1. Please open URL https://dataplatform.cloud.ibm.com/
2. Please click on Log in (or register here http://ibm.biz/oscon2019)

IBM **Watson**

Log in   Try it for Free
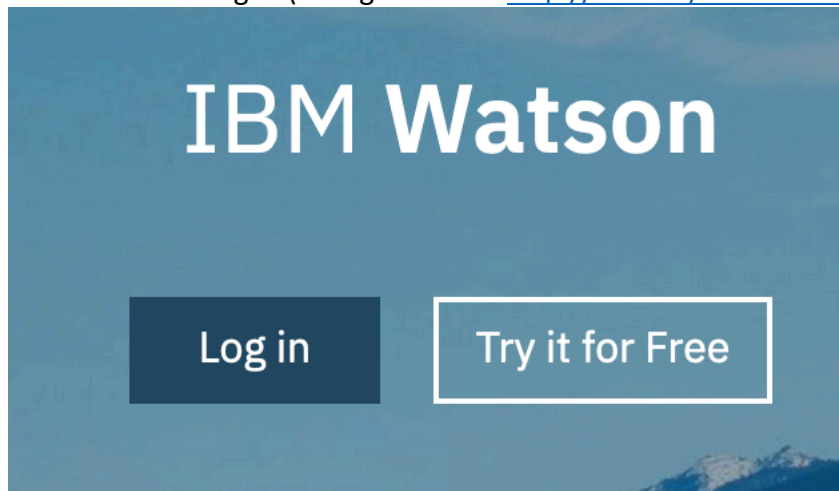
3. Please create a new project

Welcome Oscon1!

Watson Studio • Watson Knowledge Catalog

Start by creating a project

A project is how you organize your resources to work with data and collaborate with team members

Create a project
Create a project, then add the tools and assets you need.

Search a catalog
Find the assets you need in a catalog.
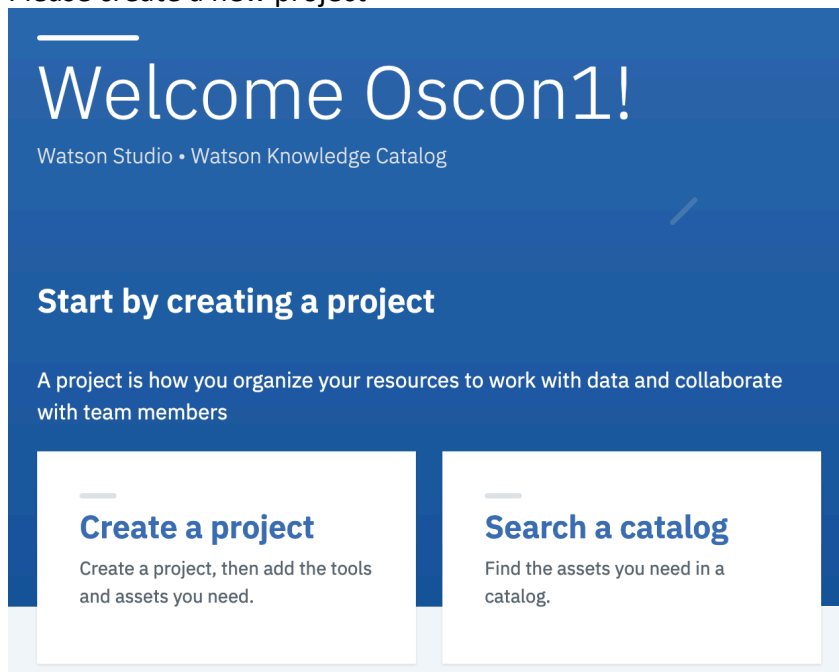
4. Please click on "Standard"

← Back

Create a project

Choose the project starter for your work. Required services with Lite plans are provisioned automatically. You can add other assets and services later.

Standard
Work with any type of asset. Add services for analytical assets as you need them.

Import project
Import a project from a Zip file or a sample project.
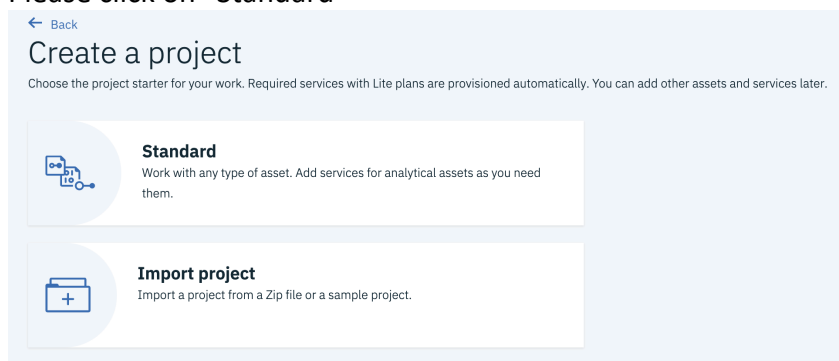
5. Please enter "default" as project name

