CADRE-JEDI-Edu Setup

IMPORTANT NOTE FOR WINDOWS USERS: CADRE-JEDI-Edu is currently only supported for Mac, due to frequent technical issues with running Docker on a Windows PC laptop. If you have access to a Mac laptop, it is strongly recommended that you bring it to the workshop. If you only have a Windows PC, you should still be able to run the CADRE-JEDI-Edu exercise from your laptop but it may require some help from your local IT support.

The instructions for installing Docker (within which CADRE-JEDI-Edu can run on your laptop), obtaining the CADRE-JEDI-Edu repository, and starting a Jupyter session in which the CADRE-JEDI-Edu tutorial will run can be found at the following link. Please also look through the frequently asked questions (FAQ) at the end of this document **before** starting.

https://github.com/NicholasGasperoni/cadre-jedi-edu/blob/develop/START.md

While many people do not encounter technical challenges while following the above-linked instructions, occasionally some technical challenges have been reported, especially from Windows PC users.

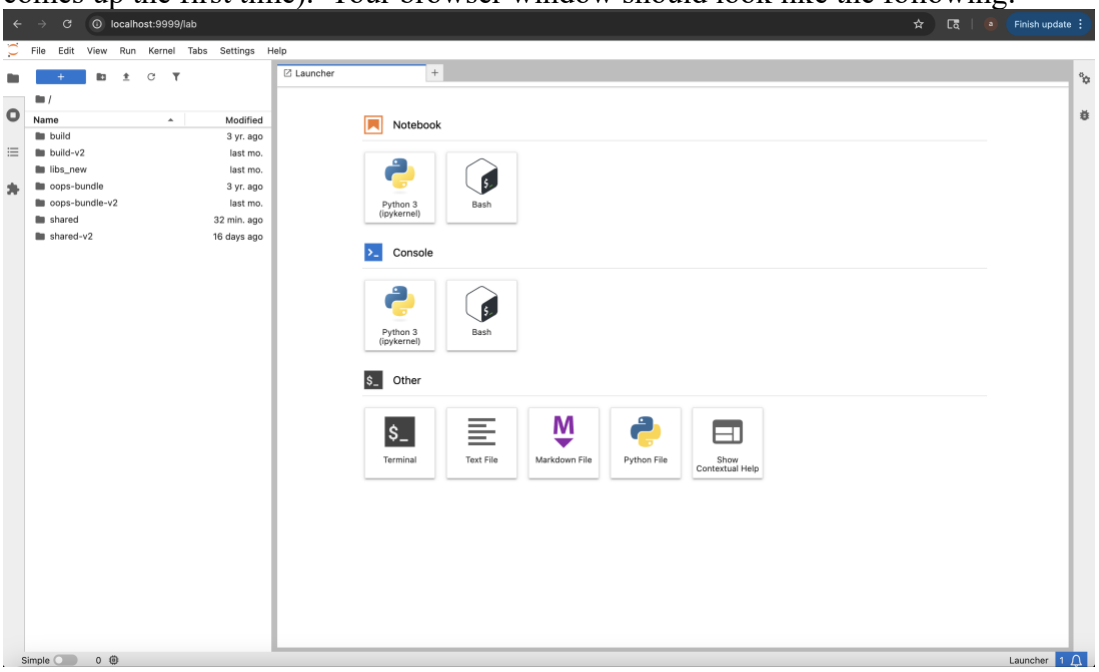
If you are not able to reach the screenshots (1)-(3) below, even after following the instructions carefully and checking the FAQ, we ask that you first ask your local IT support for help.

For issues that still are not resolved with your local IT support, we will provide a virtual helpdesk via Slack on 26-27 May 2026 to attempt to resolve any remaining technical challenges.
Slack channel invite link: https://join.slack.com/t/cadrejedi-edu/shared_invite/zt-3xwlw5gcm-v21~QJOynOmt5vjqDViE5A

