



Arquitectura de Servicios de Red

Práctica 2

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miguel — miguel@miguel-VirtualBox: ~/Downloads — ssh miguel@localhost -p 2222 — 133x48
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-34-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

13 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Your Hardware Enablement Stack (HWE) is supported until April 2025.
Last login: Wed Sep 15 11:25:24 2021 from 10.0.2.2
miguel@miguel-VirtualBox:~$ ls -la
total 100
drwxr-xr-x 18 miguel miguel 4096 sep 16 16:52 .
drwxr-xr-x  3 root  root   4096 sep  8 11:35 ..
-rw-r--r--  1 miguel miguel  985 sep 16 17:02 .bash_history
-rw-r--r--  1 miguel miguel  220 sep  8 11:35 .bash_logout
-rw-r--r--  1 miguel miguel 3771 sep  8 11:35 .bashrc
drwx----- 13 miguel miguel 4096 sep 15 10:57 .cache
drwx----- 11 miguel miguel 4096 sep 16 16:43 .config
drwx-----  3 miguel miguel 4096 sep 16 16:42 .gnupg
drwx-----  3 miguel miguel 4096 sep  8 11:39 .local
drwx-----  5 miguel miguel 4096 sep 13 16:51 .mozilla
-rw-r--r--  1 miguel miguel  807 sep  8 11:35 .profile
drwx-----  2 miguel miguel 4096 sep  8 11:39 .ssh
-rw-r--r--  1 miguel miguel    0 sep 13 16:48 .sudo_as_admin_successful
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Desktop
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Documents
drwxr-xr-x  2 miguel miguel 4096 sep 16 17:05 Downloads
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Music
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Pictures
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Public
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Templates
drwxr-xr-x  2 miguel miguel 4096 sep  8 11:39 Videos
drwxr-xr-x  2 root  root   4096 sep 15 10:34 html
-rw-r--r--  1 miguel miguel 10918 sep 15 10:21 index.html
drwxrwxr-x  2 miguel miguel 4096 sep 16 16:52 shared
miguel@miguel-VirtualBox:~$ cd Downloads/
miguel@miguel-VirtualBox:~/Downloads$ ls -la
total 20204
drwxr-xr-x  2 miguel miguel  4096 sep 16 17:05 .
drwxr-xr-x 18 miguel miguel  4096 sep 16 16:52 ..
-rw-rw-r--  1 miguel miguel 20676672 sep 16 17:05 NASA_access_log_Jul95.gz
miguel@miguel-VirtualBox:~/Downloads$ gzip -g NASA_access_log_Jul95.gz
gzip: invalid option -- 'g'
Try 'gzip --help' for more information.
miguel@miguel-VirtualBox:~/Downloads$ gzip -d NASA_access_log_Jul95.gz
miguel@miguel-VirtualBox:~/Downloads$
```

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miguel — miguel@miguel-VirtualBox: ~ — ssh miguel@localhost -p 2222 — 133x48

miguel@miguel-VirtualBox:~/Downloads$ ls
NASA_access_log_Jul195
miguel@miguel-VirtualBox:~/Downloads$ cd ..
miguel@miguel-VirtualBox:~$ mv ./Downloads/NASA_access_log_Jul195 .
miguel@miguel-VirtualBox:~$ ls
Desktop Documents Downloads Music NASA_access_log_Jul195 Pictures Public Templates Videos html index.html shared
miguel@miguel-VirtualBox:~$ sudo apt-get install aptitude
[[sudo] password for miguel:
Reading package lists... Done
Building dependency tree
Reading state information... Done
aptitude is already the newest version (0.8.12-1ubuntu4).
0 upgraded, 0 newly installed, 0 to remove and 13 not upgraded.
miguel@miguel-VirtualBox:~$ aptitude search grace
p  golang-github-facebookgo-grace-dev          - Graceful restart & zero downtime deploy for Go servers
p  golang-gopkg-tylerb-graceful.v1-dev          - Go package for gracefully shutting down HTTP server
p  grace                                         - XY graphing and plotting tool
p  node-graceful-fs                             - drop-in replacement improving the Node.js fs module
p  python3-pygrace                             - Python3 bindings for grace
miguel@miguel-VirtualBox:~$ aptitude install grace
E: Could not open lock file /var/lib/dpkg/lock-frontent - open (13: Permission denied)
E: Unable to acquire the dpkg frontend lock (/var/lib/dpkg/lock-frontent), are you root?
miguel@miguel-VirtualBox:~$ sudo aptitude install grace
The following NEW packages will be installed:
  grace gsfons(a) libaec0(a) libfftw3-double3(a) libgfortran5(a) libhdf5-103(a) libmotif-common(a) libnetcdf15(a)
  libquadmath0(a) libs2(a) libutempter0(a) libxbae4m(a) libxm4(a) libxmhtml1.1(a) xfonts-100dpi(a) xterm(a)
0 packages upgraded, 16 newly installed, 0 to remove and 13 not upgraded.
Need to get 13,7 MB of archives. After unpacking 30,6 MB will be used.
Do you want to continue? [Y/n/?] Y
Get: 1 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libmotif-common all 2.3.8-2build1 [10,8 kB]
Get: 2 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libxm4 amd64 2.3.8-2build1 [993 kB]
Get: 3 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 gsfons all 1:8.11+urwcyr1.0.7-pre44-4.4 [3.120 kB]
Get: 4 http://es.archive.ubuntu.com/ubuntu focal/main amd64 libutempter0 amd64 1.1.6-4 [8.256 B]
Get: 5 http://es.archive.ubuntu.com/ubuntu focal-updates/universe amd64 xterm amd64 353-1ubuntu1.20.04.2 [765 kB]
Get: 6 http://es.archive.ubuntu.com/ubuntu focal/main amd64 libfftw3-double3 amd64 3.3.8-2ubuntu1 [728 kB]
