

Prática de Manipulação de Processo I

Abra o terminal;

Execute o comando top;

```
23 de fev 13:55
PDITA681@PDITA3409L: ~
PDITA681@PDITA3409L:~$ top

top - 13:55:10 up 49 min,  2 users,  load average: 0,28, 0,25, 0,13
Tarefas: 245 total,  1 em exec., 244 dormindo,  0 parado,  0 zumbi
%CPU(s):  0,3 us,  0,5 sy,  0,5 ni, 98,6 id,  0,1 wa,  0,0 hi,  0,0 si,  0,0 st
MB mem:   7717,2 total,  3908,3 free,  2327,3 used,  2265,3 buff/cache
MB swap:  4096,0 total,  4096,0 free,  0,0 used.  5389,9 avail mem

  PID  USUARIO  PR  NI  VIRT  RES  SHR  S  %CPU  %MEM  TEMPO+  COMANDO
1893 PDITA681 20  0 1092976 97472 60160 S  2,0  1,2  0:11.34 Xorg
2148 PDITA681 20  0 4950976 290824 122880 S  1,7  3,7  0:30.97 gnome-shell
2566 PDITA681 39 19 785064 36568 20904 S  1,3  0,5  0:00.54 tracker-miner-f
6810 PDITA681 20  0 771420 57184 44848 S  1,3  0,7  0:01.25 gnome-terminal-
6918 PDITA681 39 19 466064 28812 23564 S  1,3  0,4  0:00.04 tracker-extract
2443 PDITA681 20  0 308388 7680 7168 S  0,7  0,1  0:00.02 ibus-portal
495 systemd+ 20  0 17076 7424 6656 S  0,3  0,1  0:02.90 systemd-oomd
1789 PDITA681 9 -11 130664 15220 8576 S  0,3  0,2  0:00.09 pipewire
1804 PDITA681 20  0 10624 6400 4480 S  0,3  0,1  0:00.46 dbus-daemon
6299 PDITA681 20  0 32,7g 266716 195564 S  0,3  3,4  0:14.72 chrome
6342 PDITA681 20  0 33,1g 177988 121556 S  0,3  2,3  0:14.79 chrome
1 root 20  0 169528 13136 9040 S  0,0  0,2  0:01.23 systemd
2 root 20  0 0 0 0 S  0,0  0,0  0:00.00 kthreadd
3 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 rcu_gp
4 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 rcu_par_gp
5 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 slub_flushwq
6 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 netns
7 root 20  0 0 0 0 I  0,0  0,0  0:00.50 kworker/0:0-i915-unordered
8 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 kworker/0:0H-events_highpri
11 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 mm_percpu_wq
12 root 20  0 0 0 0 I  0,0  0,0  0:00.00 rcu_tasks_kthread
13 root 20  0 0 0 0 I  0,0  0,0  0:00.00 rcu_tasks_rude_kthread
14 root 20  0 0 0 0 I  0,0  0,0  0:00.00 rcu_tasks_trace_kthread
15 root 20  0 0 0 0 S  0,0  0,0  0:00.06 ksoftirqd/0
16 root 20  0 0 0 0 I  0,0  0,0  0:00.98 rcu_preempt
17 root rt 0 0 0 0 S  0,0  0,0  0:00.01 migration/0
18 root -51 0 0 0 0 S  0,0  0,0  0:00.00 idle_inject/0
19 root 20  0 0 0 0 S  0,0  0,0  0:00.00 cpuhp/0
20 root 20  0 0 0 0 S  0,0  0,0  0:00.00 cpuhp/1
21 root -51 0 0 0 0 S  0,0  0,0  0:00.00 idle_inject/1
22 root rt 0 0 0 0 S  0,0  0,0  0:00.07 migration/1
23 root 20  0 0 0 0 S  0,0  0,0  0:00.07 ksoftirqd/1
25 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 kworker/1:0H-events_highpri
26 root 20  0 0 0 0 S  0,0  0,0  0:00.00 cpuhp/2
27 root -51 0 0 0 0 S  0,0  0,0  0:00.00 idle_inject/2
28 root rt 0 0 0 0 S  0,0  0,0  0:00.07 migration/2
29 root 20  0 0 0 0 S  0,0  0,0  0:00.09 ksoftirqd/2
31 root 0 -20 0 0 0 I  0,0  0,0  0:00.00 kworker/2:0H-events_highpri
32 root 20  0 0 0 0 S  0,0  0,0  0:00.00 cpuhp/3
33 root -51 0 0 0 0 S  0,0  0,0  0:00.00 idle_inject/3
```

