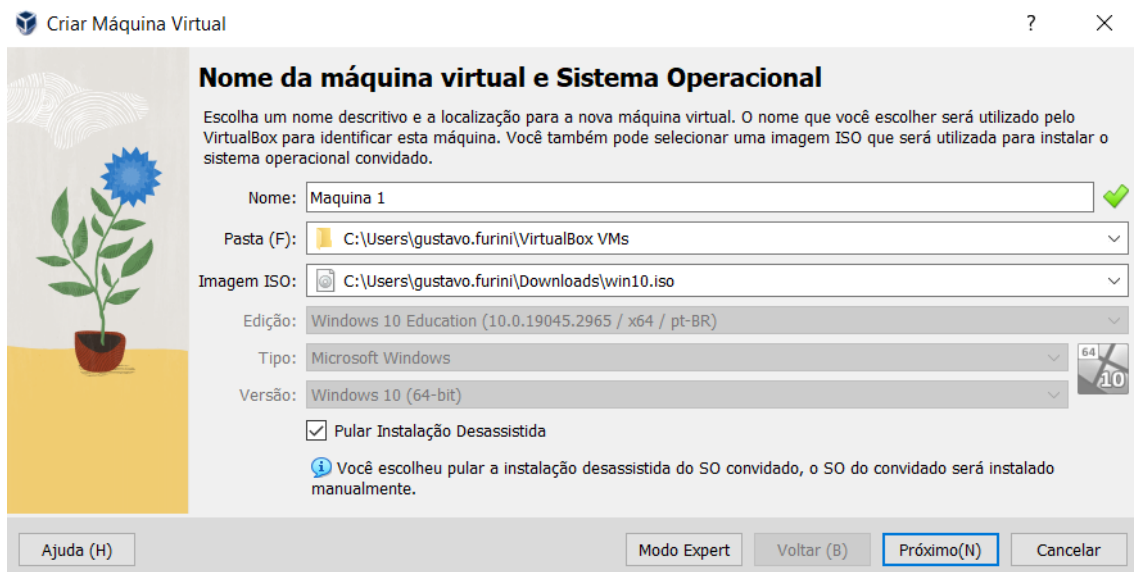


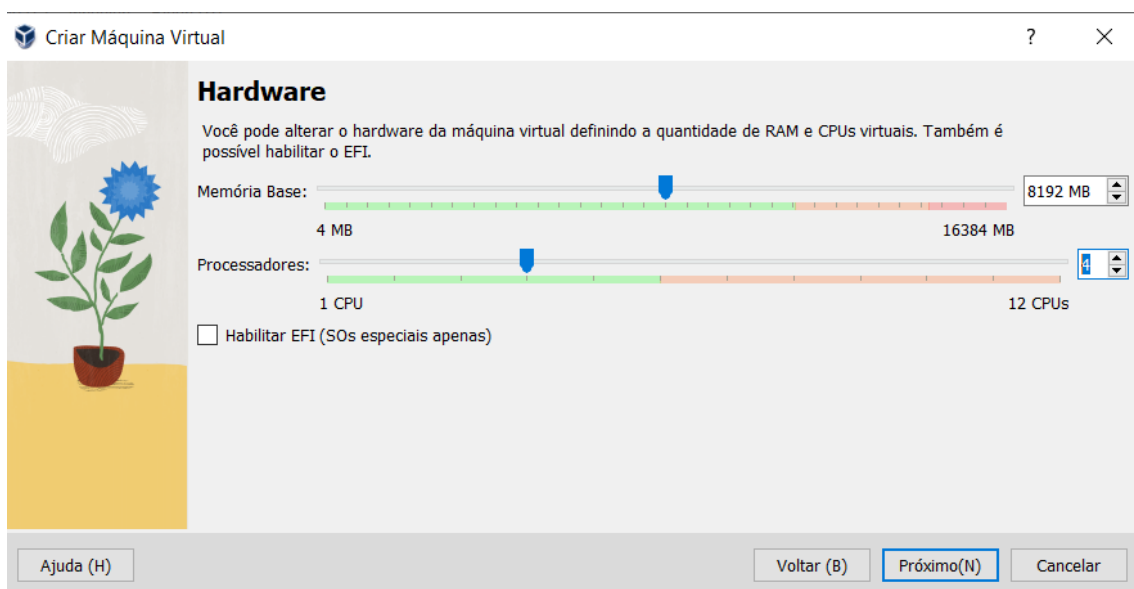
Gabriel Maron, Gustavo Furini, Theo Cesar e Thomas  
Frentzel

