Getting Started with Research Computing

Welcome to Getting Started with Research Computing. Read this article to get started while you are waiting for your access to be completed.

Unix Account - overview

The SOM Research cluster is available to the entire SOM community, as well as collaborative researchers.

To access the cluster, and presumably to run graphical statistical applications, you will need Xwin32 (Windows) or X11 Quartz (OSX).

Connecting to the Research cluster:

Quartz

If you are on a Mac, you can find Quartz on your system at Applications > Utilities. Quartz is a terminal that will tunnel graphical connections, just as Xwin32 does.

Connecting via Quartz terminal: ssh -Y <netID>@research.som.yale.edu

Xwin32

Xwin32 can be found at https://software.yale.edu. Xwin32 translates dissimilar systems, allowing Linux graphics to show up on a Windows machine.

Xwin32 installation key: 68097357-06764817

Xwin32 connection settings:

connection type: ssh
host: research.som.yale.edu
command: /usr/bin/xterm -ls

username/password are optional*

Moving data to/from the Research cluster:

WinSCP

Using WinSCP, you can transfer files between your Windows workstation and the Linux Cluster. Xwin already exists in your home directory, so you can connect with WinSCP, download it and install it on your workstation.

Data

Once connected to the Research Cluster, you can find our stored datasets at /data. Additionally, you can access all data available to Yale by signing up for a WRDS account.

Read more about Data and Data Governance at SOM.

Quick list - useful commands

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<th>Command</th>
<th>What does it do?</th>
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<td>applications</td>
<td>This launches a menu, from which you can choose various applications to run</td>
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<td>bhosts</td>
<td>Shows cluster workload status/availability</td>
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<td>bjobs</td>
<td>Quick listing of jobs running on the cluster</td>
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<td>bkill</td>
<td>Terminates jobs currently running on the cluster</td>
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A more comprehensive list of available cluster commands can be found here.

**Additional Resources**

The SOM Research cluster has a number of additional resources and system tools. In addition to a number of compilers, interpreted languages and editors, MySQL and Postgresql databases are available. To utilize these services contact SOM IT.

**Getting Help**

This is a quick intro to accessing and using the cluster, and not meant to be all-inclusive. If you have questions or need any help, please contact SOM IT.

**Notes**

*username/password will be requested if not pre-filled*