

Accessing Smart Institutions Jupyter Notebook

This user guide outlines how to access and use Jupyter Notebook to supplement HACK OHIO Smart Institutions data exploration, visualization, and modeling. **Note: Users should utilize either Google Chrome or Firefox web browser when accessing the application and Jupyter Notebook.**

1. To access Jupyter Notebook, the user may first need to access the Smart Institutions application static console in order to start the instance. To do so, navigate to the following link:

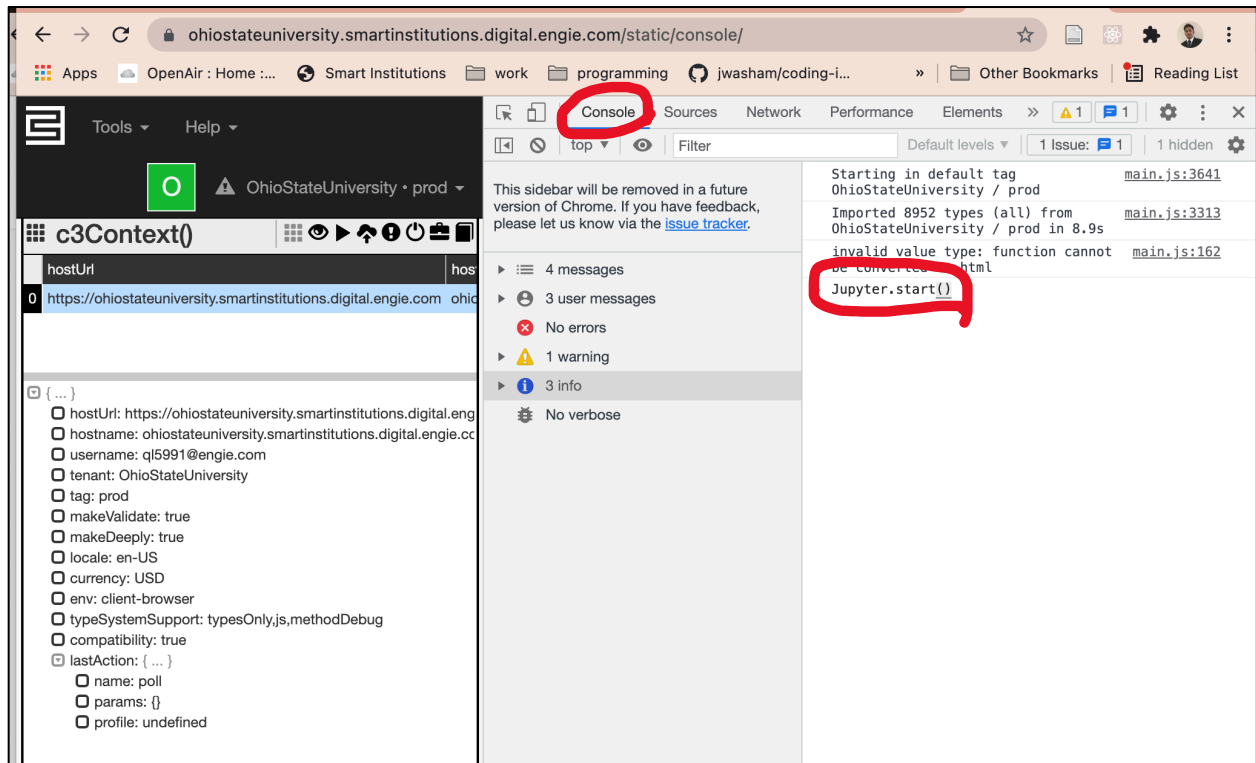
<https://ohiostateuniversity.smartinstitutions.digital.engie.com/static/console>

2. If the user has not yet logged into the application's main website (i.e., <https://ohiostateuniversity.smartinstitutions.digital.engie.com>), then he/she will likely be asked to enter login credentials:

