

# Connecting to SoC Linux

F19

# Access to SoC Servers

- ▶ You need to be connected the Clemson University network
  - ▶ On campus
    - ▶ that means eduroam.edu
  - ▶ Off campus,
    - ▶ that means making a VPN connection

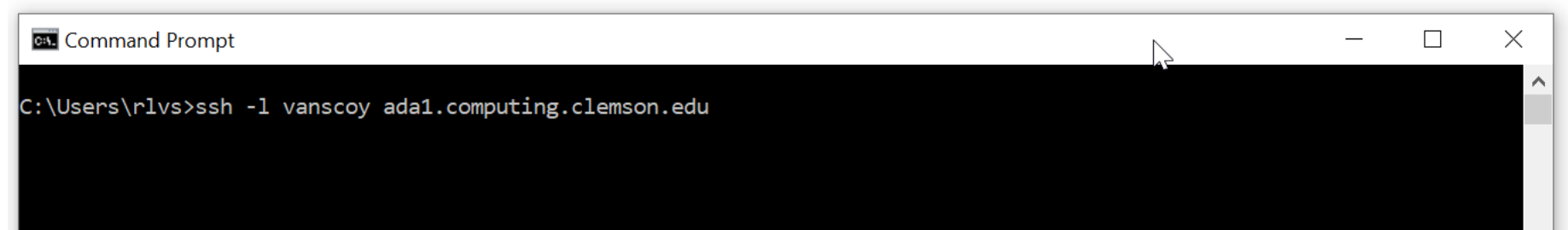
# Access to SoC Servers ON CAMPUS - 1

- ▶ Go to a School of Computing Lab computer (McAdams) and login using your CID
- ▶ Using your personal computer connected to CU's network, then:

```
ssh ada1.computing.clemson.edu
```

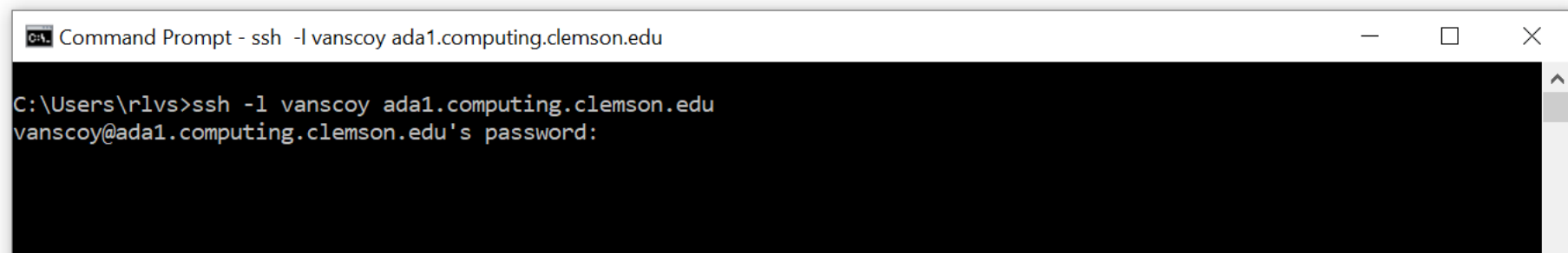
```
...
```

```
ssh ada17.computing.clemson.edu
```



# Access to SoC Servers ON CAMPUS - 2

- ▶ Login with your CU password:



```
Command Prompt - ssh -l vanscoy ada1.computing.clemson.edu
C:\Users\r1vs>ssh -l vanscoy ada1.computing.clemson.edu
vanscoy@ada1.computing.clemson.edu's password:
```

# Access to SoC Servers ON CAMPUS - 3

► And you're in:

```

C:\Users\r1vs>ssh -l vanscoy ada1.computing.clemson.edu
vanscoy@ada1.computing.clemson.edu's password:
*****
                Welcome to the
      CLEMSON UNIVERSITY SCHOOL OF COMPUTING
      Unauthorized use is prohibited!

      PARTIAL LIST OF PUBLIC CLIENT MACHINES
      Hostnames      Location      OS           Architecture  CPU Cores    Mem
      -----
      ada1..17       McAdams 110A  Ubuntu 16.04  x86_64 i5      4 x 3.40GHz   16GB
      babbage1..33   Barre B108   Ubuntu 16.04  x86_64 i7      4 x 3.60GHz   16GB
      joey1..20      n/a         Ubuntu 16.04  x86_64 i7      4 x 3.40GHz   16GB
      titan1..5      n/a         Ubuntu 16.04  x86_64 E5      4 x 3.00GHz   32GB
      newton         n/a         Ubuntu 16.04  x86_64 Xeon    24 x 2.40GHz  96GB

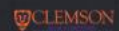
      * Off-campus SSH access: access.computing.clemson.edu
      * General information can be found at computing.clemson.edu/help
      * Virtual Linux Desktop: virtual.computing.clemson.edu
      * Questions or problems with Linux lab systems? Email ithelp@clemson.edu
      or see the friendly folks in 123, 127, 128, or 129 McAdams

***** Last updated: 2019-05-03 *****
Last login: Wed Jul 31 12:41:43 2019 from 172.23.3.218
[12:45:40] vanscoy@ada1:~ [1] pwd
/home/vanscoy
[12:45:54] vanscoy@ada1:~ [2]
  
