## SISTEMAS OPERATIVOS 2018-2

GRUPO: 02

PRÁCTICA: 02

ALUMNO: VICTOR EDUARDO VALDEZ

- 1. SISTEMA OPERATIVO USADO: Ubuntu 17.10
- 2. PROGRAMA PARA TRAZAR: strace
- 3. PROGRAMA TRAZADO: git
- 4. ¿POR QUÉ ELEGÍ ESTE PROGRAMA?

Porque sencillamente quiero saber cómo funciona esta útil herramienta 'desde dentro' del sistema operativo, ya que git lo estamos ocupando dentro del curso de la materia para el envío de prácticas, tareas, proyectos; simple curiosidad :)

```
lalo@lalo-PC: ~
                                                                          Archivo Editar Ver Buscar Terminal Ayuda
lalo@lalo-PC:~$ strace git
execve("/usr/bin/git", ["git"], [/* 58 vars */]) = 0
brk(NULL) = 0x1ee4000
access("/etc/ld.so.nohwcap", F_OK) = -1 ENOENT (No such file or directory)
mmap2(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0) = 0xb
access("/etc/ld.so.preload", R OK)
                                      = -1 ENOENT (No such file or directory)
openat(AT FDCWD, / "/etc/ld.so.cache", 0 RDONLY 0 CLOEXEC) = 3
fstat64(3, {st mode=S IFREG|0644, st size=84471, ....}) = 0
mmap2(NULL, 84471, PROT READ, MAP PRIVATE, 3, 0) = 0xb7efc000
                                        = 0
close(3)
fstat64(3, {st_mode=S_IFREG|0644, st_size=480564, ...}) = 0
mmap2(NULL, 483512, PROT READ|PROT EXEC, MAP PRIVATE|MAP DENYWRITE, 3, 0) = 0xb
mmap2(0xb7efa000, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP FIXED|MAP DENYWRI
TE, 3, 0x74000) = 0xb7efa000
close(3)
                                        = 0
access("/etc/ld.so.nohwcap", F OK)
                                       = -1 ENOENT (No such file or directory)
openat(AT FDCWD, "/lib/i386-linux-gnu/libz.so.1", 0 RDONLY|0 CLOEXEC) = 3
```

```
lalo@lalo-PC:~$ strace git
execve("/usr/bin/git", ["git"], [/* 58 vars */]) = 0
brk(NULL)
                                        = 0x1ee4000
access("/etc/ld.so.nohwcap", F_OK)
                                        = -1 ENOENT (No such file or directory)
mmap2(NULL, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP ANONYMOUS, -1, 0) =
0xb7f11000
access("/etc/ld.so.preload", R OK)
                                        = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/etc/ld.so.cache", O_RDONLY|O_CLOEXEC) = 3
fstat64(3, {st_mode=S_IFREG|0644, st_size=84471, ...}) = 0
mmap2(NULL, 84471, PROT READ, MAP PRIVATE, 3, 0) = 0xb7efc000
close(3)
                                        = 0
access("/etc/ld.so.nohwcap", F_OK)
                                        = -1 ENOENT (No such file or directory)
openat(AT FDCWD, "/lib/i386-linux-qnu/libpcre.so.3", O RDONLY|O CLOEXEC) = 3
read(3, "\177ELF\1\1\1\0\0\0\0\0\0\0\0\0\3\0\1\0\0\0\360\16\0\0004\0\0\0"...,
512) = 512
fstat64(3, {st_mode=S_IFREG|0644, st_size=480564, ...}) = 0
mmap2(NULL, 483512, PROT READ|PROT EXEC, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0xb7e85000
mmap2(0xb7efa000, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x74000) = 0xb7efa000
close(3)
                                        = 0
access("/etc/ld.so.nohwcap", F_OK)
                                        = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/i386-linux-gnu/libz.so.1", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\1\1\1\0\0\0\0\0\0\0\0\3\0\3\0\1\0\0\0 \30\0\0004\0\0\"..., 512)
fstat64(3, {st_mode=S_IFREG|0644, st_size=120300, ...}) = 0
mmap2(NULL, 122968, PROT READ|PROT EXEC, MAP PRIVATE|MAP DENYWRITE, 3, 0) =
0xb7e66000
mmap2(0xb7e83000, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x1c000) = 0xb7e83000
close(3)
                                        = 0
access("/etc/ld.so.nohwcap", F OK)
                                        = -1 ENOENT (No such file or directory)
openat(AT FDCWD, "/lib/i386-linux-qnu/libpthread.so.0", O RDONLY|O CLOEXEC) = 3
read(3, "\177ELF\1\1\1\0\0\0\0\0\0\0\0\3\0\1\0\0\0\0\220P\0\0004\0\0"...,
512) = 512
fstat64(3, {st_mode=S_IFREG|0755, st_size=142204, ...}) = 0
mmap2(NULL, 123484, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0xb7e47000
mmap2(0xb7e62000, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x1a000) = 0xb7e62000
mmap2(0xb7e64000, 4700, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS,