Inicie em segundo plano o programa gedit;

```
23 de fev 14:07
PDITA681@PDITA3409L: ~
PDITA681@PDITA3409L:~$ gedit &
[1] 8469
PDITA681@PDITA3409L:~$ Gtk-Message: 14:03:21.477: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.

(gedit:8469): Gtk-WARNING **: 14:03:21.551: GTK+ module /snap/gedit/684/gnome-platform/usr/lib/gtk-2.0/modules/libcanberra-gtk-module.so cannot be loaded.
GTK+ 2.x symbols detected. Using GTK+ 2.x and GTK+ 3 in the same process is not supported.
Gtk-Message: 14:03:21.551: Failed to load module "canberra-gtk-module"

(gedit:8469): Gtk-WARNING **: 14:03:21.552: GTK+ module /snap/gedit/684/gnome-platform/usr/lib/gtk-2.0/modules/libcanberra-gtk-module.so cannot be loaded.
GTK+ 2.x symbols detected. Using GTK+ 2.x and GTK+ 3 in the same process is not supported.
Gtk-Message: 14:03:21.552: Failed to load module "canberra-gtk-module"

(gedit:8469): GLib-GIO-WARNING **: 14:03:21.606: Error creating IO channel for /proc/self/mountinfo: Permission denied (g-file-error-quark, 2)

** (gedit:8469): WARNING **: 14:03:46.717: atk-bridge: get_device_events_reply: unknown signature

[1]+  Concluido                  gedit
PDITA681@PDITA3409L:~$
```

Selecione um processo que estava em execução e use o conjunto ps, pipe e grep para filtrar esse processo;

```
23 de fev 14:10
PDITA681@PDITA3409L: ~
PDITA681@PDITA3409L:~$ gedit &
[1] 9642
PDITA681@PDITA3409L:~$ Gtk-Message: 14:09:38.331: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.

(gedit:9642): Gtk-WARNING **: 14:09:38.405: GTK+ module /snap/gedit/684/gnome-platform/usr/lib/gtk-2.0/modules/libcanberra-gtk-module.so cannot be loaded.
GTK+ 2.x symbols detected. Using GTK+ 2.x and GTK+ 3 in the same process is not supported.
Gtk-Message: 14:09:38.405: Failed to load module "canberra-gtk-module"

(gedit:9642): Gtk-WARNING **: 14:09:38.406: GTK+ module /snap/gedit/684/gnome-platform/usr/lib/gtk-2.0/modules/libcanberra-gtk-module.so cannot be loaded.
GTK+ 2.x symbols detected. Using GTK+ 2.x and GTK+ 3 in the same process is not supported.
Gtk-Message: 14:09:38.406: Failed to load module "canberra-gtk-module"

(gedit:9642): GLib-GIO-WARNING **: 14:09:38.460: Error creating IO channel for /proc/self/mountinfo: Permission denied (g-file-error-quark, 2)

PDITA681@PDITA3409L:~$ pwd
/home/PDITA681
PDITA681@PDITA3409L:~$ ps -aux | grep gedit
PDITA681  9642  2.3  0.7 769636 57712 pts/0    Sl  14:09   0:00 /snap/gedit/684/usr/bin/gedit
PDITA681  9732  0.0  0.0   6544  2304 pts/0    S+   14:09   0:00 grep --color=auto gedit
PDITA681@PDITA3409L:~$
** (gedit:9642): WARNING **: 14:10:03.559: atk-bridge: get_device_events_reply: unknown signature
```

