

Lesson Module Status

- Slides – draft
 - Properties - done
 - Flash cards –
 - First minute quiz – done
 - Web calendar summary – done
 - Web book pages – done
 - Commands – done
 - Lab – done
 - Supplies () - na
 - Class PC's – na
 - Chocolates - bringing
-
- Backup headset charged - done
 - CCC Confer wall paper - done
 - Slides & Lab uploaded - done
 - Slides copied to thumb drive -done
 - Final project posted - done
 - Extra credit labs posted - done



Dennis



Christopher



Francisco



Rich

Instructor: **Rich Simms**
Dial-in: **888-450-4821**
Passcode: **761867**



Abd



Sarah



Astitow



Mike D.



Alex



Christine



Steven



Richie



Nathan



Tony



Sergio



Anthony



Fernando



Miguel



Lars



Jennifer



Rudy



Laura P.



Nick



Juan



Jacob



Andrew



Luke



Saulius

Online Class Students



Edtson



James B.



Liz



Casady



Jason



Aaron



Steve



Songul



Stephanie



Victor



Tanya



Mike P.



Adriana



Laura S.



Olivia



Janelle

Email me (risimms@cabrillo.edu) a relatively current photo of your face for 3 points extra credit

Quiz

No Quiz
Today !



- [] Has the phone bridge been added?
- [] Is recording on?
- [] Does the phone bridge have the mike?
- [] Share slides, putty (rsimms, simmsben, roddyduk), Chrome and Eko VM
- [] Disable spelling on PowerPoint

File Transfer and Review

Objectives	Agenda
<ul style="list-style-type: none">• Transfer project files to Windows and Linux systems• Prepare for final exam	<ul style="list-style-type: none">• No Quiz• Questions from last week• File transfer continued• Practice Test #3• Project Workshop (optional)

Previous material and assignment

1. Questions?



Housekeeping

Progress Check Remaining points to earn
12/5/2010

Forum-4 20
Test-3 30 + 10XC
Final project 60 + 30XC
Extra credit 0-90XC

Percentage	Total Points	Letter Grade	Pass/No Pass
90% or higher	504 or higher	A	Pass
80% to 89.9%	448 to 503	B	Pass
70% to 79.9%	392 to 447	C	Pass
60% to 69.9%	336 to 391	D	No pass
0% to 59.9%	0 to 335	F	No pass

adaldrida	311
alatar	361
amroth	266
anborn	37
arador	321
arwen	413
balrog	329
barliman	481
beregond	75
berethor	386
bilbo	289
bombadil	325
carc	346
celebrian	438

cirdan	456
denethor	410
durin	348
dwalin	441
elrond	501
eomer	325
eowyn	385
frodo	382
gamling	410
gimli	441
gorbag	172
grima	116
gwaihir	409
huan	454

ingold	440
ioreth	433
khamul	119
lobelia	388
marhari	369
nazgul	386
nessa	150
orome	390
quickbeam	348
samwise	434
saruman	398
shadowfax	507
theoden	395
tulkas	455
varda	383

Let me know if your Grade or P/NP option is correct

Due midnight tonight:

- Final Project submittal

Due midnight December 15:

- Five forum posts
- Extra credit labs

Next week is **Cabrillo Finals Week**

- Our final exam is Test #3 (30 points)
Practice test is available on the website
- Time: 1:00PM - 3:50PM
Starting 15 minutes earlier than usual
- Date: December 15th
- Place: Room 2501 or online



Possible Points	Requirements
30	Implementing all five tasks (6 points each): <ul style="list-style-type: none"> • Requirements for each task: <ul style="list-style-type: none"> - Minimum of 10 script command lines - Has comments to explain what it does - Has user interaction
25	You don't have to do all of these but do at least five: <ul style="list-style-type: none"> • Redirecting stdin (5 points) • Redirecting stdout (5 points) • Redirecting stderr (5 points) • Use of permissions (5 points) • Use of filename expansion characters (5 points) • Use of absolute path (5 points) • Use of relative path (5 points) • Use of a PID (5 points) • Use of inodes (5 points) • Use of links (5 points) • Use of a GID or group (5 points) • Use of a UID or user (5 points) • Use of a signal (5 points) • Use of piping (5 points) • Use of an environment variable (5 points) • Use of a comment (5 points) • Use of /bin/mail (5 points) • Use of a conditional (5 points) The maximum for this section are 25 points.
5	Present your script in front of the class
Points lost	
-15	Fails to run from /home/cis90/bin/allscripts
-15	The other users in the cis90 group are unable to read and execute your script.
-5	For each error message displayed
Extra credit	
30	Up to three additional tasks (10 points each)

Please don't overlook this part of the grading rubric!

Final Project Check

```
[rsimms@opus ~]$ /home/cis90/bin/testscripts
```

```
***** AOK *****
```

```
-rwxr-xr-x 1 antiden cis90 15721 Dec  8 00:33 /home/cis90/antiden/bin/myscript is AOK (Dennis) :-)
-rwxr-x--- 1 birmijam cis90 752 Dec  7 09:41 /home/cis90/birmijam/bin/myscript is AOK (James) :-)
-rwxr-x--- 1 botoschr cis90 3587 Dec  8 07:47 /home/cis90/botoschr/bin/myscript is AOK (Christopher) :-)
-rwxr-x--- 1 brownliz cis90 915 Nov 26 14:40 /home/cis90/brownliz/bin/myscript is AOK (Liz) :-)
-rwxr-x--- 1 cardefra cis90 1911 Dec  6 14:09 /home/cis90/cardefra/bin/myscript is AOK (Francisco) :-)
-rwxr-x--- 1 dakkaabd cis90 7660 Dec  2 23:15 /home/cis90/dakkaabd/bin/myscript is AOK (Abd) :-)
-rwxr-x--- 1 daviesar cis90 4500 Dec  7 22:01 /home/cis90/daviesar/bin/myscript is AOK (Sarah) :-)
-rwxr-x--- 1 dawadast cis90 1059 Dec  6 14:58 /home/cis90/dawadast/bin/myscript is AOK (Astitow) :-)
-rwxr-x--- 1 delfimik cis90 31732 Dec  7 22:00 /home/cis90/delfimik/bin/myscript is AOK (Mike) :-)
-rwxr-xr-x 1 derriale cis90 497 Nov 24 16:03 /home/cis90/derriale/bin/myscript is AOK (Alex) :-)
-rwxr-x--- 1 dingechr cis90 1433 Dec  6 23:23 /home/cis90/dingechr/bin/myscript is AOK (Christine) :-)
-rwxr-x--x 1 enriqste cis90 766 Dec  6 14:41 /home/cis90/enriqste/bin/myscript is AOK (Steve) :-)
-rwxr-x--- 1 garciton cis90 3541 Dec  6 20:35 /home/cis90/garciton/bin/myscript is AOK (Tony) :-)
-rwxr-xr-x 1 hamiljas cis90 708 Dec  7 21:09 /home/cis90/hamiljas/bin/myscript is AOK (Jason) :-)
-rwxr-xr-x 1 hrdinste cis90 2174 Dec  7 16:22 /home/cis90/hrdinste/bin/myscript is AOK (Steve) :-)
-rwxr-x--- 1 martiant cis90 12516 Dec  8 07:44 /home/cis90/martiant/bin/myscript is AOK (Anthony) :-)
-rwxr-x--- 1 messison cis90 5403 Dec  6 14:12 /home/cis90/messison/bin/myscript is AOK (Songul) :-)
-rwxr-x--- 1 mottste cis90 808 Nov 17 14:27 /home/cis90/mottste/bin/myscript is AOK (Stephanie) :-)
-rwxr-x--- 1 ojedavic cis90 5202 Dec  8 02:19 /home/cis90/ojedavic/bin/myscript is AOK (Victor) :-)
-rwxr-x--- 1 orozcmig cis90 2194 Dec  7 16:23 /home/cis90/orozcmig/bin/myscript is AOK (Miguel) :-)
-rwxr-x--- 1 palmilar cis90 3322 Dec  7 06:14 /home/cis90/palmilar/bin/myscript is AOK (Lars) :-)
-rwxrwxrwx 1 parrijen cis90 15240 Dec  7 21:55 /home/cis90/parrijen/bin/myscript is AOK (Jennifer) :-)
-rwxr-x--- 1 pennitan cis90 5664 Dec  4 18:30 /home/cis90/pennitan/bin/myscript is AOK (Tanya) :-)
-rwxr-x--- 1 pirkllau cis90 11504 Dec  6 14:01 /home/cis90/pirkllau/bin/myscript is AOK (Laura) :-)
-rwxr-xr-x 1 plastadr cis90 9097 Dec  7 15:36 /home/cis90/plastadr/bin/myscript is AOK (Adriana) :-)
-rwxr-x--- 1 redmanic cis90 481 Dec  1 13:33 /home/cis90/redmanic/bin/myscript is AOK (Nick) :-)
-rwxr-x--- 1 rochajua cis90 1937 Dec  7 22:00 /home/cis90/rochajua/bin/myscript is AOK (Juan) :-)
-rwxr-xr-x 1 roddyduk cis90 4528 Dec  1 09:06 /home/cis90/roddyduk/bin/myscript is AOK (Duke) :-)
-r-xr-x--- 1 salinjac cis90 4325 Dec  7 20:26 /home/cis90/salinjac/bin/myscript is AOK (Jacob) :-)
-rwxr-xr-x 1 simmsben cis90 10511 Nov 13 13:27 /home/cis90/simmsben/bin/myscript is AOK (Benji) :-)
-rwxr-xr-x 1 srecklau cis90 75894 Dec  8 07:26 /home/cis90/srecklau/bin/myscript is AOK (Laura) :-)
-rwxr-x--- 1 valaddre cis90 1293 Dec  1 15:42 /home/cis90/valaddre/bin/myscript is AOK (Drew) :-)
-rwxrwxr-x 1 velasliv cis90 633 Nov 17 15:10 /home/cis90/velasliv/bin/myscript is AOK (Olivia) :-)
-rwxr-x--- 1 wattsluk cis90 3732 Dec  8 03:08 /home/cis90/wattsluk/bin/myscript is AOK (Luke) :-)
-rwxr-xr-x 1 woodjan cis90 3154 Dec  8 04:58 /home/cis90/woodjan/bin/myscript is AOK (Janelle) :-)
-rwxr-x--x 1 zilissau cis90 3000 Dec  8 01:46 /home/cis90/zilissau/bin/myscript is AOK (Saulius) :-)
```

