Working Remotely on LTS Machines

Note: If you live or work on-campus and have access to the libraries or residences, we strongly suggest that you primarily use LTS machines in-person and do not work remotely. Here are the links to the full list of LTS locations and the library hours for using the in-person LTS machines. The LTS machines in residences are available 24/7, as are the machines in the Lathrop study room. The number of LTS machines available for remote access is MUCH more limited than the in-person machines. As a result, there could be a shortage if too many students use the LTS remote machines right before the due date, so please plan to complete the assignment early or (preferably) use the in-person LTS machines instead.

Contents

1. LTS Machine Use
2. How to connect to a remote LTS machine

What is an LTS Machine?

The Learning and Technologies Spaces (LTS) Machines are essentially the computer cluster machines found around dorms and common spaces on campus. They come with many of the necessary software and packages used by courses in the engineering and science departments. **While you may access LTS machines remotely, we strongly encourage students to use the LTS machines in person as there will be a very limited number of machines available online**. LTS machines can be accessed in person at most libraries and student residences. Here is a full list of locations: https://thehub.stanford.edu/find-software-and-computers/desktop-locations.

LTS Machine Use

The LTS Macs have all the necessary software packages installed for this class. We **highly recommend students with Windows** machines and students who feel less comfortable installing their own software and packages **to use the remote Mac computers offered through LTS.**

Python 2.7 is no longer supported on the LTS machines. **To run Python from the terminal, you would have to type python3.** Since all of our code is in Python3.9, whenever you are running a python script on the LTS machines **from the terminal**, you **must make a specific call to "python3.9"**.

For example, in assignment 2, you will call:

```
python3.9 predict.py <arguments>
```

WARNING: Once you log out of the LTS machines, **any files you have stored on them will be deleted**. Therefore, it's important to ensure that you **save all your work either on Google Drive or on an external drive** to prevent data loss.

For Windows users: Some assignments may require the use of PyRosetta4, which is supported primarily on Mac OS. While it is possible to set up PyRosetta on Windows 10, the install is quite a bit more complex and the teaching staff may not be able to assist with any software-related bugs that may arise. For this reason, **Windows users are strongly advised to use the LTS machines**.

How to connect to a remote LTS machine

To connect to a remote LTS machine, go to https://cluster-checkout.stanford.edu/, and choose *macOS on the Web* using Apporto. Then, launch the "Mac Virtual Desktop". It will take a while before getting the virtual machine allocation.