-1, 0) = 0xb7e64000
close(3)
access("/etc/ld.so.nohwcap", F OK)
                                        = -1 ENOENT (No such file or directory)
openat(AT_FDCWD, "/lib/i386-linux-gnu/librt.so.1", O_RDONLY|O_CLOEXEC) = 3
read(3, "\177ELF\1\1\0\0\0\0\0\0\0\0\0\3\0\1\0\0\0\0\0\31\0\0004\0\0"...,
512) = 512
fstat64(3, {st_mode=S_IFREG|0644, st_size=34788, ...}) = 0
mmap2(NULL, 37432, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0xb7e3d000
mmap2(0xb7e45000, 8192, PROT READ|PROT WRITE, MAP PRIVATE|MAP FIXED|MAP DENYWRITE,
3, 0x7000) = 0xb7e45000
close(3)
access("/etc/ld.so.nohwcap", F OK)
                                        = -1 ENOENT (No such file or directory)
openat(AT FDCWD, "/lib/i386-linux-qnu/libc.so.6", O RDONLY|O CLOEXEC) = 3
```

```
read(3, "\177ELF\1\1\1\3\0\0\0\0\0\0\0\3\0\1\0\0\0\20\213\1\0004\0\0"...,
512) = 512
fstat64(3, {st_mode=S_IFREG|0755, st_size=1918740, ...}) = 0
mmap2(NULL, 1923612, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_DENYWRITE, 3, 0) =
0xb7c67000
mprotect(0xb7e36000, 4096, PROT NONE)
                                        = 0
mmap2(0xb7e37000, 12288, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_DENYWRITE,
3, 0x1cf000) = 0xb7e37000
mmap2(0xb7e3a000, 10780, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS,
-1, 0) = 0xb7e3a000
close(3)
                                        = 0
mmap2(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0xb7c65000
set_thread_area({entry_number:-1, base_addr:0xb7c65700, limit:1048575, seg_32bit:1,
contents:0, read_exec_only:0, limit_in_pages:1, seg_not_present:0, useable:1}) = 0
(entry number:6)
mprotect(0xb7e37000, 8192, PROT READ)
                                        = 0
mprotect(0xb7e62000, 4096, PROT_READ)
                                        = 0
mprotect(0xb7e45000, 4096, PROT_READ)
                                        = 0
mprotect(0xb7e83000, 4096, PROT_READ)
                                        = 0
mprotect(0xb7efa000, 4096, PROT READ)
                                        = 0
mprotect(0x757000, 8192, PROT READ)
                                        = 0
mprotect(0xb7f3d000, 4096, PROT_READ)
                                        = 0
                                        = 0
munmap(0xb7efc000, 84471)
set_tid_address(0xb7c65768)
                                        = 4614
set_robust_list(0xb7c65770, 12)
                                        = 0
rt sigaction(SIGRTMIN, {sa handler=0xb7e4baa0, sa mask=[], sa flags=SA SIGINFO},
NULL. 8) = 0
rt_sigaction(SIGRT_1, {sa_handler=0xb7e4bb30, sa_mask=[], sa_flags=SA_RESTART|
SA SIGINFO\}, NULL, 8) = 0
rt_sigprocmask(SIG_UNBLOCK, [RTMIN RT_1], NULL, 8) = 0
ugetrlimit(RLIMIT STACK, {rlim cur=8192*1024, rlim max=RLIM INFINITY}) = 0
uname({sysname="Linux", nodename="lalo-PC", ...}) = 0
openat(AT_FDCWD, "/dev/null", O_RDWR|O_LARGEFILE) = 3
close(3)
brk(NULL)
                                        = 0x1ee4000
brk(0x1f05000)
                                        = 0x1f05000
brk(0x1f06000)
                                        = 0x1f06000
open("/usr/lib/locale/locale-archive", O RDONLY|O LARGEFILE|O CLOEXEC) = 3
fstat64(3, {st_mode=S_IFREG|0644, st_size=5574176, ...}) = 0
mmap2(NULL, 2097152, PROT_READ, MAP_PRIVATE, 3, 0) = 0xb7a65000
mmap2(NULL, 1249280, PROT_READ, MAP_PRIVATE, 3, 0x2db000) = 0xb7934000
mmap2(NULL, 4096, PROT READ, MAP PRIVATE, 3, 0x544000) = 0xb7f10000
close(3)
open("/usr/lib/locale/locale-archive", O_RDONLY|O_LARGEFILE|O_CLOEXEC) = 3
fstat64(3, {st_mode=S_IFREG|0644, st_size=5574176, ...}) = 0
mmap2(NULL, 4096, PROT_READ, MAP_PRIVATE, 3, 0x547000) = 0xb7f0f000
close(3)
rt_sigprocmask(SIG_UNBLOCK, [PIPE], NULL, 8) = 0
rt sigaction(SIGPIPE, {sa handler=SIG DFL, sa mask=[PIPE], sa flags=SA RESTART},
{sa_handler=SIG_DFL, sa_mask=[], sa_flags=0}, 8) = 0
fstat64(1, {st_mode=S_IFCHR|0620, st_rdev=makedev(136, 0), ...}) = 0
write(1, "usage: git [--version] [--help] "..., 281usage: git [--version] [--help]
[-C <path>] [-c name=value]
           [--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
           [-p | --paginate | --no-pager] [--no-replace-objects] [--bare]
```

```
