

There is no Cloud

It's just someone else's computer

Cloud Virtual Machines

- Amazon Web Services (EC2)
- Digital Ocean (Droplets)
- Linode
- Lots of others
- \$5 - \$10 per month gives you a decent server you can do actual work on

Amazon Web Services

- Amazon Educate program
- Compute Credits for students and classes
- <https://aws.amazon.com/education/awseducate/>
 - Create your own AWS account (you'll have to have a credit card to sign up)
 - Add AWS Educate credits \$100/year

Class Web Servers

- **You** get a web server, and **you** get a web server...
- Everyone gets their own web server
- Built on AWS using OpsWorks and Chef for some automation
- Simple portal page to manage your server

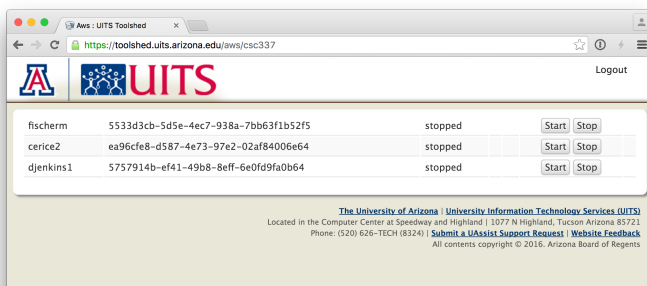
Management Site

<https://toolshed.uits.arizona.edu/aws/csc337>

- Start & Stop your server
- See your server's IP address
- Change your login password
- Your username is your UA NetID

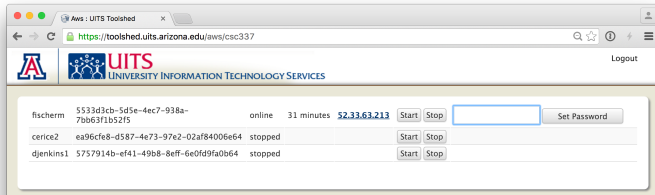
Management Site

<https://toolshed.uits.arizona.edu/aws/csc337>



Management Site

- Once your server is 'online' you can set your password
- Only have to set your password once
- Log in to your server using SSH
- Stop your server when you're not working on it



Connecting • Mac

- Terminal
- Applications/Utilities/Terminal.app

```
markfischer — fischer@fischer:~ — ssh fischer@52.33.63.213 — 83x27
~ ssh fischer@52.33.63.213
The authenticity of host '52.33.63.213 (52.33.63.213)' can't be established.
ECDSA key fingerprint is SHA256:SDLYPTpmKuT/V6IS3LkNtr8Bw5Jx/jlppnx3NmbpY.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '52.33.63.213' (ECDSA) to the list of known hosts.
fischer@52.33.63.213's password:
Last login: Thu Mar 17 06:00:59 2016 from ip72-211-148-200.tc.ph.cox.net
This instance is managed with AWS OpsWorks.

##### OpsWorks Summary #####
Operating System: amazon 2015.09
OpsWorks Instance: fischer
OpsWorks Instance ID: 5533d3cb-5d5e-4ec7-938a-7bb63f1b52f5
OpsWorks Layers: Student Instances
OpsWorks Stack: cs337
EC2 Region: us-west-2
```

```
markfischer — fischer@fischer:~ — ssh fischer@52.33.63.213 — 83x27
~ ssh fischer@52.33.63.213
```

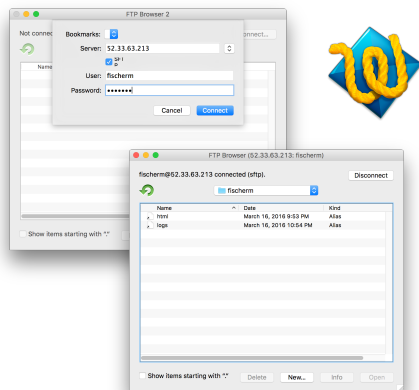
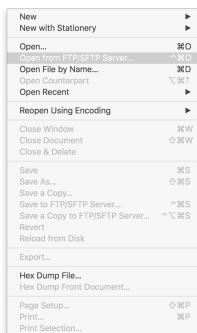
Connecting • Mac

- Remotely Editing Text
- Many Many options
 - Feel free to use whatever you want
- TextWrangler is the one I can help you with



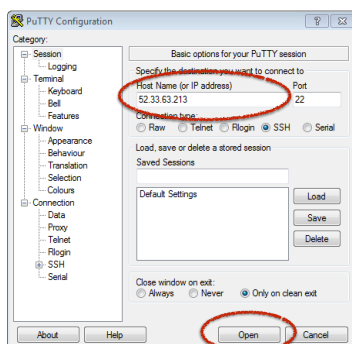
<http://www.barebones.com/products/textwrangler/>

