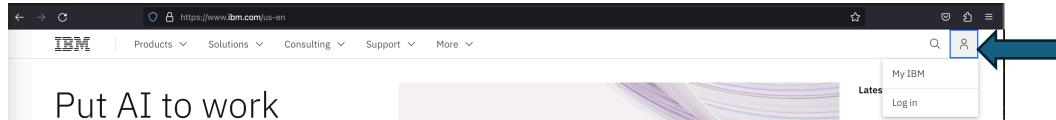


Setup for the watsonx.data hands on lab on IBM Tech Zone

- 1) get an IBM ID - if you do not have one already.
tips here: <https://ibm.github.io/watsonx-data-lab/wxd-reference-ibmid/>
- 2) Tip: to confirm if your IBM ID works, sign-in at <https://www.ibm.com>



- 3) Get yourself a Tech Zone VM assigned:

You can do this an hour or two before the scheduled session (the VMs should be provisioned and started by then)

Visit

<https://techzone.ibm.com/my/workshops/xxxxxxxxxxxx> << USE the URL shared via email

password/access code: <<< enter the access code sent over email

A screenshot of the IBM Tech Zone workshop page for a Lockheed Martin watsonx.data workshop. The page shows the workshop title, date (Thu, Jan 25th 2024, 4:00 am - 6:00 pm PST), status (Approved), region (Americas), and location (Online). There is a "Complete session" button. Below the title, there's a "Description" section with the text "Lockheed Martin watsonx.data workshop". In the bottom right, there's a "Need help?" section with contact emails. At the bottom, there's a form to enter the workshop password/access code, with a blue arrow pointing to the input field. The input field has placeholder text "Enter access code" and a "Submit password/access code" button.

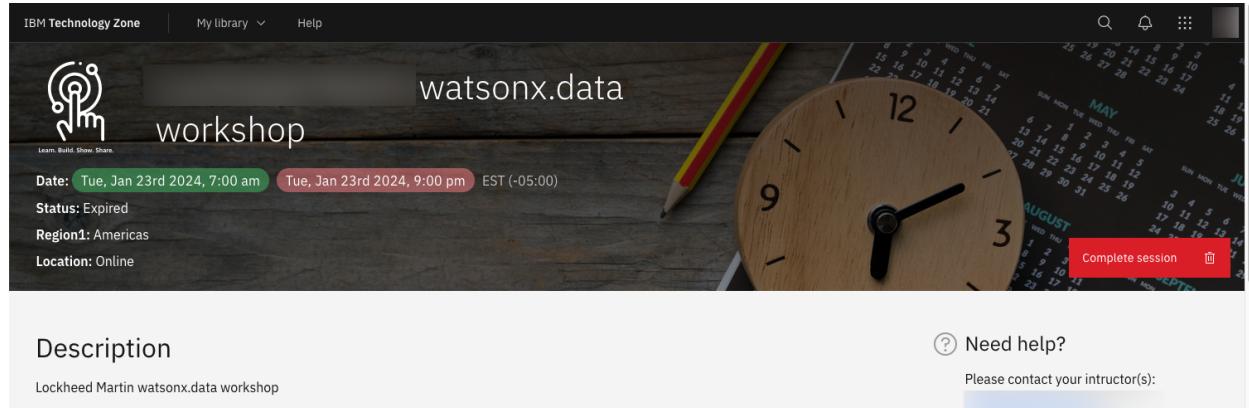
An environment (Virtual Machine) will then be assigned to you.

For more information, see: <https://ibm.github.io/watsonx-data-lab/wxd-reference-workshop/>

4) The Environment page details.

The environment page will also list all the URLs that you need to open up in your browser.

For example:



The screenshot shows a web interface for a WatsonX Data Lab session. At the top, there's a navigation bar with 'IBM Technology Zone', 'My library', and 'Help'. Below the navigation, the session title is 'watsonx.data workshop'. It displays the following session details: Date: Tue, Jan 23rd 2024, 7:00 am - Tue, Jan 23rd 2024, 9:00 pm EST (-05:00); Status: Expired; Region1: Americas; Location: Online. To the right of the details is a large wooden-style clock showing approximately 10:10. Below the clock is a red button labeled 'Complete session' with a trash icon. On the left, under 'Description', it says 'Lockheed Martin watsonx.data workshop'. On the right, there's a 'Need help?' section with a question mark icon and the text 'Please contact your instructor(s):'.

