

Atividade 10 - Relatório Cliente Linux

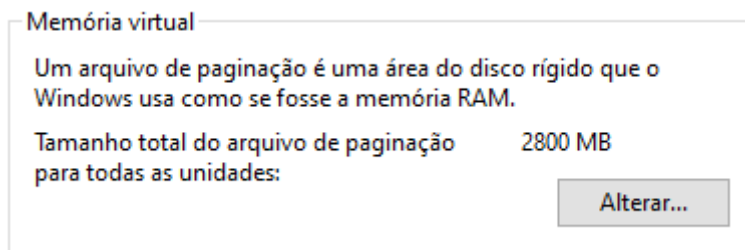
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1. Informe via comando e/ou interface GUI:

As seguintes informações da sua máquina:

SO, CPU, RAM, Tipo de Disco, Tamanho Disco, Tamanho Memória Estendida

```
WindowsProductName : Windows 10 Home
CsProcessors : {Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz}
OsTotalVirtualMemorySize : 6282484
PS C:\Users\marli> wmic diskdrive get model,serialNumber,size,mediaType
MediaType Model SerialNumber Size
Fixed hard disk media ST31000524AS ATA Device 9VPBWM2L 1000202273280
```



2. Qual ferramenta você utilizou para criar o ambiente Linux?

WSL

3. Veja os comandos a seguir, descreva para que serve e liste as informações importantes que trazem (print):

3.1. sudo apt update – Procura Updates para os pacotes instalados

```
luiz_carlos@DESKTOP-PV51Q3D:~$ sudo apt update
[sudo] password for luiz_carlos:
Get:1 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Hit:2 http://archive.ubuntu.com/ubuntu focal InRelease
Get:3 http://archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
Get:5 http://archive.ubuntu.com/ubuntu focal-updates/main amd64 c-n-f Metadata [14.3 kB]
Fetched 342 kB in 3s (101 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
All packages are up to date.
```

3.2. top – Traz informações a respeito do Consumo de HW

```
luiz_carlos@DESKTOP-PVS1Q3D: ~  
top - 21:26:51 up 57 min, 0 users, load average: 0.29, 0.09, 0.03  
Tasks: 5 total, 1 running, 4 sleeping, 0 stopped, 0 zombie  
%Cpu(s): 0.0 us, 0.1 sy, 0.0 ni, 99.7 id, 0.2 wa, 0.0 hi, 0.0 si, 0.0 st  
MiB Mem : 3079.7 total, 2756.3 free, 56.9 used, 266.5 buff/cache  
MiB Swap: 1024.0 total, 1024.0 free, 0.0 used, 2881.1 avail Mem  


| PID | USER     | PR | NI | VIRT  | RES  | SHR  | S | %CPU | %MEM | TIME+   | COMMAND |
|-----|----------|----|----|-------|------|------|---|------|------|---------|---------|
| 1   | root     | 20 | 0  | 896   | 580  | 516  | S | 0.0  | 0.0  | 0:00.05 | init    |
| 7   | root     | 20 | 0  | 896   | 84   | 20   | S | 0.0  | 0.0  | 0:00.00 | init    |
| 8   | root     | 20 | 0  | 896   | 84   | 20   | S | 0.0  | 0.0  | 0:00.25 | init    |
| 9   | luiz_ca+ | 20 | 0  | 10040 | 4948 | 3248 | S | 0.0  | 0.2  | 0:00.62 | bash    |
| 292 | luiz_ca+ | 20 | 0  | 10876 | 3696 | 3196 | R | 0.0  | 0.1  | 0:00.07 | top     |


```

3.3. more /proc/cpuinfo – Traz diversas informações sobre a CPU

```
luiz_carlos@DESKTOP-PVS1Q3D: ~  
luiz_carlos@DESKTOP-PVS1Q3D:~$ more /proc/cpuinfo  
processor       : 0  
vendor_id      : GenuineIntel  
cpu family     : 6  
model          : 37  
model name     : Intel(R) Core(TM) i3 CPU          540 @ 3.07GHz  
stepping       : 5  
microcode      : 0xffffffff  
cpu MHz        : 3066.767  
cache size     : 4096 KB  
physical id    : 0  
siblings       : 4  
core id        : 0  
cpu cores      : 2  
apicid         : 0  
initial apicid: 0  
fpu            : yes  
fpu_exception  : yes  
cpuid level    : 11  
wp             : yes  
flags          : fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush  
mmx fxsr sse sse2 ht syscall nx rdtscp lm constant_tsc rep_good nopl xtopology cpuid pni ssse3 c  
x16 pcid sse4_1 sse4_2 popcnt hypervisor lahf_lm pti ssbd ibrs ibpb stibp flush_l1d arch_capabili  
ties
```

