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01212151

## Criando EC2 na AWS

### EC2

Instâncias (1/2)		Informações			Conectar	Estado da instância	Ações	Executar instâncias
		Pesquisar						
	Name	ID de instância	Estado da inst...	Tipo de inst...	Verificação de s...	Status do al...	Zona de dispon...	DNS IPv4 p
<input checked="" type="checkbox"/>	urubu100	i-0df2aa9a395f92419	Executando	t2.micro	-	Sem alar...	us-east-1d	ec2-3-215-

A instância está sendo executada

### Volume

Volumes (1/2)

Filtrar volumes

Ações

Criar volume

	Name	ID do volume	Tipo	Tamanho	IOPS	Taxa de tra...	Snapshot	Criado
<input checked="" type="checkbox"/>	urubu100	vol-014403acfc7ca55ab	gp2	30 GiB	100	-	snap-0f7a6ea...	2022/04/13 18:37 GMT-3

O volume está em uso, pois esse é o volume que está associado a instância

### Chave SSH

```
CH13042022RA01212151
-----BEGIN OPENSSH PRIVATE KEY-----
b3B1bnNzaC1rZXktdjEAAAABG5vbmUAAAAEbm9uZQAAAAAAAAABAAAAMwAAAAAtz
c2gtZWQyNTUxOQAAACBKks4Q172jms6F+hS2GygSe6yLZi/j/eNJR18InHWP7QAA
AIi1vma1tb5mtQAAAAAtzc2gtZWQyNTUxOQAAACBKks4Q172jms6F+hS2GygSe6yL
Zi/j/eNJR18InHWP7QAAAEAwUQIBATAFBgMrZXAEIgQgUALWNKLH1DpLKirT0KgP
pEqSzHDXva0azoX6FLYbKBJ7rItmL+P9401GXwicdY/tAAAAAAECAwQF
-----END OPENSSH PRIVATE KEY-----
```

SSH significa Secure Shell, é um protocolo de rede que permite os usuários acessar e gerenciar de forma remota o servidor pela internet.

## Me conectando via SSH

```
Lucas@Lucas-Pc MINGW64 ~/Desktop/AC2-S0
$ chmod 400 CH13042022RA01212151.pem

Lucas@Lucas-Pc MINGW64 ~/Desktop/AC2-S0
$ ssh -i "CH13042022RA01212151.pem" ubuntu@ec2-3-215-174-81.compute-1.amazonaws.com
The authenticity of host 'ec2-3-215-174-81.compute-1.amazonaws.com (3.215.174.81)' can't be established.
ED25519 key fingerprint is SHA256:J9JAcrRtU6N60DyIVRdNxiHGtoE/F4Bjt10mrDb3S08.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-3-215-174-81.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.11.0-1022-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Wed Apr 13 21:55:58 UTC 2022

System load:  0.1               Processes:            100
Usage of /:   4.9% of 29.02GB   Users logged in:     0
Memory usage: 20%              IPv4 address for eth0: 172.31.1.119
Swap usage:   0%

1 update can be applied immediately.
To see these additional updates run: apt list --upgradable

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-1-119:~$ |
```

### Adicionando senha para user *root*

```
ubuntu@ip-172-31-1-119:~$ sudo passwd root
New password:
Retype new password:
passwd: password updated successfully
```

### Adicionando senha para user *ubuntu*

```
ubuntu@ip-172-31-1-119:~$ sudo passwd ubuntu
New password:
Retype new password:
passwd: password updated successfully
```

O comando `sudo passwd` permite nos adicionar uma senha ao usuário da máquina

## Adicionando user *ra01212151* + senha

```
root@ip-172-31-1-119:/home/ubuntu# sudo adduser ra01212151
Adding user 'ra01212151' ...
Adding new group 'ra01212151' (1001) ...
Adding new user 'ra01212151' (1001) with group 'ra01212151' .
Creating home directory '/home/ra01212151' ...
Copying files from '/etc/skel' ...
New password:
Retype new password:
passwd: password updated successfully
Changing the user information for ra01212151
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:

Is the information correct? [Y/n]
root@ip-172-31-1-119:/home/ubuntu#
```

