

Hands-on Lab Prerequisites

To be able to complete the hands-on tutorials during the workshop, you need to have access to some services on IBM Cloud, namely Watson Studio, Watson Machine Learning, and Watson OpenScale, which in turn requires you have access to an IBM Cloud account.

The following steps outline the steps to create an IBM Cloud account and the required services for this hands-on lab.

Create IBM Cloud account and required services

- 1- If you have an IBM Cloud account already, then navigate to <https://cloud.ibm.com> and provide your IBMid (annotated with red rectangle in Figure 1) and click **Continue** to authenticate by providing your IBM Cloud account credentials.

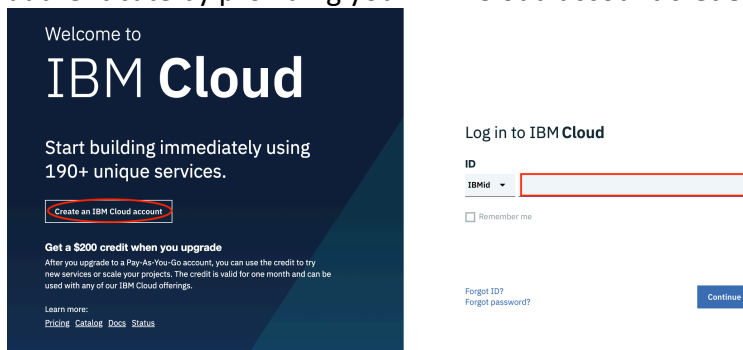


Figure 1: IBM Cloud Sign up

If you do not have an IBM Cloud account, please sign up for an IBM Cloud account by navigating to https://cloud.ibm.com/registration?cm_mmc=dataai2019 and following the instruction to sign up for an account.

- 2- Once you've authenticated, click on **Catalog** (annotated with red oval) and click on **AI** in the left navigation column (annotated with red arrow) as shown in Figure 2.

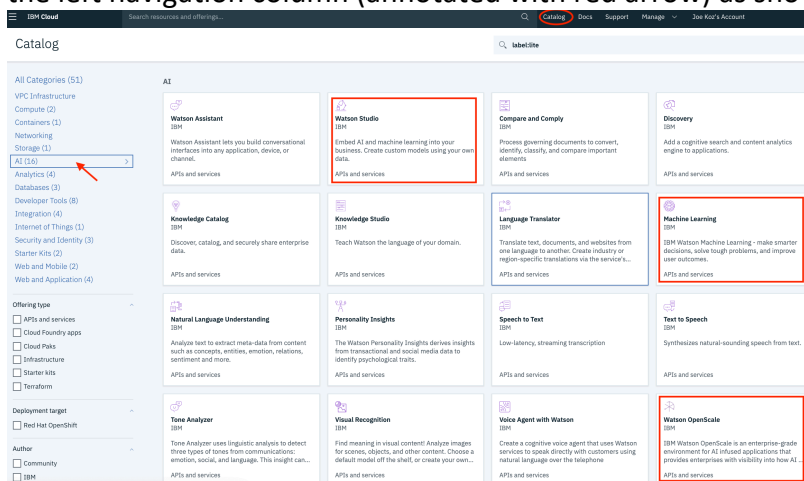


Figure 2: IBM Cloud AI Catalog

- Click on **Machine Learning** (annotated with red rectangle) as shown in Figure 2. You'll repeat the process for **Watson Studio** and **Watson Openscale**.
- On Machine Learning service creation page, select a region (Dallas), choose the **Lite** plan, and click **Create** button. You can also optionally specify a unique name for the service and add any tags if you wish (need to scroll down).

