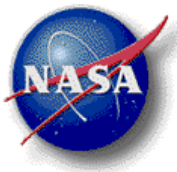# Linux 101 Support Q&A

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Purpose

NCCS staff will go over some basic helpdesk FAQs and then answer basic linux questions proposed by the user community.

Agenda

FAQs

- Why does my sftp/scp disconnect without transferring any files?

- Why are my shells so slow at startup?

- Why is my environment broken?

- How do I use my storage on Discover or ADAPT

sftp/scp disconnects without transferring any files

Discover:

➢ First thing to check: the "bastion" node Proxy command config or Winscp config (depends on client OS). Please refer to the following links for proper command:

  ➢ https://www.nccs.nasa.gov/nccs-users/instructional/logging-in/bastion-host

  For windows:

  ➢ https://www.nccs.nasa.gov/nccs-users/instructional/using-discover/file-transfer/local-to-nccs-systems

➢ Second thing to check: Your user environment on discover.

  ➢ You can not print ("echo", "module list" to STDOUT) from within your .login/.profile/.cshrc/.tcshrc/.bashrc (or other shell init based on your default shell). This interrupts communication with the sftp/scp client and is a well documented issue (google the error message).

Module env changes upon opening a new shell and shell slow upon startup

- module commands **should not** be placed in .bashrc or .cshrc/.tcshrc. See "man csh" or "man bash" regarding which files and which order are sourced in shell invocation.

- If there is a set of modules you commonly use, put those module commands into a separate file and source that file (bash "." or "source", tcsh/csh "source") when needed.

- Modules needed for interactive use should really only be loaded sourced from your .login/.profile/.bash_profile (again depends on shell, see the man page for the order and which file to use).

Broken Env

- Don't simply copy someone else's .cshrc/.login/.tcshrc/.bashrc/.profile.

- You need to understand that anything you put in your shell init can effect running work on the cluster as well as interactive access.

- You need to understand what you are adding to your shell initialization (man bash/man csh depending on your default shell or the shell you may be using in your batch/shell scripts).

Using storage on Discover or ADAPT

- Home directories are small (1-5GB). Access via $HOME environment variable or /home/<username> link.

- NOBACKUP (or personal scratch space) should be accessed via either the $NOBACKUP environment variable or system specific link:
  - Discover: /discover/nobackup/<username>
  - ADAPT: /adapt/nobackup/people/<username> - (note this path changed recently, stop using "/att" paths
  - *DON'T* use paths that start with /gpfsm in either environment. Those are GPFS mount paths and might change, the link paths are there to use in soft links or scripts/code so that when user data is migrated from one filesystem to another your code doesn't break.

Discover specific storage docs:

https://www.nccs.nasa.gov/nccs-users/instructional/using-discover/file-system-storage

ADAPT specific storage docs:

https://www.nccs.nasa.gov/nccs-users/instructional/adapt-instructional/storage

Q&A

Link

https://ryanstutorials.net/linuxtutorial/

Please read through the link before submitting basic linux questions to:

support@nccs.nasa.gov