The image displays two side-by-side screenshots of the ENGIE digital login interface. Both screenshots show a header with a gear icon and the text 'Connecting to' followed by a small gear icon. Below this, it says 'Sign-in with your ENGIE Digital account to access osu-smartinstitutions-prod'. The main content area features the ENGIE digital logo, a placeholder for a profile picture, and the text 'Sign In'. Below this, there is a 'Username' field with a hint 'Engie employees : ID Group, Customers : external email'. The left screenshot shows an empty username field and a 'Next' button. The right screenshot shows the username field filled with 'tomadamkremer@gmail.com'. Below the username field is a 'Password' field with a hint 'Engie employees : ID Group, Customers : external email'. The right screenshot shows an empty password field and a 'Sign In' button. A red error message 'Please enter a password' is visible below the password field. A notification box at the top of the right screenshot states: 'This is the first time you are connecting to engiedigital.okta-emea.com from this browser'. At the bottom of both screenshots, there is a link 'Need help signing in?'.

3. Once static console is rendered, open the browser's developer tools. (Normally, this can be done by pressing *Ctrl + Shift + I* on Windows or *Cmd + Opt + I* on macOS. For more information about Google Chrome dev tools, refer to <https://developer.chrome.com/docs/devtools/open/>, while this additional link can be used for Firefox, <https://developer.mozilla.org/en-US/docs/Tools>.

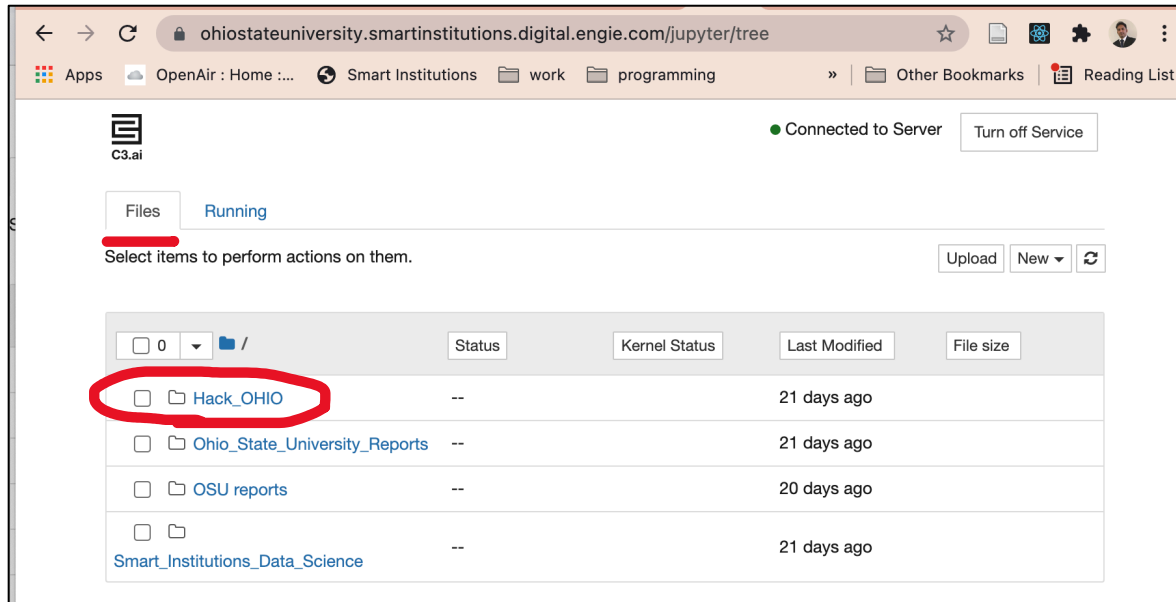
4. To start the Jupyter Notebook container, navigate to the “Console” tab and run the following code by entering directly in the console and pressing Enter to run: `Jupyter.start()`. **Note: This may take a few minutes to process and the user will know when the instance has started once “undefined” is visible under the start command.**



5. Once the instance has started, navigate to the following URL to access the Jupyter Notebook: <https://ohiostateuniversity.smartinstitutions.digital.engie.com/jupyter/>