```

# Access to SoC Servers via Web Browser

- ▶ Using your laptop connected to the CU network
- ▶ <https://virtual.computing.clemson.edu>
  - Launch session
  - SoC Desktop
  - Launch

# Virtual Computing-1



## My Sessions

Launch Session

Filter



SoC Desktop



SoC Desktop  
(GPU  
Enabled)



Terminal  
(GPU  
Enabled)

Search Bookmarks

Global Bookmarks  
My Bookmarks

/usr/sbin/lightdm-session startxfce4

Single

Launch

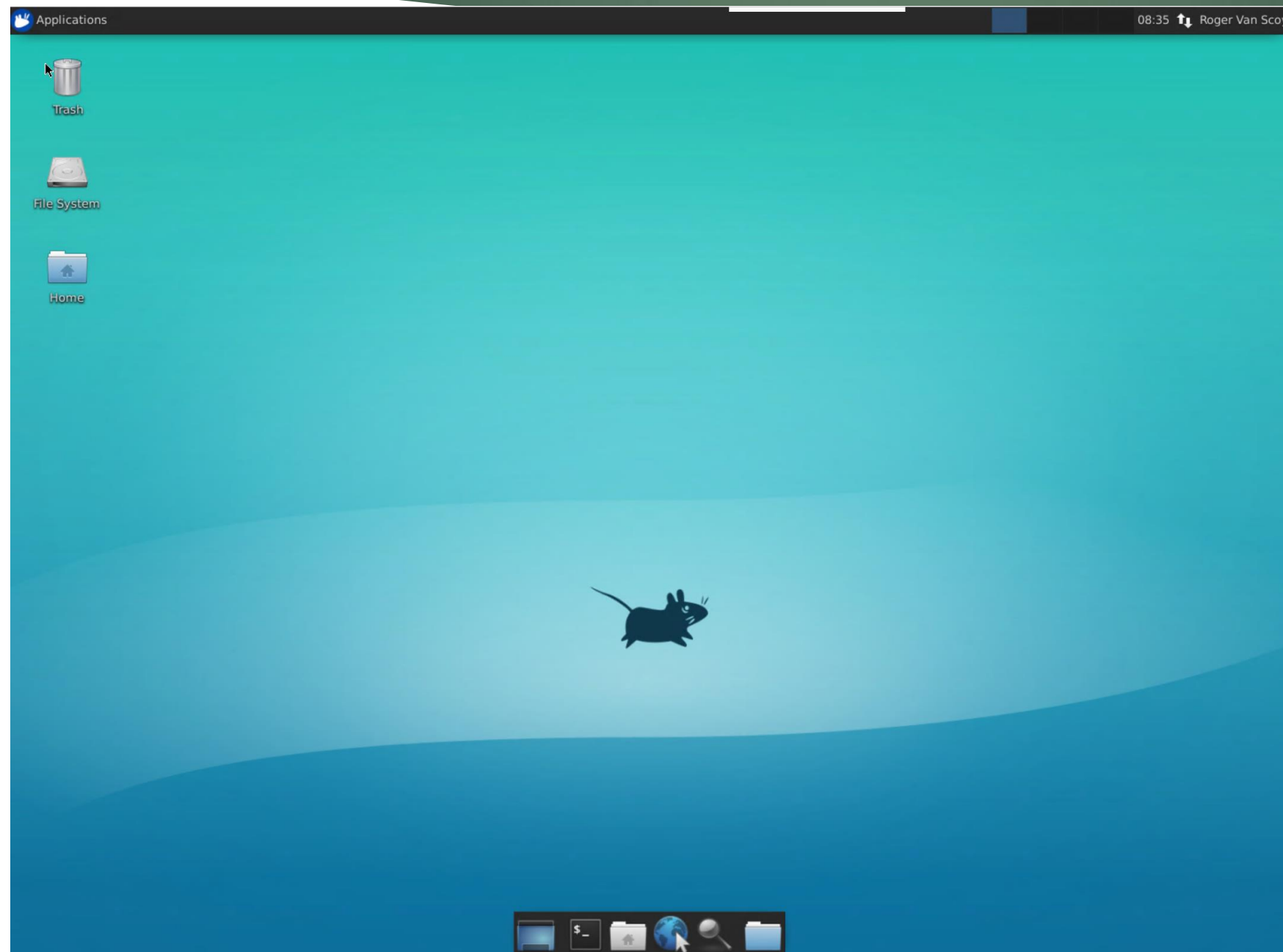
Cancel

# Access to SoC Servers via Web Browser

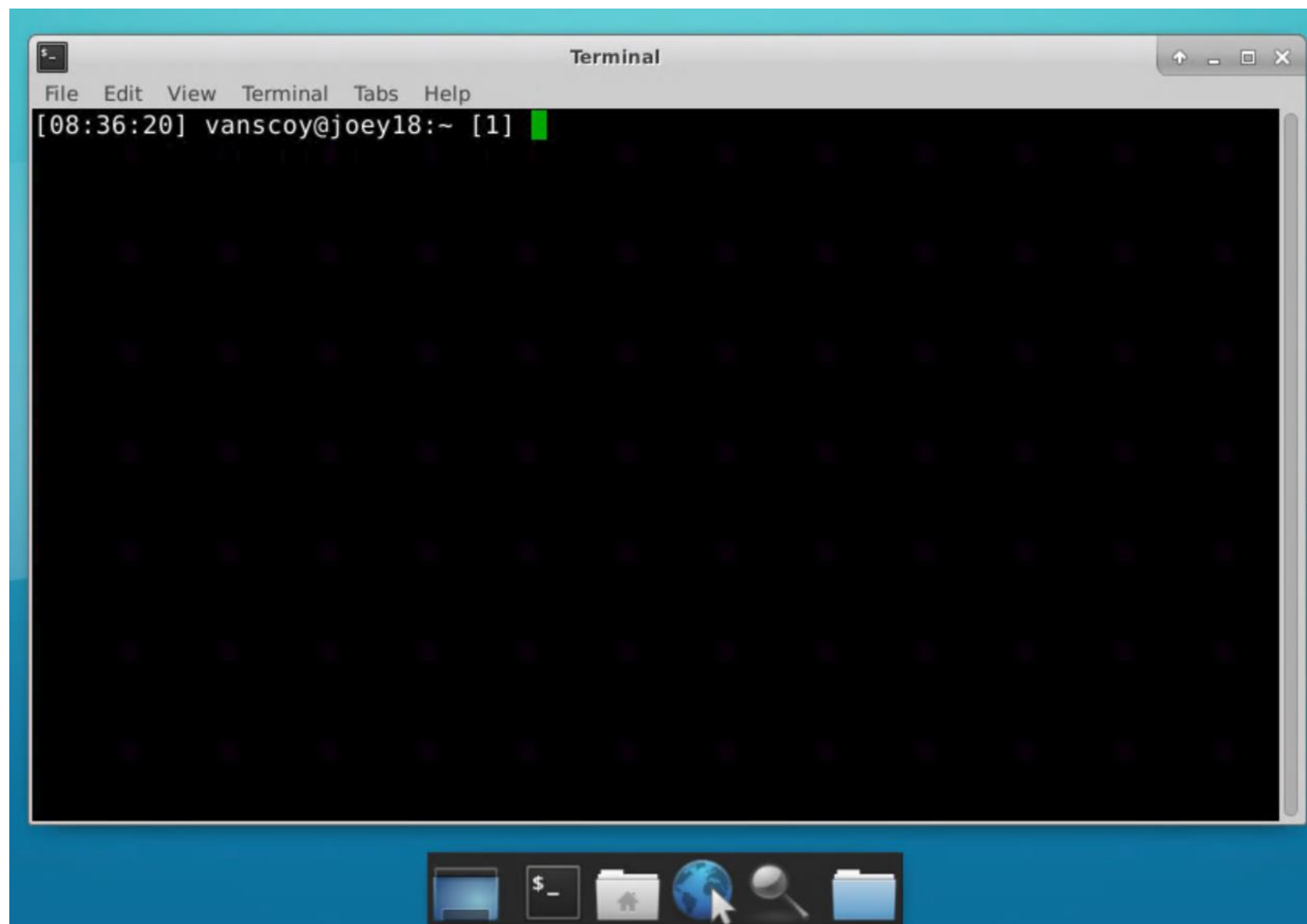
- ▶ From the virtual desktop  
Open a terminal window  
Maximize the window
- ▶ You can work in this terminal window or  
`ssh <ada#>.computing.clemson.edu`  
where `<ada#>` is: `ada1`, or `ada2`, ... `ada17`
- ▶ How many computers are you using at this moment?



