

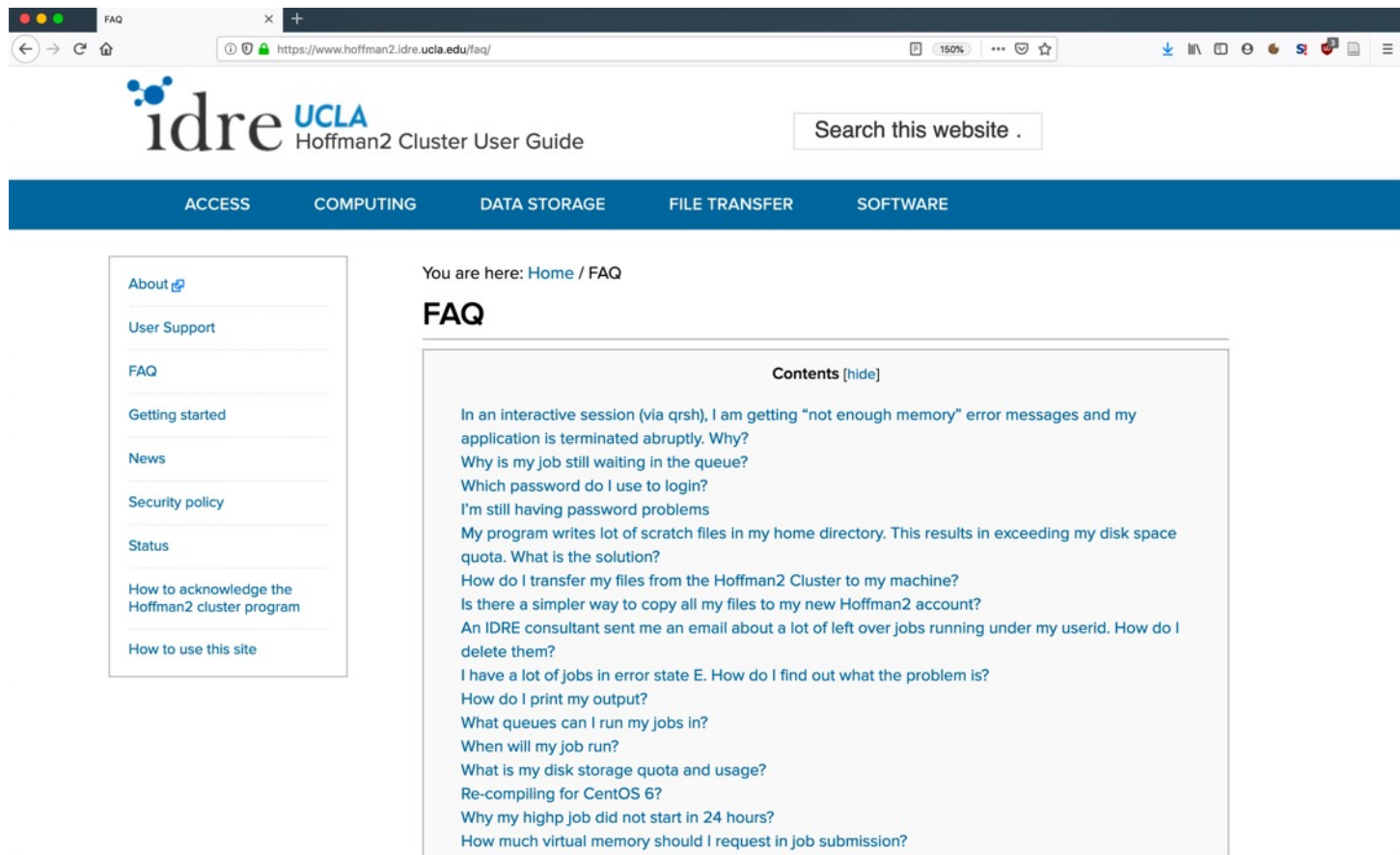
Working on the  
Hoffman2 cluster

# Working on the Hoffman2 cluster

Homepage & Resources:

<https://www.hoffman2.idre.ucla.edu/>

Also, <https://idre.ucla.edu/>



The screenshot shows a web browser window displaying the Hoffman2 Cluster User Guide website. The browser's address bar shows the URL <https://www.hoffman2.idre.ucla.edu/faq/>. The website header features the IDRE UCLA logo and the text "Hoffman2 Cluster User Guide". A search bar is located to the right of the logo. Below the header is a navigation bar with links to ACCESS, COMPUTING, DATA STORAGE, FILE TRANSFER, and SOFTWARE. On the left side, there is a sidebar menu with links to About, User Support, FAQ (which is highlighted), Getting started, News, Security policy, Status, How to acknowledge the Hoffman2 cluster program, and How to use this site. The main content area shows the breadcrumb "You are here: Home / FAQ" followed by the heading "FAQ". Below the heading is a "Contents [hide]" section with a list of frequently asked questions, including: "In an interactive session (via qssh), I am getting 'not enough memory' error messages and my application is terminated abruptly. Why?", "Why is my job still waiting in the queue?", "Which password do I use to login?", "I'm still having password problems", "My program writes lot of scratch files in my home directory. This results in exceeding my disk space quota. What is the solution?", "How do I transfer my files from the Hoffman2 Cluster to my machine?", "Is there a simpler way to copy all my files to my new Hoffman2 account?", "An IDRE consultant sent me an email about a lot of left over jobs running under my userid. How do I delete them?", "I have a lot of jobs in error state E. How do I find out what the problem is?", "How do I print my output?", "What queues can I run my jobs in?", "When will my job run?", "What is my disk storage quota and usage?", "Re-compiling for CentOS 6?", "Why my highp job did not start in 24 hours?", and "How much virtual memory should I request in job submission?".