Formativa 1 RA1 – Instalação de SO Linux,  
Windows e Dual Boot

Curitiba  
2024



*Figura 1 - Criando a máquina virtual*



*Figura 2- Definindo a quantidade de memória e o número de processadores que a máquina virtual vai usar*

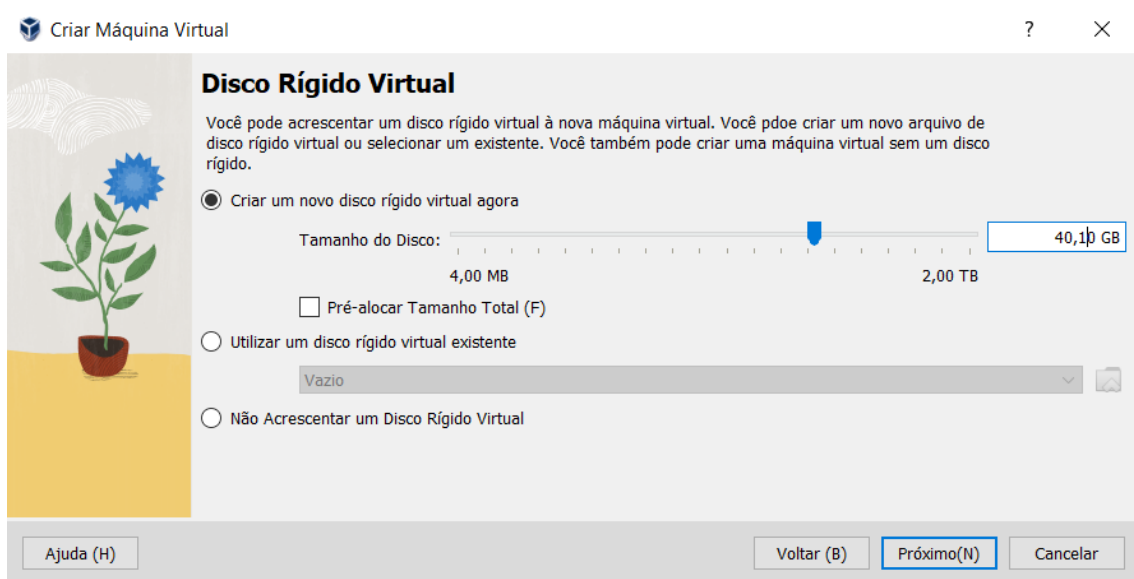
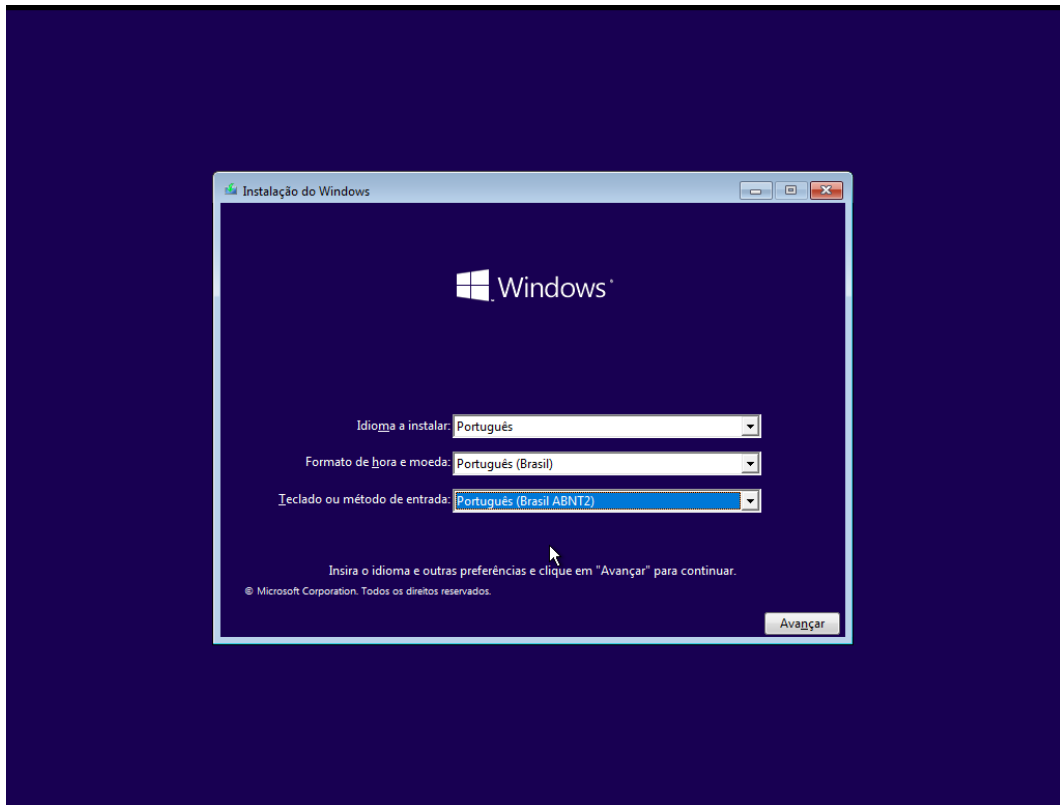