# Virtual Computing-2

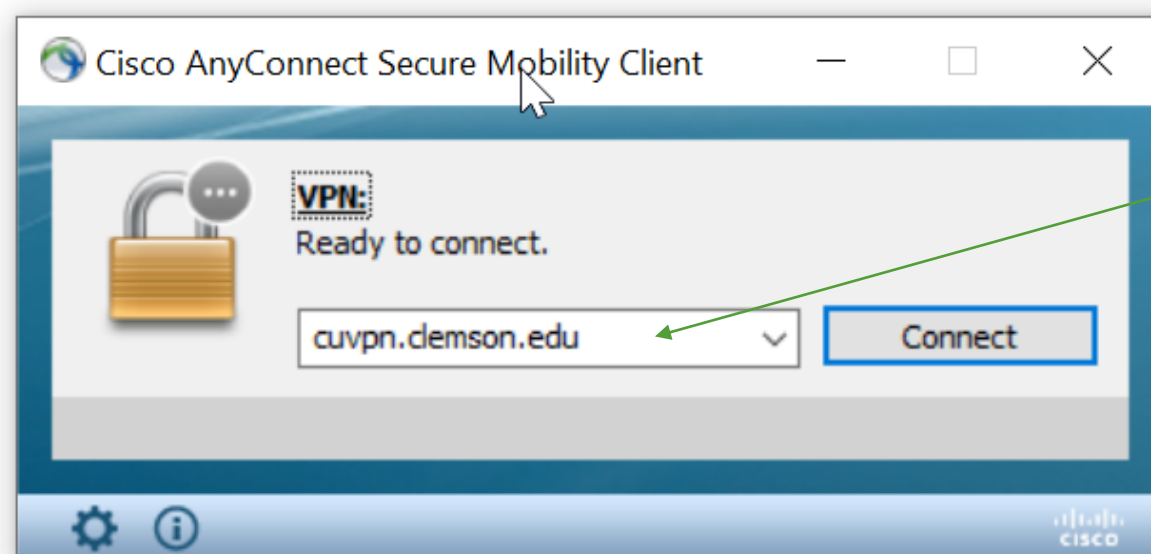


# Virtual Computing-3



# Getting Access When Off Campus

- ▶ Make a VPN connection
- ▶ <https://access.computing.clemson.edu>



use this for the connection name

then click connect

# Getting Access When Off Campus

- ▶ Login using
  - ▶ username: your CID
  - ▶ Password: your password
  - ▶ Duo Passcode: push
- ▶ Click OK

Cisco AnyConnect | cuvpn.demson.edu

Logging into the VPN now requires two-factor authentication through Duo Security. To enroll and for more information, please visit [2fa.demson.edu](https://2fa.demson.edu).

Username:

Password:

Duo Passcode:

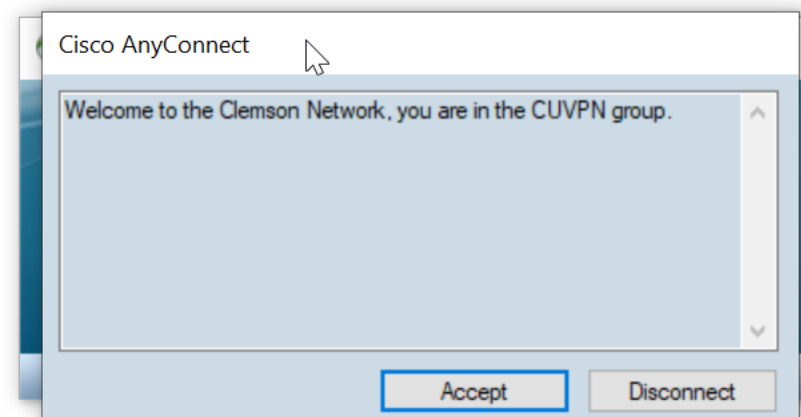
1. Type your six-digit One-Time Passcode  
2. Type "push" to get a Duo Mobile app prompt  
3. Type "phone" to receive a call  
4. Type "sms" to receive text passcodes