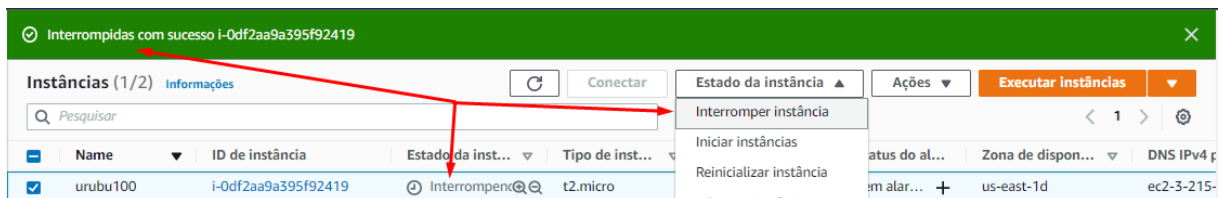
## Fornecendo super poderes para o user *ra01212151*

```
root@ip-172-31-1-119:/home/ubuntu# sudo usermod -aG sudo ra01212151
```

Esse comando nos permite alterar o tipo de usuário para um super usuário.

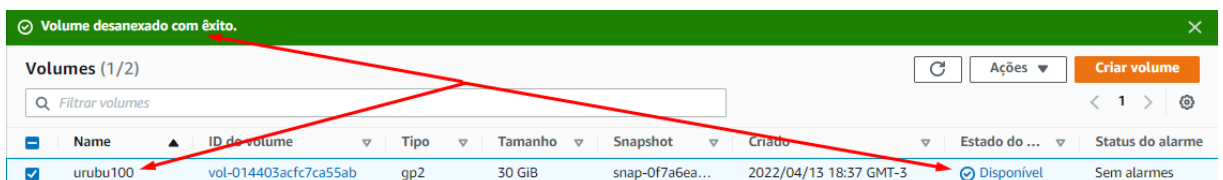
## Desassociando volume

### Interrompendo a instância EC2



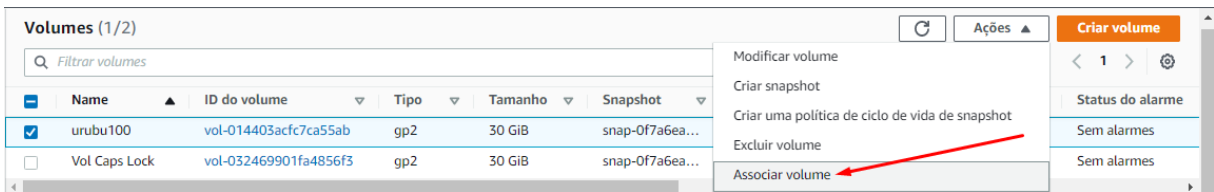
Devemos primeiro interromper a EC2

### Desassociando o volume



Em seguida, podemos desassociar o volume a EC2

## Associando o volume

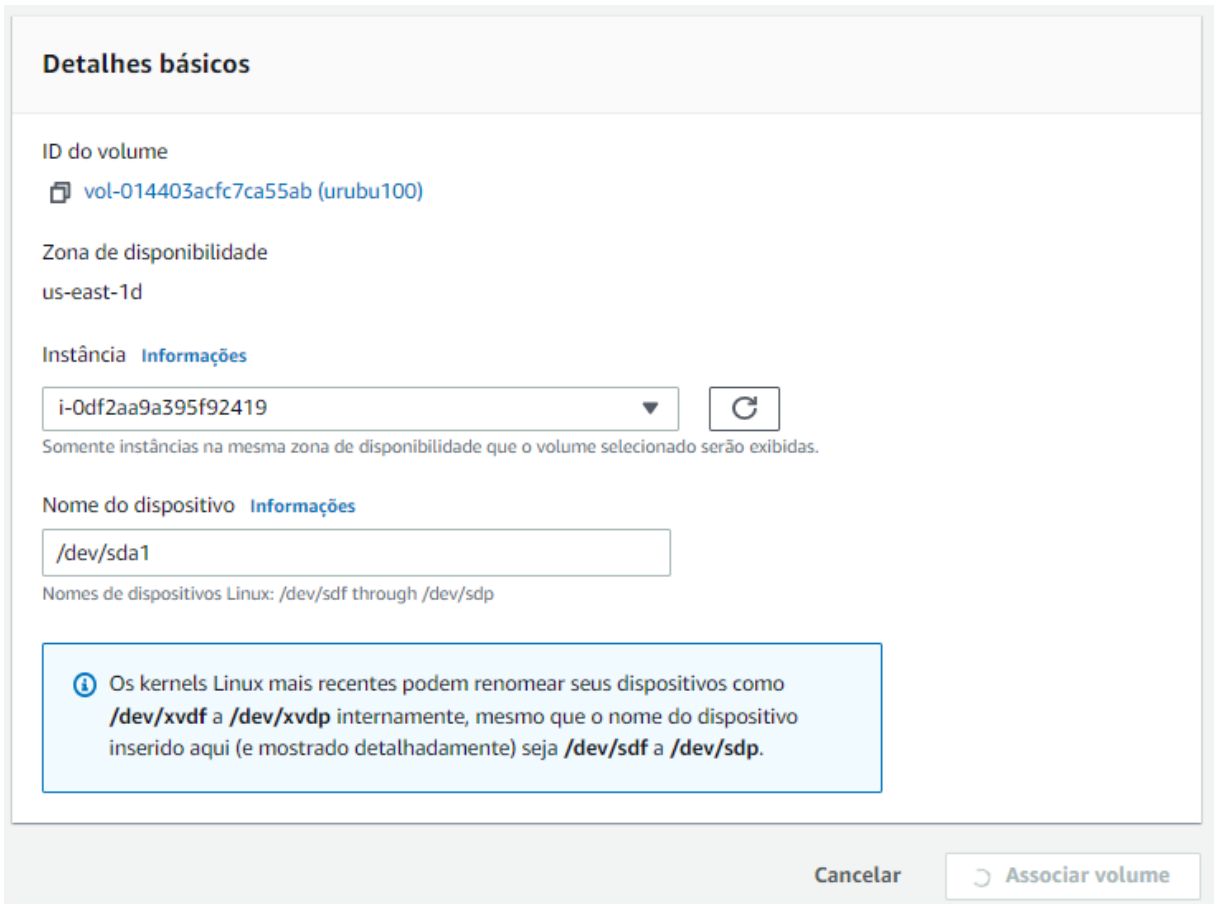


The screenshot shows the AWS console 'Volumes' page. A table lists two volumes: 'urubu100' and 'Vol Caps Lock'. The 'urubu100' row is selected. An 'Ações' (Actions) menu is open, showing options like 'Modificar volume', 'Criar snapshot', and 'Associar volume'. A red arrow points to the 'Associar volume' option.

	Name	ID do volume	Tipo	Tamanho	Snapshot
<input checked="" type="checkbox"/>	urubu100	vol-014403acfc7ca55ab	gp2	30 GiB	snap-0f7a6ea...
<input type="checkbox"/>	Vol Caps Lock	vol-032469901fa4856f3	gp2	30 GiB	snap-0f7a6ea...