Get: 7 http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 libquadmath0 amd64 10.3.0-1ubuntu1-20.04 [146 kB]
Get: 8 http://es.archive.ubuntu.com/ubuntu focal-updates/main amd64 libgfortran5 amd64 10.3.0-1ubuntu1-20.04 [736 kB]
Get: 9 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libaec0 amd64 1.0.4-1 [19,1 kB]
Get: 10 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libs2 amd64 1.0.4-1 [5.188 B]
Get: 11 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libhdf5-103 amd64 1.10.4+repack-11ubuntu1 [1.311 kB]
Get: 12 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libnetcdf15 amd64 1:4.7.3-1 [341 kB]
Get: 13 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libxbae4m amd64 4.60.4-7 [105 kB]
Get: 14 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 libxmhtml1.1 amd64 1.1.10-3 [209 kB]
Get: 15 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 grace amd64 1:5.1.25-7build1 [1.342 kB]
Get: 16 http://es.archive.ubuntu.com/ubuntu focal/universe amd64 xfonts-100dpi all 1:1.0.4-nmu1 [3.823 kB]
Fetched 13,7 MB in 1s (12,6 MB/s)
Selecting previously unselected package libmotif-common.
(Reading database ... 169930 files and directories currently installed.)
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miguel — miguel@miguel-VirtualBox: ~ — ssh miguel@localhost -p 2222 — 133x48

miguel@miguel-VirtualBox:~$ wc --help
Usage: wc [OPTION]... [FILE]...
  or:  wc [OPTION]... --files0-from=F
Print newline, word, and byte counts for each FILE, and a total line if
more than one FILE is specified.  A word is a non-zero-length sequence of
characters delimited by white space.

With no FILE, or when FILE is -, read standard input.

The options below may be used to select which counts are printed, always in
the following order: newline, word, character, byte, maximum line length.
  -c, --bytes          print the byte counts
  -m, --chars          print the character counts
  -l, --lines          print the newline counts
  --files0-from=F      read input from the files specified by
                        NUL-terminated names in file F;
                        If F is - then read names from standard input
  -L, --max-line-length print the maximum display width
  -w, --words          print the word counts
  --help              display this help and exit
  --version            output version information and exit

GNU coreutils online help: <https://www.gnu.org/software/coreutils/>
Report wc translation bugs to <https://translationproject.org/team/>
Full documentation at: <https://www.gnu.org/software/coreutils/wc>
or available locally via: info '(coreutils) wc invocation'
miguel@miguel-VirtualBox:~$
```

```
miguel — miguel@miguel-VirtualBox: ~ — ssh miguel@localhost -p 2222 — 98x7

miguel@miguel-VirtualBox:~$ wc -l NASA_access_log_Jul95
1891714 NASA_access_log_Jul95
miguel@miguel-VirtualBox:~$ awk '{if($9 == 404){print $0}}' NASA_access_log_Jul95 | uniq | wc -l
10687
miguel@miguel-VirtualBox:~$
```

```
miguel — miguel@miguel-VirtualBox: ~ — ssh miguel@localhost -p 2222 — 106x5

miguel@miguel-VirtualBox:~$ awk '{print $7}' NASA_access_log_Jul95 | sort | uniq -c | sort | tail -1
111144 /images/NASA-logosmall.gif
miguel@miguel-VirtualBox:~$
```

```
miguel — miguel@miguel-VirtualBox: ~ — ssh miguel@localhost -p 2222 — 106x13

miguel@miguel-VirtualBox:~$ awk '{print $1}' NASA_access_log_Jul95 | sort | uniq -c | sort -r | head
17572 piweba3y.prodigy.com
11591 piweba4y.prodigy.com
9868 piweba1y.prodigy.com
7852 alyssa.prodigy.com
7573 siltb10.orl.mmc.com
5922 piweba2y.prodigy.com
5434 edams.ksc.nasa.gov
4906 163.206.89.4
4863 news.ti.com
4353 disarray.demon.co.uk
miguel@miguel-VirtualBox:~$
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miguel — miguel@miguel-VirtualBox: ~ — ssh miguel@localhost -p 2222 — 134x14

miguel@miguel-VirtualBox:~$ sort -k10 -n -r NASA_access_log_Jul95 | head
derec - - [07/Jul/1995:14:03:32 -0400] "GET /shuttle/countdown/video/livevideo.jpeg HTTP/1.0" 200 6823936
wuzza.harvard.edu - - [22/Jul/1995:13:08:18 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
spider.the.com - - [07/Jul/1995:10:28:56 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
netspace.net.au - - [09/Jul/1995:09:22:14 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
jcj8363.dukepower.com - - [17/Jul/1995:13:31:01 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
acf4.nyu.edu - - [13/Jul/1995:14:38:43 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
198.122.135.40 - - [25/Jul/1995:17:58:56 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
163.206.89.4 - - [14/Jul/1995:09:11:29 -0400] "GET /statistics/1995/bkup/Mar95_full.html HTTP/1.0" 200 3155499
www-b6.proxy.aol.com - - [08/Jul/1995:22:33:46 -0400] "GET /statistics/1995/Jun/Jun95_reverse_domains.html HTTP/1.0" 200 2973350
www-b6.proxy.aol.com - - [08/Jul/1995:22:24:24 -0400] "GET /statistics/1995/Jun/Jun95_reverse_domains.html HTTP/1.0" 200 2973350
miguel@miguel-VirtualBox:~$
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