Define project details

Name

default

Description

Project description

Choose project options

☑ Restrict who can be a collaborator ⓘ

6. Please add a storage service by clicking on "Add"

Define storage

① **Select storage service**

Add

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

② **Refresh**

7. Please scroll down on the service creation page, keep "Lite" plan selected and click on "Create"

PLAN	FEATURES	PRICING
⦿ Lite	**1 COS Service Instance** 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 The Lite service plan for Cloud Object Storage includes Regional and Cross Regional resiliency, flexible data classes, and built in security.	Free
○ Standard	**There is no minimum fee, so you pay only for what you use.**	Expand each section to view details

Cancel   Create

8. Please click on "Confirm"

Confirm Creation

Plan

Lite ▾

Resource group

Default ▾

Service name

cloud-object-storage-vr

Cancel   **Confirm**

9. Please click on "Refresh"

Define storage

① Select storage service

Add

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

② **Refresh**

10. Please click on "Create"

New project

Define project details

Name

default

Description

Project description

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-vr

Cancel   Create

11. Please click on "Settings"

☰   IBM **Watson Studio**   Upgrade ⬆

My Projects   /   default   ⬆ ⌄   ·⊙   Launch IDE ⌄   ⊕ Add to project

Overview   Assets   Environments   Jobs   Bookmarks   Deployments   Access Control   Settings

12. Please click on "Add service"

Storage

🛢   Cloud Object Storage ⓘ   Manage in IBM Cloud
        0 Byte used

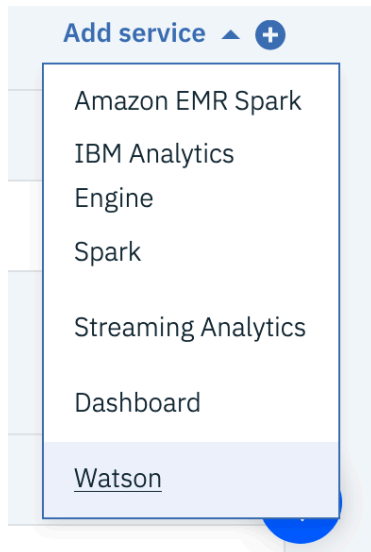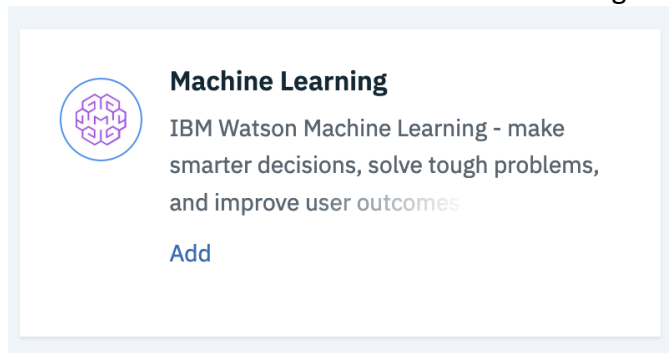**Associated services**   Add service ⌄ ⊕

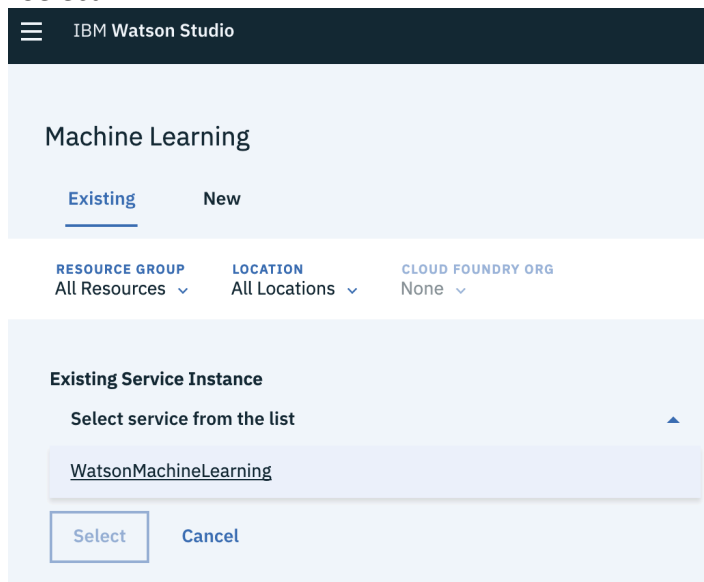| NAME	SERVICE TYPE	PLAN	ACTIONS
You don't have any Associated services yet.			