Figura 3 - Definindo o tamanho do disco (armazenamento da máquina virtual)



Figura 4 - Sumário das especificações da VM

Instalando o Windows:



*Figura 5- Escolhendo o idioma, hora e teclado do Windows*

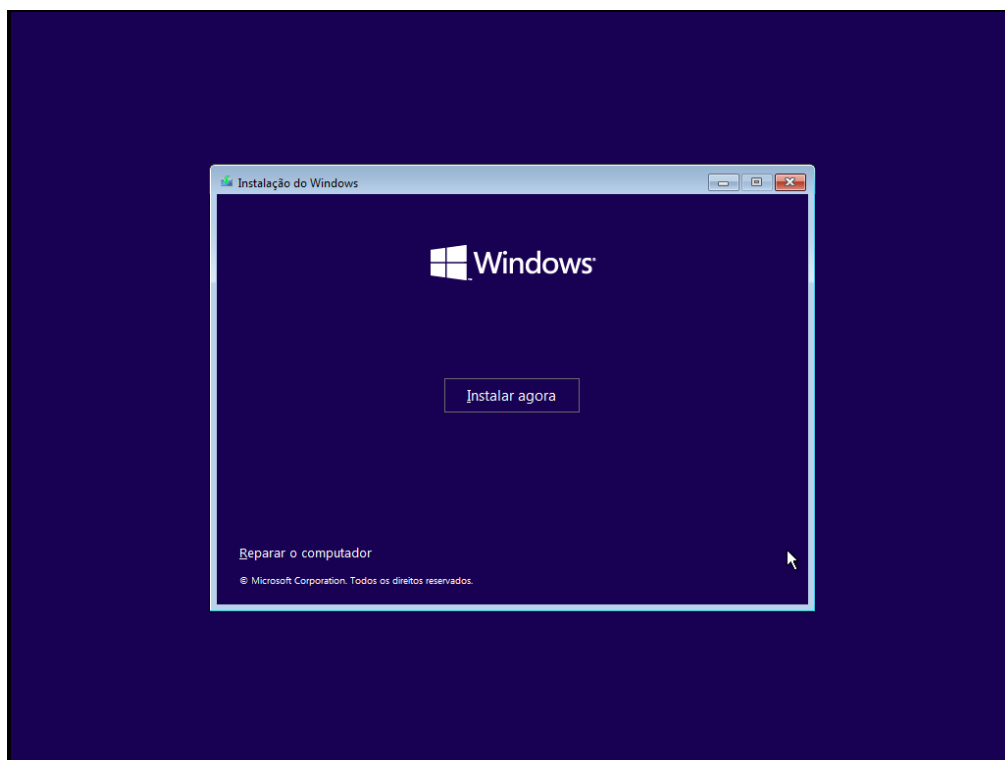


Figura 6 - Início da instalação

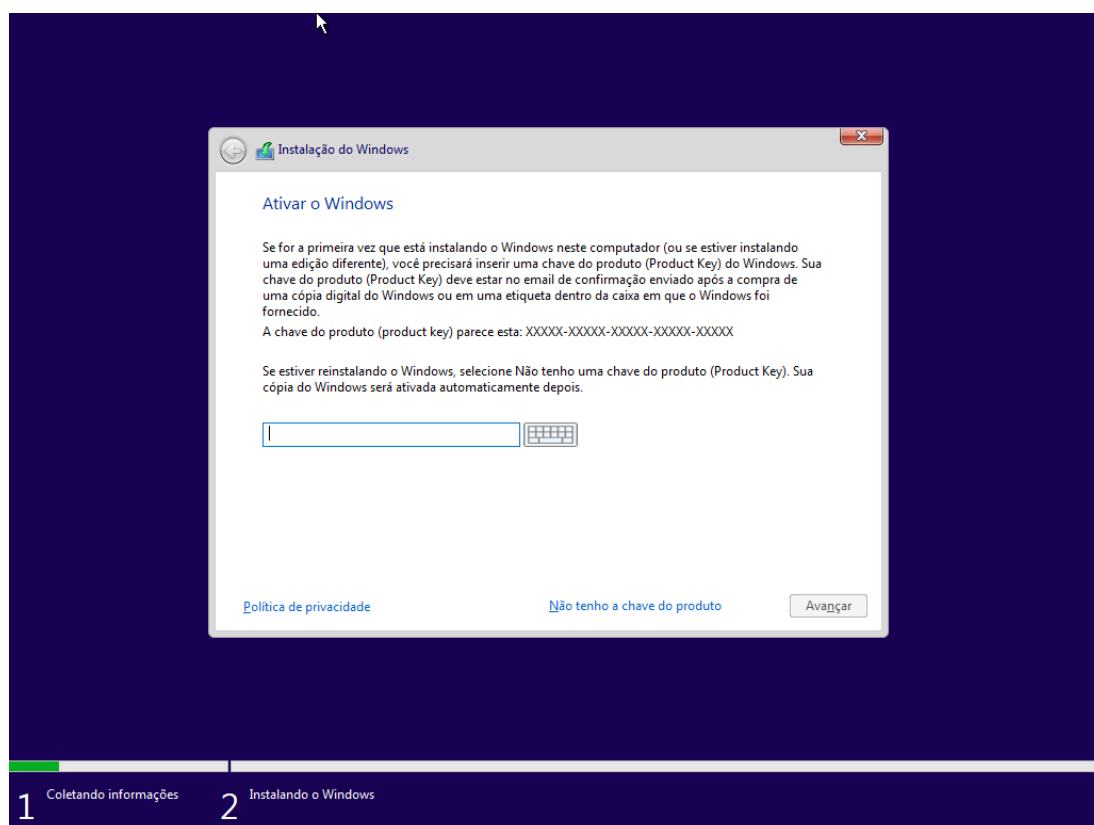


Figura 7- Chave para ativação do Windows (como não tínhamos escolhemos a opção de não possuir a chave)

