

Practice session on Linux

November 6, 2006

1 Basics

1. Sign on to your account on `fisher.stats.uwo.ca` using the SSH client on the PC.
2. Use `ls` to list your files.
3. Use `vi` to edit a new file called “test.txt”.
4. Use `pwd` to print your working directory.
5. Use `mkdir` to create a subdirectory called “testdir”.
6. Use `mv` to move `test.txt` into `testdir`.
7. Use `cd` to change your working directory to `testdir`.
8. Use `ls` to see what files are there.
9. Use `pico` to edit `test.txt`.
10. Use `cd` to change back to the parent directory.
11. Use `less` to list the contents of `test.txt`.

2 Startup files

The `bash` shell has a complicated startup procedure, depending on how it is started.

- When started in a “login” shell (the first shell you start), it executes instructions in the following order:
 1. `/etc/profile`. This is a system-owned file, which sets up the `PATH` variable (to determine where commands are found), and various other environment variables. You can see these by typing `printenv` at the command prompt.
 2. `~/.bash_profile`. This file normally exists in your home directory `~`. It’s one place to put customizations, but not the best. Our new-user default just executes the `~/.bashrc` file described below.
- When started in interactive mode, but not as a login, it runs
 1. `~/.bashrc`. This is where you would normally put commands you want run in every shell.
- When started in non-interactive mode, not as a login, things are complicated: see the `man bash` help page for the details.

The main thing you’ll want to put in your `~/.bashrc` file are “aliases” for commands that you use frequently. Here are some of the ones I use:

```
alias ll='ls -l'
alias ls='ls --color=auto'
alias fisher='ssh fisher.stats.uwo.ca'
alias sshstart='ssh-agent >~/ssh-agent-pid; source ~/ssh-agent-pid; ssh-add'
```

1. Use the editor of your choice to enter some aliases into your `~/.bashrc` file.
2. Load them, and test them.