Nessa etapa, estamos revertendo o passo anterior, associando o volume a EC2

## Configurando detalhes básicos



The screenshot shows the 'Detalhes básicos' form in the AWS console. It contains fields for 'ID do volume' (vol-014403acfc7ca55ab), 'Zona de disponibilidade' (us-east-1d), 'Instância' (i-0df2aa9a395f92419), and 'Nome do dispositivo' (/dev/sda1). A note at the bottom states: 'Os kernels Linux mais recentes podem renomear seus dispositivos como /dev/xvdf a /dev/xvdp internamente, mesmo que o nome do dispositivo inserido aqui (e mostrado detalhadamente) seja /dev/sdf a /dev/sdp.' At the bottom right, there are 'Cancelar' and 'Associar volume' buttons.

**Detalhes básicos**

ID do volume  
vol-014403acfc7ca55ab (urubu100)

Zona de disponibilidade  
us-east-1d

Instância [Informações](#)  
i-0df2aa9a395f92419

Nome do dispositivo [Informações](#)  
/dev/sda1

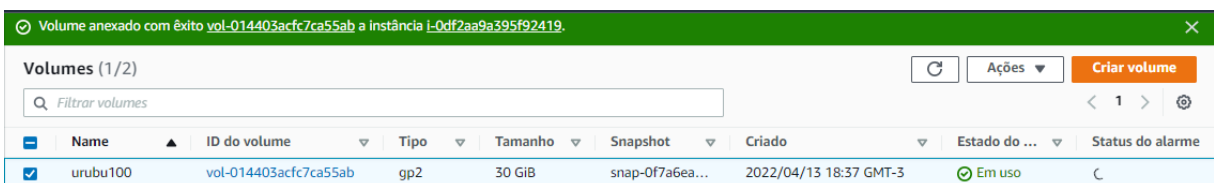
Names de dispositivos Linux: /dev/sdf through /dev/sdp

Os kernels Linux mais recentes podem renomear seus dispositivos como /dev/xvdf a /dev/xvdp internamente, mesmo que o nome do dispositivo inserido aqui (e mostrado detalhadamente) seja /dev/sdf a /dev/sdp.

