

Exercícios Práticos

Comandos Linux 7

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1 - Monitorização de Recursos

```
correia@correia-VirtualBox:~/Documents$ top
```

```
top - 22:28:34 up 1:31, 1 user, load average: 0,00, 0,00, 0,00
Tasks: 198 total, 2 running, 196 sleeping, 0 stopped, 0 zombie
%Cpu(s): 21,1 us, 7,9 sy, 0,0 ni, 71,1 id, 0,0 wa, 0,0 hi, 0,0 si, 0,0 st
MiB Mem : 3906,7 total, 1523,8 free, 792,1 used, 1590,9 buff/cache
MiB Swap: 3750,0 total, 3750,0 free, 0,0 used. 2838,0 avail Mem
```

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
948	correia	20	0	5092468	366608	138532	S	109,1	9,2	3:05.99	gnome-shell
3804	correia	20	0	562156	52152	39952	R	27,3	1,3	0:03.19	gnome-terminal-
3979	correia	20	0	21876	3968	3328	R	18,2	0,1	0:00.22	top
1	root	20	0	167772	12700	8220	S	0,0	0,3	0:01.84	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

```
correia@correia-VirtualBox:~/Documents$ du -h /home
```

```
4,0K    /home/correia/Downloads
4,0K    /home/correia/Music
4,0K    /home/correia/Pictures
4,0K    /home/correia/Public
8,0K    /home/correia/.cache/ubuntu-pro
392K    /home/correia/.cache/gstreamer-1.0
102K    /home/correia/.cache/libudfreadu
```

2 - Cron Jobs

```
correia@correia-VirtualBox:~/Documents$ crontab -e
no crontab for correia - using an empty one
```

```
crontab: installing new crontab
correia@correia-VirtualBox:~/Documents$ crontab -l
* * * * * touch ~/Documents/teste.txt
```

3 - Histórico de Comandos

```
correia@correia-VirtualBox:~/Documents$ history
 1  vim
 2  ls
 3  sudo apt update
 4
```

```
correia@correia-VirtualBox:~/Documents$ !2
ls
arquivo_copiado.txt      arquivo.txt      exercicio_linux_compactado_tar.gz
arquivo_permissao.txt   exercicio_linux teste.txt
```

4 - Filtros e Redirecionamento

```
correia@correia-VirtualBox:~/Documents$ echo "Olá Mundo" > lista.txt
correia@correia-VirtualBox:~/Documents$ cat lista.txt
Olá Mundo
correia@correia-VirtualBox:~/Documents$ grep -i "Mundo" lista.txt
Olá Mundo
```

5 - Usuários e Grupos

```
correia@correia-VirtualBox:~/Documents$ cut -d: -f1 /etc/passwd
```

```
nptcp
gdm
correia
```

```
correia@correia-VirtualBox:~/Documents$ sudo addgroup meugrupo
[sudo] password for correia:
Adding group 'meugrupo' (GID 1001) ...
Done.
correia@correia-VirtualBox:~/Documents$ sudo usermod -aG meugrupo correia
correia@correia-VirtualBox:~/Documents$ groups correia
correia : correia adm cdrom sudo dip plugdev lpadmin lxd sambashare meugrupo
```

6 - SSH

```
correia@correia-VirtualBox:~/Documents$ sudo systemctl status ssh
● ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-02-26 22:55:51 WET; 27s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 4615 (sshd)
    Tasks: 1 (limit: 4598)
   Memory: 1.7M
      CPU: 21ms
   CGroup: /system.slice/ssh.service
           └─4615 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

fev 26 22:55:51 correia-VirtualBox systemd[1]: Starting OpenBSD Secure Shell server...
fev 26 22:55:51 correia-VirtualBox sshd[4615]: Server listening on 0.0.0.0 port 22.
fev 26 22:55:51 correia-VirtualBox sshd[4615]: Server listening on :: port 22.
fev 26 22:55:51 correia-VirtualBox systemd[1]: Started OpenBSD Secure Shell server.
```

```
correia@correia-VirtualBox:~/Documents$ ssh localhost
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ED25519 key fingerprint is SHA256:7sGxyXmkM+K4Phv2zl3XsewMWGGiRfKTsiMUXDiuAHk.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? y
Please type 'yes', 'no' or the fingerprint: yes
Warning: Permanently added 'localhost' (ED25519) to the list of known hosts.
correia@localhost's password:
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.5.0-21-generic x86_64)
```

7 - Firewall(UFW)

```
correia@correia-VirtualBox:~$ sudo ufw enable
Command may disrupt existing ssh connections. Proceed with operation (y|n)? y
Firewall is active and enabled on system startup
correia@correia-VirtualBox:~$ sudo ufw allow ssh
Rule added
Rule added (v6)
correia@correia-VirtualBox:~$ sudo ufw status
Status: active
```

To	Action	From
--	-----	----
22/tcp	ALLOW	Anywhere
22/tcp (v6)	ALLOW	Anywhere (v6)

8 - Visualização de Logs

```
correia@correia-VirtualBox:~$ tail -n 10 /var/log/syslog | grep "error"
Feb 26 23:00:06 correia-VirtualBox tracker-extract[5453]: Task for 'file:///usr/share/ap
plications/htop.desktop.dpkg-new' finished with error: Error when getting information fo
r file "/usr/share/applications/htop.desktop.dpkg-new": No such file or directory
```

9 - Instalação de Pacotes

```
correia@correia-VirtualBox:~$ sudo apt install nano
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  hunspell
The following NEW packages will be installed:
  nano
```

```
correia@correia-VirtualBox:~$ sudo apt install htop
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Suggested packages:
  lm-sensors
The following NEW packages will be installed:
  htop
```

10 - Variáveis de Ambiente

```
correia@correia-VirtualBox:~$ export MEU_DIRETORIO=$HOME
correia@correia-VirtualBox:~$ cd $MEU_DIRETORIO
correia@correia-VirtualBox:~$ cd Documents/
correia@correia-VirtualBox:~/Documents$ cd $MEU_DIRETORIO
```