3.4. cpuid | more – Traz Informações mais específicas sobre a CPU e uma lista com várias funções que ela consegue realizar

```
luiz_carlos@DESKTOP-PVS1Q3D: ~  
luiz_carlos@DESKTOP-PVS1Q3D:~$ cpuid | more  
CPU 0:  
  vendor_id = "GenuineIntel"  
  version information (1/eax):  
    processor type = primary processor (0)  
    family         = 0x6 (6)  
    model          = 0x5 (5)  
    stepping id    = 0x5 (5)  
    extended family = 0x0 (0)  
    extended model = 0x2 (2)  
    (family synth) = 0x6 (6)  
    (model synth)  = 0x25 (37)  
    (simple synth)  = Intel Core (unknown type) (Clarkdale/Arrandale K0) [Westmere] {Nehalem},  
32nm  
  miscellaneous (1/ebx):  
    process local APIC physical ID = 0x0 (0)  
    cpu count                       = 0x4 (4)  
    CLFLUSH line size               = 0x8 (8)  
    brand index                      = 0x0 (0)  
  brand id = 0x00 (0): unknown  
  feature information (1/edx):  
    x87 FPU on chip                 = true  
    VME: virtual-8086 mode enhancement = true  
    DE: debugging extensions         = true
```

3.5. sudo dmidecode - Este comando decodifica tabelas DMI (Desktop Management Information)

```

luiz_carlos@DESKTOP-PVS1Q3D:~$ sudo dmidecode
# dmidecode 3.2
Scanning /dev/mem for entry point.
# No SMBIOS nor DMI entry point found, sorry.

```

3.6. hardinfo – Traz várias informações sobre o Arquivos, Dispositivos Conectados e Hardware, além de vários Benchmarks

```

Selecting system
Kernel Modules
Boots
Languages
Filesystems
Display
Environment Variables
Development
Users
Groups
Devices
Processor
Memory
PCI Devices
USB Devices
Printers
Battery
Sensors
Input Devices
Storage
DMI
Memory SPD
Resources
Network
Interfaces
IP Connections
Routing Table
ARP Table
DNS Servers
Statistics
Shared Directories
Benchmarks
CPU Blowfish
[CPU Blowfish]owfish benchmark...
(Unknown);Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz;12267_08=5.069024; 5.069024; 4|4|(Unknown)|Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz|1 physical processor; 2 cores; 4 threads|4x 3066
.77 MHz|3153592|1|2|4|(Unknown)
CPU CryptHash
[CPU CryptHash]ash benchmark...
(Unknown);Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz;12267_08=271.866047; 1.147624; 4|4|(Unknown)|Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz|1 physical processor; 2 cores; 4 threads|4x 3066
66.77 MHz|3153592|1|2|4|(Unknown)
CPU Fibonacci
[CPU Fibonacci]e 42nd Fibonacci number...
(Unknown);Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz;12267_08=0.970326; 0.970326; 1|1|(Unknown)|Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz|1 physical processor; 2 cores; 4 threads|4x 3066
.77 MHz|3153592|1|2|4|(Unknown)
CPU N-Queens
[CPU N-Queens]ens benchmark...
(Unknown);Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz;12267_08=6.259341; 6.259341; 4|4|(Unknown)|Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz|1 physical processor; 2 cores; 4 threads|4x 3066
.77 MHz|3153592|1|2|4|(Unknown)
CPU Zlib
[CPU Zlib]lib benchmark...
(Unknown);Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz;12267_08=0.355692; 0.355692; 4|4|(Unknown)|Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz|1 physical processor; 2 cores; 4 threads|4x 3066
.77 MHz|3153592|1|2|4|(Unknown)

```

3.7. inxi -C – Traz informações sobre a CPU

```

luiz_carlos@DESKTOP-PVS1Q3D:~$ inxi -C
CPU:      Topology: Dual Core model: Intel Core i3 540 bits: 64 type: MT MCP
          L2 cache: 4096 KiB
          Speed: 3067 MHz min/max: N/A Core speeds (MHz): 1: 3067 2: 3067 3: 3067 4: 3067