Final Project Check

```
[rsimms@opus ~]$ /home/cis90/bin/testscripts

***** myscript is missing *****
Oops, no /home/cis90/beltredt/bin/myscript file found for beltredt (Edtson) :-(
Oops, no /home/cis90/dahlicas/bin/myscript file found for dahlicas (Casady) :-(
Oops, no /home/cis90/fouric/bin/myscript file found for fouric (Richie) :-(
Oops, no /home/cis90/galbrnat/bin/myscript file found for galbrnat (Nathan) :-(
Oops, no /home/cis90/hernaaar/bin/myscript file found for hernaaar (Aaron) :-(
Oops, no /home/cis90/komicser/bin/myscript file found for komicser (Sergio) :-(
Oops, no /home/cis90/menafer/bin/myscript file found for menafer (Fernando) :-(
Oops, no /home/cis90/perezrud/bin/myscript file found for perezrud (Rudy) :-(
Oops, no /home/cis90/pitzemik/bin/myscript file found for pitzemik (Mike) :-(

***** r or x permission missing *****
[rsimms@opus ~]$
```

Points lost	
-15	Fails to run from <code>/home/cis90/bin/allscripts</code>
-15	The other users in the cis90 group are unable to read and execute your script.
-5	For each error message displayed

*Note, you can lose up to 30 points if your script cannot be run from **allscripts** by other students in the class*

Additional Linux courses:

CIS 130 - Linux/UNIX Shell Programming

CIS 191 - Linux/UNIX System Administration

CIS 192 - Linux/UNIX Network Administration

CIS 193 - Linux/UNIX Security Administration




CIS 130 UNIX/Linux Shell Programming

Presents an introduction to shell programming in a UNIX/Linux environment, and is designed for system administrators or technical users with little or no programming background. Prerequisites: CIS 90.

Section	Days	Times	Units	Instructor	Room
71122	T	06:00PM-09:05PM	4.00	J.Griffin	2501
&	Arr.	Arr.		J.Griffin	OL

Section 71122 is a Hybrid ONLINE course. It meets weekly throughout the semester at the scheduled times with an additional 6 hr 10 min online lab per week. For details, see instructor's web page at www.cabrillo.edu/services/disted/online.html. Students will be required to show that they meet the course prerequisites.

Register now to get in this course for the Spring 2011 term

CIS 90 Introduction to UNIX/Linux 

Provides a technical overview of the UNIX/Linux operating system, including hands-on experience with commands, files, and tools. Recommended Preparation: CS 1L or CIS 172.

Transfer Credit: CSU.

Section	Days	Times	Units	Instructor	Room
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71336	Th	01:15-4:20PM	3.00	R.Simms	OL
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Section 71336 is an ONLINE course. All classes will meet weekly using CCC Confer on Thursdays 1:15PM-4:20PM. Required online orientation Thursday 2/10, 1:15PM-4:20PM. For instructions on attending online with CCC Confer, e-mail the instructor at risimms@cabrillo.edu. For details, see instructor's web page at www.cabrillo.edu/services/disted/online.html.

70037	W & Arr.	01:15PM-04:20PM Arr.	3.00	J.Griffin J.Griffin	2501 OL
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Section 70037 is a Hybrid ONLINE course. It meets weekly throughout the semester at the scheduled times with an additional 3 hr 5 min online lab per week. For details, see instructor's web page at www.cabrillo.edu/services/disted/online.html.

*Online section
using CCC Confer
Th afternoons*

*Classroom section
meets in the 2501
classroom on the Aptos
campus W afternoon*

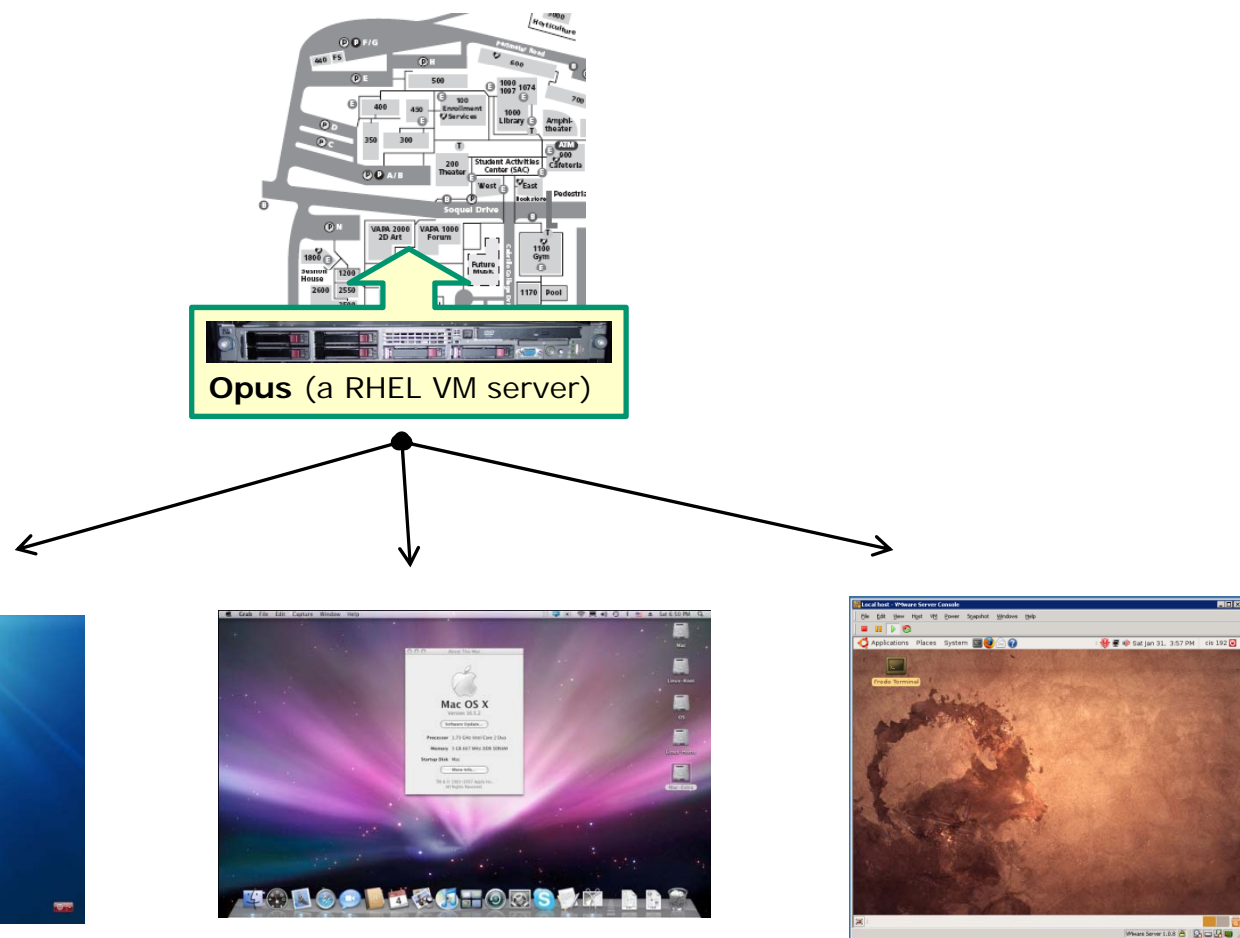
If you have friends who are interested in UNIX/Linux, let them know we have two CIS 90 sections available to choose from for next Spring