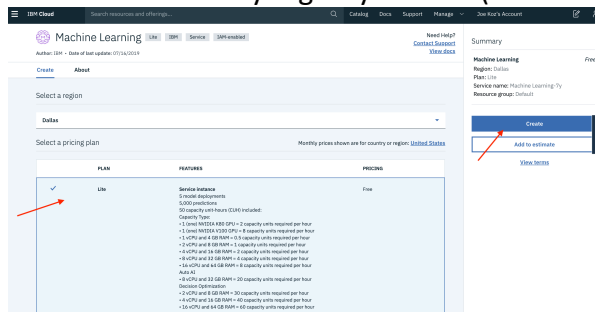


Figure 3: Machine Learning creation page

- On the Machine Learning page, click Service credentials from the left navigation column (annotated with red oval). If credentials are already created for your service, click on the View credentials drop down (annotated with red arrow) and copy/paste the credentials. If not, then click New credential (annotated with red rectangle) and press **Add** on the pop-up window. Then copy/paste credentials from View credentials drop down as shown in Figure 4. These credentials are needed for the hands-on lab.

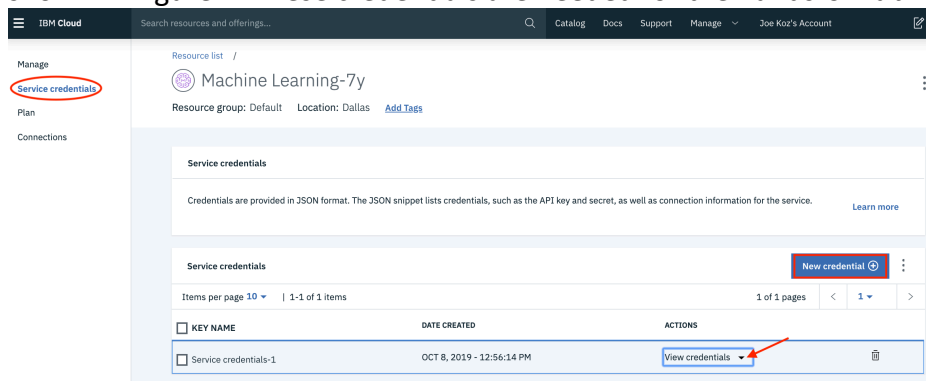


Figure 4: Service Credentials

- Go back to the IBM Cloud AI Catalog by clicking on **Catalog** in the top navigation bar and then clicking AI in the left navigation column as in step 2 above.
- Click on Watson Openscale tile as shown in Figure 2 and create a Watson Openscale service instance Lite plan (similar to step 4 above). No need to copy service credentials.
- On the Watson Openscale instance page, click **Launch Application** (annotated with red oval in figure 5).

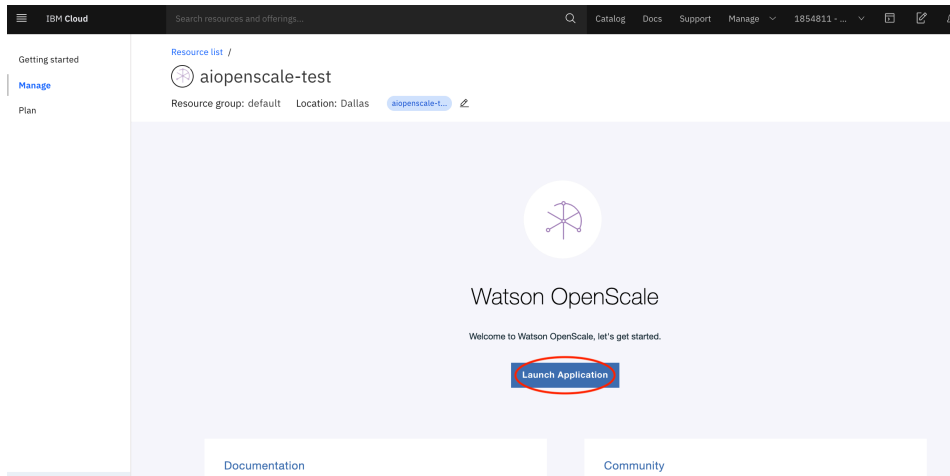


Figure 5: Watson OpenScale instance Launch Application

- 9- When Watson OpenScale launches, click the **Auto setup** (annotated with red rectangle in Figure 6) button to have OpenScale setup and run a demo scenario for you so you can see how OpenScale monitors a model. This setup is completely automated and takes approximately 10 minutes to run. For more details, check the [Watson OpenScale documentation](#).