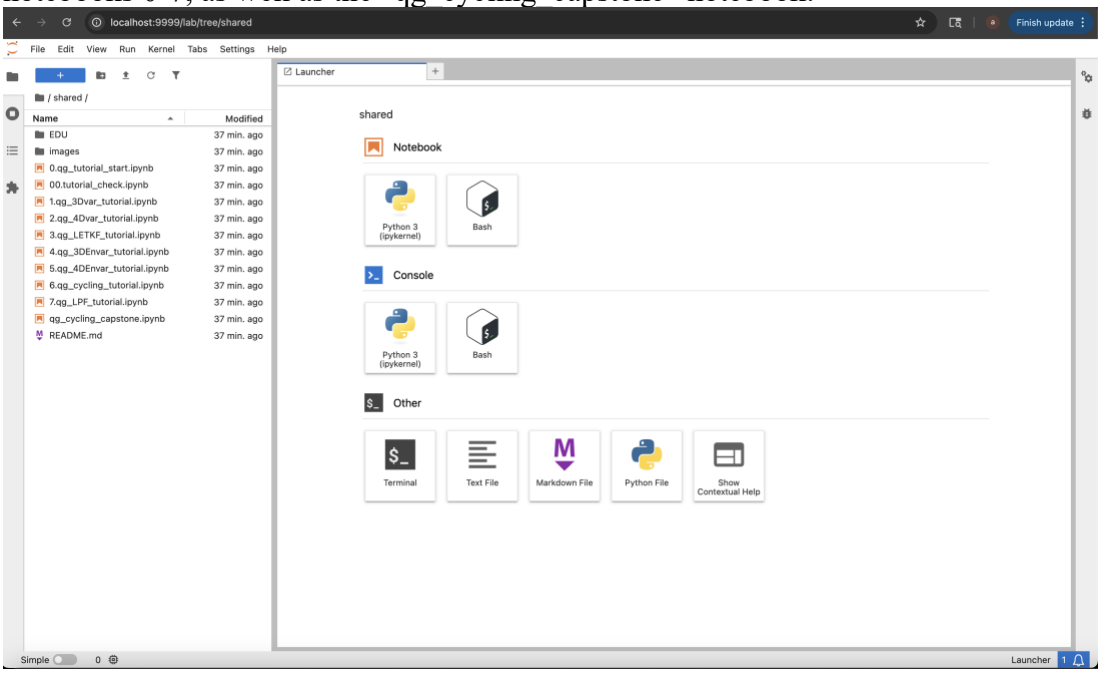
In the event that there are any participants with technical issues that still could not be resolved at the virtual help desk, you will be paired with another participant for the CADRE-JEDI-Edu tutorial sessions during the workshop.

If you are able to reach the three steps shown in the screenshots below, then you are ready for the CADRE-JEDI-Edu tutorial at the 2nd annual CADRE-EPIC DA Training and Workshop:

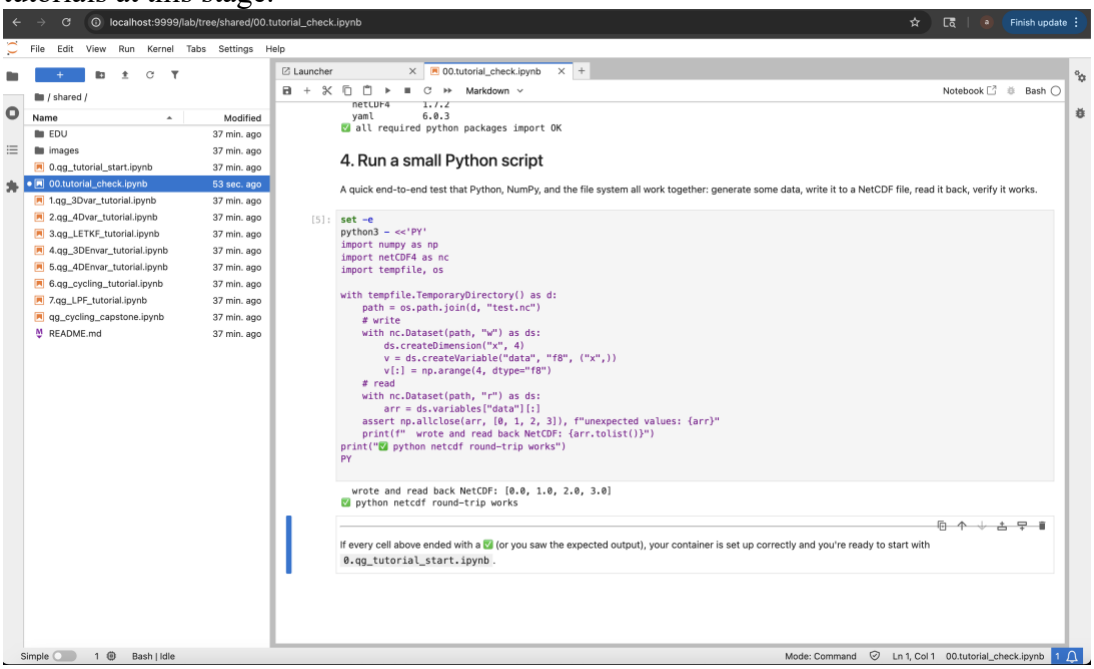
(1) After you do the "docker run …" command, wait about 10 seconds and go to "localhost:9999" in a browser window (wait another 10 seconds and refresh if nothing comes up the first time). Your browser window should look like the following:



(2) Click on the "shared" folder at the left side of the window. You should now see tutorial notebooks 0-7, as well as the "qg_cycling_capstone" notebook:



(3) Open the 00.tutorial_check.ipynb notebook, and run through all the steps of that notebook by clicking the play button to advance through each step. All steps should produce output that includes a green check, like in the following screenshot. We will start from here at the workshop, so there is no need to click through the steps of the other tutorials at this stage.



Congratulations. You are ready for the CADRE-JEDI-Edu Tutorial!

Common Issues/FAQ:

(1)
Issue: you are able to open the container in your browser (localhost:9999), but the "shared" folder is empty or does not contain the correct contents.

Solution: Check the path used in the docker run command. Most likely issue is there is an error in the specified path, so the container cannot see the tutorial directories or python notebooks.

You can confirm that this is the problem by navigating to your **cadre-jedi-edu/notebooks** directory in terminal (Mac) or Powershell (PC) and compare its contents with your shared folder within the running "localhost:9999" container . If they are different, then the path you gave it within the "docker run" command was incorrect.

(2)
Issue: Jupyter continually says “connecting to kernel” or something similar

Solution: the "Virtual Machine Options" setting needs to be set to “Docker VMM” (see instructions in link at top of page, under “Open Docker”

(3)
Issue: “docker run” command does not work, getting an error similar to the below

“docker: Error response from daemon: failed to set up container networking: driver failed programming external connectivity on endpoint competent_germain (c1ad587da50ef319d2fc0baa1071f103ea3e09796b0be7afc48e8fff1c39ddc2): Bind for 0.0.0.0:9999 failed: port is already allocated”

Solution: This means a previously-built container is already running. Open the “Docker Desktop” app’s dashboard and check the “containers” tab to see what is running.
→If it is the same container you wanted to run, then you can just open a browser and go to “localhost:9999” without submitting the new “docker run” command. This container will stay running until you manually stop it or quit out of the Docker Desktop app.
→If it is a different container (or you had built a new one), then stop the currently-running one in “Docker Desktop” before resubmitting the “docker run” command in your terminal window

(4)
Issue: “Cannot connect to the Docker daemon at . . .” when running commands like “docker build…” or “docker run…”.

Solution: This means that the Docker application that you installed is not currently running. Repeat the “Open Docker” step in the above-linked instructions.

(5: Windows only)
Issue: Some Windows users experienced slow computation time within the tutorial resulting from their system having more logical processors than CPUs.

Solution: This can be avoided on Windows machines as follows.
→Create a file called “.wslconfig” (yes, with the dot at the beginning) in your user folder (c:\Users\{username}\.wslconfig)
→Within this file, type the following lines exactly as written and save the file:
[wsl2]
processors=4
→If you know how many CPUs your machine has, you can use that number for processors. Otherwise, 4 is usually fine.
→Restart your machine

(6: Windows only)
Issue: "git" command not found when doing "git clone…"

Solution:
→exit from wsl and run the following italicized commands to ensure you have the Ubuntu wsl:
wsl --install -d Ubuntu (ignore any error code about "ALREADY_EXISTS")
wsl --set-default Ubuntu
wsl -u root
→check if you have git already installed, and install it if "git –version" does not find git as follows:
git --version (if this prints a version of git then you can resume from "git clone…" step)
sudo apt update
sudo apt install git (now you can resume from "git clone…" step)

(7: Windows only)
Issue: "operation requires elevation" error when installing Docker

Solution: This means your windows account is not installing Docker Desktop with administrator privileges. The solution is to delete the first (failed) installation directory and then try to install as administrator. Follow these steps:

1) Navigate to hidden "ProgramData" directory:
   1a) Press **Windows Key + R** on your keyboard
   1b) In the popup box, type "C:\ProgramData" and click OK
2) Delete the "DockerDesktop" or "Docker" folder if it exists
3) Right click on the Docker Desktop installer file and click **Run as administrator**.