Cancelar Associar volume

Nessa etapa, devemos dizer qual a instância, e qual a nomenclatura do dispositivo que estava associado a ela (nesse caso, nossa instância estava utilizando a /dev/sda1).

## Confirmando...



The screenshot shows the AWS console 'Volumes' page after the volume has been successfully associated with the EC2 instance. A green notification bar at the top states: 'Volume anexado com êxito vol-014403acfc7ca55ab a instância i-0df2aa9a395f92419.' The table below shows the volume 'urubu100' with the status 'Em uso' (In use).

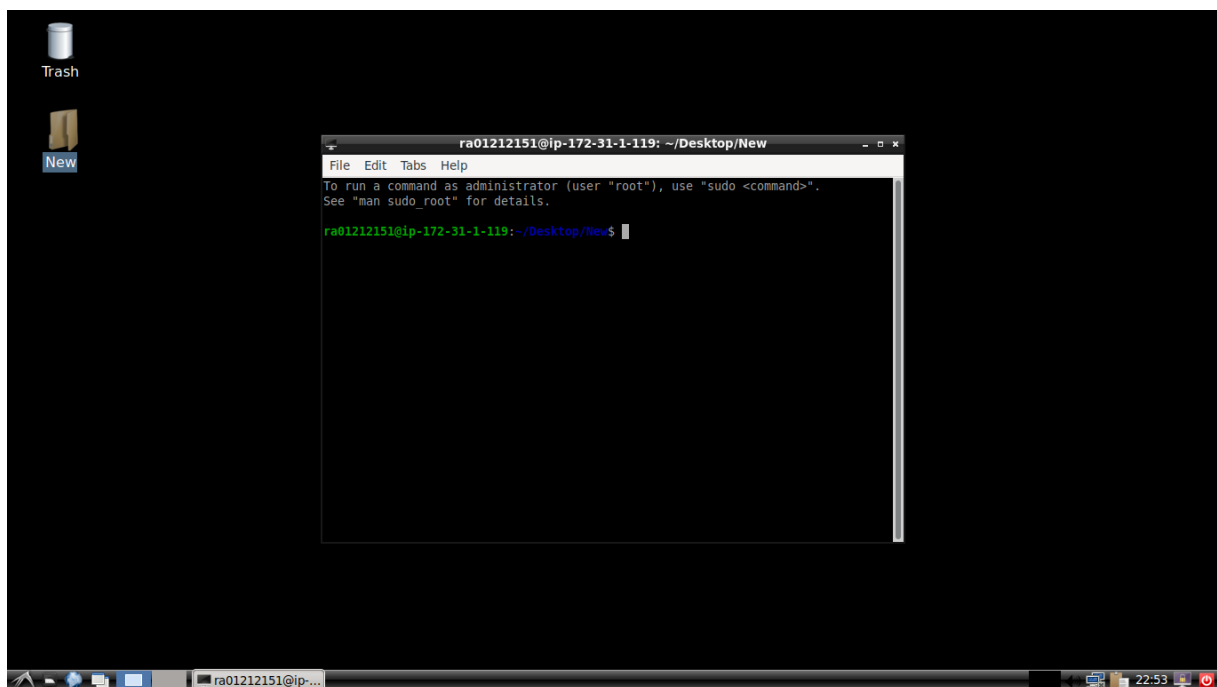
	Name	ID do volume	Tipo	Tamanho	Snapshot	Criado	Estado do ...	Status do alarme
<input checked="" type="checkbox"/>	urubu100	vol-014403acfc7ca55ab	gp2	30 GiB	snap-0f7a6ea...	2022/04/13 18:37 GMT-3	Em uso	

