DATA420-25S1 How to access computing resources

Summary

The computing resources that you will use for this course are hosted on Azure Virtual Desktop and you can access these from the computer labs or from your own device using the Windows App. The steps below will walk you through how to access these computing resources.

1. Open the Windows App web client or install and open the Windows App native app instead

(a) Sign in using your student account to access our workspace

2. Connect to MADS Desktop

(a) Web client

- Enable file transfer, clipboard, keyboard shortcuts and click ”don’t show again”
- Sign in again and allow remote desktop connection in pop up window
- Follow the prompts to make the desktop full screen and to collapse the toolbar

(b) Native app

- Verify your password

3. Open the terminal

(a) Make sure the current tab is Windows PowerShell otherwise open Windows PowerShell
(b) Feel free to customize the visual look and feel of the window

4. Run the command **Connect-Kubernetes** in the terminal

(a) This will connect to Kubernetes which is where your resources will be created
(b) Follow the prompts to sign in using your student account (again)
(c) This command should output a username and a token expiration date

5. Run the command **Start-Jupyter** in the terminal

(a) This will create the resources and containers in Kubernetes, including retrieving container images from an online registry, and start a Jupyter session and open it in the browser locally

(b) This command can take a long time to run initially

(c) This command will continue running in the terminal which you should leave open while you are using Jupyter

6. Work through each of the examples from LEARN

(a) Download the examples from LEARN and move them to your M:\

- bash.sh
- notebook.ipynb

(b) Refresh the file browser in Jupyter

(c) Open and work through each of the examples by following the instructions in the comments

(d) Save any changes that you made so you can refer back to them later

7. Close Jupyter

8. Stop the process running in the terminal using Ctrl + C or by closing the terminal

9. Run the command **Stop-Jupyter** in the terminal

(a) The will stop containers and delete resources created in Kubernetes, which you should run after closing Jupyter and before you disconnect from the remote desktop