Connecting • Mac



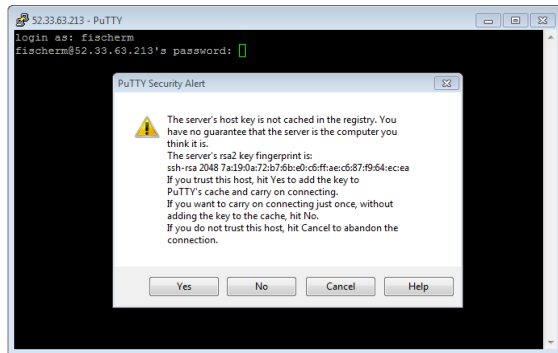
Connecting • Windows

- Putty

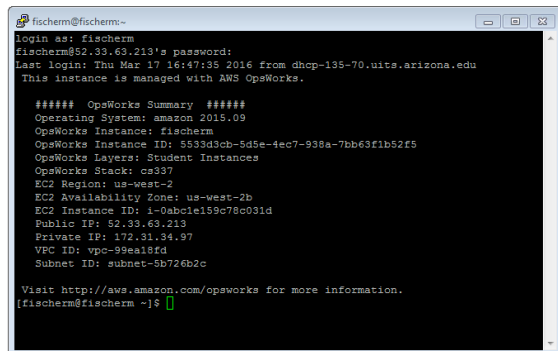


<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

Connecting • Windows



Connecting • Windows

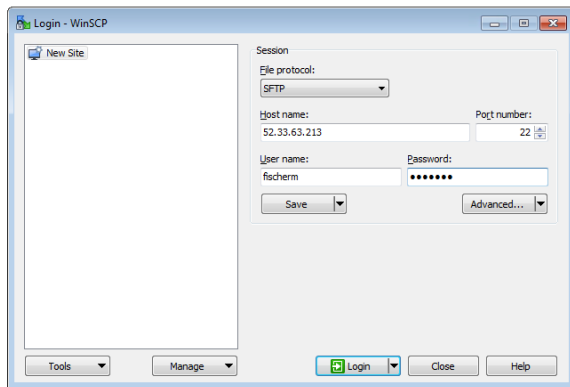


Connecting • Windows

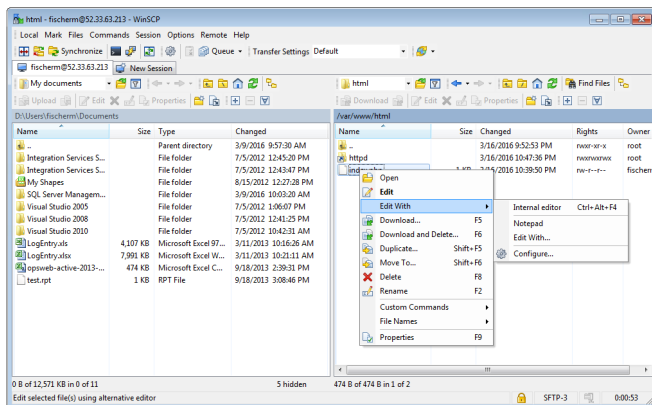
- Remotely Editing Text
- Many Many ways to do this
 - Use whatever you can figure out
- WinSCP is the one I can help you with

<https://winscp.net/eng/download.php>

Connecting • Windows



Connecting • Windows



Make Some Directories

```
[fischem@fischem ~]$ ls -la
total 24
drwxr-xr-x 4 root root 4096 Mar 17 05:54 .
drwxr-xr-x 2 fischem fischem 138 Mar 17 06:01 .bash_history
-rw-r--r-- 1 fischem fischem 18 Sep 2 2015 .bash_logout
-rw-r--r-- 1 fischem fischem 193 Sep 2 2015 .bash_profile
-rw-r--r-- 1 fischem fischem 124 Sep 2 2015 .bashrc
lrwxrwxrwx 1 root root 13 Mar 17 04:53 html -> /var/www/html
lrwxrwxrwx 1 root root 14 Mar 17 05:54 logs -> /var/log/httpd
[fischem@fischem ~]$
[fischem@fischem ~]$
[fischem@fischem ~]$ mkdir assignment5
[fischem@fischem ~]$ ls -la
total 28
drwxr-xr-x 3 fischem fischem 4096 Mar 17 17:21 .
drwxr-xr-x 4 root root 4096 Mar 17 04:53 ..
drwxrwxr-x 2 fischem fischem 4096 Mar 17 17:21 assignment5
-rw-r--r-- 1 fischem fischem 138 Mar 17 06:01 .bash_history
-rw-r--r-- 1 fischem fischem 18 Sep 2 2015 .bash_logout
-rw-r--r-- 1 fischem fischem 193 Sep 2 2015 .bash_profile
-rw-r--r-- 1 fischem fischem 124 Sep 2 2015 .bashrc
lrwxrwxrwx 1 root root 13 Mar 17 04:53 html -> /var/www/html
lrwxrwxrwx 1 root root 14 Mar 17 05:54 logs -> /var/log/httpd
[fischem@fischem ~]$
```