## Instalando a GUI

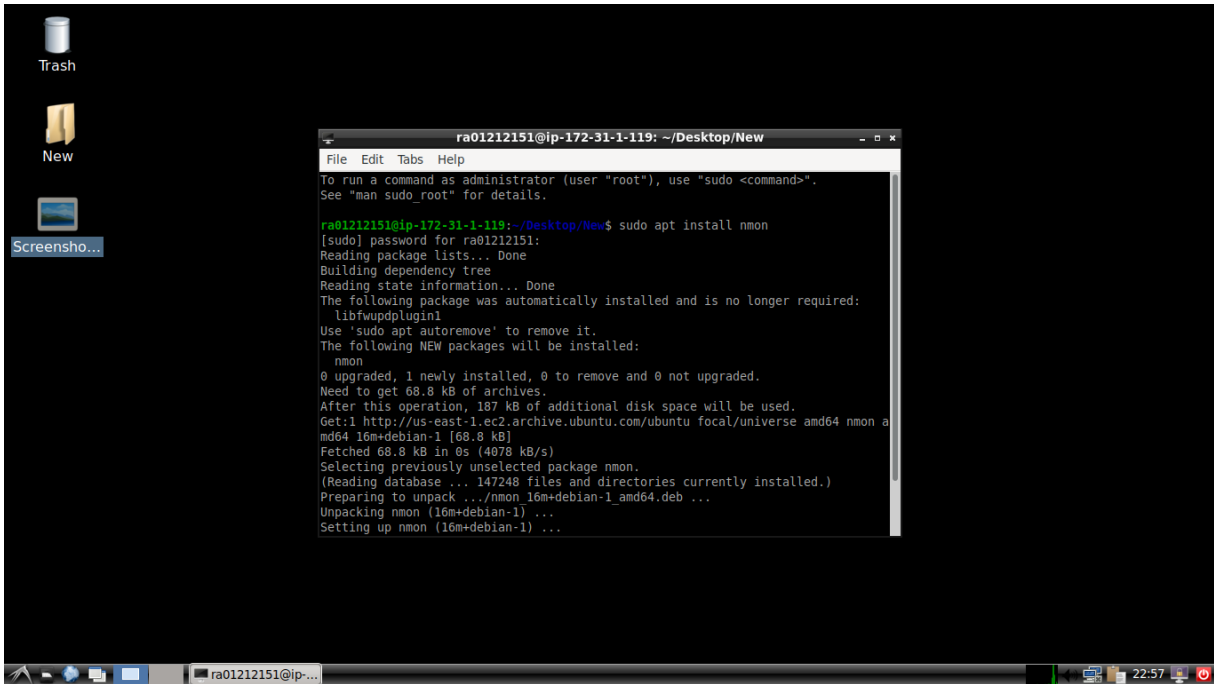
```
ubuntu@ip-172-31-1-119:~$ sudo apt update && sudo apt upgrade
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 Packages [8628 kB]
Get:6 http://security.ubuntu.com/ubuntu focal-security/main amd64 Packages [1385 kB]
Get:7 http://security.ubuntu.com/ubuntu focal-security/main Translation-en [240 kB]
Get:8 http://security.ubuntu.com/ubuntu focal-security/main amd64 c-n-f Metadata [10.0 kB]
Get:9 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [859 kB]
Get:10 http://security.ubuntu.com/ubuntu focal-security/restricted Translation-en [122 kB]
Get:11 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 c-n-f Metadata [532 B]
Get:12 http://security.ubuntu.com/ubuntu focal-security/universe amd64 Packages [698 kB]
Get:13 http://security.ubuntu.com/ubuntu focal-security/universe Translation-en [124 kB]
Get:14 http://security.ubuntu.com/ubuntu focal-security/universe amd64 c-n-f Metadata [14.3 kB]
Get:15 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 Packages [20.7 kB]
Get:16 http://security.ubuntu.com/ubuntu focal-security/multiverse Translation-en [5196 B]
Get:17 http://security.ubuntu.com/ubuntu focal-security/multiverse amd64 c-n-f Metadata [500 B]
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe Translation-en [5124 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 c-n-f Metadata [265
```

```
ubuntu@ip-172-31-1-119:~$ sudo apt-get install xrdp lxde-core lxde tigervnc-standalone-server -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
lxde is already the newest version (10).
lxde-core is already the newest version (10).
tigervnc-standalone-server is already the newest version (1.10.1+dfsg-3).
xrdp is already the newest version (0.9.12-1).
The following package was automatically installed and is no longer required:
  libfwupdplugin1
Use 'sudo apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
```