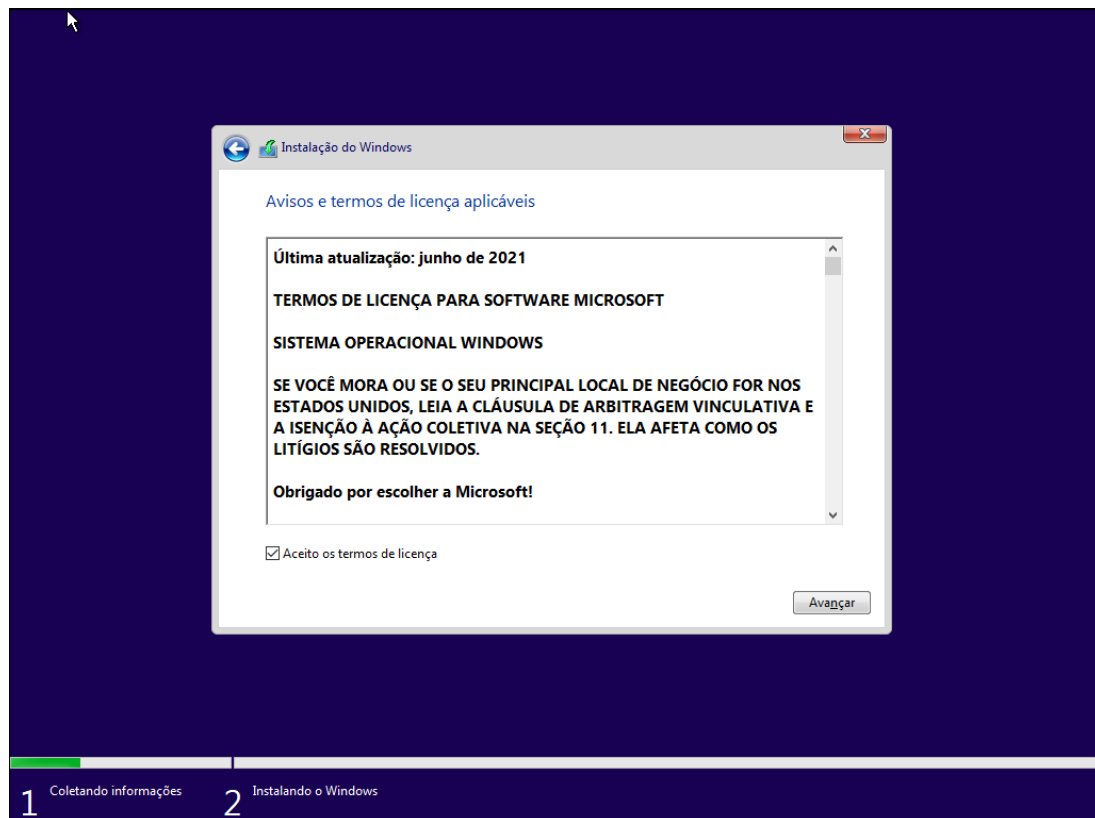


Figura 8 - Aceitando os termos da licença

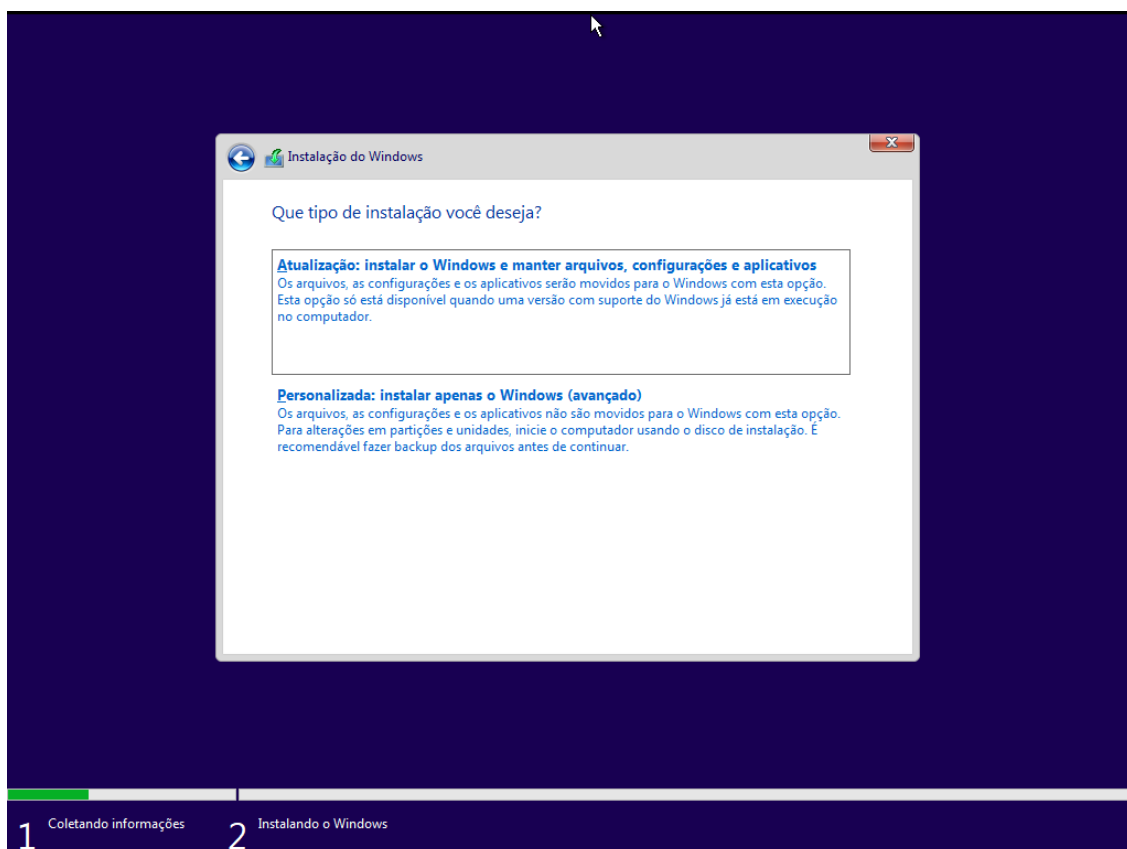


Figura 9 - Escolhendo o tipo de instalação (escolhemos a PERSONALIZADA)

