UNIVERSITY OF BIRMINGHAM

Setting up vLab & GitLab

Instructions

Vasileios Panagiotis Lenis
Anas Rana

Introduction

- **vLab** (Virtual Laboratory) is a digital platform hosted on Amazon Web Services (AWS) and it is provided by the University of Birmingham to all the students in MSc in HDS, Bioinformatics and Bioinformatics Distance Learning (DL).

- vLab resources:
  - JupyterLab interface for working with Python
  - Linux command line interface
  - RStudio environment for working with the R programming language

Step by step guide for vLab activation

- Accessing the vLab
- Accessing the RStudio
- Accessing the JupyterLab
- Accessing the Command Line Interface (CLI)
- Extending your time limit
- Troubleshooting
- Setting up the GitLab

UNIVERSITY OF BIRMINGHAM

Accessing the vLab

- vLab can be accessed through the following link:

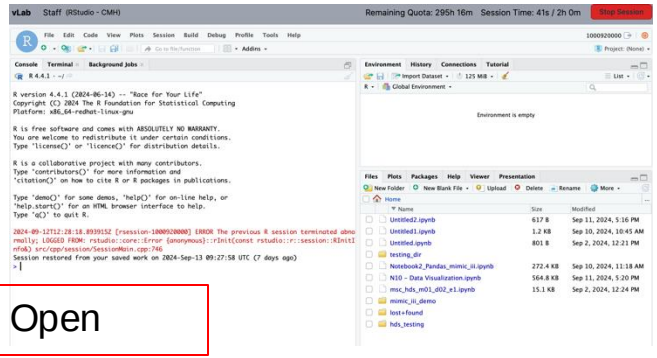
https://vlab.oc1.aws.cs.bham.ac.uk/

- If you are not already logged in, you might be asked to log in using your university Microsoft login.
- When you logged in, you will be able to launch either an R studio or Jupyter session