File Transfer

File Transfer

Downloading your Opus file to your home computer



Windows

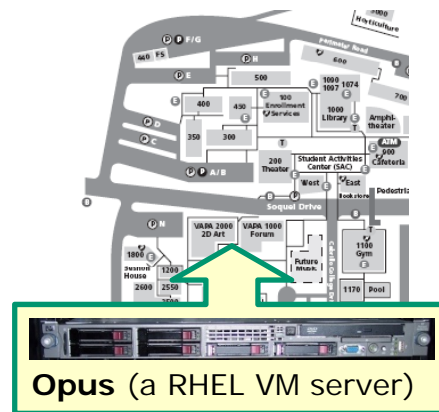
Mac

Linux 18

File Transfer Windows Filezilla

File Transfer

Downloading your Opus file to your home computer



Windows

*For Windows you can use the pscp
(Putty scp) program or a file transfer
utility like Filezilla*

File Transfer

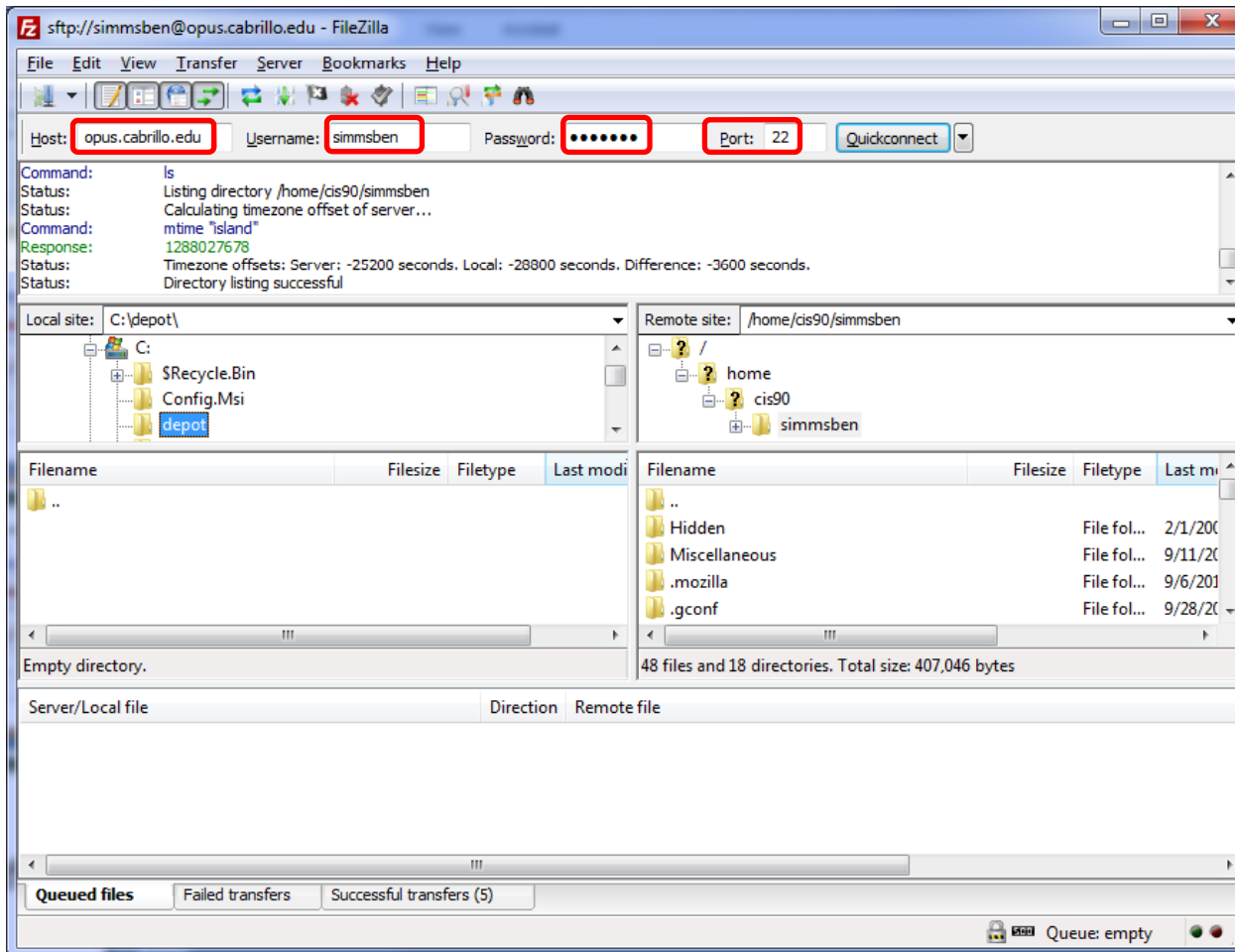
Downloading your Opus file to Windows using Filezilla

<http://filezilla-project.org/download.php>

The screenshot shows a web browser window displaying the FileZilla project's download page. The browser's address bar shows the URL `filezilla-project.org/download.php`. The page features the FileZilla logo and the tagline "The free FTP solution". A sidebar on the left contains navigation links for Home, FileZilla (Features, Screenshots, Download, Documentation), FileZilla Server (Download), General (Contact, Forum, Project page, Wiki), and Development (Source code, Nightly builds, Translations, Version history, Changelog, Issue tracker). A "PayPal DONATE" button and "Sponsors: Supported by artmotion" are also visible. The main content area is titled "Client Download" and states: "The latest stable version of FileZilla Client is 3.3.5.1. Please select the file appropriate for your platform below." Under the "Windows" section, it lists two options: `FileZilla_3.3.5.1_win32-setup.exe` (recommended) and `FileZilla_3.3.5.1_win32.zip`. It notes that "Windows XP, Vista and Windows 7 are supported". Under the "Linux" section, it lists `FileZilla_3.3.5.1_i586-linux-gnu.tar.bz2` and `FileZilla_3.3.5.1_x86_64-linux-gnu.tar.bz2`, with a note: "Built for Debian 5.0 (Lenny). It is highly recommended to use the package management system of your distribution or to manually compile FileZilla if you are running a different flavour of Linux." Under the "Mac OS X" section, it lists `FileZilla_3.3.5.1_i686-apple-darwin9.app.tar.bz2` (Intel) and `FileZilla_3.3.5.1_powerpc-apple-darwin9.app.tar.bz2` (PowerPC G4). An inset window in the bottom right corner shows the FileZilla client interface with a file list.