```

3.8. likwid-topology - Traz diversas infos sobre a CPU e seus cores lógicos

```

Selecionar luiz_carlos@DESKTOP-PVS1Q3D: ~
luiz_carlos@DESKTOP-PVS1Q3D:~$ likwid-topology
-----
CPU name:      Intel(R) Core(TM) i3 CPU 540 @ 3.07GHz
CPU type:p://arcIntel Core Westmere processormain amd64 liblua5.2-0 amd64 5.2.4-1.1build3 [106 kB
CPU stepping:  5
*****.1build3 [99.8 kB
Hardware Thread Topology
*****fsg1-1 [800 kB]
Sockets:1005 kB in 7s (116 kB/s)
Cores per socket:      2
Threads per core:      2
-----
HWThread      Thread      Core      Socket      Available
0              0              0          0          *
1              1              0          0          *
2              0              1          0          *
3              1              1          0          *
-----
Socket 0:      ( 0 1 2 3 )
-----
Cache Topology
*****
Level:        1

```

3.9. Lscpu – Também traz bastante informação sobre a CPU

```
luiz_carlos@DESKTOP-PVS1Q3D: ~  
luiz_carlos@DESKTOP-PVS1Q3D:~$ lscpu  
Architecture:          x86_64  
CPU op-mode(s):        32-bit, 64-bit  
Byte Order:            Little Endian  
Address sizes:         36 bits physical, 48 bits virtual  
CPU(s):                4  
On-line CPU(s) list:   0-3  
Thread(s) per core:    2  
Core(s) per socket:    2  
Socket(s):             1  
Vendor ID:             GenuineIntel  
CPU family:            6  
Model:                 37  
Model name:            Intel(R) Core(TM) i3 CPU           540 @ 3.07GHz  
Stepping:               5  
CPU MHz:               3066.767  
BogoMIPS:              6133.53  
Hypervisor vendor:     Microsoft  
Virtualization type:   full  
L1d cache:             64 KiB  
L1i cache:             64 KiB  
L2 cache:              512 KiB  
L3 cache:              4 MiB  
Vulnerability Itlb multihit: KVM: Mitigation: VMX unsupported
```

3.10. Lshw – Traz pouquíssimas informações sobre a placa mae e a Memória (Que por sinal é a Virtual, não minha memória RAM propriamente dita) e algumas informações sobre a CPU além de uma lista com as suas capacidades

```
Selecionar Luiz_carlos@DESKTOP-PVS1Q3D: ~  
luiz_carlos@DESKTOP-PVS1Q3D:~$ sudo lshw  
desktop-pvs1q3d  
  description: Computer  
    width: 64 bits  
    capabilities: smp vsyscall32  
  *-core  
    description: Motherboard  
      physical id: 0  
    *-memory  
      description: System memory  
        physical id: 0  
        size: 3200MiB  
    *-cpu  
      product: Intel(R) Core(TM) i3 CPU           540 @ 3.07GHz  
      vendor: Intel Corp.  
      physical id: 1  
      bus info: cpu@0  
      width: 64 bits  
      capabilities: fpu fpu_exception wp vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca  
cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx rdtscp x86-64 constant_tsc rep_good nopl  
xtopology cpuid pni ssse3 cx16 pcid sse4_1 sse4_2 popcnt hypervisor lahf_lm pti ssbd ibrs ibpb st  
ibp flush_l1d arch_capabilities  
    *-pn00:00  
      product: PnP device PNP0b00
```

3.11. Lstopo – Deveria ter trazido a topologia do sistema (Um desenho de como o sistema funciona)

```

luiz_carlos@DESKTOP-PVS1Q3D:~$ lstopo
Machine (3080MB total)
  Package L#0
    NUMANode L#0 (P#0 3080MB)
      L3 L#0 (4096KB)
        L2 L#0 (256KB) + L1d L#0 (32KB) + L1i L#0 (32KB) + Core L#0
          PU L#0 (P#0)
          PU L#1 (P#1)
        L2 L#1 (256KB) + L1d L#1 (32KB) + L1i L#1 (32KB) + Core L#1
          PU L#2 (P#2)
          PU L#3 (P#3)
      Block "sdb"
      Block "sda"
      Net "eth0"

```

OBS:

Prô, sabia que dá pra usar o PoweShell pelo cmd? Se liga

```

C:\Users\marli>powershell
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos os direitos reservados.

Experimente a nova plataforma cruzada PowerShell https://aka.ms/pscore6

PS C:\Users\marli> Get-ComputerInfo

```