13. Please select "Watson"

14. Please click on "Add" on the "Machine Learning" service

15. Please select "WatsonMachineLearning" from the dropdown and then click in "Select"

16. Please click on "Manage in IBM Cloud"

Storage

Cloud Object Storage ⓘ   Manage in IBM Cloud
0 Byte used

Associated services   Add service ▼ ⊕

NAME	SERVICE TYPE	PLAN	ACTIONS
You don't have any Associated services yet.			

17. Please click on "Create Bucket"

≡ IBM **Cloud**   Search resources and offerings...   Q   Catalog Docs Support Manage ∨   oscon1 oscon1's Account   ✎ ⚇

Getting started   Resource list /

Buckets   🔷 cloud-object-storage-vr   View docs ⋮

Endpoint   Resource group: Default   **Add Tags**

Service credentials

Connections   **Buckets**

Usage details   Q Prefix filter   ⓘ   Create bucket ⊕

Plan

Name	Public Access ⓘ	Location ⓘ	Storage Class	Created	Advanced ⓘ	
default-donotdelete-pr-0f9e2sbesglsik		us-geo	Standard	07/15/2019 11:53:47 AM		•••

Items per page: **10** ▼ | 1-10 of items   ‹   ›

18. Please create a new bucket called "yournamedata", please replace "yourname" with your name or any other unique identifier. Please keep all other values as illustrated below. Then please click on "Create bucket".

Unique bucket name: See naming rules

yournamedata

Resiliency   **Location**

Regional   ▼   us-south   ▼

Best performance

Storage class ⓘ See pricing for each class

Standard   ▼

Additional configuration (optional)

☐ Add Archive rule ⓘ

☐ Add Expiration rules ⓘ

☐ Add Retention policy ⓘ

This feature is available for our Standard plan customers only. See pricing

Additional Services (optional)

☐ Add Key Protect Keys ⓘ

                                                            Create bucket

19. Please repeat the previous two steps to create a bucket called, "yournameresults", please, again, replace "yourname" with your name or any other unique identifier.

20. Please click on "Service credentials", then on "New credential"

IBM Cloud	Search resources and offerings...		Catalog	Docs	Support	Manage ⌄	oscon1 oscon1's Account	

Resource list /

🔷 cloud-object-storage-vr   View docs ⋮

Resource group: Default   Add Tags

Service credentials

Credentials are provided in JSON format. The JSON snippet lists credentials, such as the API key and secret, as well as connection information for the service.   Learn more

Service credentials   New credential ⊕   ⋮

Items per page **10** ⌄ | 1-3 of 3 items   1 of 1 pages   <   **1** ⌄   >

☐ KEY NAME	DATE CREATED	ACTIONS
☐ WDP-Viewer-default-donotdelete-pr-0f9e2sbesglsik	JUL 15, 2019 - 11:53:47 AM	View credentials ⌄ 🗑
☐ WDP-Project-Management-f37303ad-445a-4859-9375-995f2374a9c3	JUL 15, 2019 - 11:53:38 AM	View credentials ⌄ 🗑
☐ WDP-Editor-default-donotdelete-pr-0f9e2sbesglsik	JUL 15, 2019 - 11:53:46 AM	View credentials ⌄ 🗑

21. Please make sure that "Include HMAC Credential" is checked, then click on "Add"

Add new credential

Name:

Service credentials-1

Role: ⓘ

Writer   ▼

Select Service ID (Optional) ⓘ

Select Service ID...   ▼

☑ **Include HMAC Credential** ⓘ

Add Inline Configuration Parameters (Optional): ⓘ

{"HMAC":true}

Cancel   **Add**

22. On the "Service credentials-1" row, please click on "View credentials". Please use the 📋 symbol to copy the credentials to your clip board. Using a text editor (e.g. notepad) please store this credentials as cloud_object_store.json

23. Please click on "Resource List"

IBM Cloud

Dashboard

Resource List

Cloud Foundry

Kubernetes

VPC Infrastructure New

Classic Infrastructure

cloud-object-storage-vr

Resource group: Default   Add Tags

☐ KEY NAME

☐ WDP-Viewer-default-donotdelete-pr-0f9e2sbesglsik

☐ WDP-Project-Management-f37303ad-445a-4859-9375-995f2374a9c3

24. Please click on "WatsonMachineLearning"

Resource list

Name ▲	Group	Location
🔍 Filter by name or IP address...	Filter by group or org... ▼	Filter... ▼
＞ **Devices** (0)		
＞ **VPC Infrastructure** (0)		
＞ **Kubernetes Clusters** (0)		
＞ **Cloud Foundry Apps** (0)		
＞ **Cloud Foundry Services** (0)		
⌄ **Services** (3)		
💡 KnowledgeCatalog	Default	Dallas
WatsonMachineLearning	Default	Dallas
WatsonStudio	Default	Dallas

