

FIRST LECTURE

In rete trovate molti primer su linux ed unix; uno e' quello che vi ho segnalato ieri

<http://www.tldp.org/LDP/intro-linux/html/index.html>

un altro che ho guardato (di cui e' disponibile il .pdf, che non accludo perche' un po' pesante) e'

<http://linux-training.be/linuxfun.pdf>

quest'ultimo ovviamente contiene di piu' di quanto vi ho detto ieri.

UNIX INTRODUCTION - LIST OF ARGUMENTS

1. General

Kernel, filesystem, shells; file structure

Multi-user and multi-processes (fork, exec; context switch)

2. Absolutely basic commands

-relative and absolute paths, case sensitive, good and bad names;

"hidden" files and directories and their usual use

- ., .., \$HOME, ~

- pwd, cd, ls (-a, -l, -lh, -1), mkdir, rmdir, cp (-i, -r), mv, touch, file

- TAB

- "--help"

- man, info

3. Files

- head, tail [-f], cat, more/less (/ ,? ,g ,G ,arrows)

- which, whereis, locate, find (see shell .pdf)

- du

- ownership, permissions, chmod, chgrp, chown

- grep, sed, awk: see Giuliano's slides

4. Shell (see .pdf)

- .bashrc, .bash_profile, .bash_logout

When Bash is invoked as an interactive login shell, it first reads and executes commands from the file /etc/profile, if that file exists. After reading that file, it looks for ~/.bash_profile, ~/.bash_login, and ~/.profile, in that order, and reads and executes commands from the first one that exists and is readable.

When a login shell exits, Bash reads and executes commands from the file ~/.bash_logout, if it exists. This does not happen with a non-login shell

When an interactive shell that is not a login shell is started, Bash reads and executes commands from ~/.bashrc, if that file exists. This may be inhibited by using the --norc option. The --rcfile file option will force Bash to read and execute commands from file instead of ~/.bashrc.

example: show issuing "bash" and "ssh 0"

- history, !(n), ctrl-r

- special characters *, ?, ;, \, ", ' ,

- in particular: IO redirection (>,<,<<,|)

- shell environment and variables; echo, \$, `, export (example)

- shell scripting (see Giuliano's slides later)

- HOME, PS1, PATH, LD_LIBRARY_PATH, DISPLAY (xhost), MANPATH

- env, set

- alias

- user limits: ulimit

- other common shell variables (IDL_PATH, PYTHONPATH, GSL_INC[LUDE], GSL_LIB, _GSL_HOME and the like

5. Processes

- ps (-x, -ux), jobs, top
- &, bg, fg
- queuing systems (scheduler)

6 Remote connection

- ssh (-Y)
- ftp
- scp, sftp
- rsync
- passphrases

7 An editor: Emacs

- VYSIVYG and not (notes on vi)
- give the hand reference
- common Emacs commands (explain from hand reference) (not done)
- some vi (not done)

REFERENCES:

<http://vic.gedris.org/Manual-ShellIntro/1.2/ShellIntro.pdf>

<http://www.tldp.org/LDP/intro-linux/html/index.html>

+1hr about `grep` e regular expressions