Use o comando apt para instalar o comando htop;
Teste o comando htop;

```
23 de fev 14:17
PDITA681@PDITA34091: ~

PDITA681@PDITA34091:~$ sudo apt install htop
Lendo listas de pacotes... Pronto
Construindo árvore de dependências... Pronto
Lendo informação de estado... Pronto
Os seguintes pacotes foram instalados automaticamente e já não são necessários:
  libmodbus5 libwpe-1.0-1 libwpebackend-fdo-1.0-1
Utilize 'sudo apt autoremove' para os remover.
Pacotes sugeridos:
  lm-sensors
Os NOVOS pacotes a seguir serão instalados:
  htop
0 pacotes atualizados, 1 pacotes novos instalados, 0 a serem removidos e 121 não atualizados.
É preciso baixar 158 kB de arquivos.
Depois desta operação, 402 kB adicionais de espaço em disco serão usados.
Err:1 http://archive.ubuntu.com/ubuntu mantic/main amd64 htop amd64 3.2.2-2
404 Not Found [IP: 2620:2d:4002:1::102 80]
E: Falhou ao buscar http://archive.ubuntu.com/ubuntu/pool/main/h/htop/htop_3.2.2-2_amd64.deb 404 Not Found [IP: 2620:2d:4002:1::102 80]
E: Impossível buscar alguns arquivos, talvez executar apt-get update ou tentar com --fix-missing?
PDITA681@PDITA34091:~$
PDITA681@PDITA34091:~$ htop
Comando 'htop' não encontrado, mas poder ser instalado com:
sudo snap install htop # version 3.3.0, or
sudo apt install htop # version 3.2.2-2
Veja 'snap info htop' para versões adicionais.
PDITA681@PDITA34091:~$ sudo snap install htop
htop 3.3.0 from Maximiliano Bertacchini (maxiberta) installed
PDITA681@PDITA34091:~$ htop
locales-launch: Data of pt_BR locale not found, generating, please wait...
PDITA681@PDITA34091:~$
```

```
23 de fev 14:17
PDITA681@PDITA34091: ~

0[|||||] 5.2% Tasks: 139, 573 thr, 110 kthr; 0 running
1[|||||] 2.6% Load average: 0.06 0.16 0.19
2[|||||] 5.7% Uptime: 01:11:26
3[|||||] 4.0%
Mem[|||||] 2.06G/7.54G
Swp[|||||] 0K/4.00G

Main 1/0
PID USER PRI NI VIRT RES SHR CPU%MEM% TIME+ Command
2148 PDITA681 20 0 4888M 284M 120M S 3.9 3.7 1:00.20 /usr/bin/gnome-shell
8317 PDITA681 20 0 759M 61432 46460 R 3.9 0.8 0:04.00 /usr/libexec/gnome-terminal-server
10474 PDITA681 20 0 7096 5632 3328 R 3.2 0.1 0:00.32 /snap/htop/4407/usr/local/bin/htop
10893 PDITA681 20 0 1077M 108M 68288 R 1.9 1.3 0:30.18 /usr/lib/xorg/Xorg vt2 -displayfd 3 -auth /run/user/1004/gdm/Xauthority -nolisten tcp -background
4093 systemd-oo 20 0 17076 7424 6656 S 0.6 0.1 0:04.30 /lib/systemd/systemd-oomd
707 polkitd 20 0 379M 10824 8268 S 0.6 0.2 0:00.31 /usr/lib/polkit-1/polkitd --no-debug
10804 PDITA681 20 0 10624 6400 4480 S 0.6 0.1 0:00.63 /usr/bin/dbus-daemon --session --address=systemd: --nofork --nopidfile --systemd-activation --syslog-only
1923 PDITA681 20 0 1077M 108M 69288 S 0.6 1.3 0:03.73 /usr/lib/xorg/Xorg vt2 -displayfd 3 -auth /run/user/1004/gdm/Xauthority -nolisten tcp -background
2166 PDITA681 20 0 4888M 284M 120M S 0.6 3.7 0:00.07 /usr/bin/gnome-shell
1 root 20 0 166M 14544 9040 S 0.0 0.2 0:01.82 /sbin/init splash
231 root 19 -1 50776 16952 15544 S 0.0 0.2 0:00.44 /lib/systemd/systemd-journald
270 root 20 0 29548 8064 4736 S 0.0 0.1 0:00.24 /lib/systemd/systemd-udev
498 systemd-re 20 0 22408 13440 10240 S 0.0 0.2 0:01.78 /lib/systemd/systemd-resolved
501 systemd-ti 20 0 90564 7552 6656 S 0.0 0.1 0:00.06 /lib/systemd/systemd-timesyncd
561 systemd-ti 20 0 90564 7552 6656 S 0.0 0.1 0:00.00 /lib/systemd/systemd-timesyncd
693 avahi 20 0 8568 3968 3840 S 0.0 0.1 0:00.20 avahi-daemon: running [PDITA34091.local]
694 root 20 0 11004 5376 4992 S 0.0 0.1 0:00.05 /usr/lib/bluetooth/bluetoothd
695 messagebus 20 0 12268 7424 4480 S 0.0 0.1 0:01.21 /dbus-daemon --system --address=systemd: --nofork --nopidfile --systemd-activation --syslog-only
```

