
Hoffman2 Cluster User Guide

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Attention: This is a prototype page, not a real site.

Note:

- New classes for 2020
 - New Application installed
 - [PDF version](#)
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INTRODUCTION

1.1 Getting started guide

1.2 Security policy

1.3 Cluster summary

2.1 Text terminal

2.1.1 Linux and Mac

UNIX-based system, such as Linux and Mac OS X, generally are equipped with an ssh client. Use the ssh command from a terminal:

```
ssh login_id@hoffman2.idre.ucla.edu
```

where login_id is replaced by your cluster user name.

2.1.2 Windows

Using Putty

Step 1. Start PuTTY by double-clicking the PuTTY shortcut icon on your desktop, or double-clicking putty.exe in your PuTTY installation directory. The PuTTY Configuration window will open.

Step 2. Enter the host name:

```
hoffman2.idre.ucla.edu
```

in the appropriate text entry box and under the Protocol: heading select SSH. Enter Hoffman2 in the Saved Sessions text box.

Step 3. On the left side of the window there is a panel labeled Category:. If you see a plus sign (+) next to the word Connection, click on it. It will turn to a minus sign (-) and additional entries will appear under Connection. One of them will be SSH. If you see a plus sign (+) next to the word SSH, click on it. It will turn to a minus sign (-) and additional entries will appear under SSH. Click on SSH in order to modify the SSH connection options.

Step 4. Select the 2 radio button under the Preferred SSH Protocol Version: heading.

Step 5. If you are going to use PuTTY in conjunction with an X-server: Enter the xterm command, as follows, in the Remote command: text box:

```
/usr/bin/xterm -ls -sb -sl 1000
```

Enable X11 forwarding by clicking on Tunnels in the Category panel at the left. Then make sure Enable X11 forwarding is checked.

Step 6. Click Session in the Category panel at the left. Click the Save button to the right of the Saved Sessions list to save your configuration options.

Step 7. Click the Open button at the bottom of the PuTTY Configuration window. The first time you access the cluster, you will see a Security Alert window. You can check the fingerprint shown against Login Node Fingerprints. Click the Yes button.

Step 8. A PuTTY login window will appear. Enter your Hoffman2 login ID and password.

Step 9. Fix your PuTTY desktop shortcut by right clicking your PuTTY shortcut icon. Select the Properties menu item. Select the Shortcut tab. Add @Hoffman2 as the target where Hoffman2 is the name that you entered in the Saved Sessions text box in step 2. Click the OK button. For example: Target: "C:\Program Files\PuTTY\putty.exe" @Hoffman2

2.2 Graphical Environment

ENVIRONMENT MODULES

3.1 Overview

3.2 Making environment permanent

3.3 Setting up the environment for a job

RUNNING JOBS

This is the computing section.

4.1 Scheduling policy

4.2 Using the scheduler

4.3 Job script examples

4.4 Sequential jobs

4.5 Multiple-core shared-memory jobs

4.6 MPI distributed memory jobs

4.7 High Priority Jobs

4.8 Interactive jobs

4.9 GPU Computing

PROGRAMMING

5.1 Compilers

5.2 OpenMP

5.3 MPI

5.4 Linking with libraries

DATA STORAGE

6.1 Home directory

6.2 Scratch directory

6.3 Compute-node local storage

6.4 Your purchased storage space

FILE TRANSFER

7.1 Using scp

7.2 Using sftp

7.3 Using Globus

USING SOFTWARE PACKAGES

8.1 Use cases

8.2 Supported software packages

8.2.1 Abacus

8.2.2 Matlab

ADVANCED TOPICS

9.1 Installing Python in your home directory

TUTORIALS

See also the [label-faq](#).