> Storage (1)					
> Network (0)					
> Cloud Foundry Enterprise Environments (0)					
> Functions Namespaces (0)					
> Apps (0)					
> Developer Tools (0)					

- 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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## Task 3: Creating a new project

1. Click on **Create a project**

IBM Cloud Pak for Data
Upgrade
Lavanya Sunderarajan's Ac...
LS

## Welcome Lavanya!

Watson Studio • Watson Machine Learning

**Learn by example**

Solve a specific business problem with a comprehensive tutorial in a sample project.

[Take a guided tutorial](#)

**Start working**

Create a project, add your team, and start preparing, analyzing, or modelling data.

[Create a project](#)

**Add features**

Create services with the tools, data, or other capabilities that you need.

[Create a service](#)

Quick navigation

Projects

Support

- Documentation
- FAQ
- What's new
- Give feedback

## Overview

**Recent projects**

AssessTermDepositInterest	Jun 24, 2020 03:59 PM
foodClassGenI	Jun 23, 2020 04:44 PM
myclass1	Jun 23, 2020 04:13 PM

**New in gallery**

**Notifications**

No notifications

You will see your most recent notifications here.

**Your services**

Watson Studio-qo	Today at 01:44 PM
Machine Learning-6r	Jun 24, 2020 03:05 PM
Visual Recognition-wm	Jun 23, 2020 04:19 PM
cloud-object-storage-iv	Jun 23, 2020 04:12 PM
Discovery-h0	May 29, 2020 10:17 AM

**Relaunch tour panel**

You can launch the tour panel any time from the Support menu

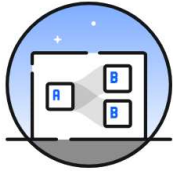
<https://dataplatfom.cloud.ibm.com/projects/new-project?context=cpdaas>

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

[← Back](#)

## Create a project

Choose whether to create an empty project or to preload your project with data and analytical assets. Add collaborators and data, and then choose the right tools to accomplish your goals. Add services as necessary.



### Create an empty project

Add the data you want to prepare, analyze, or model. Choose tools based on how you want to work: write code, create a flow on a graphical canvas, or automatically build models.

**NEW** AutoAI experiment tool: Fully automated approach to building a classification or reg...

#### USE TO

Prepare and visualize data  
Analyze data in notebooks  
Train models



### Create a project from a sample or file

Get started fast by loading existing assets. Choose a project file from your system, or choose a curated sample project.

#### USE TO

Learn by example  
Build on existing work  
Run tutorials

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

## New project

### Define project details

Name

r-intro-final

Description

Introduction to R Final Project

### 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

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**.

IBM Watson Studio

Upgrade ⓘ

IBM Watson Account

Existing

New

### Cloud Object Storage

IBM Cloud Object Storage is a highly scalable cloud storage service, designed for high durability, resiliency and security. Store, manage and access your data via our self-service portal and RESTful APIs. Connect applications directly to Cloud Object Storage using other IBM Cloud Services with your data.

#### Features

##### Storage for the IBM Cloud

IBM Cloud Object Storage provides unstructured data storage for cloud applications. Libraries and SDKs support a common set of 53 API functions for connecting new applications to scalable cloud storage and integrating your data into other services on the IBM Cloud Platform as well as IBM Watson services. IBM Cloud Object Storage is available with Regional, Cross Region and single site resiliency options worldwide.

##### Built-in Aspera high-speed transfer

With IBM Cloud Object Storage Aspera high-speed data transfer, you can improve data transfer performance by quickly transferring data over long distances, and under various network conditions. It is natively integrated into Cloud Object Storage and there is no additional cost for uploading data.

##### Storage Classes and Archive Policy

Choose storage classes based on your usage patterns for active, less-active, and cold workloads with Standard, Vault, and Cold Vault respectively. Use Flex class for dynamic data access with usage patterns that are hard to predict. For rarely used data that requires long-term retention, simply set an Archive policy with our existing storage-class tiers allowing you to reduce costs even further with our lowest priced Archive storage.

##### Access and Key Management

IBM Identity and Access Management (IAM) policies allow for granular access control at the bucket level using role-based policies. Key Protect support allows customers to have their own managed encryption keys for higher level data security.

**Pricing Plan:** Monthly Prices shown above reflect the: **United States**

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

The Lite service plan for Cloud Object Storage includes Regional and Cross Regional resiliency, flexible data classes, and built-in security.

Expand each section to view details

Cancel

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**.

## New project

### Define project details

Name

r-intro-final

Description

Introduction to R Final Project

### Choose project options

☐ Restrict who can be a collaborator ⓘ

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

### Storage

Cloud Object Storage-hu

Cancel

Create

After creating the project you will need to add a Jupyter notebook to your project. Instructions for this are provided in a subsequent lab.

## Author(s)

Joseph Santarcangelo

## Other Contributor(s)

Yan Luo

## Change log

Date	Version	Changed by	Change Description
2022-02-21	2.9	D.M.Naidu	Updated the screenshot
2022-02-18	2.8	Geetika Pal	Updated the screenshot
2021-10-19	2.7	Lakshmi Holla	Updated cloud account creation instructions
2021-10-13	2.6	Lakshmi Holla	Updated cloud creation instructions
2021-08-19	2.5	Lakshmi Holla	Changed Watson Studio screenshots.
2021-03-19	2.4	Yan Luo	Updated the screenshots and specific version to R
2021-01-25	2.3	Rav Ahuja	Forked from original and split Jupyter notebook instructions in separate lab
2020-11-18	2.2	Malika Singla	Updated the screenshot
2020-10-05	2.1	Malika Singla	Updated the Effort and Objective
2020-09-05	2.0	Malika Singla	Updated the screenshot

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