

Lab: Creating a Watson Studio Project with Jupyter Notebook

This tutorial walks you through setting up an account on the IBM Cloud and a project in Watson Studio such that you can use Jupyter Notebook for your work.

1. Please follow this link to create an [IBM Cloud Account](#). It's completely free, you don't need a credit card and the account never expires.

In case you are getting an error like below, please try with a different email address before you contact support. E.g. a non - gmail address.

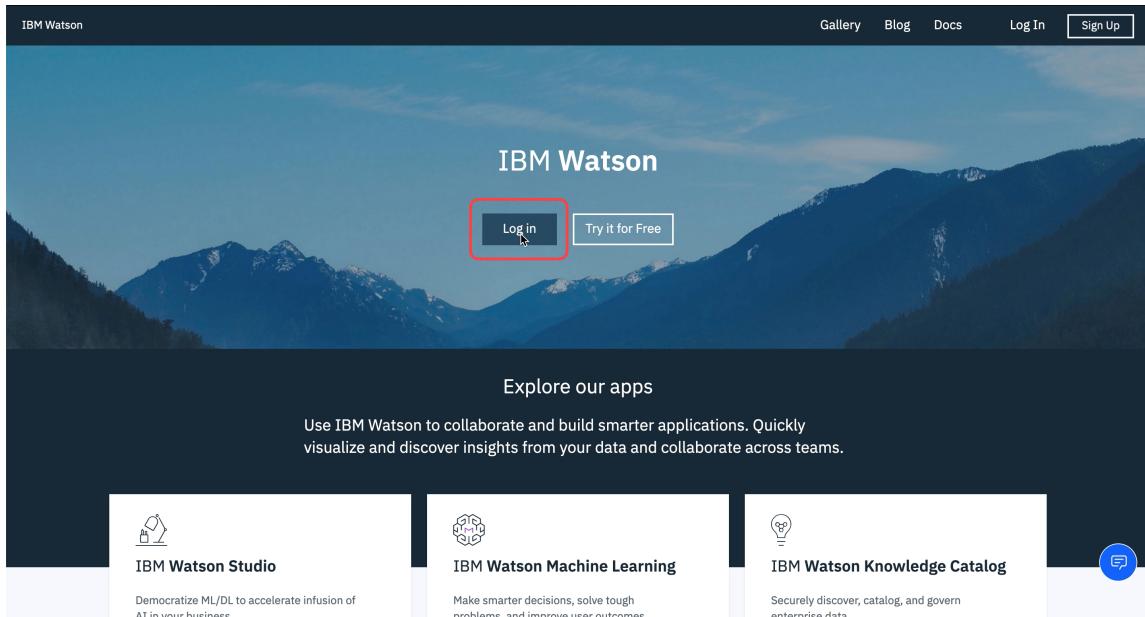


Failure during registration

Try again in a few minutes. If you continue having problems, contact us at this link:

<https://watson.service-now.com/wcp>

2. Once you've completed registration and confirmed your email address, please open dataplateform.cloud.ibm.com and click **Log In**.



3. Now please click on **Create a project**.

The screenshot shows the 'IBM Watson Studio' interface. The top navigation bar includes 'IBM Watson Studio', 'Upgrade', a notification bell, the user name 'Vevew50608 Vevew50608...', and a 'Get started' button. The main area features a large blue circular graphic with a magnifying glass icon. The text 'Welcome Vevew50608!' is prominently displayed, along with 'Watson Studio • Watson Knowledge Catalog'. Below this, a section titled 'Start by creating a project' contains the text: 'A project is how you organize your resources to work with data and collaborate with team members'. Two buttons are visible: 'Create a project' (which is highlighted with a red box) and 'Search a catalog'. A small note below the 'Create a project' button says: 'Create a project, then add the tools and assets you need.'

4. Now please click **Create an empty project**.

IBM Watson Studio

Upgrade Vevew50608 Vevew50608'...

[← Back](#)

Create a project

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

Waiting for dataplatform.cloud.ibm.com...

5. Under **Name**, please type "default", then please click on **Add** under **Define Storage**.

IBM Watson Studio

Upgrade Vevew50608 Vevew50608'...

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.

Define storage

① Select storage service
Add

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

② Refresh

Create

6. Once you see the screen below, please scroll down.

IBM Watson Studio Upgrade Bell Vevew50608 Vevew50608'... W

Cloud Object Storage

[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 use 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 S3 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 Process shown above reflect the: [United States](#)
Transferring data from fast.appcues.com...

