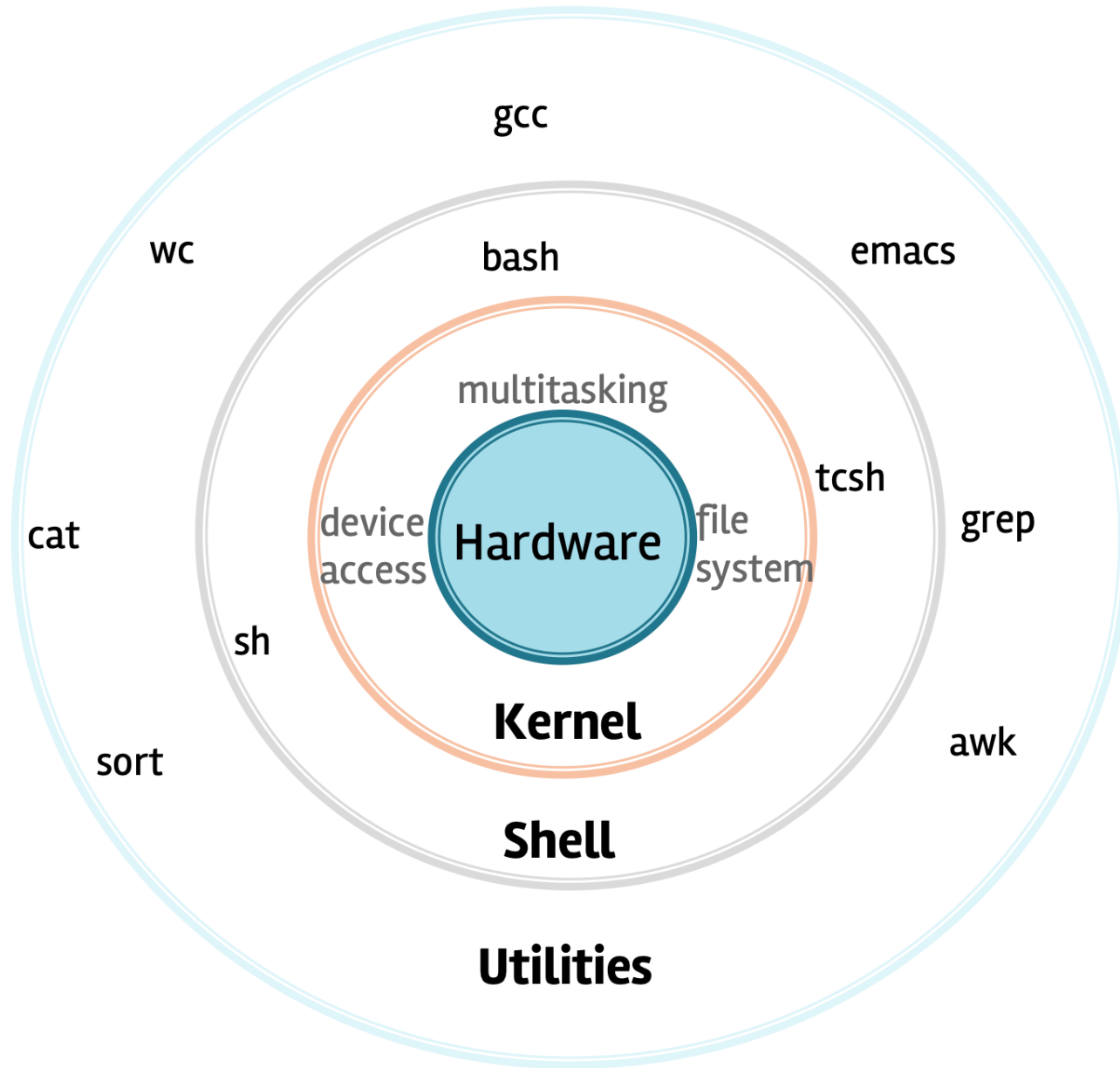


Linux e la Command Line

Linux

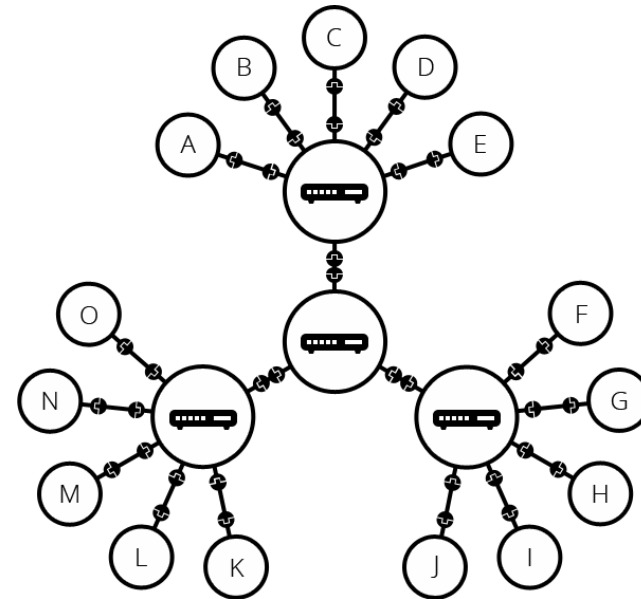
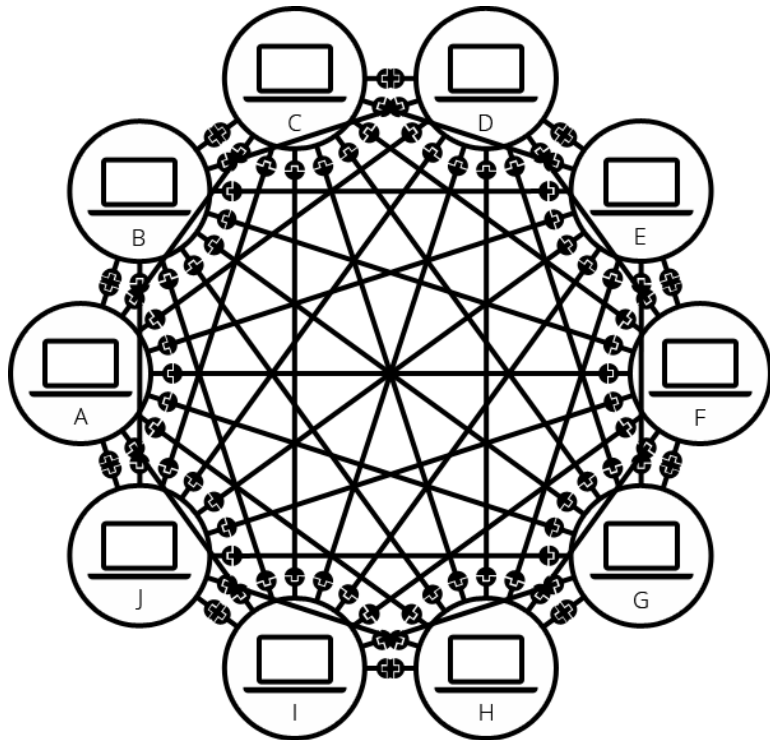
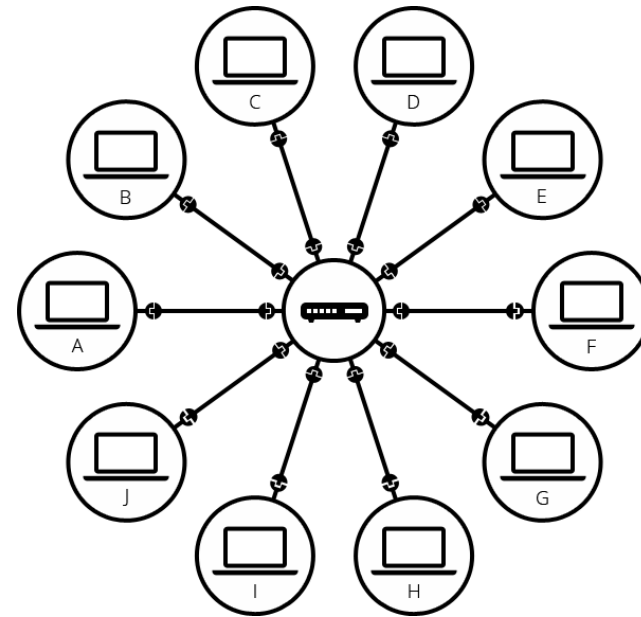
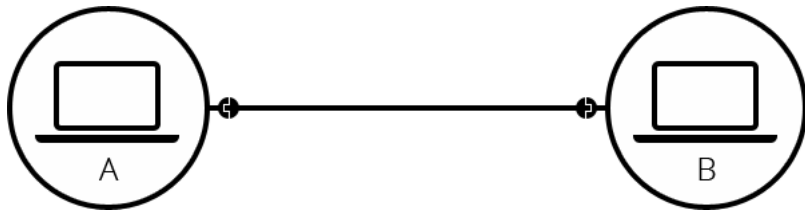
- Sistema operativo open-source e gratuito
- Utilizza il kernel Linux e le GNU utilities
- È disponibile attraverso diverse “distribuzioni” adattate a usi diversi (Debian, Ubuntu, ...)
- 2/3 dei web server utilizza Linux
- Il 100% dei TOP500 supercomputers usa Linux
- Android usa il kernel Linux (cellulari, Kindle, smart-TV,)
- Lo standard di fatto nella Fisica delle alte Energie
- Vasta comunità di sviluppatori volontari di software



