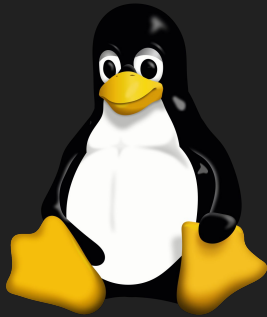


Introduction to FLOSS, Linux and CLI

Free and Open Source Software





Philosophy of the GNU Project

Taken directly from the GNU site.

Free software means that the software's users have freedom. (The issue is not about price.) We developed the GNU operating system so that users can have freedom in their computing.

Specifically, free software means users have the four essential freedoms: (0) to run the program, (1) to study and change the program in source code form, (2) to redistribute exact copies, and (3) to distribute modified versions.

Software differs from material objects—such as chairs, sandwiches, and gasoline—in that it can be copied and changed much more easily. These facilities are why software is useful; we believe a program's users should be free to take advantage of them, not solely its developer.

Free? Meaning one can't earn?

How do Open Source Companies make money?

How do Open Source Programmers make money?



“Hello everybody out there using minix -

I'm doing a (free) operating system (just a hobby, won't be big and professional like gnu) for 386(486) AT clones. This has been brewing since april, and is starting to get ready. I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat (same physical layout of the file-system (due to practical reasons) among other things).”

...

...

“PS. Yes - it's free of any minix code, and it has a multi-threaded fs. It is NOT portable (uses 386 task switching etc), and it probably never will support anything other than AT-harddisks, as that's all I have :-).”

Linux is a kernel not an OS.

Linux Distros



What makes a distro?



Display/Login Manager



Package
Manager



Window
Manager



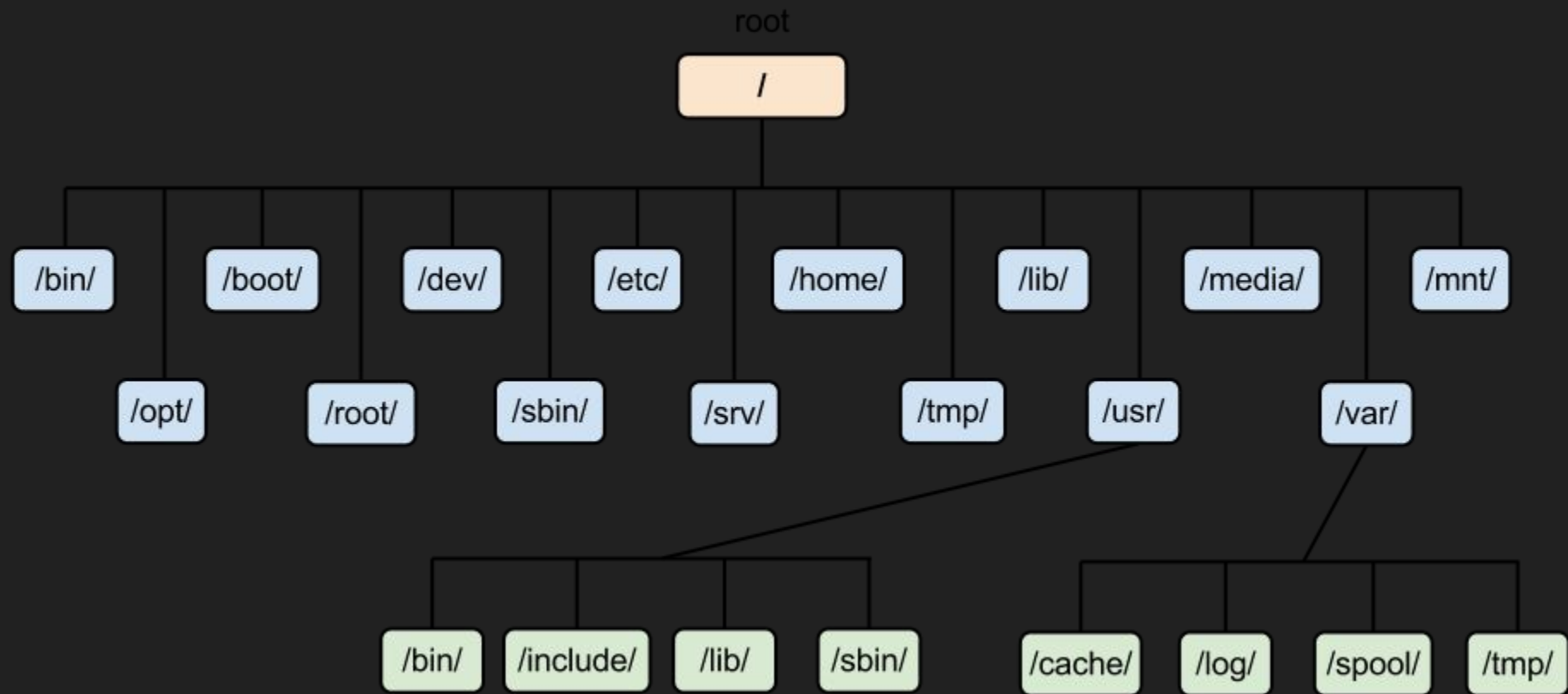
Suite
of Applications



Other tools (maybe
domain specific)

First Boot

Linux vs Windows



echo Hello, World

ls #List contents of directory

cd <Directory Name> #Change Directory

pwd # Print Working Directory

mkdir <New Directory Name> # Make new directory

cd .. # To go back

touch <filename> # Empty file

cat <filename> # Show contents (Empty)

echo <Some content> > <filename> # New content

cat <filename>


```
echo <Some more content> >> <filename> #Append
```

```
rm <filename>
```

```
rmdir <DirectoryName> # Remove empty directory
```

```
rm -r <Folder_NotEmpty> # Arguments, recursively
```

```
ls -l
```

```
# Piping commands
```

```
ls | grep "Search_term"
```

```
echo "Something" >> file
```

```
echo "Some new line" >> file
```

```
echo "This is another sentence." >> file
```

cat file | grep line

Sorting example for redirections

Looking for information

whereis <appname>

whatis <appname>

man man

man ls

#####

.. - Shortform/Alias for parent directory

. - Shortform/Alias for current directory

Dev Commands

<text editor> <filename.extension>

<compiler> <filename.extension>

./a.out

Example:

vim main.c

gcc main.c

./a.out