File Transfer

Downloading your Opus file to Windows using Filezilla

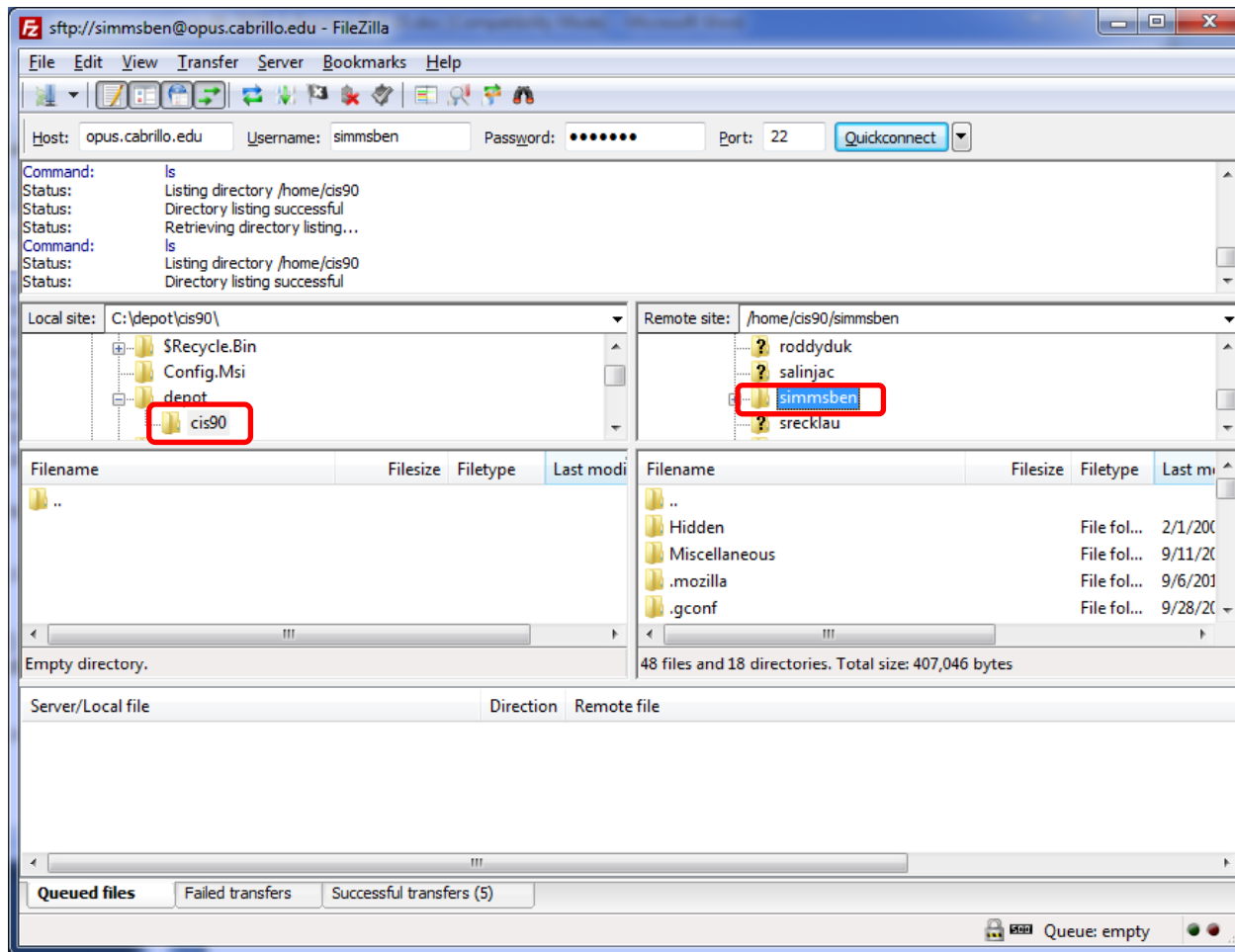


*Specify
opus.cabrillo.edu as
the host name with
your Opus username,
password and port 22
then click
Quickconnect*

File Transfer

Downloading your Opus file to Windows using Filezilla

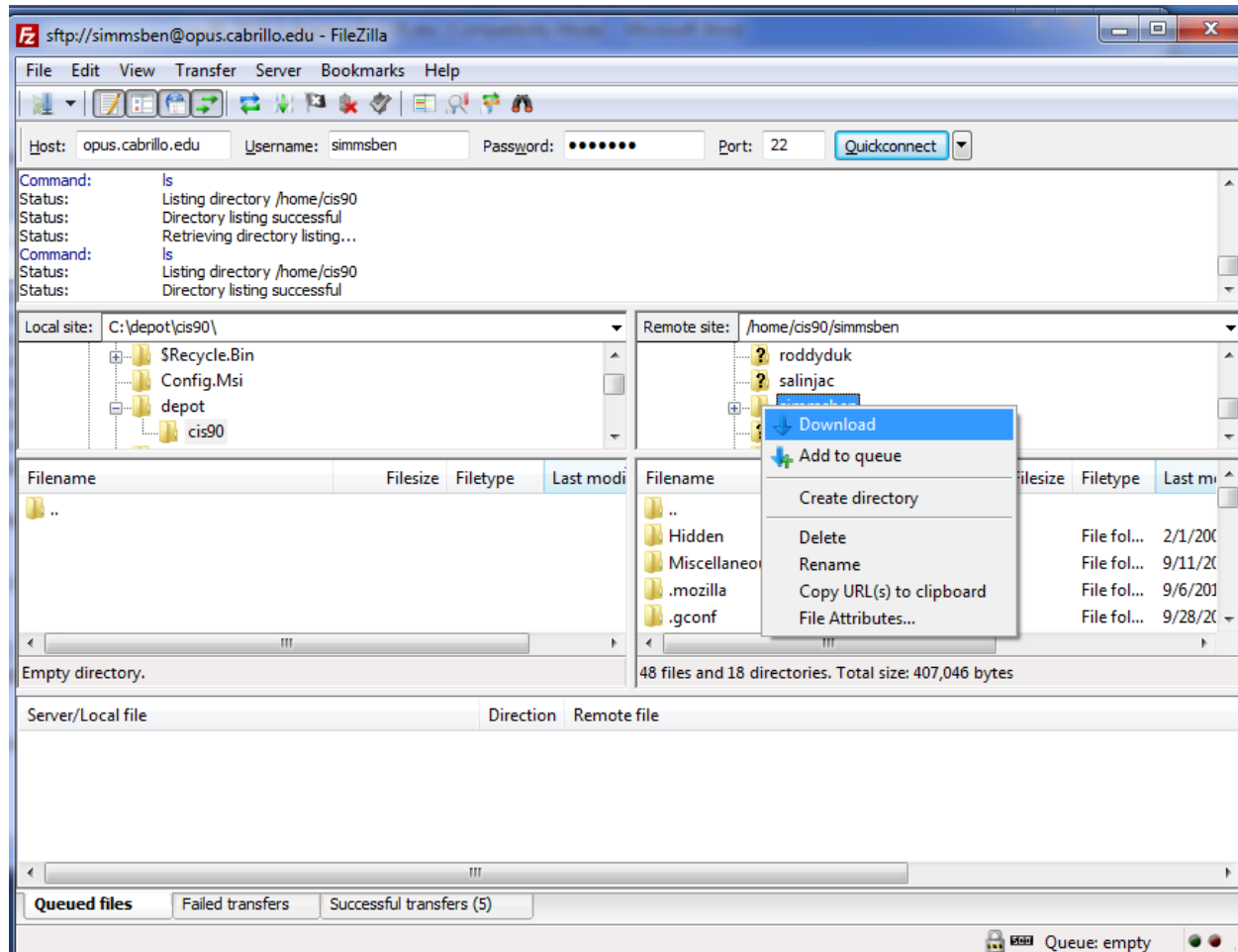
Select local folder to download file into



