

Using SSH

For logging into and executing commands on a remote machine, we use the SSH client `ssh`.

Note

To be able to log into the Research Computing systems, you must be on the Dartmouth network. This includes being on-campus wifi (Dartmouth Secure) or on VPN if coming from off-campus.

On OSX machines, this client is available using the Terminal application.

On Windows machines, we can use the MobaXTerm application to start ssh sessions.

There are a couple of tools that are available on both platforms:

- **Secure shell extension for Chrome**

This option allows you to open a ssh session without having to install any software on your machine.

- **FastX**

This option is an ssh client that renders graphical output from remote Unix/Linux servers. Useful for applications, e.g., Matlab, that are usually used through an interactive, graphical interface.

Usage

Discovery cluster

```
ssh <my netID>@discovery.dartmouth.edu
```

Andes8 -- 128 cores, 1.5TB memory

```
ssh <my netID>@andes8.dartmouth.edu
```

Polaris8 -- 192 cores, 1.5TB memory

```
ssh <my netID>@polaris8.dartmouth.edu
```

With X11 forwarding:

```
ssh -Y <my netID>@discovery.dartmouth.edu
```

What is X11 forwarding?

X11 forwarding is what allows you to run a GUI (Graphical user interface) from the command line. For example, you can launch firefox, or run Matlab interactively. Another use case for X11 forwarding would be to display a graph, or an image.

X11 forwarding on a mac.

If you would like to enable X11 support for your native terminal with Mac OSX. You can download a free application called XQuartz

XQuartz

X11 forwarding on a windows PC

Windows has a few different options for X11 forwarding. We recommend that you use MobaXTerm as it provides not only a terminal emulator, but a SFTP client, and X11 server all in one. Another to mention would be putty.

MobaXterm

Putty