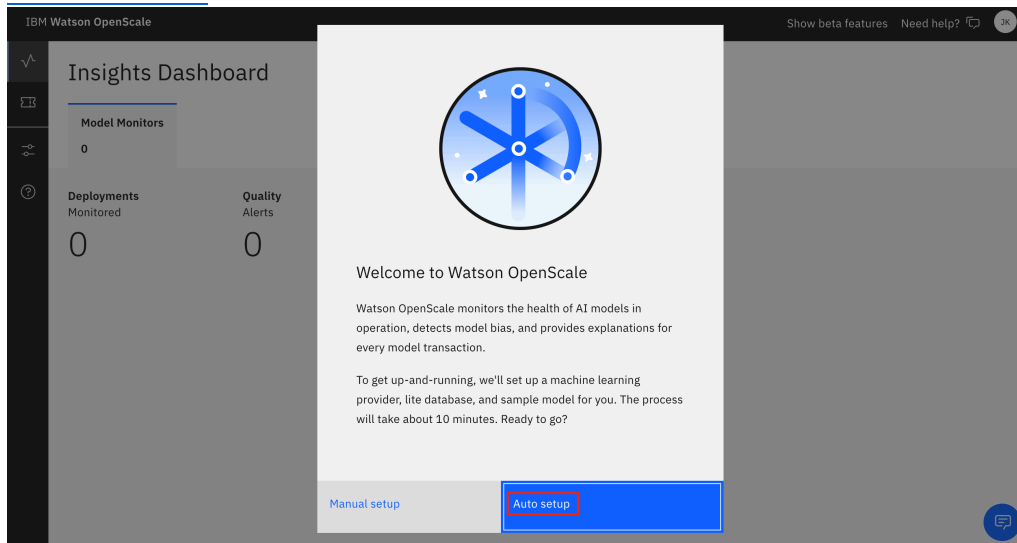


Figure 6: Watson OpenScale Auto setup

- 10- Go back to the IBM Cloud AI Catalog by clicking on **Catalog** in the top navigation bar and then clicking AI in the left navigation column as in step 2 above.
- 11- Click on Watson Studio tile as shown in Figure 2.
- 12- On Watson Studio service page, select a region (Dallas), choose the **Lite** plan and click **Create** button. You can also optionally specify a unique name for the service and add any tags if you wish (need to scroll down).

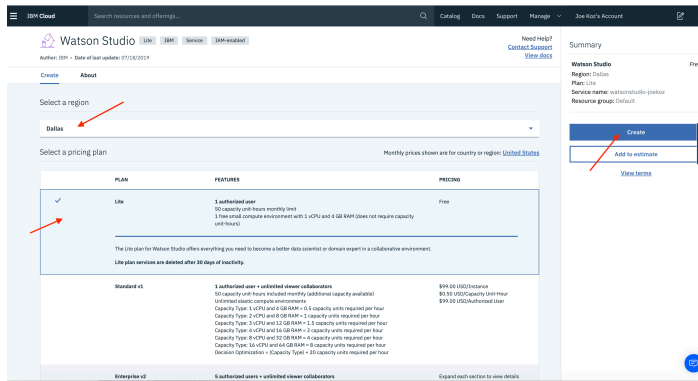


Figure 7: Watson Studio instance creation page

13- On the page that loads, click **Get Started** button to launch Watson Studio as shown in Figure 8.

