

Navigating in UNIX

There are 3 basic commands for navigating the filesystem

- **Where on earth am I?**

`pwd`

Short for 'present working directory'. This will show you your current location as an absolute (more on what this means below). For example:

```
/home/anthony/data
```

- **What's in my current location?**

`ls`

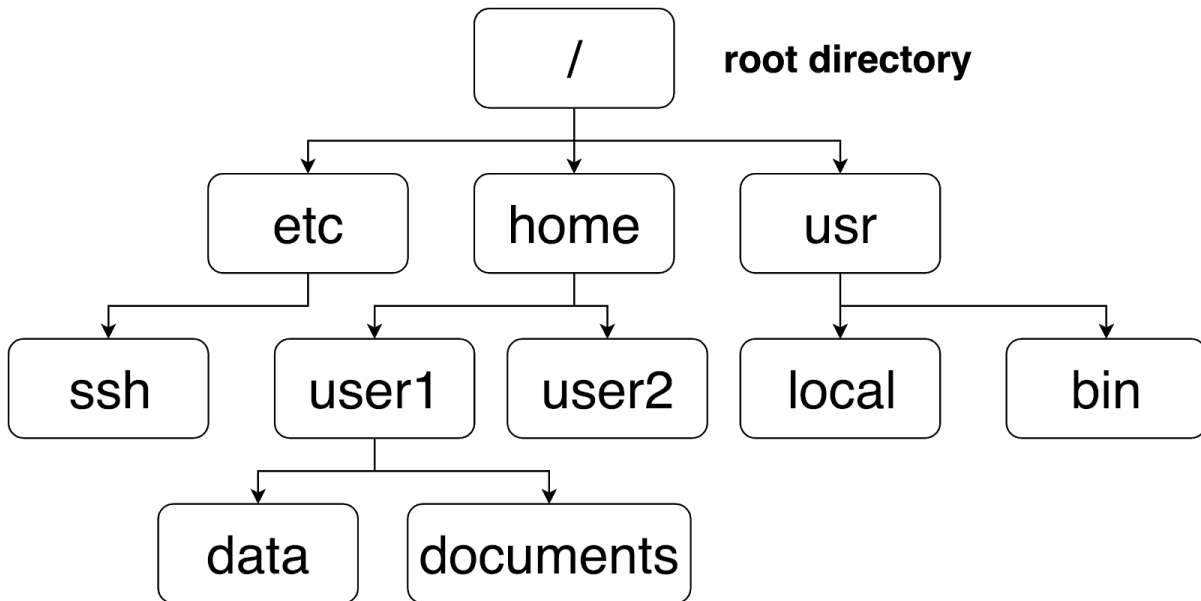
Short for 'list' this will list the files in the current location. Variations include

```
ls -l      detailed list showing time stamps and permissions
ls -la     detailed list showing hidden files beginning with '.' such as the .ssh directory
ls -ltr    detailed list showing the items created most recently at the bottom 'tr' for reverse sort by time
```

- **Get me out of here!**

`cd`

Short for 'change directory' this will change your location to the path specified after the `cd` command. The path can be either absolute or relative. To explain the difference look at the example file tree shown below.



An **absolute** path always starts from the root directory which in UNIX is represented by a /

Therefore the absolute path to the data directory of user1 is

`/home/user1/data`

The absolute path to the bin directory is

`/usr/bin`

Therefore to change directories to these place **no matter where you are** you can type `cd /home/user1/data` or `cd /usr/bin` respectively.

A **relative** path is a location starting from the current working directory and does **not** start with a /. If you need to go back up a directory you type `..` which stands for up a level into the parent directory. Therefore if you are in the directory `/home/user1`

- to navigate to the data directory you would type

`cd data`

- to navigate to user2 directory you would type

`cd ../user2`

This navigates up a level in the tree to home and then down into user2

If your present working directory is `/usr/bin` to navigate to the user 1 documents directory you could

- use the absolute path

```
cd /home/user1/documents
```

- Use the relative path

```
cd ../../home/user1/documents
```

back up to usr then to / and then down into home then user and finally documents.

Useful commands

- `cd` `cd` on its own will take you straight to your home directory `/home/user1` (`/Users/user1` on a mac)
- `cd -` This will take you to the directory you were previously in

References

- [Comprehensive tutorial](#)
- [Cheatsheet](#)