Setup MAMBA

January 14, 2019

Our class has been setup on the UNC Charlotte MAMBA cluster. It will be used for submission and grading of your programming assignments.

1 Connecting to mamba

The machine is only accessible using a Linux terminal interface. You will only get access to the head node of mamba, all the computation will run on machine you do not have direct access to. You will connect to the head node and submit jobs from there.

1.1 Being on the right network

Mamba is not accessible from IP addresses outside of campus.

- It is available from any hardline on campus. (Though you probably don't have one.)
- Using WiFi, it is accessible only if you are connected to the eduroam (niner guest won't work)
- From outside of campus, you will need to connect to UNCC's VPN first. See instruction on this link `https://faq.uncc.edu/pages/viewpage.action?pageId=6653379`. Make sure to connect to the student VPN: `vpn.uncc.edu/students`.
- In any case, if you are using your own DNS servers, make sure to disable them before using mamba.

1.2 DUO Setup

MAMBA utilizes DUO for SSH logins. Please ensure that you setup your DUO accounts in order to access `mamba.urc.uncc.edu`. Follow this link `https://spaces.uncc.edu/pages/viewpage.action?pageId=35651686`.

1.3 Using ssh on Linux

If you are using the linux environment (or MacOS X), open terminal and you can connect to mamba using ssh: `ssh ninerneruser@mamba.urc.uncc.edu`

1.4 Connecting from Windows Directly

If you are using windows directly, you will need an ssh client to access mamba. Putty is the most popular client and it can be downloaded from `https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html` .

2 Work folder

`mamba.urc.uncc.edu` is both the INTERACTIVE and SUBMIT host for the cluster.

- Each user directory has a quota of 150GB and is located at `/users/<username>`.
- This volume is BACKED UP nightly with a seven day window.
- Never modify the permissions on `/users/<username>`.

Additional information on MAMBA may be found at `https://urc.uncc.edu/educational-clusters/mamba-user-notes` . Please let us know if you encounter any issues.

Most part of the above user guide is taken from Dr. Erik Saule ITCS 5145 - Parallel Computing Class