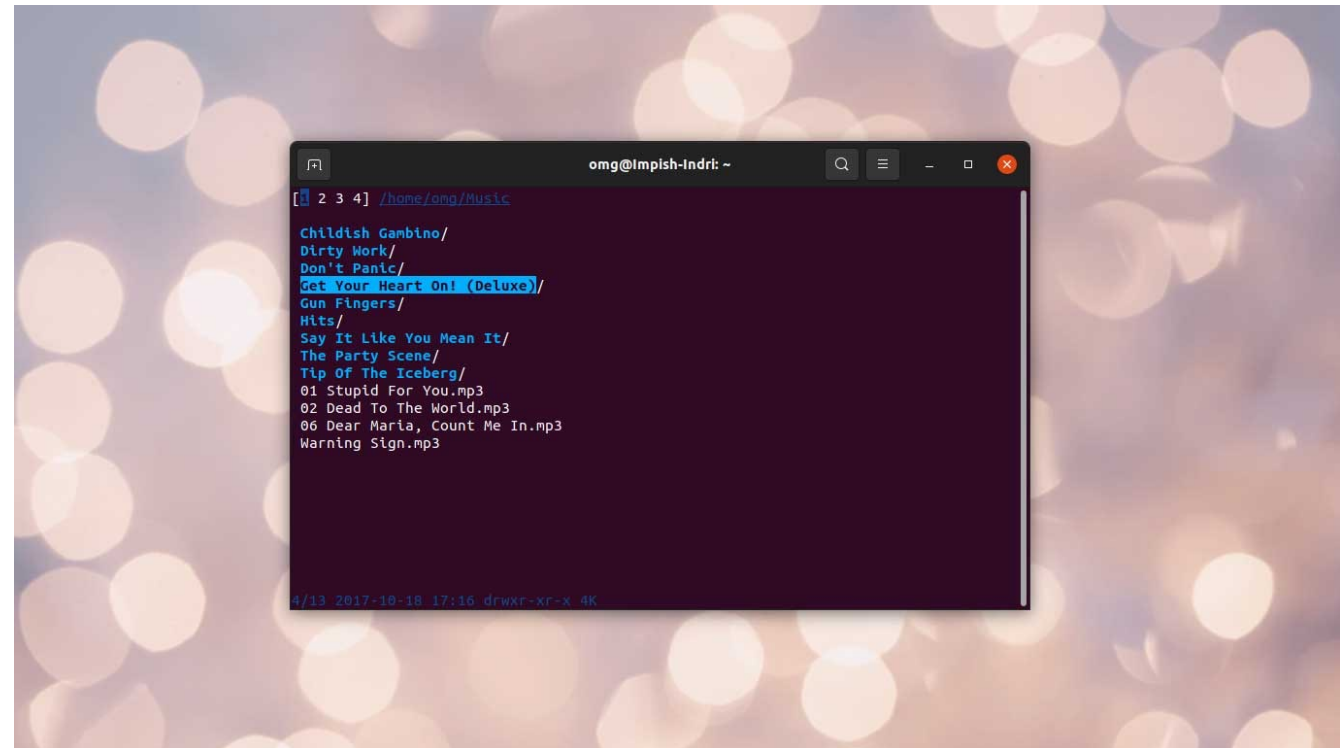
Calcolo oggi



Computer in rete



Il terminale



Linea di comando

*“when you are a child you use a computer by looking at the pictures.
When you grow up, you learn to read and write”*

```
Last login: Tue Sep 12 14:28:01 on ttys000

+++++
run
"source /Users/maina/bin/acd_func.sh"
to enable cd -- and easily access 10 most recent dirs
+++++

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
~$
```

```
Last login: Tue Sep 12 14:28:01 on ttys000

+++++
run
"source /Users/maina/bin/acd_func.sh"
to enable cd -- and easily access 10 most recent dirs
+++++

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
~$pwd
```

```
Last login: Tue Sep 12 14:28:01 on ttys000

+++++
run
"source /Users/maina/bin/acd_func.sh"
to enable cd -- and easily access 10 most recent dirs
+++++

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
~$pwd
/Users/maina
~$
```

Documentazione

- <https://linuxcommand.org/tlcl.php> sito + libro scaricabile
- <https://github.com/RehanSaeed/Bash-Cheat-Sheet>
- man pages e.g. `man ls` per visualizzare la pagina su “ls”


```
[username@scc1 ~]$ command --option argument
```

Esempio:

ls

ls -a

ls -al

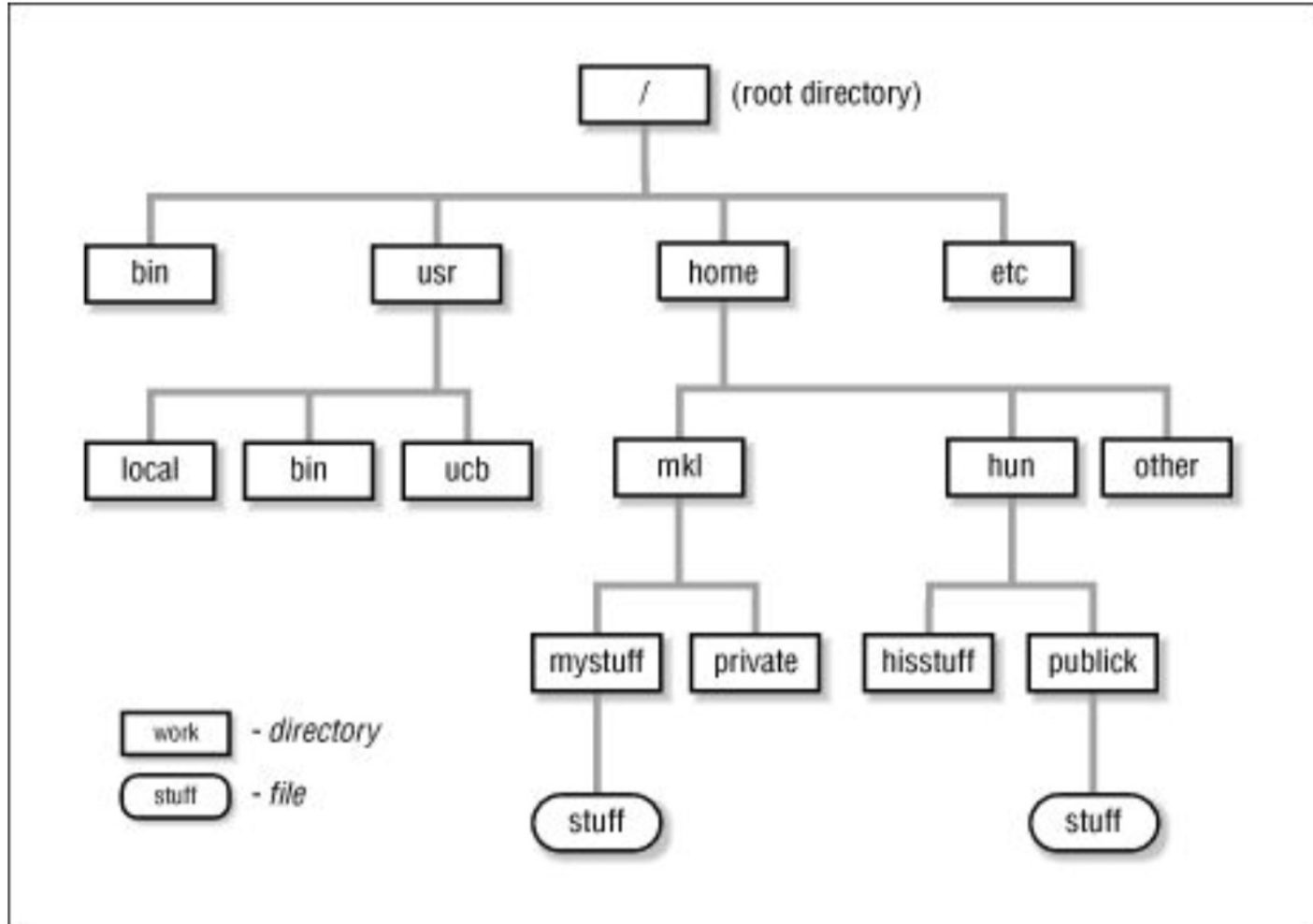
ls -lh

ls -lt

ls -ltr

Il comando find permette una selezione ancora più fine

Il filesystem

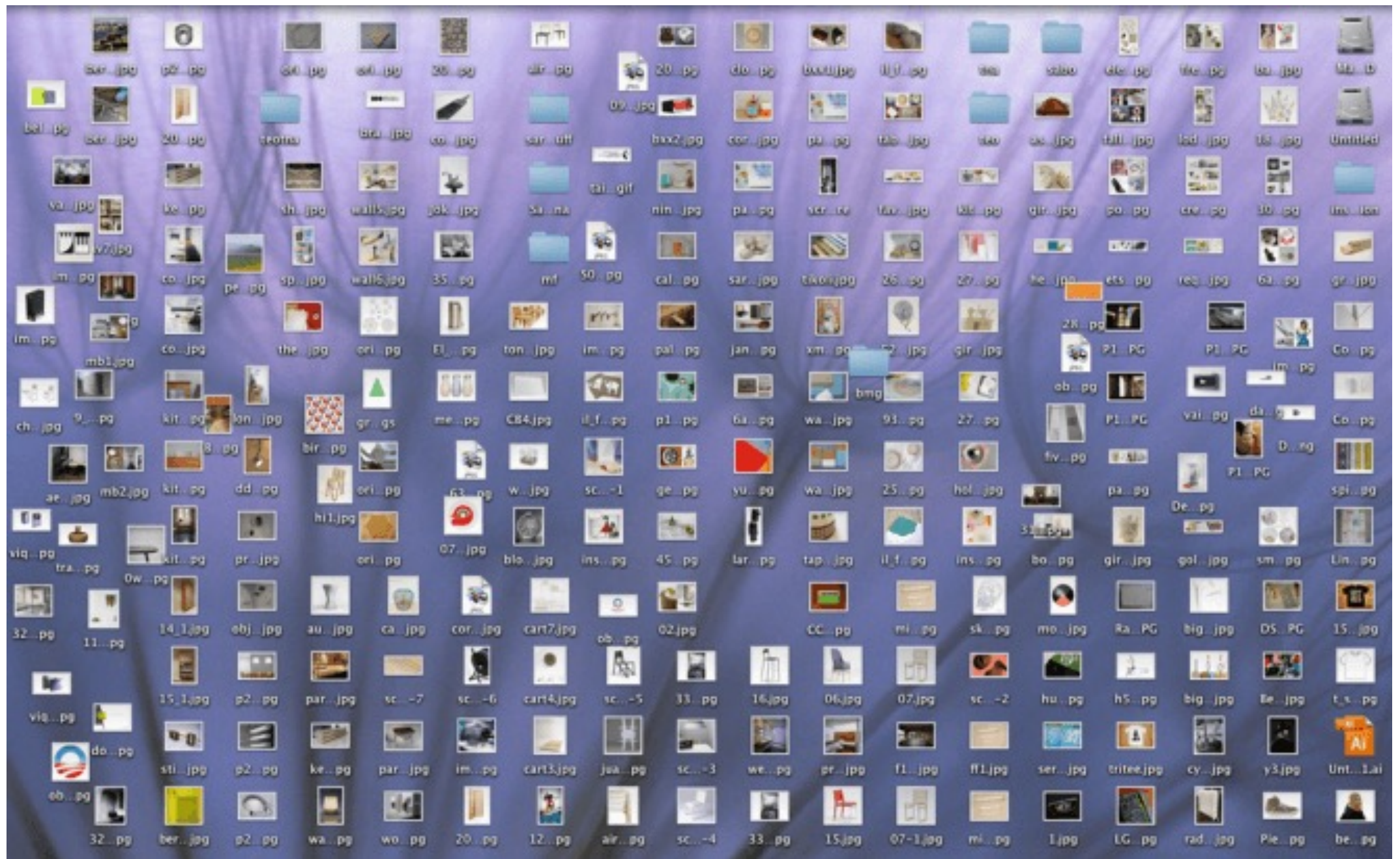


Indirizzo assoluto:

`/home/mkl/mystuff/stuff`

Indirizzo relativo
(se sono in `/home/mkl/`)

`mystuff/stuff`



Muoversi nel filesystem

<code>pwd</code>	stampa la cartella in cui ci si trova
<code>ls</code>	stampa la lista dei file nella cartella
<code>cd</code>	cambia cartella

Cartelle/simboli speciali

<code>.</code> (<code>./</code>)	la cartella presente
<code>..</code> (<code>../</code>)	la cartella che contiene la cartella presente. Se sono in <code>/home/mkl/blabla/mystuff</code> <code>cd ..</code> Mi porta in <code>/home/mkl/blabla</code>
<code>~</code>	la propria cartella home <code>cd ~</code>
<code>*</code>	wildcard: qualunque combinazione di caratteri <code>ls *.txt</code> mostra tutti i file con estensione txt

Agire su file/cartelle

mkdir

mkdir -p

echo >

echo >>

less

head/tail

rm

rm -f

rm -fr

mv

Trovare file/cartelle

```
find ~ -name bu -type d
```

```
find . -name my_file.txt
```

```
find ~/my_stuff -name "*.txt"
```

Trovare caratteri all'interno di file

```
grep tric myfile.txt
```

Filesystem per esercitarsi

http://personalpages.to.infn.it/~maina/test_FileSystem/test_FileSystem.tar.gz

Scaricate usando **curl**

Decomprimate ed estraete le cartelle con **tar zxvf test_FileSystem.tar.gz**