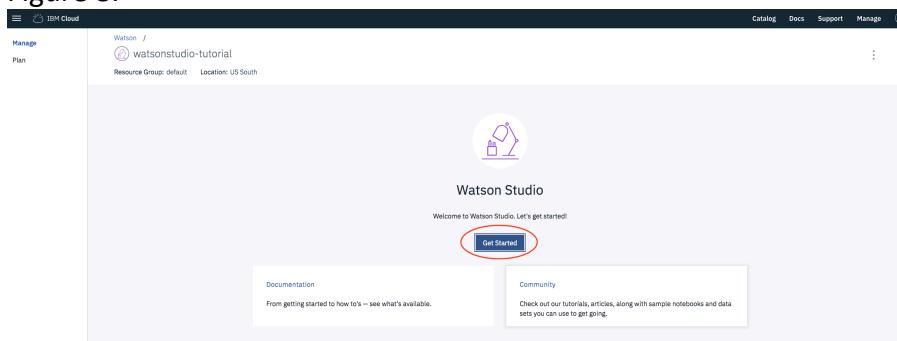


Figure 8: Launch Watson Studio

After this initial setup, for future logging into Watson Studio, you can paste the following url into your browser, provide your credentials and you're logged into IBM Watson landing page: <https://dataplatform.ibm.com/>

Create a Hello World notebook in Watson Studio

Once logged into IBM Watson Studio landing page, create a new project.

1- Click on **Create a project** button to start a new project as shown in Figure 9.

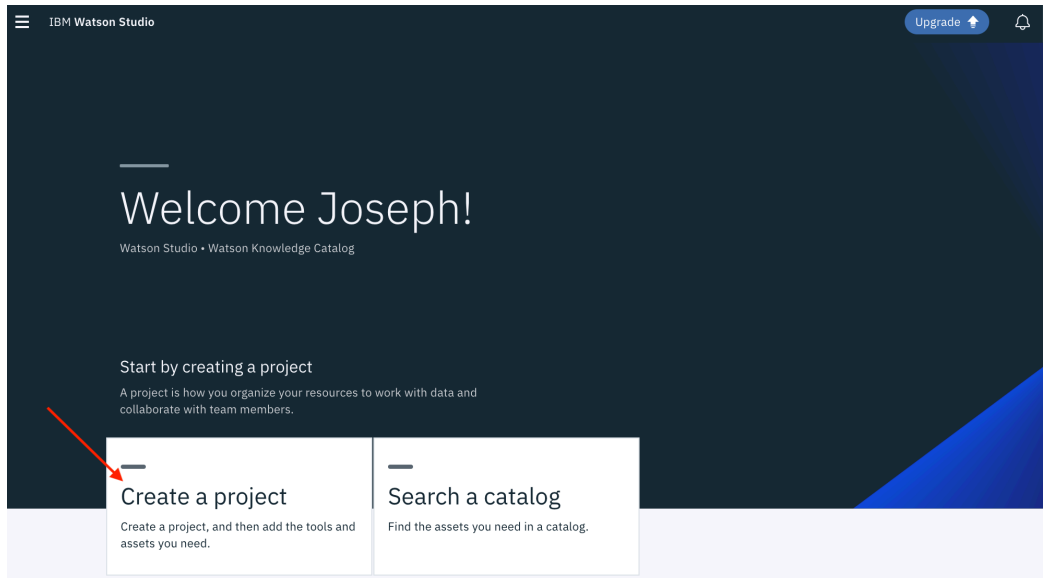


Figure 9: New Project in Watson Studio

2- Select **Create an empty project**.

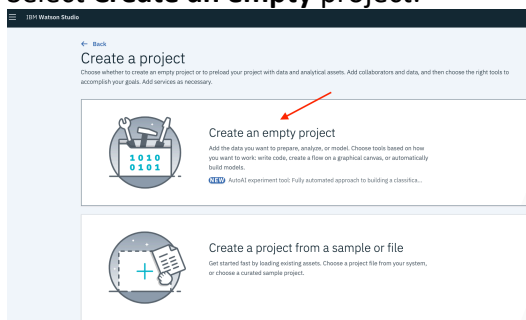


Figure 10: Watson Studio project option tiles

- 3- Provide a name for the project, a description if you wish (optional), and select the cloud object storage to associate with your project; then press Create.
Cloud Object Storage is needed for storing project assets.
If you don't have a Cloud Object Storage (COS) instance created in your IBM Cloud account, you will need to create a COS instance by clicking **Add** (annotated with red oval in Figure 11) on Watson Studio project creation page. This will redirect you to your IBM Cloud account where you can select the Lite plan for Cloud Object Storage and click **Create**.

