

Module 1.1

ATMOS 5340: Environmental Programming and Statistics

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Accessing a Linux Terminal Window Using CHPC's Open OnDemand

The objective of this document is to get you familiar with CHPC's Open OnDemand service, which is a web portal that provides *remote access* to CHPC file systems and computing resources. Using Open OnDemand, we can view, edit, upload and download files, run GUI applications in a Linux environment by simply using our web browser! This service eliminates the need for us to install programs onto our computers, and therefore eliminates issue associated with system dependencies and so on!



To start, open your web browser on either your personal computer or computer lab desktop and go to the following webpage: <https://ondemand-class.chpc.utah.edu/>

Upon clicking this link, Open OnDemand will ask for your University of Utah Login credentials (uID + password). If you have provided the correct credentials, your web browser should take you to the following webpage:

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Apps Files Jobs Clusters Interactive Apps Classes

Pinned Apps A featured subset of all available apps

| | | | |
|--|---|--|---|
| Cluster Status System Installed App | Basic Interactive Desktop System Installed App | Expert Interactive Desktop System Installed App | Jupyter System Installed App |
| RStudio Server System Installed App | MATLAB System Installed App | COMSOL Multiphysics System Installed App | VSCode Server System Installed App |
| VMD System Installed App | ANSYS Workbench System Installed App | SIMULIA Abaqus System Installed App | IDL System Installed App |

Click on the “Basic Interactive Desktop” and you should see:

| Classes |
|----------------------|
| Atmospheric Sciences |
| ATMOS Synoptic |
| Bioinformatics |
| MIB2020 |
| Chemical Engineering |
| CHEN Jupyter |
| CHEN2450 |
| Geography |
| GEOG5670 desktop |

| Interactive Apps |
|----------------------------|
| Desktops |
| Basic Interactive Desktop |
| Desktop |
| Expert Interactive Desktop |
| IDEs |
| ANSYS Electronics Desktop |
| ANSYS Workbench |
| Abaqus |
| COMSOL Multiphysics |

Basic Interactive Desktop version: 6acab92

This app will launch an interactive desktop on one compute node. You will have full access to the resources these nodes provide. This is analogous to an interactive batch job.

Cluster

Select the cluster or Frisco node to create this session on.
If you select frisco please ignore all the entries below.

Number of hours

Maximum wall time on notchpeak-shared-short is 8 hours, general nodes 72 hours, owner nodes 14 days.

Number of cores

Maximum number of CPU cores on notchpeak-shared-short is 16, see cluster help pages for other cluster's node counts.

Account

Partition

I would like to receive an email when the session starts

If you do not receive the email, check your [Profile](#) for correct address.

Launch

Note: change the number of hours from 1 to at least 4, otherwise your session might be too short if you are on CHPC more than 1 hour. Then click "Launch".

You should see something like this but initially it will say "Queued". Be patient. When it says "Running" then click the blue button at the bottom

Basic Interactive Desktop (5017371)

1 node | 1 core | Running

Host: _notch308.ipob.int.chpc.utah.edu

Delete

Created at: 2022-07-30 13:46:08 MDT

Time Remaining: 7 hours and 59 minutes

Session ID: 0bf9bde2-ce00-46e9-8a22-cc43361ffae9

Compression

0 (low) to 9 (high)