Accessing the RStudio

1. Select RStudio from the list
2. Click the Start Session

3. Click to connect the session

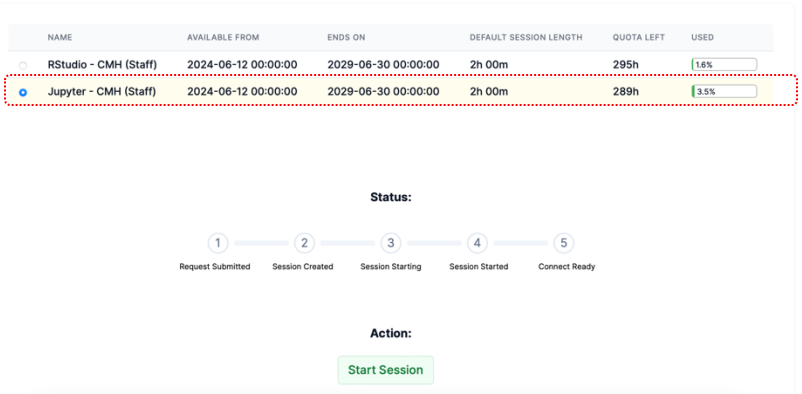


4. RStudio is Open

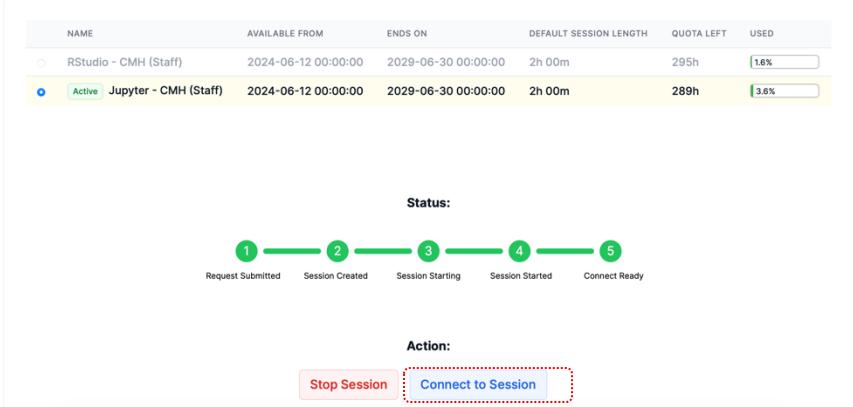
UNIVERSITY OF BIRMINGHAM

UNIVERSITY OF BIRMINGHAM

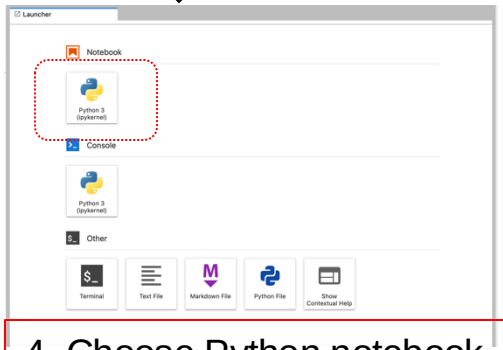
Accessing the JupyterLab



1. Select JupyterLab from the list
2. Click the Start Session



3. Click to connect the session

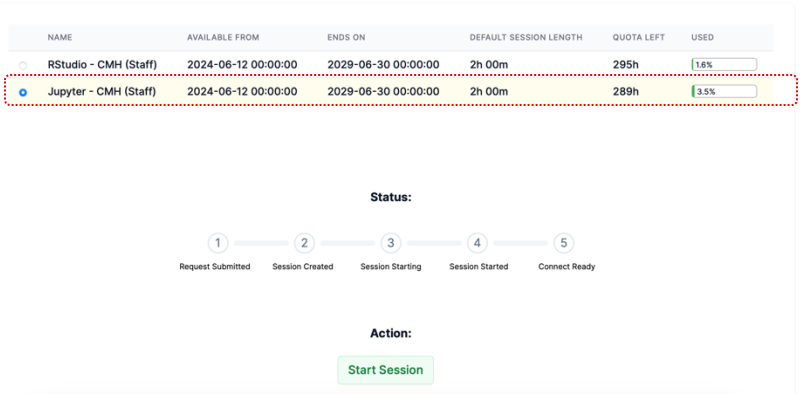


4. Choose Python notebook

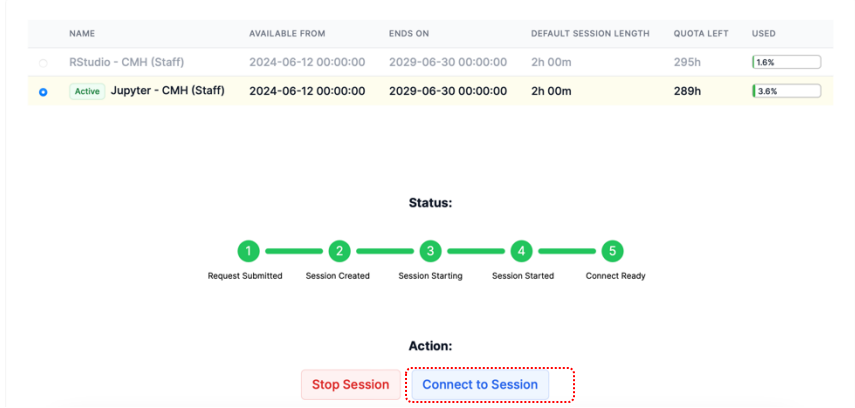
UNIVERSITY OF BIRMINGHAM

UNIVERSITY OF BIRMINGHAM

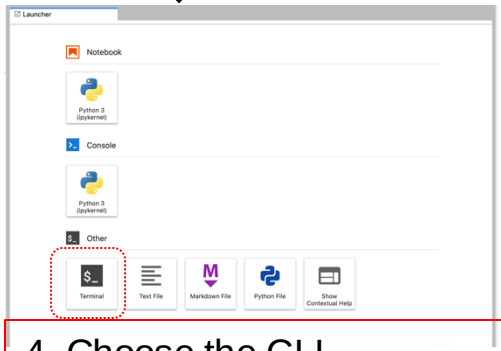
Accessing the CLI



1. Select JupyterLab from the list
2. Click the Start Session

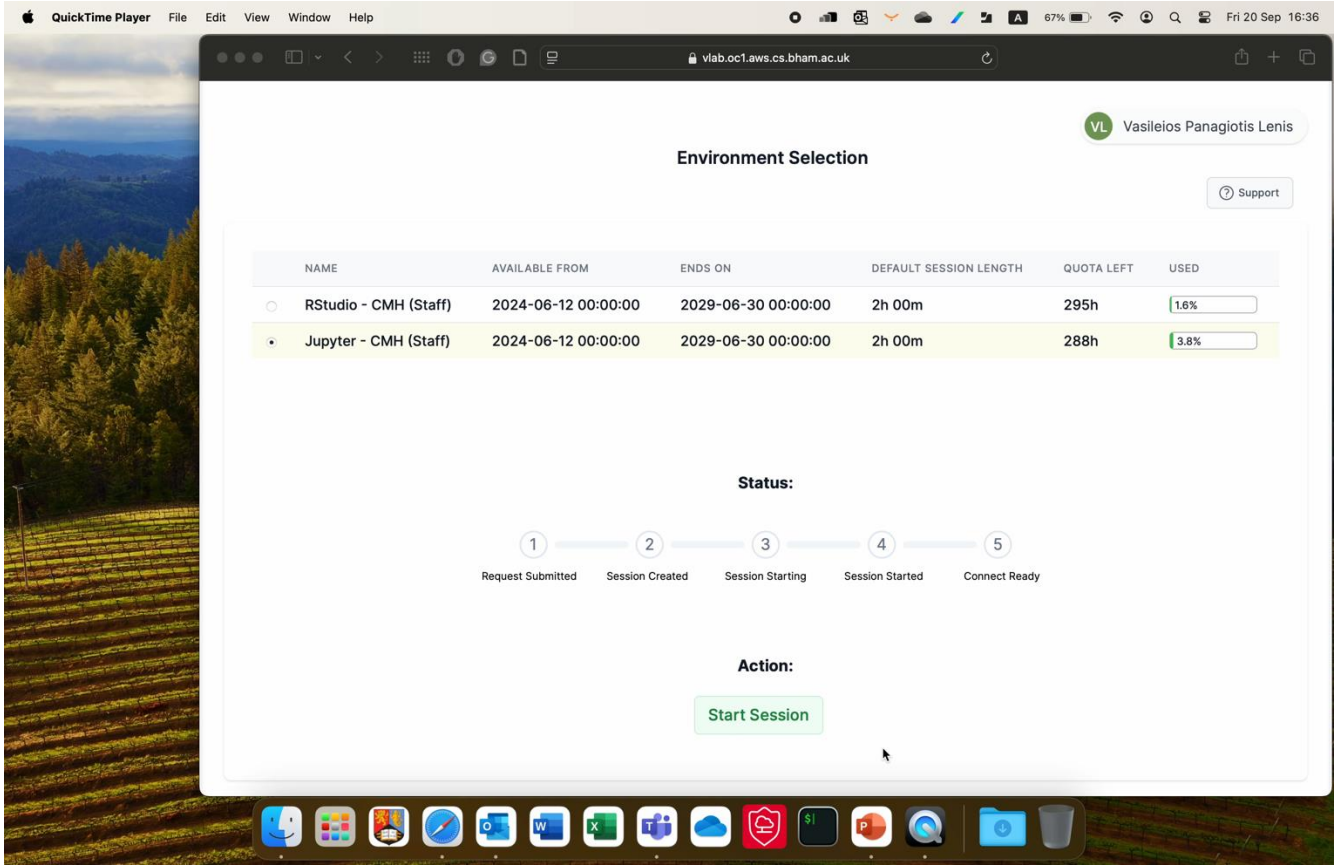


3. Click to connect the session



4. Choose the CLI

UNIVERSITY OF BIRMINGHAM



UNIVERSITY OF BIRMINGHAM

Stopping the Session

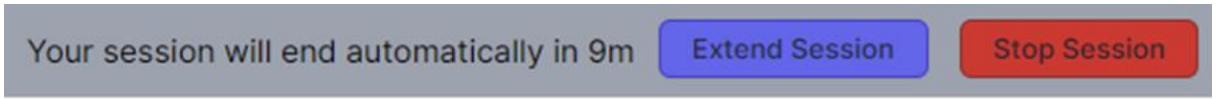