# Connecting to the cluster

- **Remote shell**

**ssh USER@hoffman2.idre.ucla.edu**

- Once connected, **start an “interactive job”** requesting 2 hours and 8GB memory:

**qssh -l h\_rt=2:00:00,h\_data=8G**

*N.B.* spaces or their absence DO MATTER; there must be no spaces around commas.

- **Remote File transfer**

Download:

**scp USER@hoffman2.idre.ucla.edu:/PATH/TO/FILE ~/Desktop/**

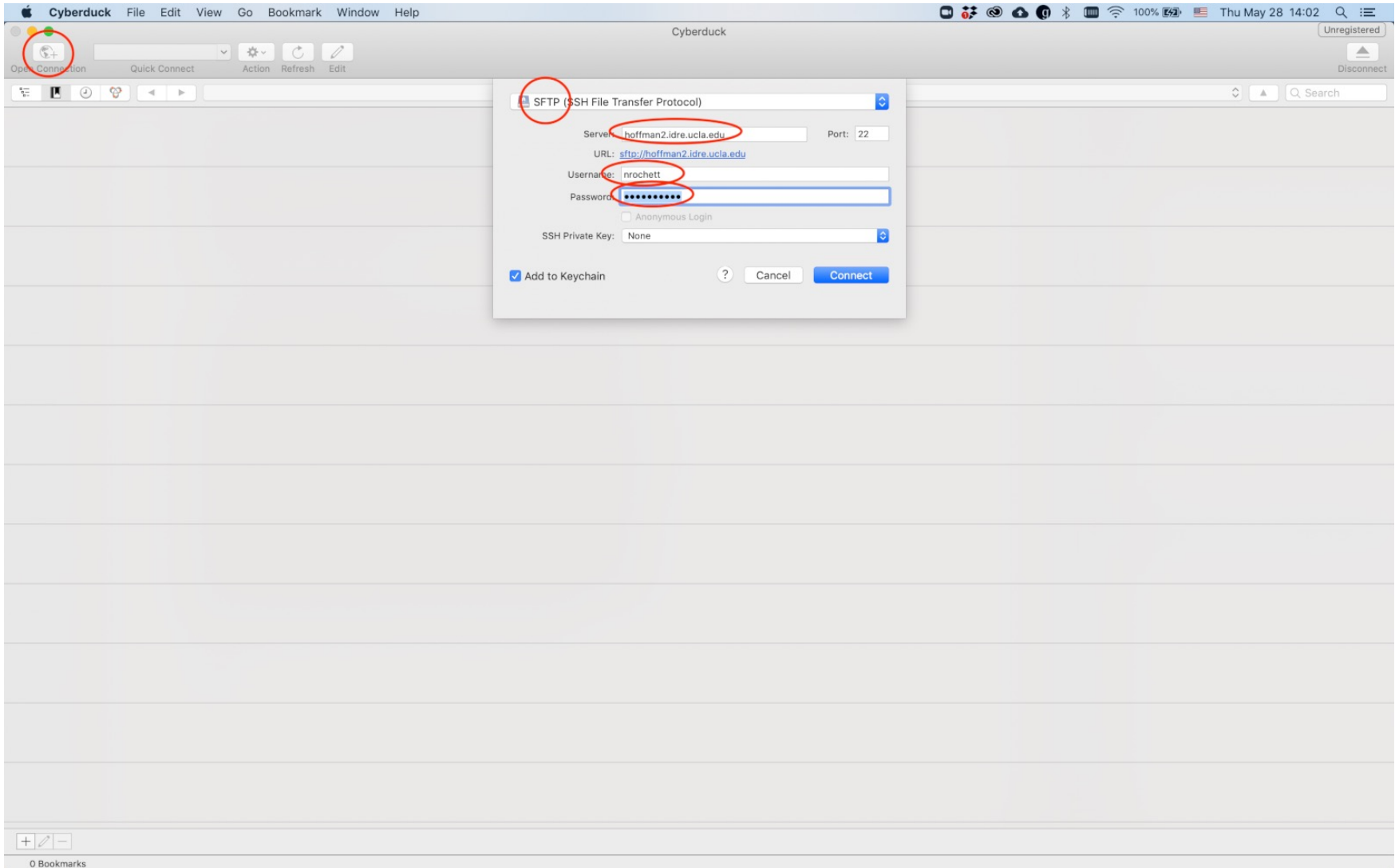
Upload:

**scp ~/Desktop/FILE USER@hoffman2.idre.ucla.edu:~/**

- Interactive clients exist:

**Cyberduck**, FileZilla...

# Cyberduck: setup for Hoffman2



# Essential Hoffman2 commands

- Request an interactive job:

**qrsh**

*(Do not run computationally heavy commands on the login node!)*

- Submit a batch/script job:

**qsub -N JOBNAME script.sh**

- Main resource options for jobs:

Time: **-l h\_rt=4:00:00**

Memory / RAM: **-l h\_data=8G**

- List current jobs: **myjobs** (or **qstat -u \$USER**)

Main job states are **r** (for running) and **qw** (for queued-waiting)

- Modules:

**module load NAME**

**module avail**

# Hoffman2 disk spaces

- Home directory

**/u/home/?/USER**

N.B. 20 GB max. — but *the workshop files are light enough so that we will be able to work there.*

- Scratch space

**/u/flashscratch/?/USER**

N.B. 2 TB max, but *data on the scratch disk is considered abandoned after two weeks, as it is intended for "temporary" files.*

- Purchased space (cf. IDRE website):

**/u/project/LABNAME/USERNAME**