Notes on using Stanford’s computing resources  
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# Computer clusters

Stanford provides all of us with access to a cluster of Linux machines. These will behave like the Terminal on your Mac or like the Unix emulator on your Windows machine. Using the command python will give you version 2.7.6, and the command python3 will give you version 3.4.3.

## ssh — logging in to your account

In your terminal application, you can log-in with

ssh USERNAME@cardinal.stanford.edu

Enter your usual Stanford password when prompted. This should trigger a two-factor prompt. Once you’re in, it’s a Unix environment. Some basic navigation commands:

|  |  |
| --- | --- |
| Command | Meaning |
| cd foo | change the current directory (your location) to foo |
| cd .. | change the current directory (your location) to the parent directory |
| ls | list all of the files and directories here |
| ls foo | list all of the files and directories in foo |
| ls -la | list all of the files and directories here with metadata |
| pwd | present working directory |

For much more: <http://linuxcommand.org/lc3_learning_the_shell.php>

## sftp — transferring files to and from your account

In [CyberDuck](https://cyberduck.io) is a free ssh utility:

1. Click Open Connection
2. Toggle to SFTP
3. Set Server to cardinal.stanford.edu
4. Set Port to 22
5. Fill in your Stanford username and password.
6. Click Connect

Alternatively, you can use Stanford’s own SFTP program, LelandSSH. For details:

<https://uit.stanford.edu/service/sharedcomputing>

## AFS on your Desktop

Stanford’s AFS set-up lets you create a remote folder right on your home machine:

<https://uit.stanford.edu/service/afs/intro/mounting>

I think the easiest path to getting this working is to install the Stanford Desktop tools and run the Kerberos set-up utility: <https://itservices.stanford.edu/service/ess>.

# Your own website

Your account comes set up with a web folder, WWW. Files you put in there are viewable on the Web. If you want to create a basic website, download the following file, edit it as you see fit, and upload it to WWW:

<http://www.stanford.edu/class/linguist278/data/samplehome/index.html>

Get the associated image:

<http://www.stanford.edu/class/linguist278/data/samplehome/images/Wug.jpg>

The file is then viewable at <http://www.stanford.edu/~USERNAME/>

# CGI programming

If you [requested CGI access](https://uit.stanford.edu/service/cgi/personal), then you have a folder called cgi-bin in your home directory. CGI programs you put there are then web accessible. For example, if you add my directory of cgi\_adder programs there, then you will be able to run them here:

<http://www.stanford.edu/~USERNAME/cgi-bin/cgi_adder/>

In many environments, CGI programs have to be set to specific file permissions, but Stanford seems to take care of all of that for us!

# Corpora

Stanford Linguistics is a member of the the [Linguistic Data Consortium](https://www.ldc.upenn.edu) (LDC), so we have access to lots of amazing corpora:

<https://linguistics.stanford.edu/resources/resources-corpora>

To request access, follow the instructions here; people who aren’t in Linguistics should cc me on their request message so that I can tell the Corpus TA who you are:

<https://linguistics.stanford.edu/resources/corpora/accessing-corpora>

With your SFTP program, you might create a stored log-in that will take you directly to the corpora, which are in /afs/ir/data/linguistic-data/. In CyberDuck, this can be set under More Options > Path.