LPI - 103.1 Work the command line
Curs 2021 - 2022

ASIX M01-ISO 103 GNU and unix commands

Work the command line

Description

Candidates should be able to interact with shells and commands using the command line. The objective assumes the Bash shell.

Key Knowledge Areas:

- ☐ Use single shell commands and one line command sequences to perform basic tasks on the command line.
- ☐ Use and modify the shell environment including defining, referencing and exporting environment variables.
- ☐ Use and edit command history.
- ☐ Invoke commands inside and outside the defined path.

The following is a partial list of the used files, terms and utilities:

- ☐ bash
- ☐ echo
- ☐ env
- ☐ export
- ☐ pwd
- ☐ set
- ☐ unset
- ☐ type
- ☐ which
- ☐ man
- ☐ uname
- ☐ history
- ☐ .bash_history
- ☐ Quoting

Introduction

Concepts:

- Prompt: [user@host dir]$
- command [options] args

- edit the command line
- [tab][tab]
- man, help

Commands:
- pwd
- ls, ls -a, ls -A, ls -l, ls -h
- date, cal
- who, whoami, w, id
- uname, uname -a, uname [-armv]

History

- history
- .bash_history
- HISTFILESIZE, HISTFILE, HISTCONTROL and HISTIGNORE
- history n
- !!
- !5
- history -c
- ctrl+r
- [tab][tab]

Help

- man, help, command –help
- man page: name, synopsis, description, etc
- man sections: 1 user command, 5 file formats, 8 admin commands
- apropos (man -k)
- whatis (man -f)
- /usr/share/man
- /usr/share/doc
- less filter in the man command: up, down, search

Execute / find Commands

- whereis, which [a], type
- PATH
- /usr/bin, /bin, /usr/sbin, /sbin…
- Proposed to next chapters: configure bash options, execute with bash and source.

Variables and quoting

- var=value (no! name = value)
- echo $var
- unset var
- Quoting:
    - name="value", echo "my path is $PATH, my user $USER"
    - name='value', echo 'my path is $PATH, my user $USER'
- set
- env
- export

Example Exercises

- Realitza els exercicis indicats a: 103..1 Work on the cmmand Line
- Realitza els exercicis del Question-Topics 103.1

Exercices

1. Show the current directory
2. Show the current date
3. List de active directory
4. Show all the information about the system (uname)
5. Show the kernel release
6. Show the users logged in the system
7. Who are you? :)

[ ]

8. List the history
9. List the last 5 commands
10. Run the last command
11. Run the command number nº (choose one)
12. User ctrl+r to locate the previous uname commands

[ ]

13. Show the help (--help) of the commands: pwd, who, whereis
14. Show the man pages of the command hostname
15. Show the sections of the manual pages.
16. Show the manual page of system the file /etc/passwd
17. Show the calendar (cal), the calendar of this year and the calendar of your birth month.

[ ]

18. List the information of the executable, man pages and configuration of the commands: date, hostname, ls
19. Show the executable of the commands: cat, head, less
20. How many manual pages has the word passwd? Identify them using the whatis command. Which option of the man command does the same?.
21. Show all the pages containing the key word passwd. Which option of the man command does the same?

[ ]

22. Show all the variables
23. Show all the environment variables
24. Show the value of the PATH variable
25. Assign to the name variable your name, and show it.
26. Assign to the fullname variable tour full name, and show it.
27. List (long list) the file .bash_history in your home directory.
28. Show the value of the shell variables: HISTFILESIZE, HISTFILE, HISTCONTROL and HISTIGNORE.