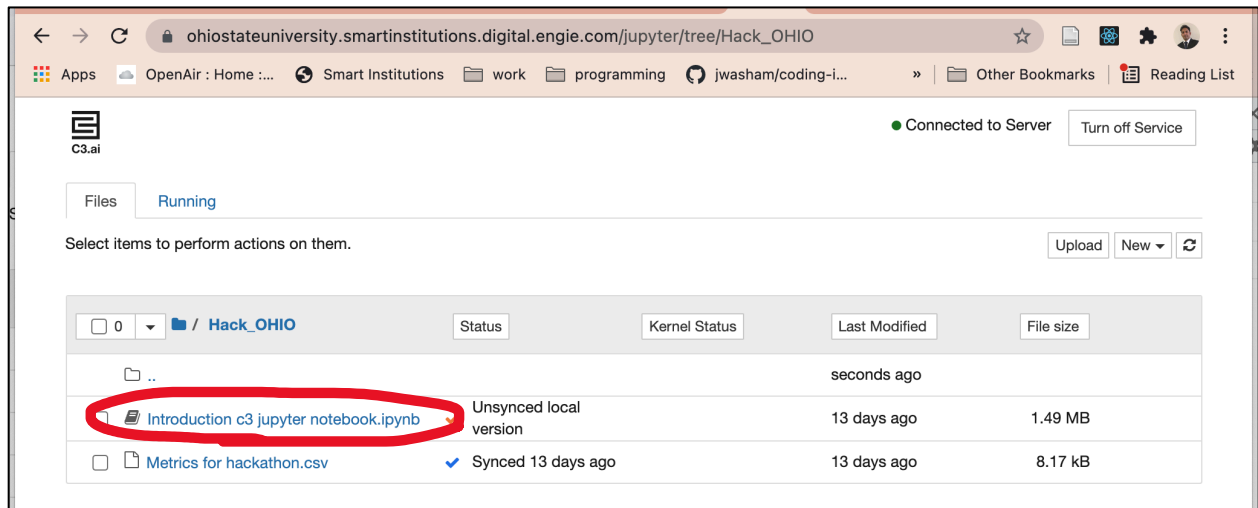
Note: If already logged into the static console, you likely won't be asked to re-enter credentials. However, if you need to login again, refer to step 2. If the user receives a message that Jupyter has not been started, wait for a few more minutes and then try or repeat step 4.

6. Click on “Hack_OHIO” folder to access the Hackathon materials.



Within the folder, the file “Introduction c3 jupyter notebook.ipynb” includes some guides on how to retrieve data from the platform.

7. Click on “Introduction c3 jupyter notebook.ipynb” to open it. Within the notebook there are additional instructions on how to access Smart Institutions data as well as useful commands to run.



8. To create a new notebook, run, “New > Python 3”. This is the notebook that should be used for your team’s specific activity, data exploration, download, etc.

The top screenshot shows the C3.ai Jupyter Notebook interface. The top bar indicates 'Connected to Server' and 'Turn off Service'. The left sidebar shows the 'Files' view with a 'Running' status. The main area displays a file list for the 'Hack_OHIO' directory. A 'New' dropdown menu is open, showing options: 'Notebook: Python 3' (highlighted), 'Other: Text File', 'Folder', and 'Terminal'.

	Status	Kernel Status	Last Modified
2			
..			seconds ago
Introduction c3 jupyter notebook.ipynb	Unsynced local version		13 days ago
Metrics for hackathon.csv	Synced 13 days ago		13 days ago

The bottom screenshot shows the notebook editor. The title bar indicates 'Untitled' and 'Last Checkpoint: a few seconds ago (unsaved changes)'. The top bar shows 'Synced November 4, 2021 9:46AM' and 'Connected to Server'. The left sidebar shows the 'File' view. The main area displays a code input area with the prompt 'In []:'. The bottom bar shows 'RAM Usage: 854.1 MB / 5.5 GB' and 'Load Avg: 0.14 0.04 0.01'.

9. Now you can try the code from “Introduction c3 jupyter notebook.ipynb” in your Jupyter Notebook!