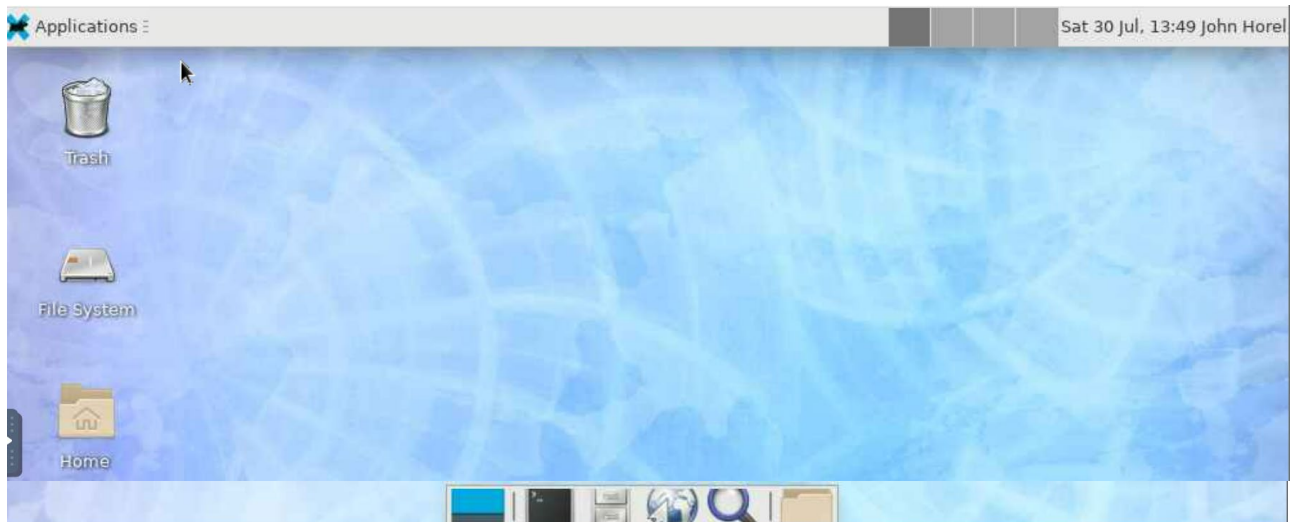
Image Quality

0 (low) to 9 (high)

Launch Basic Interactive Desktop

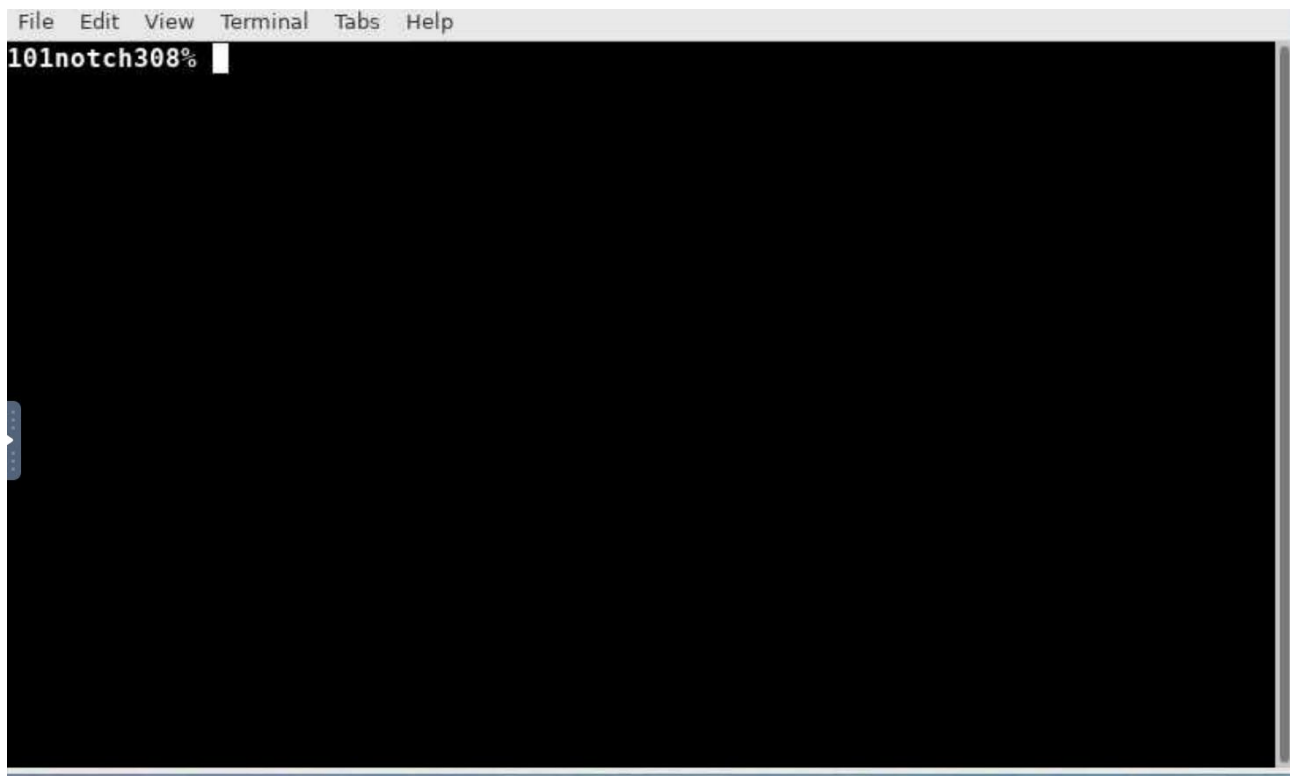
View Only (Share-able Link)

You should see then:



This is a Graphical User Interface (GUI) common to Linux, Macs, Windows, etc. Explore a bit by clicking the obvious options (Application Menu, etc).

Now, click on the black rectangle on the bottom- that is a “X-terminal” window.



Welcome to the 1980's! Most scientific computing then, and much even still now, relies on such X-terminal windows. We'll use this terminal window for learning a tiny bit about Linux.