DATA ANALYTICS GLASGOW

Server Intro Session

Exercise

This is a standforward exercise to allow you to get first hand experience using servers,

If you would rather replace the script here with a different script or a different task this is completely fine. We are simply trying to give you an opportunity to ask questions aboutt he use of the server.

Task

Please run the Python/R (choose your language) script on a servers. If you have access to the servers then the school please use them if you dont we will try to provide an alternative server which you can use.

You can run this in any of the ways that we have demonstrated to you in this session. If you get stuck feel free to ask questions of the PhD students and staff in the room.

The exercise has been designed so that you need to:

- Transfer code onto the server
- (Potentially) Install/update libraries on the cluster
- Run a small amount of code
- Transfer the code off the server.

The code to run can be found in this directory (with a little help with ChatGPT).

Your workflow is slightly different for using one of our servers and the other example server:

Schools Server

1. Connect to the VPN to gain access to the internal network
2. Select a Euclid to run the code on.
3. Git clone this repo.
4. Run the code using one of the methods shown by our PhD students
5. Transfer the results back to your system using scp from the commandline or a GUI application e.g.filevila or winscp.

Do not worry if you cannot finish this during the session, but if you think you will need to use the server, please try in your time, and ask either one of the PhD student who presented or me for help in running things.

External Server

1. Ssh into the external server
2. Git clone this repo
3. Run the code using one of the methods shown by our PhD students
4. Transfer the results from the server back to your laptop.

Note, this server will only exist during the server session and will disappear after this to complete this after the session please gain Euclid access and complete using the euclid servers.

Python Users

For those wishing to use Python rather than R, if you are doing this live in the session it might be easier to use the system Python (just to avoid setup times for anaconda. However in general we would recommend using an anaconda installation.

1 Tasks

1.1 Task 1

This task does not require any libraries and therefore should be able to be ran on any system which has python/R. The files that you need to run are called:

- Task1.py - python version of this file
- Task1.R - R version of this file

These scripts will make a simple output file called `results.csv` which you should transfer back to your system.

1.2 Task 2

This task requires an environment that has a number of packages, and on the Euclids you may have to install and set up and environment.

- Task2.py - python version of this file
- Task2.R - R version of this file