## Interface Gráfica



## Instalando o NMON

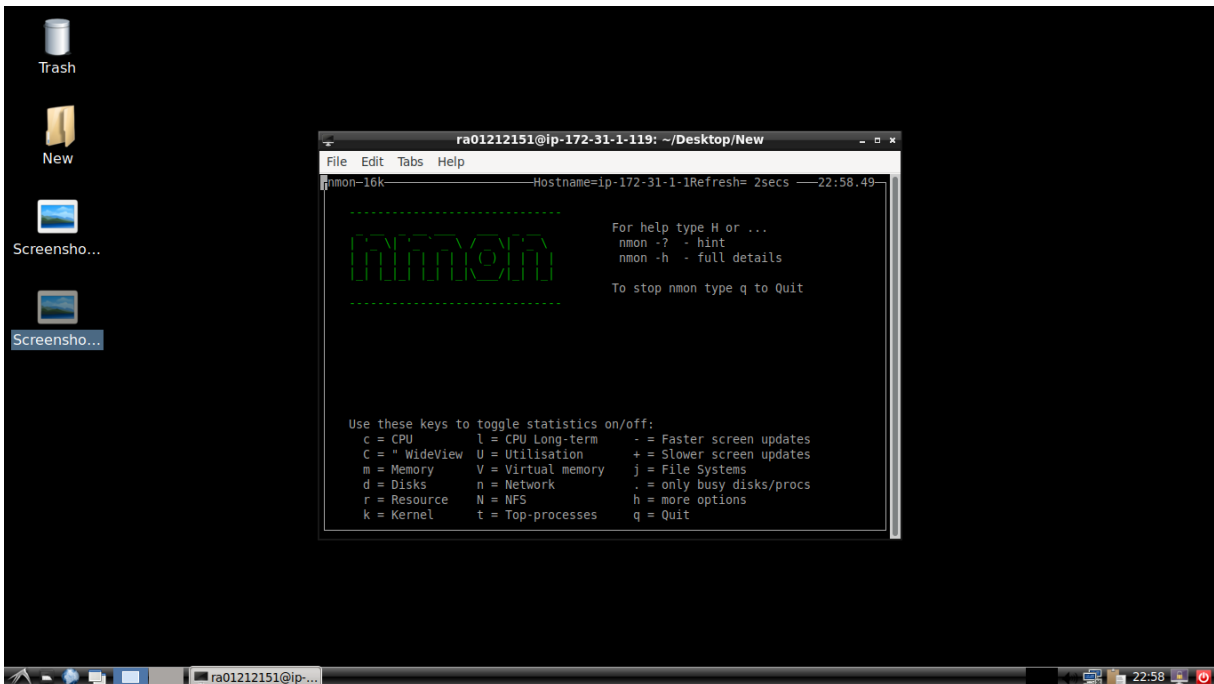


The screenshot shows a terminal window titled "ra01212151@ip-172-31-1-119: ~/Desktop/New". The user has run the command "sudo apt install nmon". The terminal output shows the package lists being read, the dependency tree being built, and the package nmon being installed. The output also shows that libfupdpugin1 was automatically installed and is no longer required. The user is prompted to use "sudo apt autoremove" to remove it. The terminal output also shows the disk space requirements and the download of the nmon package from the Ubuntu repository.

```
ra01212151@ip-172-31-1-119: ~/Desktop/New
File Edit Tabs Help
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ra01212151@ip-172-31-1-119:~/Desktop/New$ sudo apt install nmon
[sudo] password for ra01212151:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
  libfupdpugin1
Use 'sudo apt autoremove' to remove it.
The following NEW packages will be installed:
  nmon
0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.
Need to get 68.8 kB of archives.
After this operation, 187 kB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 nmon a
md64 16m+debian-1 [68.8 kB]
Fetched 68.8 kB in 0s (4078 kB/s)
Selecting previously unselected package nmon.
(Reading database ... 147248 files and directories currently installed.)
Preparing to unpack .../nmon_16m+debian-1_amd64.deb ...
Unpacking nmon (16m+debian-1) ...
Setting up nmon (16m+debian-1) ...
```

## Rodando NMON



The screenshot shows the same terminal window as before, but now the nmon command is running. The terminal displays the nmon logo and a list of statistics that can be toggled on or off. The statistics include CPU, Memory, Disks, Resource, Kernel, CPU Long-term, Utilisation, Virtual memory, Network, NFS, Top-processes, and File Systems. The user can use the keys listed to toggle these statistics on or off. The terminal also shows the hostname and refresh rate.

```
ra01212151@ip-172-31-1-119: ~/Desktop/New
File Edit Tabs Help
nmon-16k Hostname=ip-172-31-1-1 Refresh= 2secs 22:58.49

.....
nmon
.....

For help type H or ...
nmon -? - hint
nmon -h - full details

To stop nmon type q to Quit

Use these keys to toggle statistics on/off:
c = CPU          l = CPU Long-term      + = Faster screen updates
C = " WideView  U = Utilisation    + = Slower screen updates
m = Memory       V = Virtual memory  j = File Systems
d = Disks        n = Network          . = only busy disks/procs
r = Resource     N = NFS                h = more options
k = Kernel       t = Top-processes    q = Quit
```

## Capturando dados

