

# Linux commands you should be aware of !

## Command line tips

Tips that will change you life :

- Auto completion on Tabs
- Arrows to see (and execute) previous commands

## Working with file system

- Learn to use a text editor

I use **nano**, I think it is the easiest to start with.

Example usage :

```
nano /etc/dhcp/dhcpd.conf
```

- Moving yourself in the file system with **cd** command

Example usage :

```
cd /etc/dhcp
```

- Copying files with **cp** command

Example usage :

```
cp /etc/existing_file /etc/new_file
```

Useful options : -r (recursive) needed to copy directory. -p (preserve rights)

- Moving files and directory with **mv** command

Example usage :

```
mv /etc/source /etc/destination
```

- Creating directories with **mkdir**

Example usage :

```
mkdir new_directory
```

- Viewing file content with **more**, **less**, **cat**

## Processes

- **htop** to visualize resources
- **ps** to list process

I use it with -edf options

## Network

- view ip current configuration with **ifconfig**.
- Get familiar with the **/etc/network/interfaces** file.
- Viewing allocated ports with **netstat** ( with -laptun options)

## Rights

- Transfer ownership with **chown** (think change ownership)

Example usage :

```
chown new_user file
```

Options : -R, you may also specify the group.

- Modify rights threw **chmod**

Example : grant write right

```
chmod +w file
```

## Paquet management

- Search for a package (software to install) with **apt-cache search**

Example :

```
apt-cache search isc-dhcp
```

- Update your software list with **apt-get update**
- Install new software with **apt-get install**

Example usage :

```
apt-get install isc-dhcp-server
```

- Upgrade your softwares with **apt-get upgrade**

## Utils

- Get familiar with |
- **grep** to search for patterns

Example :

```
// View line of java file in the directory containing "AbstractVirtualConcreteFactory"
grep "AbstractVirtualConcreteFactory" *.java
// View packages concerning dhcp servers
apt-cache search server | grep dhcp
```

- **wc** to count words, lines and chars

```
// Count files in a directory
ls | wc -l
```