- Each student has been provided with a quota for the total amount of time you can use vLab. To avoid using this quota unnecessarily, when you have finished your session, you should select the stop session option.

UNIVERSITY OF BIRMINGHAM

Extending your time limit

- Each session is initially limited to **2 hours**. You can see how much of your session you have used in the grey bar at the top of the webpage

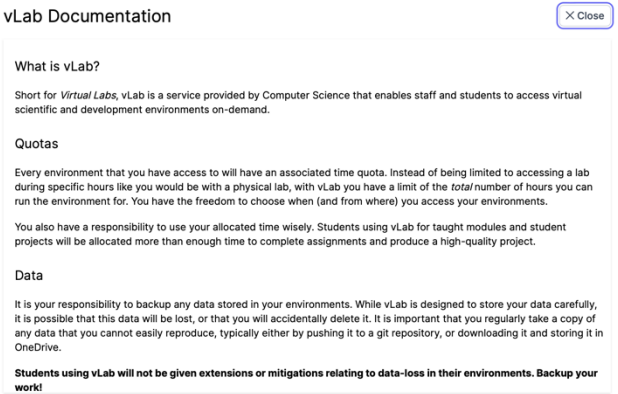
- When you have less than 10 minutes left on a session, you will be given the option to extend your time by a further two hours, which you can do be clicking the blue extend session button



UNIVERSITY OF BIRMINGHAM

Troubleshooting

- If you cannot log in to the Portal or see any Interactive Apps, please try the following steps in order:
  1. Make sure your internet connection is working.
  2. In vLab, if you can't see any apps or are having any issues, use the *Support* button for some quick help.