Select directory on Opus to download

File Transfer

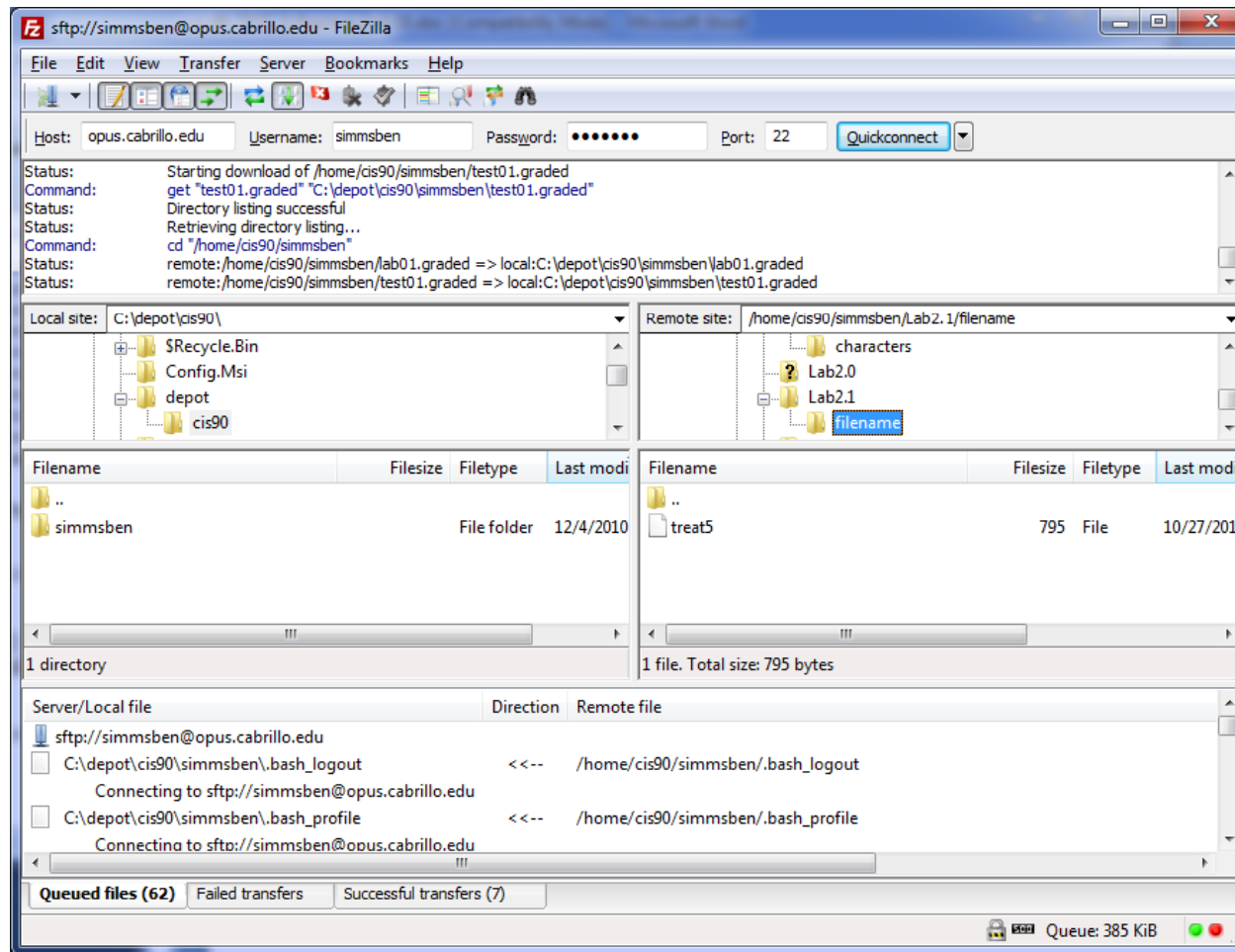
Downloading your Opus file to Windows using Filezilla



Right-click on the Opus directory and select Download

File Transfer

Downloading your Opus file to Windows using Filezilla



And away it goes downloading every file and directory it finds in the Opus directory you selected to your local folder

File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

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

PuTTY Download Page

[Home](#) | [Licence](#) | [FAQ](#) | [Docs](#) | [Download](#) | [Keys](#) | [Links](#)
[Mirrors](#) | [Updates](#) | [Feedback](#) | [Changes](#) | [Wishlist](#) | [Team](#)

Here are the PuTTY files themselves:

- PuTTY (the Telnet and SSH client itself)
- PSCP (an SCP client, i.e. command-line secure file copy)
- PSFTP (an SFTP client, i.e. general file transfer sessions much like FTP)
- PuTTYtel (a Telnet-only client)
- Plink (a command-line interface to the PuTTY back ends)
- Pageant (an SSH authentication agent for PuTTY, PSCP and Plink)
- PuTTYgen (an RSA and DSA key generation utility).

LEGAL WARNING: Use of PuTTY, PSCP, PSFTP and Plink is illegal in countries where encryption is outlawed. I believe it is legal to use PuTTY, PSCP, PSFTP and Plink in England and Wales and in many other countries, but I am not a lawyer and so if in doubt you should seek legal advice before downloading it. You may find [this site](#) useful (it's a survey of cryptography laws in many countries) but I can't vouch for its correctness.

Use of the Telnet-only binary (PuTTYtel) is unrestricted by any cryptography laws.

The files we offer below are cryptographically signed. We also supply cryptographically signed lists of MD5 checksums. To download our public keys and find out more about our signature policy, visit the [Keys page](#). If you need a Windows program to compute MD5 checksums, you could try the one at [this site](#). (This MD5 program is also cryptographically signed by its author.)

Binaries

The latest release version (beta 0.60). This will generally be a version I think is reasonably likely to work well. If you have a problem with the release version, it might be worth trying out the latest development snapshot (below) to see if I've already fixed the bug, before reporting it to me.

For Windows on Intel x86

PuTTY:	putty.exe	(or by FTP)	(RSA sig)	(DSA sig)
PuTTYtel:	puttytel.exe	(or by FTP)	(RSA sig)	(DSA sig)
PSCP:	pscp.exe	(or by FTP)	(RSA sig)	(DSA sig)
PSFTP:	psftp.exe	(or by FTP)	(RSA sig)	(DSA sig)

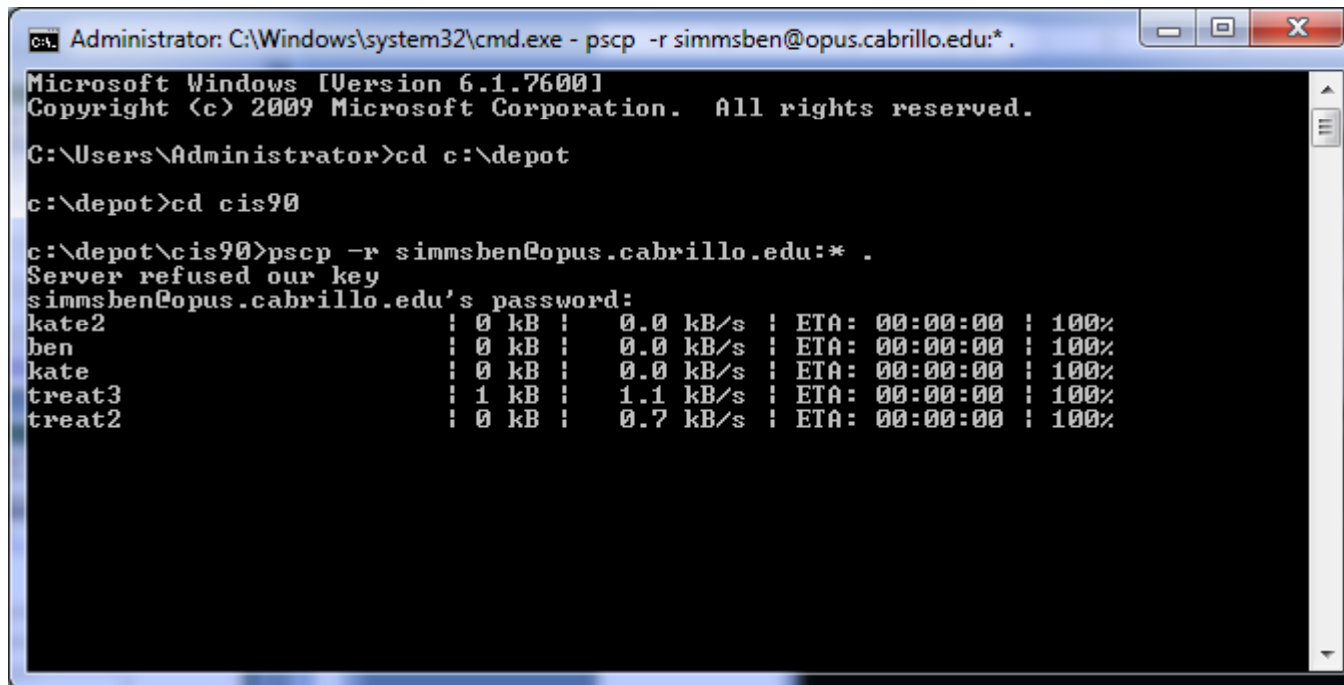
Download the pscp file and place it in your windows folder

File Transfer Windows pscp

File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

```
pscp -r username@opus.cabrillo.edu: * .
```