If you are not enrolled, you can complete enrollment at <https://2fa.demson.edu> or learn more at <https://cit.demson.edu/support/faq?id=100>

OK Cancel

# Getting Access When Off Campus

- ▶ When you see
- ▶ click Accept



- ▶ Then follow the instructions for connecting via your web browser or ssh

# From WinOS - 1

- ▶ Use ssh (if installed)
- ▶ Use WinSCP/Putty

# From WinOS - 2

- ▶ If you have a WinOS machine
  - ▶ Download and install WinSCP & Putty on your laptop
  - ▶ <https://winscp.net/eng/downloads.php>
  - ▶ Connect to ada1.computing.Clemson.edu
    - ▶ Login with your Clemson
    - ▶ ada1 ... ada17 are available

## WinSCP Downloads

[WinSCP Release Notification](#)
[Download PuTTY](#)

## Download latest WinSCP 5.13

2018-06-18

WinSCP 5.13 is a major application update. New features and enhancements include:

- Amazon S3 protocol support.
- SHA-256 host key fingerprints are used.
- Stalled connection attempts can be canceled promptly.
- Improvements to .NET assembly and scripting.

[DOWNLOAD WINSCP 5.13.3 \(9.2 MB\)](#)
[LIST OF CHANGES](#)

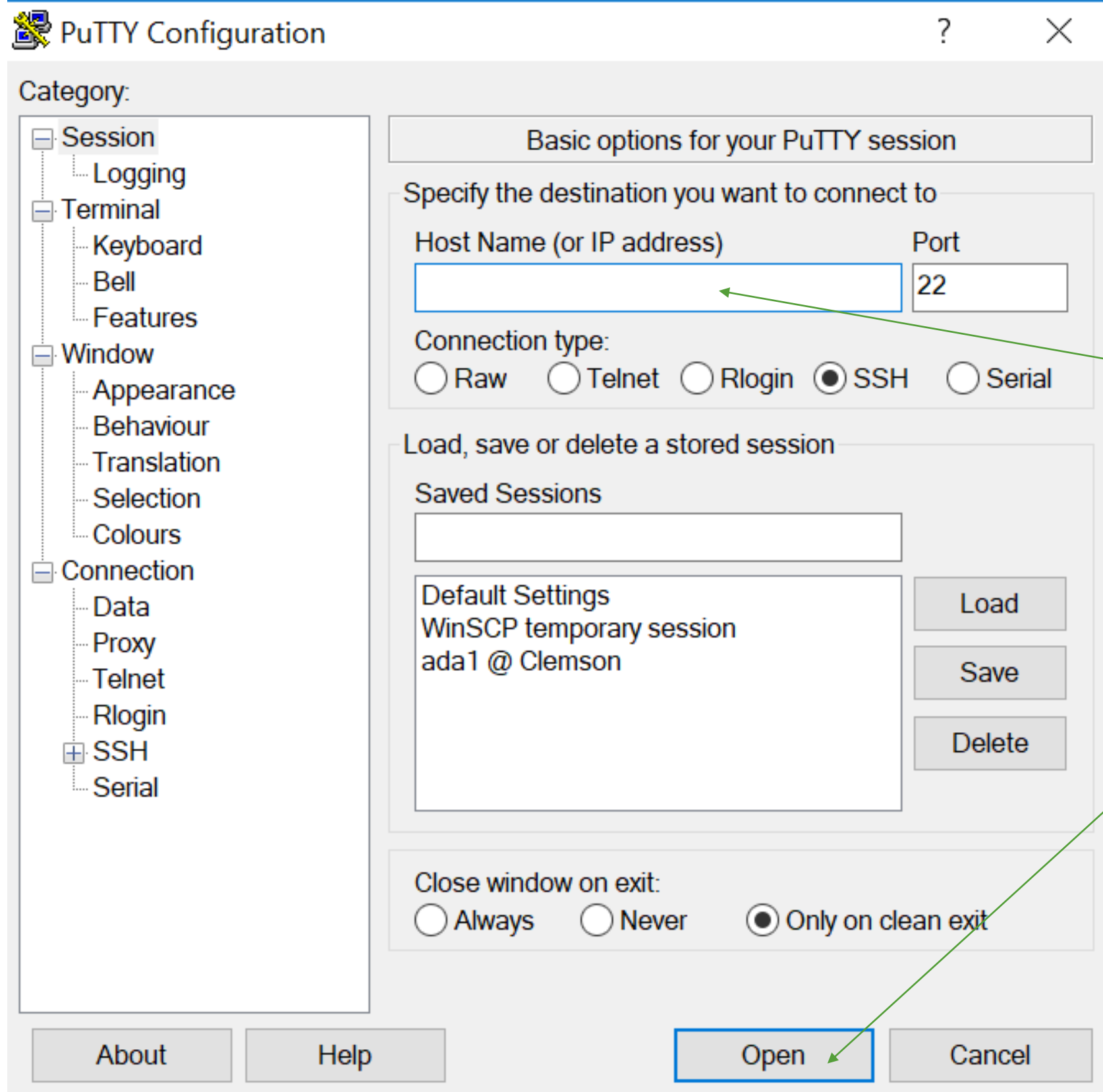
1,445,343 downloads to date

```
