

Inspeção, Monitoramento e Logs

No diretório `/proc` encontram-se os arquivos de hardware

```
root@debian:/proc# ls
1    127 188 296 428 494 6    diskstats    kcore    mtrr    sysvipc
10   13   2   3   431 496 7    dma          keys     net     thread-self
11   135 20   30  434 5    9    driver      key-users pagetypeinfo timer_list
117  14   21   31  436 502 acpi    dynamic_debug kmsg    partitions tty
119  141 22   314 437 504 asound  execdomains kpagecgroup pressure uptime
12   142 23   32  44   512 buddyinfo fb       kpagecount schedstat version
120  144 235 33   442 53   bus    filesystems kpageflags self     vmallocinfo
121  146 24   34  443 546 cgroups fs       loadavg  slabinfo vmstat
122  148 25   35  46   547 cmdline interrupts locks    softirqs zoneinfo
123  15   252 36  463 554 consoles iomem   meminfo stat
124  16   26  37  47   564 cpuinfo  ioports misc     swaps
125  18   28  38  48   58   crypto  irq      modules  sys
126  187 29   4   481 59   devices kallsyms mounts   sysrq-trigger

root@debian:/proc# _
```

In []:

Informações da CPU

O arquivo `cpuinfo` contém as informações sobre a CPU.

```
root@debian:/proc# cat cpuinfo
processor       : 0
vendor_id     : GenuineIntel
cpu family    : 6
model         : 60
model name    : Intel(R) Core(TM) i7-4770K CPU @ 3.50GHz
stepping      : 3
cpu MHz       : 3498.988
cache size    : 8192 KB
physical id   : 0
siblings      : 1
core id       : 0
cpu cores     : 1
apicid        : 0
initial apicid : 0
tpu           : yes
fpu_exception : yes
cpuid level   : 13
wp            : yes
flags         : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mm
x fxsr sse sse2 ht syscall nx rdtscp lm constant_tsc rep_good nopl xtopology nonstop_tsc cpuid tsc_k
nown_freq pni pclmulqdq monitor ssse3 cx16 pcid sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx rdra
nd hypervisor lahf_lm abm invpcid_single pti fsgsbase bmi1 avx2 bmi2 invpcid md_clear flush_l1d
bugs          : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs itlb_multihit
srbds mmio_unknown
bogomips      : 6997.97
clflush size  : 64
cache_alignm  : 64
address sizes : 39 bits physical, 48 bits virtual
power managem  :

root@debian:/proc# _
```

In []:

Versão do Kernel e Distribuição

O arquivo `version` possui informação sobre a versão da distribuição e do kernel:

```
root@debian:/proc# cat version
Linux version 6.1.0-13-amd64 (debian-kernel@lists.debian.org) (gcc-12 (Debian 12.2.0-14) 12.2.0, GNU
ld (GNU Binutils for Debian) 2.40) #1 SMP PREEMPT_DYNAMIC Debian 6.1.55-1 (2023-09-29)
root@debian:/proc#
```

In []:

Dispositivos PCI

O comando `lspci` mostra os dispositivos PCI da placa mãe.

```
root@debian:/proc# lspci
00:00.0 Host bridge: Intel Corporation 440FX - 82441FX PMC [Natoma] (rev 02)
00:01.0 ISA bridge: Intel Corporation 82371SB PIIX3 ISA [Natoma/Triton II]
00:01.1 IDE interface: Intel Corporation 82371AB/EB/MB PIIX4 IDE (rev 01)
00:02.0 VGA compatible controller: VMware SVGA II Adapter
00:03.0 Ethernet controller: Intel Corporation 82540EM Gigabit Ethernet Controller (rev 02)
00:04.0 System peripheral: InnoTek Systemberatung GmbH VirtualBox Guest Service
00:05.0 Multimedia audio controller: Intel Corporation 82801AA AC'97 Audio Controller (rev 01)
00:06.0 USB controller: Apple Inc. KeyLargo/Intrepid USB
00:07.0 Bridge: Intel Corporation 82371AB/EB/MB PIIX4 ACPI (rev 08)
00:08.0 Ethernet controller: Intel Corporation 82540EM Gigabit Ethernet Controller (rev 02)
00:0b.0 USB controller: Intel Corporation 82801FB/FBM/FR/FW/FRW (ICH6 Family) USB2 EHCI Controller
00:0d.0 SATA controller: Intel Corporation 82801HM/HEM (ICH8M/ICH8M-E) SATA Controller [AHCI mode] (
rev 02)
root@debian:/proc# _
```

Para obter detalhes um dispositivo PCI específico usa-se o comando `lspci -S` seguido ID do dispositivo e da *flag* -v. Por exemplo, para obter mais detalhes sobre o adaptador de rede, cujo ID é `00:03.0`, usa-se o comando: `lspci 00:03.0 -v`

```
root@debian:/proc# lspci -s 00:03.0 -v
00:03.0 Ethernet controller: Intel Corporation 82540EM Gigabit Ethernet Controller (rev 02)
Subsystem: Intel Corporation PRO/1000 MT Desktop Adapter
Flags: bus master, 66MHz, medium devsel, latency 64, IRQ 19
Memory at f0200000 (32-bit, non-prefetchable) [size=128K]
I/O ports at d020 [size=8]
Capabilities: [dc] Power Management version 2
Capabilities: [e4] PCI-X non-bridge device
Kernel driver in use: e1000
Kernel modules: e1000
root@debian:/proc# _
```

In []:

Módulos de Drivers Instalados

Para obter todos os módulos instalados:

```
lsmod | less
```

In []:

Dispositivos USB

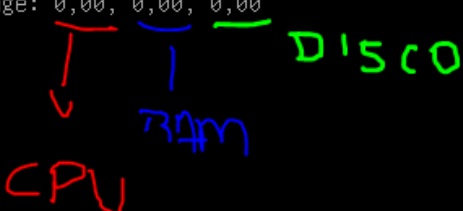
```
lsusb
```

In []:

Tempo de Execução de Recursos

```
uptime
```

```
root@debian:/proc# uptime
18:26:17 up 32 min,  1 user,  load average: 0,00, 0,00, 0,00
root@debian:/proc# _
```



In []:

Uso de Memória

```
free -m -t
```

```
root@debian:/proc# free -m -t
```

	total	usada	livre	compart.	buff/cache	disponível
Mem.:	960	204	783	0	85	756
Swap:	975	0	975			
Total:	1936	204	1759			

```
root@debian:/proc#
```

In []:

Uso de Disco por Partição

```
df -h
```

```
root@debian:/proc# df -h
```

Sist. Arq.	Tam.	Usado	Disp.	Uso%	Montado em
udev	457M	0	457M	0%	/dev
tmpfs	97M	592K	96M	1%	/run
/dev/mapper/debian--vg-root	2,1G	931M	1,1G	47%	/
tmpfs	481M	0	481M	0%	/dev/shm
tmpfs	5,0M	0	5,0M	0%	/run/lock
/dev/sda1	455M	59M	372M	14%	/boot
/dev/mapper/debian--vg-home	4,9G	104M	4,6G	3%	/home
/dev/mapper/debian--vg-tmp	234M	10K	217M	1%	/tmp
/dev/mapper/debian--vg-var	1013M	333M	612M	36%	/var
tmpfs	97M	0	97M	0%	/run/user/0

```
root@debian:/proc#
```

In []:

Processos

`top`

In []:

Logs

Os logs são armazenados no diretório `etc/var/log`