

# Unix I

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UNIX!

# What is Unix?

- ▶ Unix, Linux, \*nix, .... : What is it?
- ▶ Operating System
- ▶ Created in 1969 in the Bell Labs
- ▶ Multi-user
- ▶ Multi-task
- ▶ Protected memory
- ▶ Unix family: BSD, Linux, Mac OS X (Darwin), Android, etc.

# Why use Unix on the computing servers of the Institut Pasteur?

- ▶ Fares well in the scientific domain
- ▶ Multi-user
- ▶ Versatile
- ▶ Powerful

# The Unix Shell

# What is the Unix shell?

- ▶ a shell is a user interface for access to an **operating system's** services.
- ▶ a shell can be a **command line interface** or a **graphical user interface**
- ▶ in a command line interface, the user issues commands to the program in the form of successive lines of text (command lines).
- ▶ what is commonly referred as “Unix shell” is a set of commonly-used CLI programs.

# Hands on:

- ▶ Open your “Unix machine”
- ▶ Open a terminal

# Commands

- ▶ A command is an instruction you send to the shell to ask it to execute an action.



# Syntax: command, options, arguments

- ▶ the command: what action should be executed
- ▶ the arguments: the object of the action
- ▶ the options: flags that specify or modify the behaviour of the command

Example: ls

*ls -l*

*ls ~*

# The File system

# The file system

## Basic commands

# work with directories

ls

- ▶ list the contents of a directory

pwd

- ▶ display current directory
- ▶ print working directory

mkdir

- ▶ create one or more directories
- ▶ make directories

# display/print files

more

less

cat

head

tail

# work with files

cp

mv

rm

get help





man

cut, ta

## Tasks management and chaining

How and where to connect on the IP servers?

Thank you