Note:

- You do **not** have to download wireguard or setup router passwords etc.
 - You do not need to use ssh either.
-
- The page contains all the published services that you will use during the lab from the web browser.

Here is an example: (*your URLs will be different*)

Published services:

SSH for watsonx userid - ssh -p 41115 watsonx@useast.techzone-services.com
MySQL - Server: useast.techzone-services.com Port: 40911
PostgreSQL Port - Server: useast.techzone-services.com Port: 43133
VNC Service - vnc://useast.techzone-services.com:27314
Portainer console - <http://useast.techzone-services.com:36319>
Apache Superset - <http://useast.techzone-services.com:20559>
Presto console - <https://useast.techzone-services.com:47536>
Presto Port - Server: useast.techzone-services.com Port: 47536
Jupyter Notebook - Server: http://useast.techzone-services.com:27436/notebooks/Table_of_Contents.ipynb
Minio Endpoint - Server: useast.techzone-services.com Port: 34601
Minio console - <http://useast.techzone-services.com:20118>
Hive Thrift URL - thrift://useast.techzone-services.com:49307
Watsonx UI - <https://useast.techzone-services.com:44067>
Db2 Port - Server: useast.techzone-services.com Port: 31600
Open Port 1 - Server: useast.techzone-services.com Port: 34368
Open Port 2 - Server: useast.techzone-services.com Port: 38197

For instance, if the lab requires that you access the Minio S3 console, click on the link in this browser which says:

If you need to access the Minio console – Minio console - <http://useast.techzone-services.com:20118>

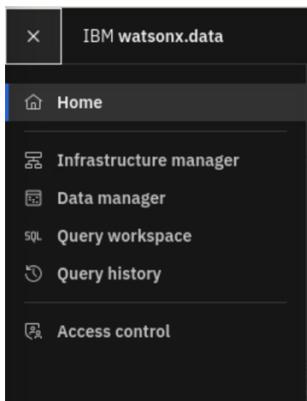
5) Try out the watsonx UI by clicking on the link:

Watsonx UI - <https://useast.techzone-services.com:44067>

Username: ibmlhadmin

Password: password

and use the left side navigation to access different features.



More details in this lab exercise: <https://ibm.github.io/watsonx-data-lab/wxd-watsonui/>

6) Credentials

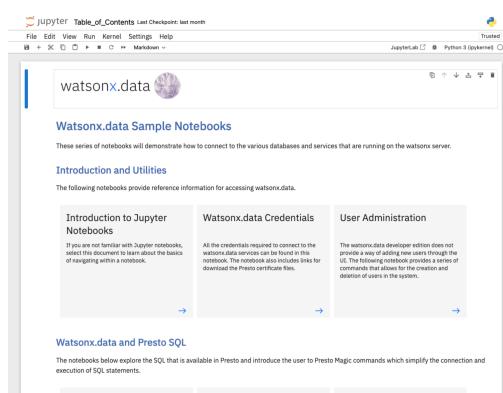
See: <https://ibm.github.io/watsonx-data-lab/wxd-reference-passwords/> for a list of usernames and passwords for each Service or tool

7) Alternative to ssh for terminal access:

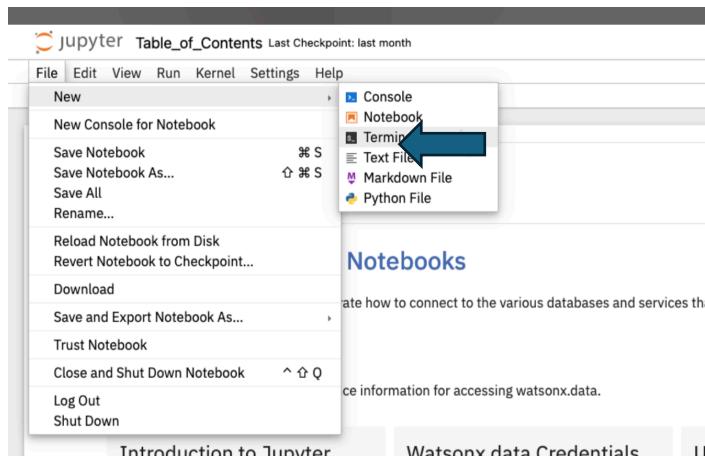
Some labs will require you to run commands in a terminal, for example, when using the presto-cli utility. You can use the terminal within the Jupyter Server for this – in the web browser itself.

Launch by clicking on the Jupyter URL:

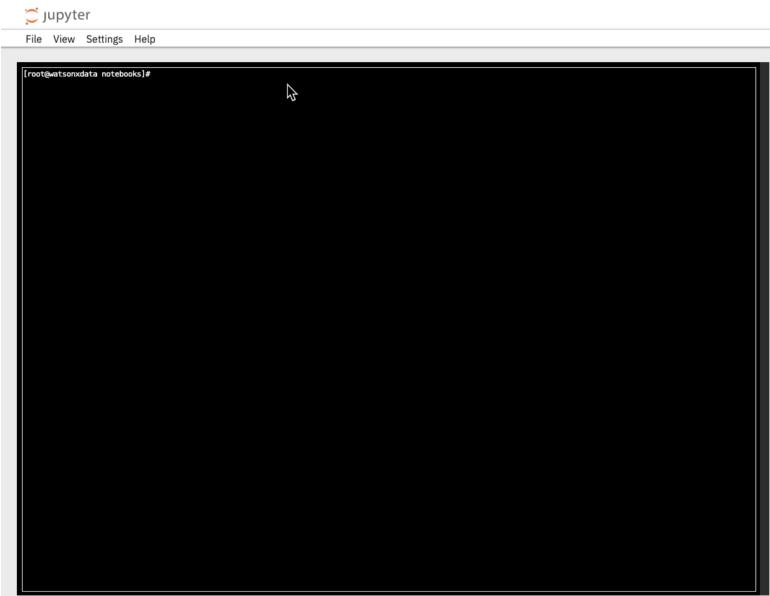
Jupyter Notebook - Server: http://useast.techzone-services.com:27436/notebooks/Table_of_Contents.ipynb



and launch a terminal from the File menu:



The terminal opens up in the same browser.



You can also copy-paste from your machine into this terminal.

- In the terminal:
 - you need to change directory to where the watsonx.data utilities are installed

```
cd /root/ibm-lh-dev/bin
```
 - You will already be logged in as **root**. So there is **no need to do "sudo su -"** as instructed in some of the exercises.

8) Accessing the Virtual Machine Desktop

The VM Desktop is a Linux desktop that gives you access to the VM directly. You have access to Firefox and Terminal as well as DBeaver & other tools, if you want to try that out.

- Using this desktop is **optional** if you are comfortable with using the terminal from Jupyter as described in [7] for ssh access.

Please see: <https://ibm.github.io/watsonx-data-lab/wxd-reference-console/> for details on launching the VM Console and how to interact with it.

Notes:

- Inside the VM, it will be best to use “localhost” in the Firefox web browser. For example, to access the watsonx.data UI, you can just use <https://localhost:9443> instead. To access minio, you would use http://localhost: 9001 .

- The list of ports is here: <https://ibm.github.io/watsonx-data-lab/wxd-reference-ports/#watsonxdata-open-ports>
 - Caution: Copy-Paste from outside the VM is not possible. So it is best to open up this URL <https://ibm.github.io/watsonx-data-lab/wxd-prestocli/> inside Firefox and copy-paste within the VM itself.
- 9) Lab exercises: <https://ibm.github.io/watsonx-data-lab/> is the main repository. In the left navigation, you will see various topics that you can try out.

For example, Core Components -> Presto CLI will take you to this page that introduces the presto-cli command line utility

<https://ibm.github.io/watsonx-data-lab/wxd-prestocli/>