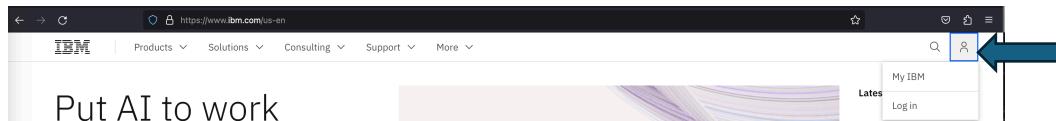


Setup for the watsonx.data hands on lab on IBM Tech Zone

- 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/student/65ab0b2e0b089a0011aa4a4e>

password/access code: `watsonx.data`

A screenshot of the IBM Tech Zone workshop registration page. At the top, it shows a workshop titled "Lockheed Martin watsonx.data workshop" with a date range from "Thu, Jan 25th 2024, 4:00 am" to "Thu, Jan 25th 2024, 6:00 pm" and a status of "Approved". Below this, there's a "Description" section with the text "Lockheed Martin watsonx.data workshop". In the "Your environment" section, there's a note about entering the workshop password/access code. A blue arrow points to the password input field, which contains the value "watsonx.data". A blue arrow also points to the "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 browser window for the IBM Technology Zone. The title bar says "IBM Technology Zone". The main content area displays a "watsonx.data workshop" banner with a wooden clock and a pencil. Below the banner, it shows the following 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

At the bottom right of the main content area, there is a red button labeled "Complete session".

Below the main content area, there is a section titled "Description" with the text "Lockheed Martin watsonx.data workshop". To the right of this section is a "Need help?" link and a note saying "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>

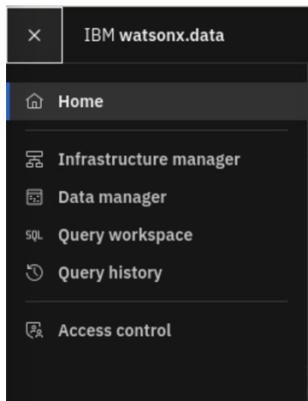
5) Try out the watsonx UI by clicking on the link:

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

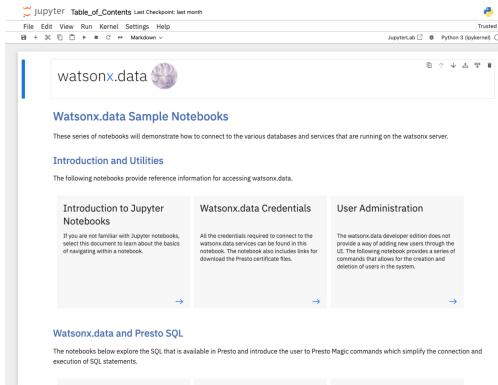
See: <https://ibm.github.io/watsonx-data-lab/wxd-reference-passwords/> for a list of usernames and passwords for each Service or tool

7) Alternative to ssh for terminal access:

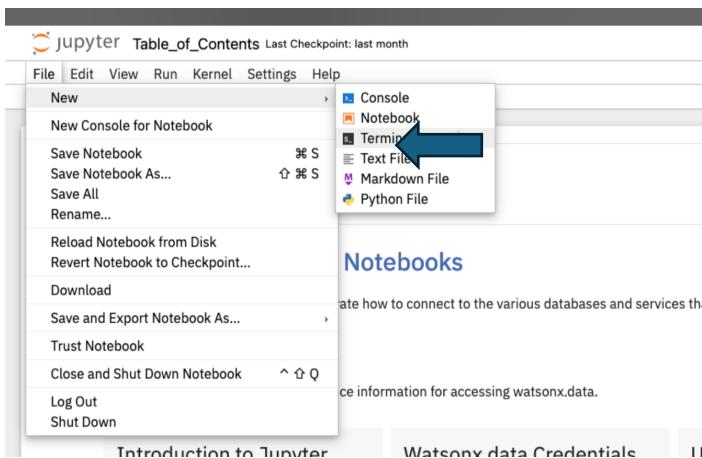
Some labs will require you to run commands in a terminal, for example, when using the presto-cli utility. You can use the terminal within the Jupyter Server for this – in the web browser itself.

Launch by clicking on the Jupyter URL:

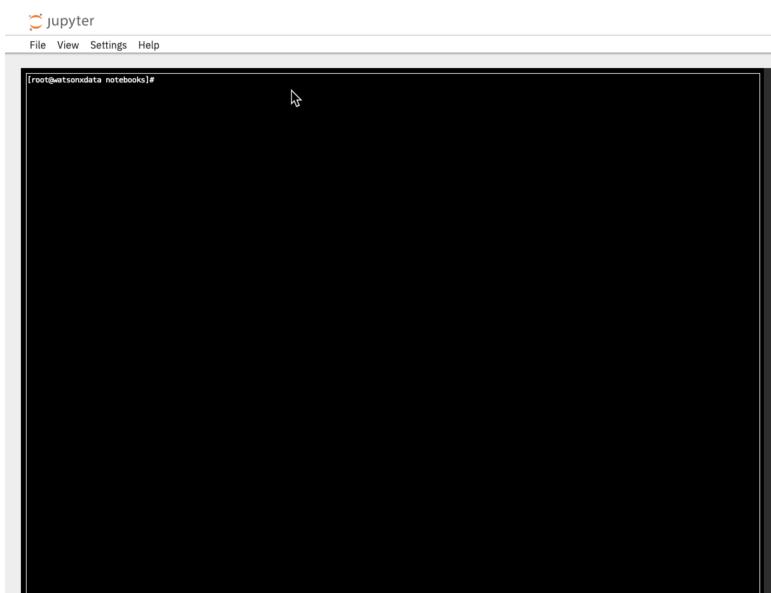
Jupyter Notebook - Server: http://useast.techzone-services.com:27436/notebooks/Table_of_Contents.ipynb



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/>