vanscoy@ada1.computing.clemson.edu
Using username "vanscoy".
*****
Welcome to the
CLEMSON UNIVERSITY SCHOOL OF COMPUTING
Unauthorized use is prohibited!

PARTIAL LIST OF PUBLIC CLIENT MACHINES
Hostnames      Location    OS          Architecture  CPU Cores  Mem
-----
ada1..17       McAdams 110A Ubuntu 16.04  x86_64 i5      4 x 3.40GHz  16GB
babbagel..33  Barre B108 Ubuntu 16.04  x86_64 i7      4 x 3.60GHz  16GB
joeyl..20      n/a        Ubuntu 16.04  x86_64 i7      4 x 3.40GHz  16GB
cerfl..28      McAdams 110D Ubuntu 16.04  x86_64 i5      4 x 3.40GHz  16GB
titan1..5      n/a        Ubuntu 16.04  x86_64 E5      4 x 3.00GHz  32GB
newton         n/a        Ubuntu 16.04  x86_64 Xeon    24 x 2.40GHz  96GB

* Off-campus SSH access: access.computing.clemson.edu
* General information can be found at http://www.computing.clemson.edu/help
* Questions or problems regarding Unix systems should be addressed to
  ithelp@clemson.edu or the friendly folks in 126, 129, 135, or 137
  McAdams

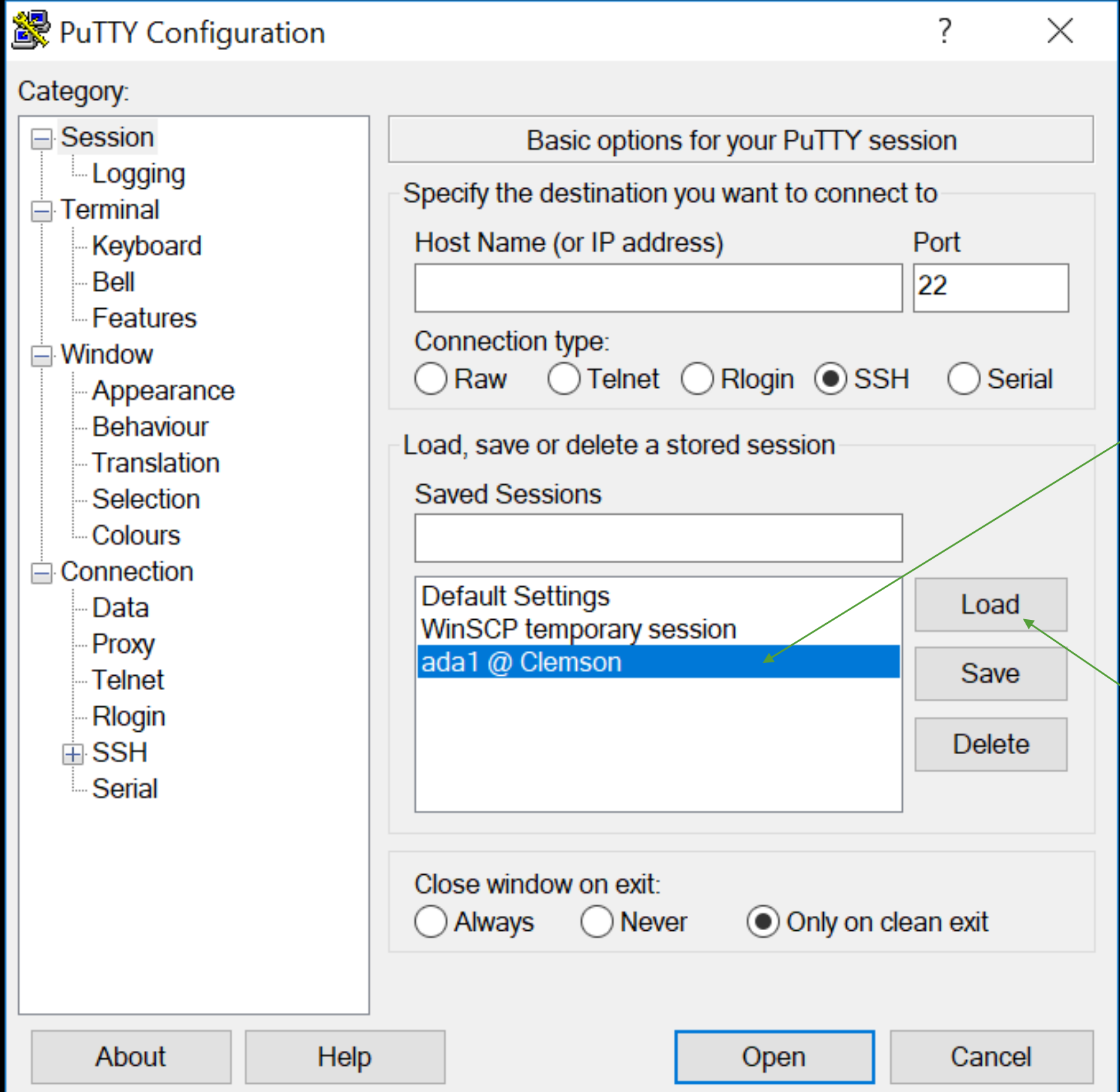
***** Last updated: 2018-08-22 *****
Last login: Tue Aug 14 09:31:38 2018 from 198.21.180.244
[11:48:18] vanscoy@ada1:~ [1]
```