7. Please make sure the **Lite** plan is selected, then please click **Create**.

IBM Watson Studio Upgrade Bell Vevew50608 Vevew50608'... W

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

PLAN	FEATURES	PRICING
<input checked="" type="radio"/> 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	Free
<input type="radio"/> Standard	There is no minimum fee, so you pay only for what you use.	Expand each section to view details

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

Cancel **Create**

8. Please click **Confirm**.

9. Please click **Refresh**.

New project

Define project details

Name
default

Description
Project description

Choose project options
 Restrict who can be a collaborator i

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

New project

Define project details

Name
default

Description
Project description

Choose project options
 Restrict who can be a collaborator i

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

Storage

cloud-object-storage-ip

Create

Congratulations, this concludes the first part of the tutorial. Please take a moment to follow through the next steps to learn how you can use Watson Studio Jupyter Notebooks.

1. Please click on **Add to project**.

The screenshot shows the IBM Watson Studio interface. At the top, there's a navigation bar with 'IBM Watson Studio', 'Upgrade', 'Launch IDE', and a user profile icon. Below the navigation bar is a header with 'My Projects / default'. The main content area has tabs for 'Overview', 'Assets', 'Environments', 'Jobs', 'Deployments', 'Access Control', and 'Settings'. Under 'Overview', there's a section for 'default' (Last Updated: 18 Feb, 2020) which includes a 'Readme' link. To the right, there are counts for 'Assets' (0) and 'Collaborators' (1). A prominent red box highlights the 'Add to project' button in the top right corner of the header.

2. Here you can select an abundance of tools, but let's go for Jupyter Notebooks first. Please click **Notebook**.

The screenshot shows the 'Choose asset type' dialog box in IBM Watson Studio. The dialog title is 'Choose asset type'. It contains a grid of asset types: Notebook (circled in red), Connection, Connected data, AutoAI experiment, Dashboard, Visual Recognition ..., Natural Language Cl..., Watson Machine Lea..., Deep learning experi..., Modeler flow, Data Refinery flow, Streams flow, and Decision Optimizatio... (labeled 'NEW'). At the bottom right of the dialog is a 'Close' button. The background of the dialog is semi-transparent, showing the 'default' project overview on the left and a 'Recent activity' section on the right.

3. In order to not use up your monthly free compute credits just select the **Default Python 3.6 Free** runtime.

New notebook

Name
Type notebook name here
40 characters remaining

Description (optional)
Type your description here
500 characters remaining

Select runtime

- Default Python 3.6 XS + DO (2 vCPU 8 GB RAM)
- Default R 3.4 XS (2 vCPU 8 GB RAM)
- ✓ Default Python 3.6 XS (2 vCPU 8 GB RAM)
- Default R 3.4 S (4 vCPU 16 GB RAM)
- Default R 3.6 S (4 vCPU 16 GB RAM)
- Default Python 3.6 S (4 vCPU 16 GB RAM)
- Default Python 3.6 Free (1 vCPU 4 GB RAM)
- Default Spark 2.4 & Scala 2.11 (Driver: 1 vCPU 4 GB RAM, 2 Executors: 1 vCPU 4 GB RAM)
- Default Spark 2.4 & R 3.6 (Driver: 1 vCPU 4 GB RAM, 2 Executors: 1 vCPU 4 GB RAM)
- Default Spark 2.4 & Python 3.6 (Driver: 1 vCPU 4 GB RAM, 2 Executors: 1 vCPU 4 GB RAM)
- Default Spark Scala 2.11 (Driver: 1 vCPU 4 GB RAM, 2 Executors: 1 vCPU 4 GB RAM)
- Default Spark R 3.4 (Driver: 1 vCPU 4 GB RAM, 2 Executors: 1 vCPU 4 GB RAM)
- Default Spark Python 3.6 (Driver: 1 vCPU 4 GB RAM, 2 Executors: 1 vCPU 4 GB RAM)

Create notebook

4. Please click **Create notebook**.

New notebook

Name
test
36 characters remaining

Description (optional)
Type your description here
500 characters remaining

Select runtime

Default Python 3.6 Free (1 vCPU 4 GB RAM)

