

HOWTO:

Basic Introduction to Linux Console Interface

- You will need to be able to login to `io.physics.tamu.edu`, the Physics Department Interactive Linux Server

1 Navigation

Files in Linux are organized in a tree structure, like most modern file storage systems. When you first login, you will be in your 'home' directory, `/home/users/$USERNAME`.

- `ls` – Lists the files and directories in the current directory.

```
pdbogen@io:~$ ls
these are some files adirectory
```

Note 1. Some files are not shown by default. Specifically, files beginning with a period ('.') are hidden by default. To list the files, use: `ls -a`

```
pdbogen@io:~$ ls -a
. .. these are some files adirectory
```

'.' and '..' refer to the current directory, and the directory containing the current directory, respectively.

- `cd` - Used to change directories

```
pdbogen@io:~$ cd adirectory
pdbogen@io:~/adirectory$ ls -a
. .. some other files
pdbogen@io:~/adirectory$ cd ..
pdbogen@io:~$
```

Note 2. Executing '`cd`' without any arguments will return you to your home directory.

2 Dealing with Files

- `rm` – ReMove – Used to delete files and directories. **USE WITH CAUTION.** `rm` will do exactly what you tell it do.

```
pdbogen@io:~$ ls
these are some files adirectory
pdbogen@io:~$ rm some
pdbogen@io:~$ ls
these are files adirectory
```

Note 3. To remove directories, use '`rm -rf`':

```
pdbogen@io~$ ls
these are some files adirectory
pdbogen@io~$ rm -rf adirectory
pdbogen@io~$ ls
these are some files
```

- **mv** – MoVe – Used to move and rename files and directories.

```
pdbogen@io~$ mv some example
pdbogen@io~$ ls
these are example files adirectory
```

Note 4. `mv` will gladly overwrite files if you ask it to. Be careful.

- **cp** – CoPy – Used to make a copy of files and directories.

```
pdbogen@io~$ cp some silly
pdbogen@io~$ ls
these are some silly files adirectory
```

- **nano** – ‘nano’ is a screen-oriented editor that you can use to edit plain text files (like HTML documents, etc.) The commands in nano are listed along the bottom of your screen.

Note 5. Nano’s commands are of the form ‘`~X`’. This means you should press the ‘`Ctrl`’ key while typing ‘`X`’ to perform that command. Our example, `Ctrl-X`, is the command to quit in nano.

3 Logging Out

To log out of your Linux shell, simply type ‘`exit`’, or press `Ctrl-D`.