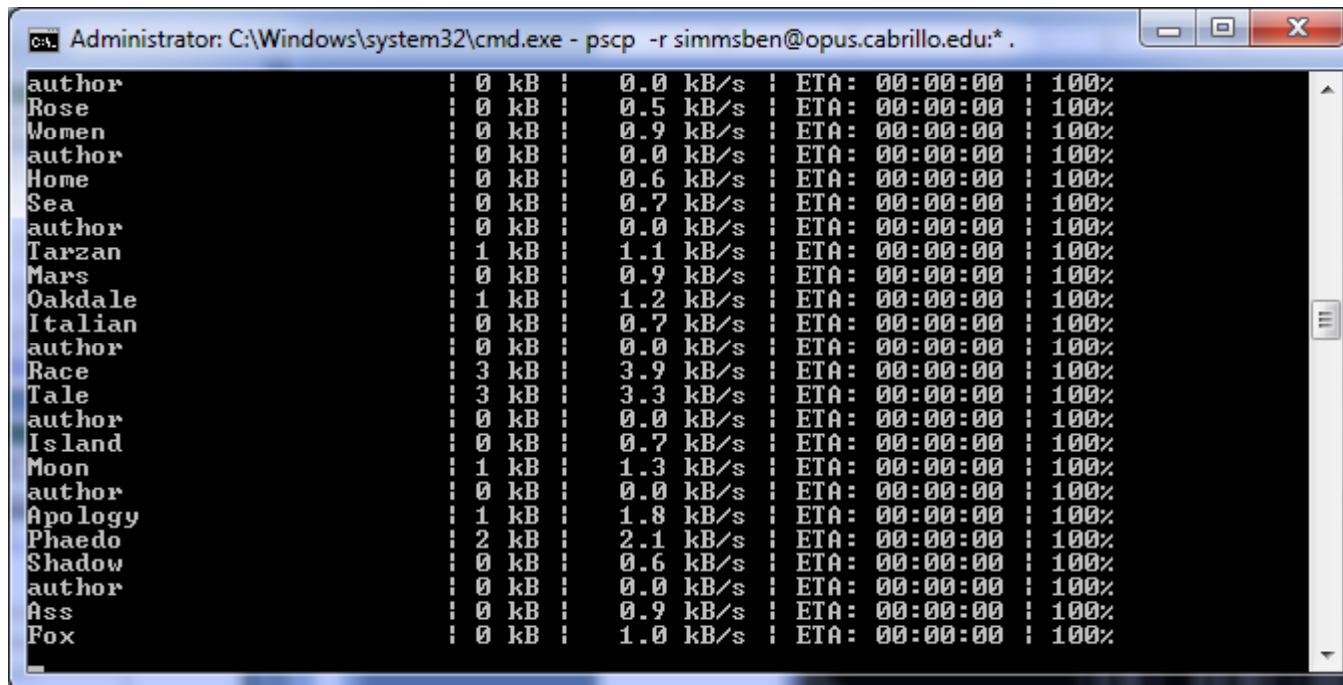
```
Administrator: C:\Windows\system32\cmd.exe - pscp -r simmsben@opus.cabrillo.edu:* .  
Microsoft Windows [Version 6.1.7600]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.  
C:\Users\Administrator>cd c:\depot  
c:\depot>cd cis90  
c:\depot\cis90>pscp -r simmsben@opus.cabrillo.edu:* .  
Server refused our key  
simmsben@opus.cabrillo.edu's password:  
kate2      | 0 kB | 0.0 kB/s | ETA: 00:00:00 | 100%  
ben        | 0 kB | 0.0 kB/s | ETA: 00:00:00 | 100%  
kate       | 0 kB | 0.0 kB/s | ETA: 00:00:00 | 100%  
treat3     | 1 kB | 1.1 kB/s | ETA: 00:00:00 | 100%  
treat2     | 0 kB | 0.7 kB/s | ETA: 00:00:00 | 100%
```

Navigate to the local folder where you want to download your Opus file to then use the pscp command with the -r option to recursively download all the files in your home directory

File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

```
pscp -r username@opus.cabrillo.edu: * .
```



```
Administrator: C:\Windows\system32\cmd.exe - pscp -r simmsben@opus.cabrillo.edu:* .  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Rose            : 0 kB : 0.5 kB/s : ETA: 00:00:00 : 100%  
Women           : 0 kB : 0.9 kB/s : ETA: 00:00:00 : 100%  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Home            : 0 kB : 0.6 kB/s : ETA: 00:00:00 : 100%  
Sea             : 0 kB : 0.7 kB/s : ETA: 00:00:00 : 100%  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Tarzan          : 1 kB : 1.1 kB/s : ETA: 00:00:00 : 100%  
Mars            : 0 kB : 0.9 kB/s : ETA: 00:00:00 : 100%  
Oakdale         : 1 kB : 1.2 kB/s : ETA: 00:00:00 : 100%  
Italian         : 0 kB : 0.7 kB/s : ETA: 00:00:00 : 100%  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Race            : 3 kB : 3.9 kB/s : ETA: 00:00:00 : 100%  
Tale            : 3 kB : 3.3 kB/s : ETA: 00:00:00 : 100%  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Island         : 0 kB : 0.7 kB/s : ETA: 00:00:00 : 100%  
Moon            : 1 kB : 1.3 kB/s : ETA: 00:00:00 : 100%  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Apology         : 1 kB : 1.8 kB/s : ETA: 00:00:00 : 100%  
Phaedo          : 2 kB : 2.1 kB/s : ETA: 00:00:00 : 100%  
Shadow          : 0 kB : 0.6 kB/s : ETA: 00:00:00 : 100%  
author          : 0 kB : 0.0 kB/s : ETA: 00:00:00 : 100%  
Ass             : 0 kB : 0.9 kB/s : ETA: 00:00:00 : 100%  
Fox             : 0 kB : 1.0 kB/s : ETA: 00:00:00 : 100%
```

File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

```
pscp -r username@opus.cabrillo.edu: * .
```

```
Administrator: C:\Windows\system32\cmd.exe
proposal2      | 2 kB | 2.1 kB/s | ETA: 00:00:00 | 100%
manpage       | 10 kB | 10.3 kB/s | ETA: 00:00:00 | 100%
better_town   | 1 kB | 1.3 kB/s | ETA: 00:00:00 | 100%
file.dos      | 0 kB | 0.1 kB/s | ETA: 00:00:00 | 100%
mystery       | 3 kB | 3.4 kB/s | ETA: 00:00:00 | 100%
fruit         | 0 kB | 0.1 kB/s | ETA: 00:00:00 | 100%
salad         | 0 kB | 0.1 kB/s | ETA: 00:00:00 | 100%
bigfile       | 10 kB | 10.3 kB/s | ETA: 00:00:00 | 100%
.history      | 0 kB | 0.0 kB/s | ETA: 00:00:00 | 100%
what_am_i    | 0 kB | 0.3 kB/s | ETA: 00:00:00 | 100%
dogs.tar      | 110 kB | 110.0 kB/s | ETA: 00:00:00 | 100%
smb.conf      | 9 kB | 9.5 kB/s | ETA: 00:00:00 | 100%
timecal       | 0 kB | 0.5 kB/s | ETA: 00:00:00 | 100%
test01.graded | 4 kB | 4.2 kB/s | ETA: 00:00:00 | 100%
lab01.graded  | 0 kB | 0.4 kB/s | ETA: 00:00:00 | 100%
uhistory      | 32 kB | 32.9 kB/s | ETA: 00:00:00 | 100%
.bash_profile | 0 kB | 0.3 kB/s | ETA: 00:00:00 | 100%
.bash_history | 16 kB | 16.1 kB/s | ETA: 00:00:00 | 100%
spellk       | 0 kB | 0.5 kB/s | ETA: 00:00:00 | 100%
.bash_logout  | 0 kB | 0.0 kB/s | ETA: 00:00:00 | 100%
scp: unable to open directory ./Hidden.bak: permission denied

c:\depot\cis90>_
```

File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

```

Administrator: C:\Windows\system32\cmd.exe
c:\depot\cis90>dir
Volume in drive C has no label.
Volume Serial Number is EE43-96D3

Directory of c:\depot\cis90

12/04/2010 04:40 PM <DIR>      .
12/04/2010 04:40 PM <DIR>      ..
12/04/2010 04:39 PM          146 .bashrc
12/04/2010 04:40 PM       16,438 .bash_history
12/04/2010 04:40 PM           24 .bash_logout
12/04/2010 04:40 PM        354 .bash_profile
12/04/2010 04:38 PM        515 .emacs
12/04/2010 04:38 PM <DIR>      .gconf
12/04/2010 04:38 PM <DIR>      .gconfd
12/04/2010 04:40 PM          36 .history
12/04/2010 04:40 PM          47 .lesshst
12/04/2010 04:39 PM <DIR>      .mozilla
12/04/2010 04:39 PM          40 .plan
12/04/2010 04:38 PM          82 .sh_history
12/04/2010 04:40 PM <DIR>      .ssh
12/04/2010 04:39 PM        6,081 .viminfo
12/04/2010 04:40 PM       10,576 bigfile
12/04/2010 04:39 PM          70 bigshell
12/04/2010 04:39 PM <DIR>      bin
12/04/2010 04:38 PM          22 characters
12/04/2010 04:39 PM       11,013 checkx2.bak
12/04/2010 04:40 PM           0 chmod
12/04/2010 04:39 PM           0 cinderella
12/04/2010 04:40 PM           0 cinderella.ba
12/04/2010 04:38 PM <DIR>      class
  