Enter the server host name here:  
adaNN.computing.Clemson.edu

Then click "open"  
And logon using your Clemson  
credentials





You can save a configuration

Then click "load"  
And logon using your Clemson  
credentials

```

ada1.computing.clemson.edu - PuTTY
*****
                                Welcome to the
                                CLEMSON UNIVERSITY SCHOOL OF COMPUTING
                                Unauthorized use is prohibited!

                                PARTIAL LIST OF PUBLIC CLIENT MACHINES

Hostnames      Location      OS      Architecture      CPU Cores      Mem
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joey1..20      n/a           Ubuntu 16.04    x86_64 i7          4 x 3.40GHz     16GB
cerf1..28      McAdams 110D   Ubuntu 16.04    x86_64 i5          4 x 3.40GHz     16GB
titan1..5      n/a           Ubuntu 16.04    x86_64 E5          4 x 3.00GHz     32GB
newton         n/a           Ubuntu 16.04    x86_64 Xeon        24 x 2.40GHz     96GB

* Off-campus SSH access: access.cs.clemson.edu
* General information can be found at http://www.cs.clemson.edu/help
* Questions or problems regarding Unix systems should be addressed to
  ithelp@clemson.edu or the friendly folks in 111, 126, 135, or 137
  McAdams

***** Last updated: 2018-07-31 *****
Last login: Tue Aug 14 08:59:31 2018 from 198.21.180.244
[09:31:39] vanscoy@ada1:~ [1]

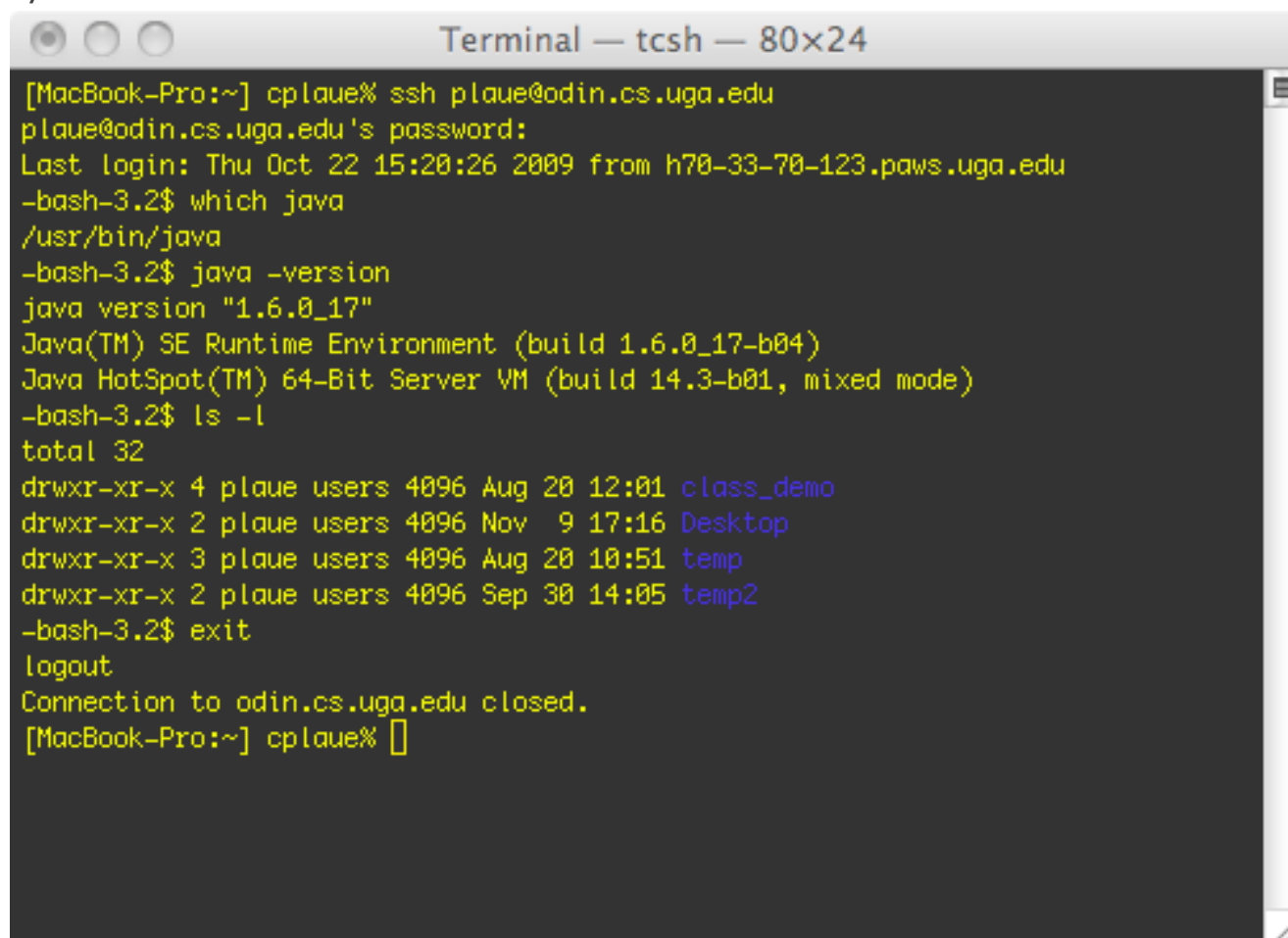
```

# From a Mac - 1

- ▶ Finder > Applications > Utilities > Terminal  
(you can drag Terminal to the Dock for quick access)
- ▶ Then you can use the commands
  - ▶ OR
- ▶ Use SSH to connect to a Clemson computer

# From a Mac - 2

- ▶ If you have a MacOS machine:  
Finder > Applications > Terminal
  - ▶ From here you can issue commands directly or from the terminal window...
  - ▶ `ssh ada1.computing.Clemson.edu`
    - ▶ Login with your Clemson
    - ▶ `ada1 ... ada17` are available



```
Terminal — tcsh — 80x24
[MacBook-Pro:~] cplae% ssh plaue@odin.cs.uga.edu
plaue@odin.cs.uga.edu's password:
Last login: Thu Oct 22 15:20:26 2009 from h70-33-70-123.paws.uga.edu
-bash-3.2$ which java
/usr/bin/java
-bash-3.2$ java -version
java version "1.6.0_17"
Java(TM) SE Runtime Environment (build 1.6.0_17-b04)
Java HotSpot(TM) 64-Bit Server VM (build 14.3-b01, mixed mode)
-bash-3.2$ ls -l
total 32
drwxr-xr-x 4 plaue users 4096 Aug 20 12:01 class_demo
drwxr-xr-x 2 plaue users 4096 Nov  9 17:16 Desktop
drwxr-xr-x 3 plaue users 4096 Aug 20 10:51 temp
drwxr-xr-x 2 plaue users 4096 Sep 30 14:05 temp2
-bash-3.2$ exit
logout
Connection to odin.cs.uga.edu closed.
[MacBook-Pro:~] cplae%
```