25. Please click on "Service credentials", then on "View credentials" in the wdp-writer row. Please use the 📋 symbol to copy the credentials to your clip board. Using a text editor (e.g. notepad) please store this credentials as watson_machine_learning.json

IBM Cloud   Search resources and offerings...   🔍   Catalog   Docs   Support   Manage ∨   oscon1 oscon1's Account

Manage

Service credentials

Plan

Connections

Resource list /

WatsonMachineLearning

Resource group: Default   Location: Dallas   Add Tags

Service credentials

Credentials are provided in JSON format. The JSON snippet lists credentials, such as the API key and secret, as well as connection information for the service.

Learn more

Service credentials

New credential ⊕

Items per page **10** ▾ | 1-1 of 1 items   1 of 1 pages ＜ 1 ▾ ＞

☐ KEY NAME   DATE CREATED   ACTIONS

☐ wdp-writer   JUL 15, 2019 - 11:57:24 AM   View credentials ▲   🗑

```
{
  "apikey": "MuUpaZ9tjR1rF6DS6mANGb2RHdAqR__ihW4lJ56LzWcj",
  "iam_apikey_description": "Auto-generated for key f6f1d9fd-1cba-4aa4-aa76-3b168d556ff9",
  "iam_apikey_name": "wdp-writer",
  "iam_role_crn": "crn:v1:bluemix:public:iam:::serviceRole:Writer",
  "iam_serviceid_crn": "crn:v1:bluemix:public:iam-identity::a/a76cc68c2e0e4de5a062860b8f3b7e8d::serviceid:ServiceId-235f45ac-e3ea
-464e-ba74-29865aaa67ac",
  "instance_id": "a2e5dde8-9602-4e94-8138-403d5c3f7be1",
```

26. Please re-visit the browser tab containing the "Watson Studio" application. Please click on "Add to project", then select "Notebook"
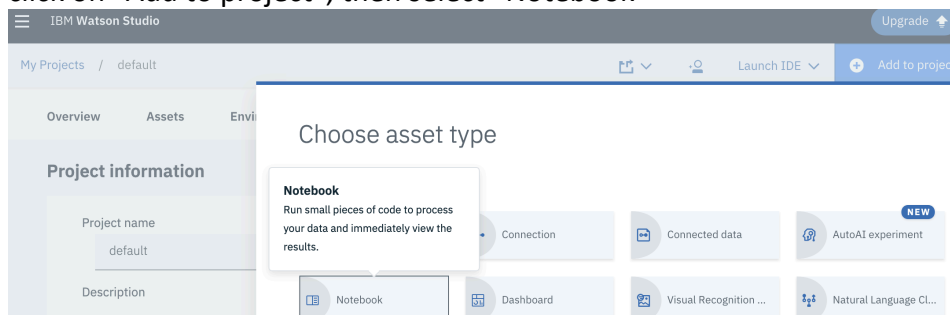
27. Please select the "fromURL" tab and paste the following URL to the "Notebook URL field" https://raw.githubusercontent.com/IBM/Trusted-ML-Pipelines/master/notebooks/ml-pipeline.ipynb, please also enter "ml-pipeline.ipynb" as name, then click on "Create notebook"

28. Please find the notebook cell containing the "wml_creds" variable and replace it with the contents of the file watson_machine_learning.json you've created previously

```
In [ ]:  wml_creds={
             "apikey": "",
             "iam_apikey_description": "",
             "iam_apikey_name": "",
             "iam_role_crn": "",
             "iam_serviceid_crn": "",
             "instance_id": "",
             "password": "",
             "url": "",
             "username": ""
         }
```

29. Please find the notebook cell containing the "cos_creds" variable and replace it with the contents of the file cloud_object_store.json you've created previously

```
In [ ]:  cos_creds={
             "apikey": "",
             "cos_hmac_keys": {
                 "access_key_id": "",
                 "secret_access_key": ""
             },
             "endpoints": "",
             "iam_apikey_description": "",
             "iam_apikey_name": "",
             "iam_role_crn": "",
             "iam_serviceid_crn": "",
             "resource_instance_id": ""
         }
```

30. Please find the notebook cell containing the "cos_info" variable and yournamedata and yournameresults with the bucket names you've created previously

```
In [ ]:  cos_info={
             'endpoint': 'https://s3.us-south.cloud-object-storage.appdomain.cloud',
             'data_bucket': 'yournamedata',
             'result_bucket':'yournameresults'
         }
```

Please go ahead and run the notebook from top.