```

```

Administrator: C:\Windows\system32\cmd.exe
12/04/2010 04:40 PM <DIR>      Lab2.0
12/04/2010 04:38 PM <DIR>      Lab2.1
12/04/2010 04:38 PM          1,028 labx2
12/04/2010 04:38 PM          1,044 letter
12/04/2010 04:39 PM          104 log
12/04/2010 04:38 PM       122,791 mbox
12/04/2010 04:40 PM <DIR>      Miscellaneous
12/04/2010 04:40 PM          759 mission
12/04/2010 04:39 PM           0 myfile
12/04/2010 04:38 PM <DIR>      poems
12/04/2010 04:39 PM          1,074 proposal1
12/04/2010 04:40 PM          2,175 proposal2
12/04/2010 04:39 PM          2,054 proposal3
12/04/2010 04:39 PM          1,580 small_town
12/04/2010 04:40 PM          9,733 smb.conf
12/04/2010 04:38 PM           70 songul
12/04/2010 04:40 PM          485 spellk
12/04/2010 04:39 PM           6 stash
12/04/2010 04:40 PM          4,276 test01.graded
12/04/2010 04:38 PM          250 text.err
12/04/2010 04:38 PM          231 text.fxd
12/04/2010 04:40 PM          509 timecal
12/04/2010 04:38 PM          1,484 treat1
12/04/2010 04:40 PM       33,699 uhistory
12/04/2010 04:39 PM           6 veronica
12/04/2010 04:40 PM          352 what_am_i
          48 File(s)          407,046 bytes
          19 Dir(s)       43,865,870,336 bytes free

c:\depot\cis90>_
  
```

Use the dir command to review what you have downloaded

File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

More example pscp commands

```
c:\depot\bin>pscp -r simmsben@opus.cabrillo.edu:/home/cis90/answers/* .
simmsben@opus.cabrillo.edu's password:
lab04          | 0 kB | 0.5 kB/s | ETA: 00:00:00 | 100%
lab10          | 1 kB | 1.6 kB/s | ETA: 00:00:00 | 100%
lab07          | 10 kB | 11.0 kB/s | ETA: 00:00:00 | 100%
lab05          | 0 kB | 0.8 kB/s | ETA: 00:00:00 | 100%
lab09          | 2 kB | 2.8 kB/s | ETA: 00:00:00 | 100%
lab06          | 4 kB | 4.4 kB/s | ETA: 00:00:00 | 100%
lab03          | 32 kB | 32.9 kB/s | ETA: 00:00:00 | 100%
lab02          | 1 kB | 1.1 kB/s | ETA: 00:00:00 | 100%
lab01          | 0 kB | 0.2 kB/s | ETA: 00:00:00 | 100%
test01        | 1 kB | 1.2 kB/s | ETA: 00:00:00 | 100%
test02        | 1 kB | 1.4 kB/s | ETA: 00:00:00 | 100%
lab08          | 5 kB | 5.2 kB/s | ETA: 00:00:00 | 100%

c:\depot\bin>
```


File Transfer

Downloading your Opus file to Windows using pscp (Putty scp)

More example pscp commands

```
c:\depot>pscp -r simmsben@opus.cabrillo.edu:/home/cis90/bin/riddle* .
simmsben@opus.cabrillo.edu's password:
riddle                | 0 kB | 0.9 kB/s | ETA: 00:00:00 | 100%
riddle2               | 0 kB | 0.9 kB/s | ETA: 00:00:00 | 100%
riddle1               | 0 kB | 0.9 kB/s | ETA: 00:00:00 | 100%
```

```
c:\depot>pscp -r simmsben@opus.cabrillo.edu:/home/cis90/bin/all* .
simmsben@opus.cabrillo.edu's password:
allscripts            | 4 kB | 4.3 kB/s | ETA: 00:00:00 | 100%
allscripts.v1         | 3 kB | 4.0 kB/s | ETA: 00:00:00 | 100%
allscripts.v2         | 4 kB | 4.3 kB/s | ETA: 00:00:00 | 100%
```

File Transfer

Linux or Mac

scp

File Transfer

Downloading your Opus files to Linux or Mac using scp

scp -r simmsben@opus.cabrillo.edu:* . *To download files*

```

cis90@eko: ~/$ mkdir cis90
cis90@eko:~/cis90$ cd cis90
cis90@eko:~/cis90$ mkdir simmsben
cis90@eko:~/cis90$ cd simmsben
cis90@eko:~/cis90/simmsben$ scp -r simmsben@opus.cabrillo.edu:* .
simmsben@opus.cabrillo.edu's password:
bigfile                100% 10KB 10.3KB/s 00:00
bigshell               100% 70   0.1KB/s 00:00
newfile10              100% 0    0.0KB/s 00:00
mydate                 100% 17   0.0KB/s 00:00
tumajan                100% 13KB 12.6KB/s 00:00
banner                 100% 6160 6.0KB/s 00:01
exscript               100% 1282 1.3KB/s 00:00
enlightenment         100% 3442 3.4KB/s 00:00
hi                     100% 107  0.1KB/s 00:00
newfile11              100% 0    0.0KB/s 00:00
myscript               100% 10KB 10.3KB/s 00:00
tryme                  100% 174  0.2KB/s 00:00
example401             100% 112  0.1KB/s 00:00
treed                  100% 190  0.2KB/s 00:00
rossjun                100% 3744 3.7KB/s 00:00
zoom                   100% 74   0.1KB/s 00:00
typescript             100% 639  0.6KB/s 00:00
I                      100% 375  0.4KB/s 00:00
  
```

File Transfer

Downloading your Opus files to Linux or Mac using scp

Is *To review what was downloaded*

```

cis90@eko: ~/cis90/simmsben
File Edit View Terminal Help
songul          100% 70    0.1KB/s  00:00
spellk         100% 485   0.5KB/s  00:00
stash          100% 6     0.0KB/s  00:00
test01.graded  100% 4276  4.2KB/s  00:00
text.err       100% 250   0.2KB/s  00:00
text.fxd       100% 231   0.2KB/s  00:00
timecal        100% 509   0.5KB/s  00:00
treatl         100% 1484  1.5KB/s  00:00
uhistory       100% 33KB  32.9KB/s 00:00
veronica       100% 6     0.0KB/s  00:00
what_am_i      100% 352   0.3KB/s  00:00
cis90@eko:~/cis90/simmsben$ ls
bigfile          Directory2  lab03.graded  myfile         text.err
bigshell         Directory3  lab07         poems          text.fxd
bin              dogs        lab10         proposal1      timecal
characters        dogs.tar    Lab2.0        proposal2      treatl
checkx2.bak      empty       Lab2.1        proposal3      uhistory
chmod            etc         labx2         small_town     veronica
cinderella       Hidden      letter        smb.conf       what_am_i
cinderella.bak  httpd.conf log            songul
class            huh         mbox          spellk
dead.letter      island      Miscellaneous  stash
Directory1      lab01.graded mission        test01.graded
cis90@eko:~/cis90/simmsben$

```

File Transfer

Downloading your Opus files to Linux or Mac using scp

*More example **scp** commands*

```

cis90@eko:~/cis90$ scp -r simmsben@opus.cabrillo.edu:/home/cis90/bin .
simmsben@opus.cabrillo.edu's password:
scp: /home/cis90/bin/final: Permission denied
scp: /home/cis90/bin/ptest: Permission denied
riddle                                100%  895      0.9KB/s   00:00
allscripts                             100% 4367      4.3KB/s   00:00
submit                                 100% 4493      4.4KB/s   00:00
check3                                 100% 1107      1.1KB/s   00:00
berth                                  100%    6      0.0KB/s   00:00
allscripts.v1                          100% 4073      4.0KB/s   00:00
scp: /home/cis90/bin/exam: Permission denied
riddle2                                100%  930      0.9KB/s   00:00
testscripts                             100% 1116      1.1KB/s   00:00
submit.old                              100% 3130      3.1KB/s   00:00
allscripts.v2                           100% 4381      4.3KB/s   00:00
checkx2                                 100%  11KB    10.8KB/s   00:00
check7                                  100% 8451      8.3KB/s   00:00
riddle1                                 100%  895      0.9KB/s   00:00
cis90@eko:~/cis90$ ls
bin  simmsben
cis90@eko:~/cis90$