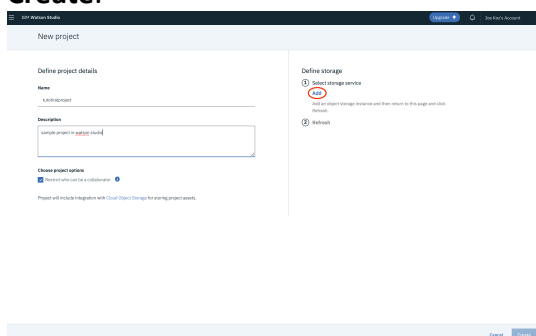


Figure 11: Watson Studio Project details

- 4- Once the Cloud Object Storage instance is created, go back to Watson Studio project creation page, click **Refresh** and then click **Create**.
- 5- On the project page, click **Assets** tab (annotated with red oval), click **Add to project** (annotated with red arrow) and select **Notebook** (annotated with red rectangle) as show in Figure 12.

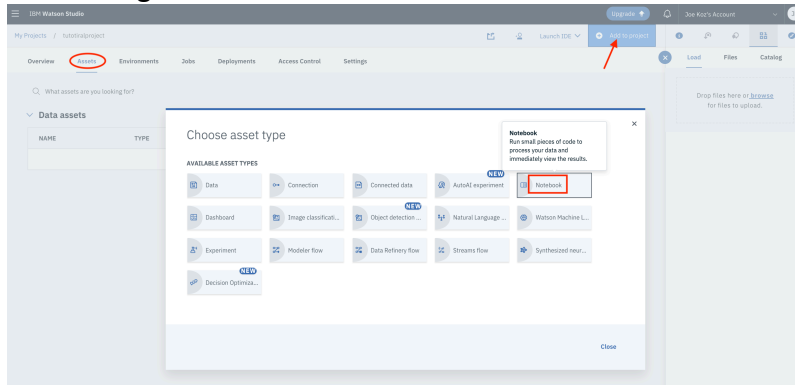


Figure 12: Watson Studio project assets tab

- 6- Specify a notebook name (helloworld), select the free runtime environment - Default Python 3.6 Free (1vCPU and 4 GB RAM) - then press **Create Notebook**.

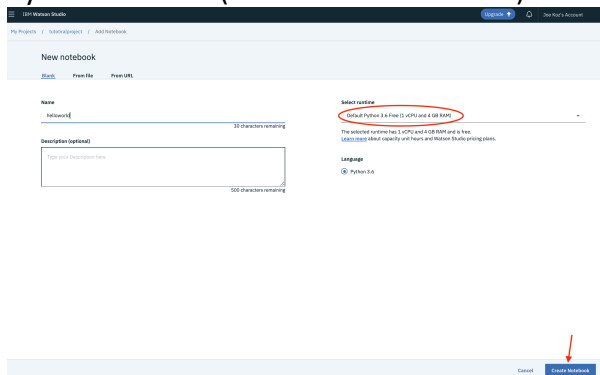


Figure 13: Create Notebook window

- 7- When the notebook loads, add the following code and press the Run Cell icon (annotated with red arrow) to execute that code as shown in Figure 14.

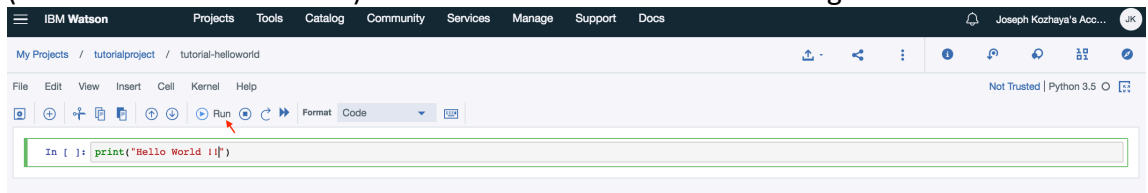


Figure 14: Simple notebook

Once you run the cell, you should see the output – **Hello World !!** - printed below the cell.

Congratulations!!

You've finished setting up required services (Watson Studio, Watson Machine Learning, and Watson Openscale) and writing a simple Hello World notebook in Watson Studio.