[--git-dir=<path>] [--work-tree=<path>] [--namespace=<name>]
) = 281
write(1, "
                     <command> [<args>]\n\n", 31
                                                           <command> [<arqs>]
) = 31
open("/usr/share/locale/locale.alias", O RDONLY|O CLOEXEC) = 3
fstat64(3, {st_mode=S_IFREG|0644, st_size=2995, ...}) = 0
read(3, "# Locale name alias data base.\n#"..., 4096) = 2995 read(3, "", 4096) = 0
close(3)
                                        = 0
open("/usr/share/locale/es/LC MESSAGES/git.mo", O RDONLY) = -1 ENOENT (No such file
or directory)
open("/usr/share/locale-langpack/es/LC_MESSAGES/git.mo", 0_RDONLY) = 3
fstat64(3, {st_mode=S_IFREG|0644, st_size=71504, ...}) = 0
mmap2(NULL, 71504, PROT_READ, MAP_PRIVATE, 3, 0) = 0xb7efd000
close(3)
open("/usr/lib/i386-linux-qnu/qconv/qconv-modules.cache", 0 RDONLY) = 3
fstat64(3, {st_mode=S_IFREG|0644, st_size=26256, ...}) = 0
mmap2(NULL, 26256, PROT_READ, MAP_SHARED, 3, 0) = 0xb792d000
close(3)
futex(0xb7e39fe4, FUTEX_WAKE_PRIVATE, 2147483647) = 0
write(1, "Estas son \303\263rden<u>es Git usadas en"..., 56Estas so</u>n órdenes Git
usadas en diferentes situaciones **AQUÍ EMPIEZA A EJECUTARSE GIT
) = 56
open("/usr/share/locale/en/LC MESSAGES/git.mo", O RDONLY) = -1 ENOENT (No such file
or directory)
open("/usr/share/locale-langpack/en/LC_MESSAGES/git.mo", O_RDONLY) = -1 ENOENT (No
such file or directory)
write(1, "\n", 1
                        = 1
write(1, "start a working area (see also: "..., 51start a working area (see also:
git help tutorial)
) = 51
write(1, " clone
                        Clone a repository"..., 54
                                                                 Clone a repository
                                                      clone
into a new directory
) = 54[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE CLONAR UN REPOSITORIO]
write(1, "
            init
                        Create an empty Gi"..., 77
                                                      init
                                                                 Create an empty Git
repository or reinitialize an existing one
) = 77[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE CREAR UN REPOSITORIO]
write(1, "\n", 1
write(1, "work on the current change (see "..., 57work on the current change (see
also: git help everyday)
) = 57
write(1, "
                        Add file contents "..., 45
                                                                 Add file contents
             add
                                                      add
to the index
) = 45 ** ESTA PARTE SE NOS DA LA OPCIÓN
                                                     UN ARCHIVO
                                                                  UN REPOSITORIO1
write(1, "
                        Mueva o renombre "..., 86
                                                                 Mueva o renombre
            ΜV
                                                      ΜV
su archivo a un directorio o cree un enlace simbolico
) = 86[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE MOVER UN ARCHIVO A OTRO DIRECTORIO EN
UN REPOSITORIO
write(1, " reset
                        Restablecer la cab"..., 69
                                                                 Restablecer la
                                                      reset
cabecera al estado actual especificado
) = 69
write(1, " rm
                        Eliminar archivos "..., 68
                                                                 Eliminar archivos
                                                      ΓM
del árbol de trabajo y del índice
```

```
) = 68[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE ELIMINAR UN ARCHIVO DE UN REPOSITORIO]
write(1, "\n", 1
write(1, "examine the history and state (s"..., 61examine the history and state
(see also: git help revisions)
) = 61
write(1, "
             bisect
                       Use binary search "..., 73
                                                    bisect
                                                               Use binary search
to find the commit that introduced a bug
) = 73
write(1, "