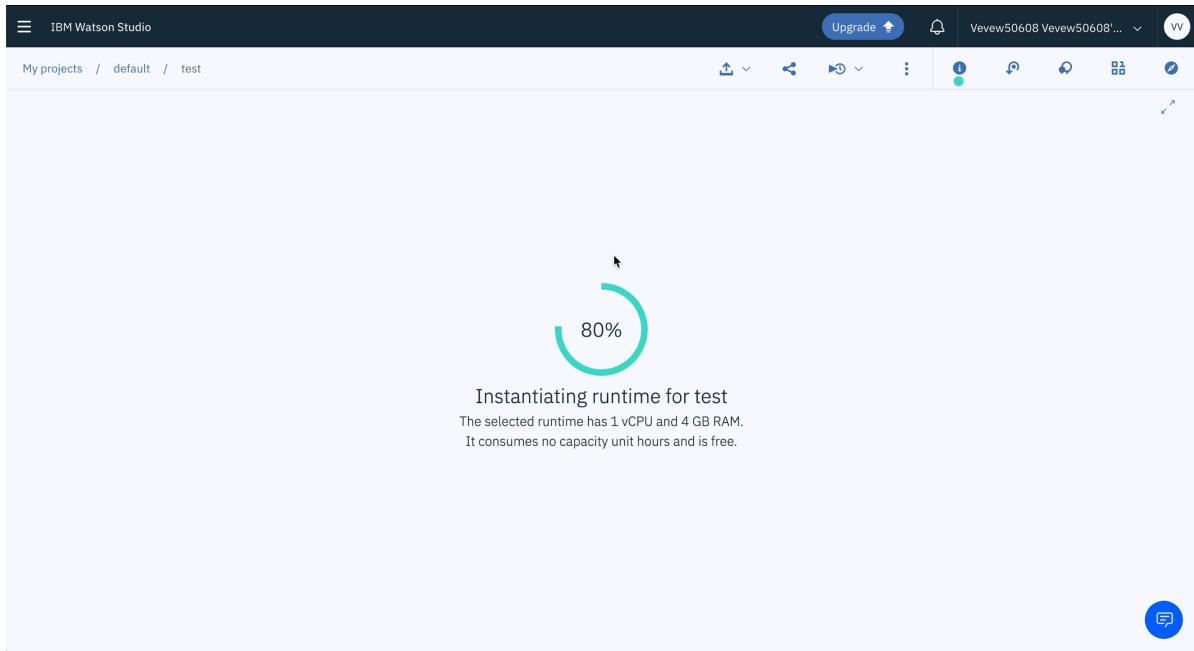
The selected runtime has 1 vCPU and 4 GB RAM.
It consumes no capacity unit hours and is free.
[Learn more](#) about capacity unit hours and Watson Studio pricing plans.

Language

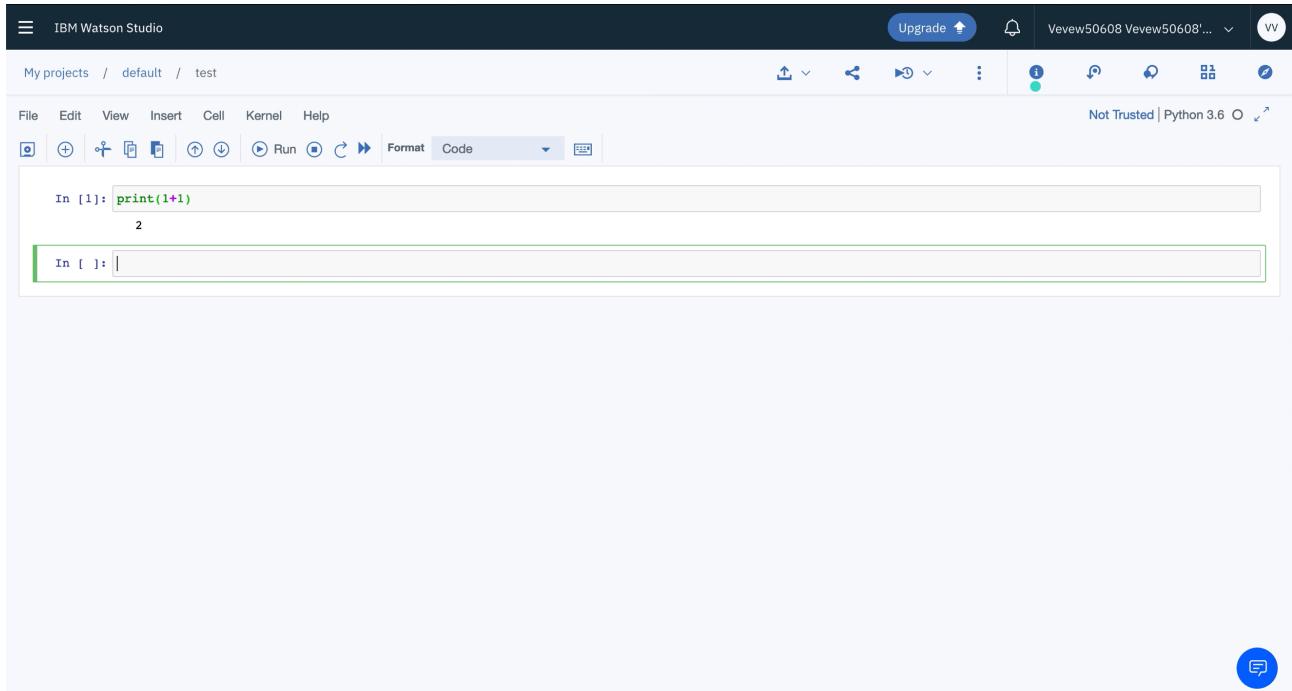
Python 3.6

Create notebook

5. Just wait until the Notebook appears. In case you are interested. The Jupyter enterprise gateway has requested resources on the Kubernetes cluster IBM hosts for serving the Jupyter kernel backing your Notebook.



6. Now you're ready to code!



This concludes this tutorial.