```

File Transfer

Downloading your Opus files to Linux or Mac using scp

*More example **scp** commands*

```
cis90@eko:~/cis90$ scp -r simmsben@opus.cabrillo.edu:/home/cis90/answers .
simmsben@opus.cabrillo.edu's password:
lab04                               100%  506      0.5KB/s   00:00
lab10                               100% 1612      1.6KB/s   00:01
lab07                               100%  11KB     11.0KB/s  00:00
lab05                               100%  822      0.8KB/s   00:00
lab09                               100% 2877      2.8KB/s   00:00
lab06                               100% 4464      4.4KB/s   00:00
lab03                               100%  33KB     32.9KB/s  00:01
lab02                               100% 1096      1.1KB/s   00:00
lab01                               100%  173      0.2KB/s   00:00
test01                              100% 1190      1.2KB/s   00:00
test02                              100% 1458      1.4KB/s   00:00
lab08                               100% 5364      5.2KB/s   00:00
cis90@eko:~/cis90$ ls
answers  bin  simmsben
cis90@eko:~/cis90$
```



Archiving

Archiving

tar command (on Opus)

Starting in the CIS 90 class directory on Opus

```
/home/cis90 $ find bin/ answers/ roddyduk/  
bin/  
bin/submit  
bin/submit.bak  
bin/exam  
bin/allscripts
```

< snipped >

```
roddyduk/review/news  
roddyduk/review/mail90  
roddyduk/review/banner  
roddyduk/review/finger  
roddyduk/program  
roddyduk/exitscript  
roddyduk/red-12-09-08  
roddyduk/red-12-09-2008  
roddyduk/blue-12-09-2008  
/home/cis90 $
```

Use find to list the files in bin/, answers/, and your /home directory used in this class.

These are the files we will archive and copy to another computer.

Archiving

tar command (on Opus)

Use wc to count the number of files in the three directories

```
/home/cis90 $ find bin/ answers/ roddyduk/ | wc -l  
263  
/home/cis90 $
```

The bin directory has allscripts, riddles and other files used in class. The answers directory has answers for each lab. Your home directory has all the files you made during the course.

Archiving

tar command (on Opus)

verbose
create

Name of tarball to create *directories to backup*

```
/home/cis90 $ tar cvf /home/cis90/roddyduk/roddyduk.tar bin/ answers/ roddyduk/  
bin/  
bin/submit  
bin/submit.bak  
bin/exam  
bin/allscripts
```

< snipped >

```
tar: roddyduk/roddyduk.tar: file is the archive; not dumped  
roddyduk/program  
roddyduk/exitscript  
roddyduk/red-12-09-08  
roddyduk/red-12-09-2008  
roddyduk/blue-12-09-2008  
/home/cis90 $
```

Backup all these files into a single tarball

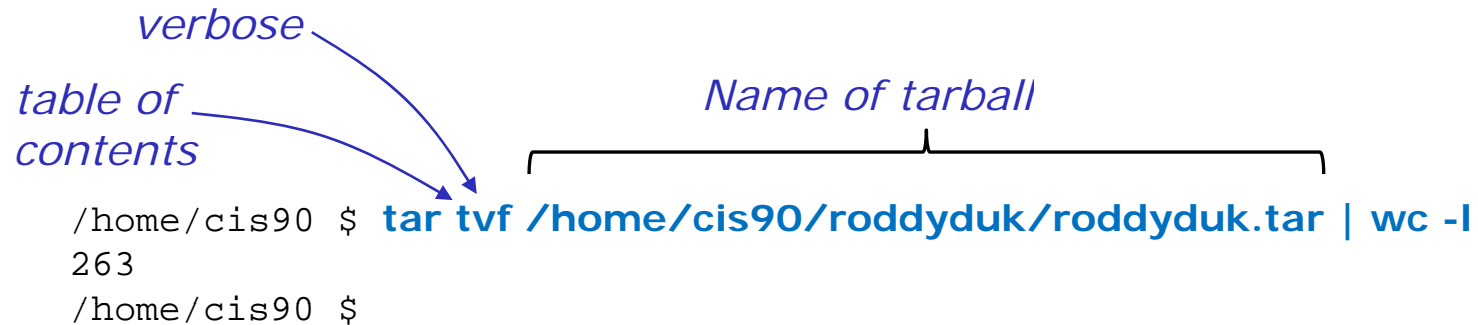
Archiving

tar command (on Opus)

verbose
table of contents

Name of tarball

```
/home/cis90 $ tar tvf /home/cis90/roddyduk/roddyduk.tar | wc -l  
263  
/home/cis90 $
```



Use the t option (table of contents) to list the contents of the tarball which are then piped to wc to count

Archiving

tar command (on Opus)

*Next, compress the archive with **gzip***

```
/home/cis90/roddyduk $ ls -l roddyduk.tar  
-rw-rw---- 1 roddyduk cis90 1034240 Dec 10 13:50 roddyduk.tar  
/home/cis90/roddyduk $
```

```
/home/cis90/roddyduk $ gzip roddyduk.tar  
/home/cis90/roddyduk $ ls -l roddyduk.tar*  
-rw-rw---- 1 roddyduk cis90 168996 Dec 10 13:50 roddyduk.tar.gz  
/home/cis90/roddyduk $
```

*Note: **gzip** renames the tarball by adding the **.gz** suffix*

Archiving

tar command (on Opus)

Archive everything in your home directory (including all sub directories) plus the class bin and answer directories into one tarball.

```
cd /home/cis90/
```

```
find bin/ answers/ $LOGNAME/ | wc -l Count the files to be archived
```

```
tar cvf /home/cis90/$LOGNAME/$LOGNAME.tar bin/ answers/ $LOGNAME/
```

```
tar tvf /home/cis90/$LOGNAME/$LOGNAME.tar | wc -l This counts the files in the archive
```

Now compress that tarball

```
cd
```

```
gzip $LOGNAME.tar
```

Archiving

tar command (on home Linux computer)

extract

```
[cis90@frodo opus-files]# tar xvf roddyduk.tar  
bin/  
bin/submit  
bin/submit.bak
```

< snipped >

```
roddyduk/program  
roddyduk/exitscript  
roddyduk/red-12-09-08  
roddyduk/red-12-09-2008  
roddyduk/blue-12-09-2008  
[cis90@frodo opus-files]#
```

*Extract the
tarball*

Archiving

tar command (on home Linux computer)

```
[cis90@frodo opus-files]# ls -l
total 1044
drwxr-xr-x  2  201  103    4096 Nov 28 17:41 answers
drwxr-x---  2  201  103    4096 Nov 30 23:25 bin
drwxr-xr-x 28 1156  103    4096 Dec 10 13:50 roddyduk
-rw-r--r--  1 root root 1034240 Dec  8 23:43 roddyduk.tar
[cis90@frodo opus-files]#
```

The bin, answer and home directories have been recreated

Archiving

tar command (on home Linux computer)

```
[cis90@frodo opus-files]# cd roddyduk/bin
[cis90@frodo bin]# ls
app      banner      datecal      hi      I      myscript.bak  treat5  tryme
backups  benscript   enlightenment home  myscript  myscript.v1  treed   zoom
[cis90@frodo bin]# myscript
-bash: myscript: command not found
[cis90@frodo bin]# ./myscript
```

Duke's CIS 90 Final Project

- 1) Color
- 2) My Find Command
- 3) More practice
- 4) Duke's friend made this one - Thank You
- 5) Task 5
- 6) Exit

Enter Your Choice:

Note we have a different path on this system so may have to specify a relative path to script file to run



Final Exam

Final Exam

The CIS 90 Final Exam is Test #3

- **The Final Exam is December 15 1:00 to 3:50PM**
- **The final exam will be Test #3
(worth 30 points + 10 points extra credit)**
 - Open book, open notes, open computer.
 - During the test you must work alone and not ask or give assistance to others.
 - If you need more time, you may take the exam home and email it to me by midnight.

Final Exam

The CIS 90 Final Exam is Test #3

- **A Practice Test 3 is available on the web site**
 - You may work with others and use the forum to discuss questions and answers on the practice test prior to the final exam.
 - Just like the real test, the first 15 questions correlate to the 15 lessons we've covered in this class.
 - Just like the real test, there are five extra credit questions at the end taken from the website Flashcards.



Project Presentations



Wrap up

New commands:

tar

gzip

gunzip

Backup and restore files

Compress file

Uncompress file

New Files and Directories:

Next Class is the Final Exam

Test #3

Five Posts

Lab X1 (extra credit)

Lab X2 (extra credit)

Project Workshop (optional)



Backup