Prática de Manipulação de Processo II

Abra o terminal;
Inicie em segundo plano o programa gedit;

```
23 de fev 14:21
PDITA681@PDITA34091: ~

PDITA681@PDITA34091:~$ gedit &
[2] 10699
PDITA681@PDITA34091:~$ Gtk-Message: 14:21:33.593: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.

Abre uma janela do gedit com o título "Documento sem título 2".
```

Pesquise pelo gedit usando o conjunto ps, | e grep;

Finalize o programa gedit utilizando o comando kill;

```
23 de fev 14:24
PDITA681@PDITA3409L: ~
PDITA681@PDITA3409L:~$ gedit &
[2] 10699
PDITA681@PDITA3409L:~$ Gtk-Message: 14:21:33.593: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.

[2]+  Concluido          gedit
PDITA681@PDITA3409L:~$ ps -aux | grep gedit
PDITA681   9642  0.1  0.7 770288 58660 pts/0    Sl   14:09   0:01 /snap/gedit/684/usr/bin/gedit
PDITA681   10818  0.0  0.0   6544  2304 pts/0    S+   14:23   0:00 grep --color=auto gedit
PDITA681@PDITA3409L:~$ kill 9642
PDITA681@PDITA3409L:~$ ps -aux | grep gedit
PDITA681   10875  0.0  0.0   6544  2304 pts/0    S+   14:24   0:00 grep --color=auto gedit
[1]+  Terminado          gedit
PDITA681@PDITA3409L:~$
```

Inicie novamente o programa gedit;

Agora finalize utilizando o comando killall;

```
23 de fev 14:30
PDITA681@PDITA3409L: ~
PDITA681@PDITA3409L:~$ gedit &
[2] 11116
PDITA681@PDITA3409L:~$ Gtk-Message: 14:28:37.797: Not loading module "atk-bridge": The functionality is provided by GTK natively. Please try to not load it.

[2]+  Concluido          gedit
PDITA681@PDITA3409L:~$ killall gedit
PDITA681@PDITA3409L:~$ ps -aux | grep gedit
PDITA681   11248  0.0  0.0   6544  2304 pts/0    S+   14:29   0:00 grep --color=auto gedit
[1]+  Terminado          gedit
PDITA681@PDITA3409L:~$
```