Introduction to Linux

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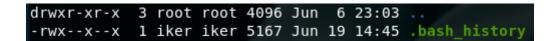
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1   Locate

If you want to locate a file you can use the **locate** command. If you do not find something, you can try running **updatedb**, because is has to build a database of the information that it's finding in order to locate what you're searching for.

2   Permissions

For the first letter of **ls -la**, if we have a **-** that is a file, if we have a **d** that is a directory.

```
drwxr-xr-x  3 root root 4096 Jun  6 23:03 ..
-rwx--x--x  1 iker iker 5167 Jun 19 14:45 .bash_history
```

Number	Permissions
0	No permissions
1	Execute
2	Write
3	Write, Execute
4	Read
5	Read, Execute
6	Read, Write
7	Read, Write, Execute

User			Group			Others		
-	-	-	-	-	-	-	-	-
-	-	x	-	-	x	-	-	x
-	w	-	-	w	-	-	w	-
-	w	x	-	w	x	-	w	x
r	-	-	r	-	-	r	-	-
r	-	x	r	-	x	r	-	x
r	w	-	r	w	-	r	w	-
r	w	x	r	w	x	r	w	x

3 The System

3.1 Color Coded

- Blue: Directory.

- Green: Executable or recognized data file.

- Sky Blue: Symbolic link file.

- Yellow with black background: Device

- Pink: Graphic image file.

- Red: Archive file.

- Red with black background: Broken link.

3.2 The Filesystem Hierarchy Standard (FHS)

- **/bin**: Essential user command binaries.

- **/etc**: Configuration files for the system.

- **/sbin**: Essential system binaries.

- **/usr**: Read-only user application support data & binaries.

  - /usr/bin: Most user commands.
  - /usr/include: Standard include files for C code.
  - /usr/lib: Obj, bin, lib files for coding and packages.
  - /usr/local: Local software (./bin ./lib ./man ./sbin ./share).
  - /usr/share: Static data shareable across all architectures.
    * /usr/share/man: Manual pages.

- **/var**: Variable data files.

  - /var/cache: Application cache data.
  - /var/lib: Data modifies as programmes run.
  - /var/lock: Lock files to track resources in use.
  - /var/log: Log files.
  - /var/opt: Variable data for installed packages.
  - /var/spool: Tasks waiting to be processed:
    * /var/spool/cron
    * /var/spool/cups
    * /var/spool/mail
  - /var/tmp: Temporary files saved between reboots.

- **/dev**: Device files included /dev/null.

- **/home**: User home directories.

- **/lib**: Libraries & kernel modules.

- **/mnt**: Mount files for temporary filesystems.

- **/opt**: Optional software applications.

- **/proc**: Process & kernel information files.

- **/root**: Home directory for the root user.