

## The Unix Shell

The Unix shell has been around longer than most of its users have been alive. It has survived so long because it's a power tool that allows people to do complex things with just a few keystrokes. More importantly, it helps them combine existing programs in new ways and automate repetitive tasks so that they don't have to type the same things over and over again. Use of the shell is fundamental to using a wide range of other powerful tools and computing resources (including "high-performance computing" supercomputers). These lessons will start you on a path towards using these resources effectively.

### Prerequisites

This lesson guides you through the basics of file systems and the shell. If you have stored files on a computer at all and recognize the word "file" and either "directory" or "folder" (two common words for the same thing), you're ready for this lesson.

If you're already comfortable manipulating files and directories, searching for files with grep and find, and writing simple loops and scripts, you probably won't learn much from this lesson.

## Getting ready

You need to download some files to follow this lesson:

- 1. Make a new folder in your Desktop called shell-novice.
- 2. Download shell-novice-data.zip (./shell-novice-data.zip) and move the file to this folder.
- 3. If it's not unzipped yet, double-click on it to unzip it. You should end up with a new folder called data.
- 4. You can access this folder from the Unix shell with:

\$ cd && cd Desktop/shell-novice/data

# **Topics**

- 1. Introducing the Shell (00-intro.html)
- 2. Files and Directories (01-filedir.html)
- Creating Things (02-create.html)

- 4. Pipes and Filters (03-pipefilter.html)
- 5. Loops (04-loop.html)
- 6. Shell Scripts (05-script.html)
- 7. Finding Things (06-find.html)

## **Other Resources**

- Reference (reference.html)
- Discussion (discussion.html)
- Instructor's Guide (instructors.html)

Software Carpentry (http://software-carpentry.org) Source (https://github.com/swcarpentry/shell-novice)

Contact (mailto:admin@software-carpentry.org) License (LICENSE.html)