UNIVERSITY OF BIRMINGHAM

Setting up the GitLab

- Many of your modules will provide data and code using the GitLab platform.
- To have access on this material you need to set up your GitLab following the steps:
  1. Login to the website
  2. Pair vLab and GitLab by setting an SSH key

UNIVERSITY OF BIRMINGHAM

1. Login to the website

- You can have access to GitLab by using the following link:

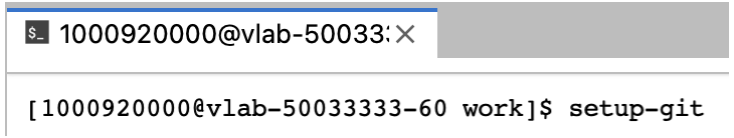
https://git.cs.bham.ac.uk/

- If you are not already logged in, you might be asked to log in using your university Microsoft login.

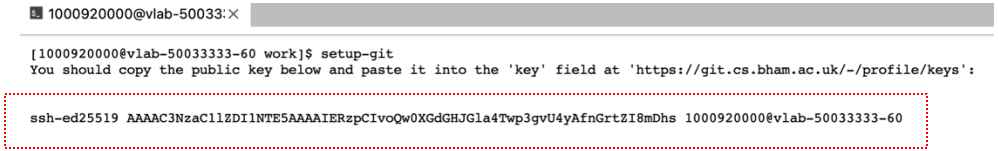
2. Pair vLab and GitLab by setting an SSH key

1. Open a CLI using Jupyter Lab (as previously described)

2. Type setup-git and click enter



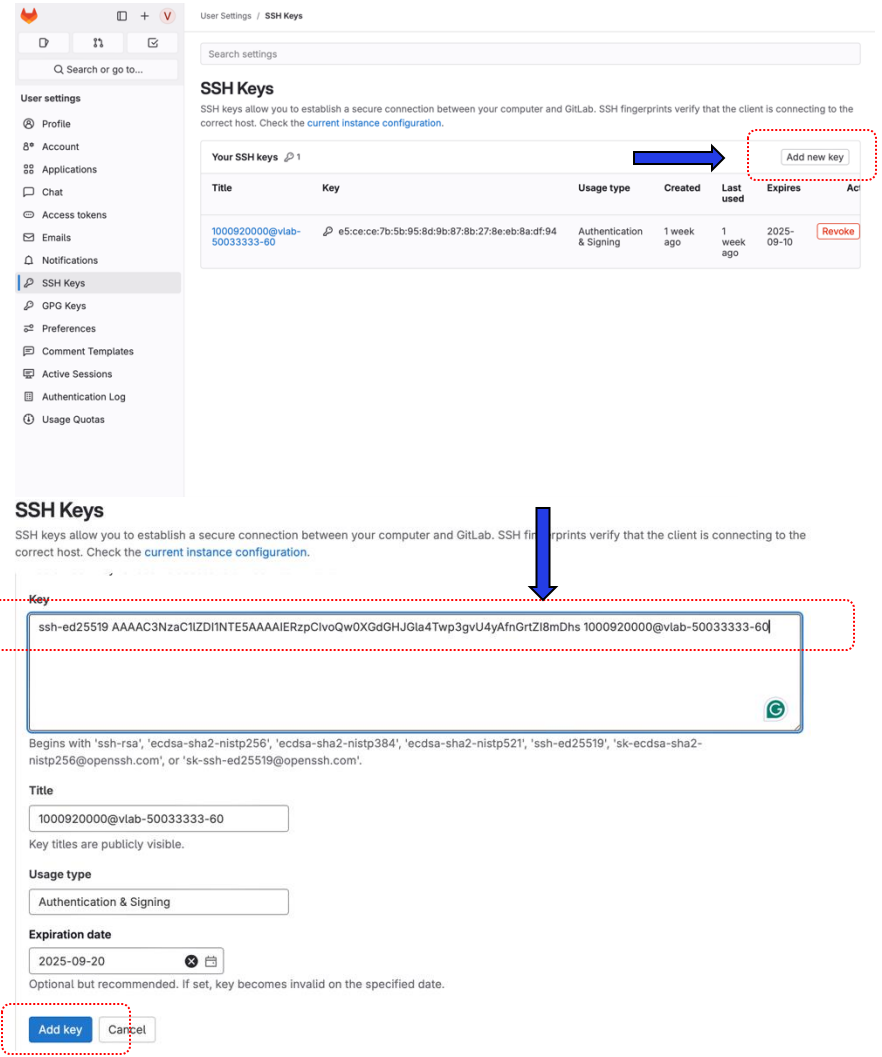
3. Copy the SSH key which is generated (ctr/cmd + c)



UNIVERSITY OF BIRMINGHAM

4. Go to SSH Keys under your profile in the GitLab (Your will be empty)

5. Choose to “Add new Key”



6. Paste the SSH and click “Add Key”

Your access to GitLab is now set up!

UNIVERSITY OF BIRMINGHAM

UNIVERSITY OF BIRMINGHAM

v.p.lenis@bham.ac.uk (Vasilis)
a.a.rana@bham.ac.uk (Anas)