                       Print lines matchi"..., 45
                                                               Print lines
           grep
                                                    grep
matching a pattern
) = 45
write(1, "
                       Show commit logs\n", 31 log
                                                            Show commit logs
            log
) = 31
write(1, "
                      Mostrar los divers"..., 52
                                                               Mostrar los
            show
                                                    show
diversos tipos de objetos
) = 52
write(1, "
           status
                       Mostrar el estado "..., 60
                                                               Mostrar el estado
                                                    status
de los árboles de trabajo
) = 60[*EN ESTA PARTE SE NOS DA UN 'STATUS' DE UN REPOSITORIO]
write(1, "\n", 1
write(1, "grow, mark and tweak your common"..., 41grow, mark and tweak your common
history
) = 41
write(1, " branch
                       List, create, or d"..., 47
                                                    branch
                                                               List, create, or
delete branches
) = 47
write(1, " checkout
                       Cambiar de rama o "..., 77
                                                    checkout
                                                               Cambiar de rama o
restaurar los archivos del árbol de trabajo
) = 77[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE CAMBIAR DE RAMA EN GIT
write(1, "
                       Record changes to "..., 47
                                                               Record changes to
            commit
                                                    commit
the repository
) = 47[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE GUARDAR
                                                    LOS CAMBIOS EN UN REPOSITORIO]
write(1, "
           diff
                       Show changes betwe"..., 73
                                                    diff
                                                               Show changes
between commits, commit and working tree, etc
) = 73[*EN ESTA PARTE SE NOS DA LA OPCIÓN DE MOSTRAR UN HISTORIAL (COMMITS, PUSH,
ETC) DENTRO DE UN REPOSITORIO]
write(1, "
                       Join two or more d"..., 62
            merge
                                                               Join two or more
                                                    merge
development histories together
) = 62
write(1, "
             rebase
                       Reapply commits on"..., 57
                                                    rebase
                                                               Reapply commits on
top of another base tip
) = 57
write(1. " tag
                       Crear, listar, eli"..., 89
                                                               Crear, listar,
                                                    taa
eliminar o verificar un objeto de etiqueta firmado con GPG
) = 89
write(1, "\n", 1
write(1, "collaborate (see also: git help "..., 43collaborate (see also: git help
workflows)
) = 43
write(1, " fetch
                       Download objects a"..., 64 fetch
                                                               Download objects
and refs from another repository
) = 64
```

```
write(1, " pull Debe integrar con "..., 70 pull Debe integrar con
otro repositorio o una sucursal local
) = 70
write(1, " push
                   Actualizaci\303\263n de "..., 73 push Actualización
de refs remotas junto con objetos asociados
) = 73
write(1, "\n", 1
write(1, "'git help -a' and 'git help -g' "..., 133'git help -a' and 'git help -g'
list available subcommands and some
concept guides. See 'git help <command>' or 'git help <concept>'
) = 133
write(1, "to read about a specific subcomm"..., 48to read about a specific
subcommand or concept.
) = 48
                                      = ?
exit group(1)
+++ exited with 1 +++ [*FINALIZA LA EJECUCIÓN]
```