



Objective for Exercise:

- How to use the GPU in Watson Studio.



Create the instance of the Watson Studio using IBM Cloud

To make sure that GPU is enabled on this instance of Watson Studio press the plan button on the top left. You should see the check mark on the right associated with the Professional Plan which will allow you to use Nvidia GPU.

Lite **1 authorized user** Free

10 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 + Watson NLP = Environment + 5

Professional **Unlimited collaborators** \$1.02 USD/Capacity Unit-Hour  

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
- 8 vCPU + 32 GB RAM = 4
- 16 vCPU + 64 GB RAM = 8
- 40 vCPU + 172 GB RAM + 1 NVIDIA V100 (1 GPU) = 68
- 80 vCPU + 344 GB RAM + 2 NVIDIA V100 (2 GPU) = 136
- Decision Optimization + Watson NLP = Environment + 5

NVIDIA V100 GPU environments available only in Dallas on IBM Cloud

HIPAA readiness option available only in Dallas on IBM Cloud


HIPAA Enabled


The Professional plan for Watson Studio enables your team to solve problems and gain a competitive advantage with enterprise-scale data science and AI. For HIPAA support, you must enable it in your IBM Cloud account settings. For instructions, go to <https://dataplatform.cloud.ibm.com/docs/content/getting-started/security.html#hipaa>


Summary


Watson Studio [Estimate costs](#)

Location: Dallas
Plan: Professional
Service name: Watson Studio-tf
Resource group: Default



Apply promo code 



☒ I have read and agree to the following license agreements:
[Terms](#) 


 Creating...

After creating the instance of the Watson Studio start the Watson Studio


Resource list / **Watson Studio-8y**  Active Add tags 

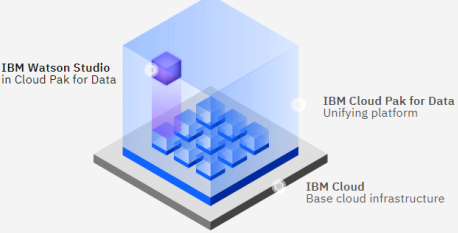
Manage

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.






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

Using the Manage button navigate back to the starting page and click **Launch in IBM Cloud Pak for Data** button to create a new project.

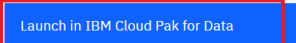
Resource list / **Watson Studio-8y**  Active Add tags 

Manage

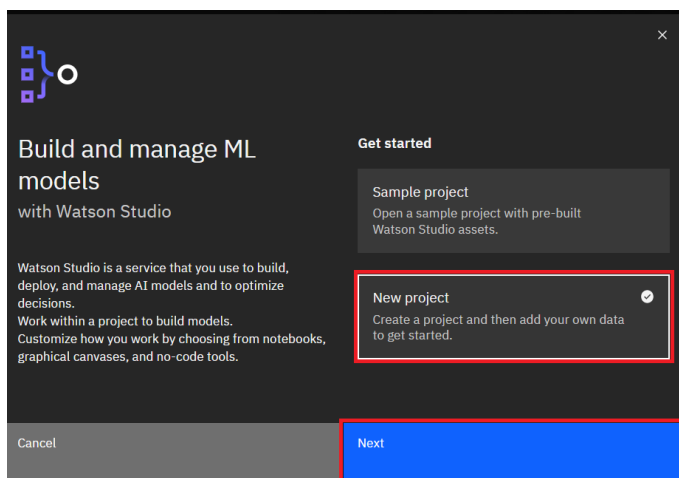
Plan

 **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.



Then select **New Project** and click **Next** button.

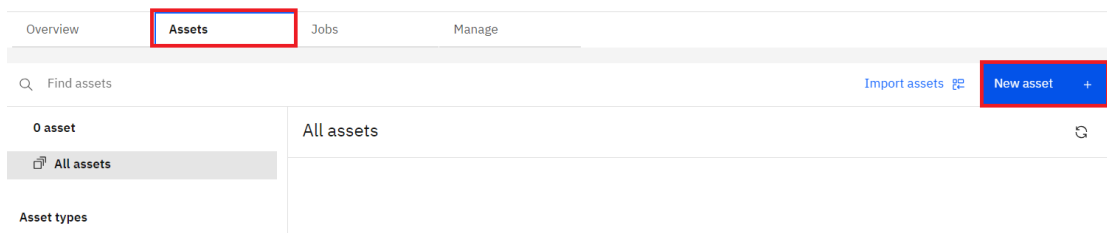


Create a new project and click Create button.

New project

A light gray form titled "Define details" and "Storage". Under "Define details", there is a "Name" field with the value "GPU", a "Description" field with the value "GPU Project", and a "Choose project options" section with two checkboxes: "Restrict who can be a collaborator" and "Mark as sensitive". Below these is a note: "Project includes integration with Cloud Object Storage for storing project assets." Under "Storage", there is a field with the value "Cloud Object Storage-hb". At the bottom right, there are two buttons: "Cancel" and "Create". The "Create" button is highlighted with a red rectangular box.

Select Asset tab to create new asset.



In the assets you can create a new notebook using an environment with a GPU. Press the Create book button.

New asset

Select a tool based on what type of asset you want and how you want to work.

Tool type

All types

Data access tools

Automated builders

Graphical builders

Code editors

Component editors

Find tools by name or description

Code editors

Federated Learning

Create a federated learning experiment to train a common model on a set of remote data sources. Share training results without sharing data.

Jupyter notebook editor

Create a notebook in which you run Python or R code to prepare, visualize, and analyze data, or build a model.

Component editors

Using the runtime selection select an environment with a GPU.

After selecting the GPU environment you can create the notebook by giving it a name and pressing create button on the bottom right:

New notebook

BlankFrom fileFrom URL

Name

GPU

Description (optional)

Type your description here

Select runtime

GPU 2xV100 Runtime 22.2 on Python 3.10 (2 x V100 GPU)

The selected runtime has 80 vCPU, 344 GB RAM and 2 V100 GPU.
It consumes 136 capacity units per hour.
[Learn more](#) about capacity unit hours and Watson Studio pricing plans.

Language

☒ Python 3.10 + GPU

Cancel

Create

Projects / GPU / GPU



16%

Instantiating runtime for GPU
The selected runtime has 80 vCPU, 344 GB RAM and 2 V100 GPU.
It consumes 136 capacity units per hour.

Author(s)

[Joseph Santarcangelo](#)

Changelog

Date	Version	Changed by	Change Description
2020-09-16	2.0	Srishti	Migrated Lab to Markdown and added to course repo in GitLab

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