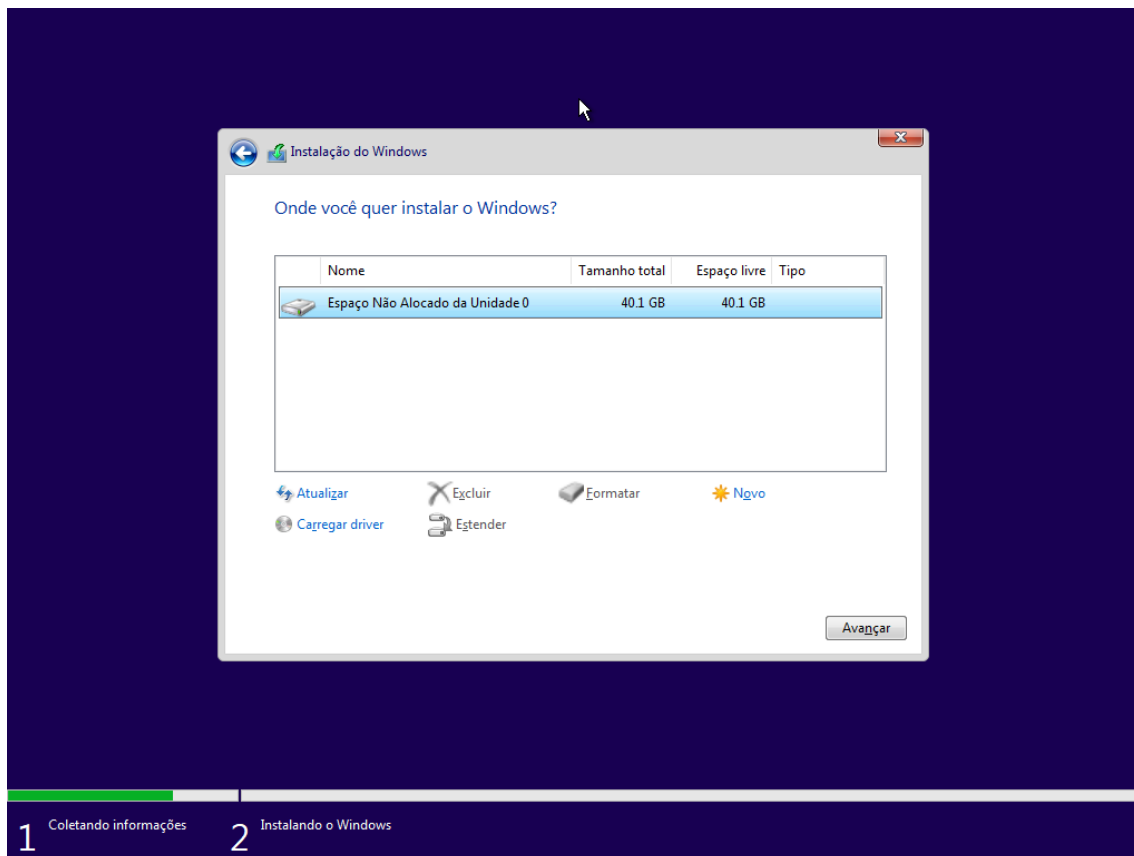


Figura 10 - Escolhendo o local, no qual o Windows vai ser instalado (escolhemos o disco previamente criado na configuração da VM)

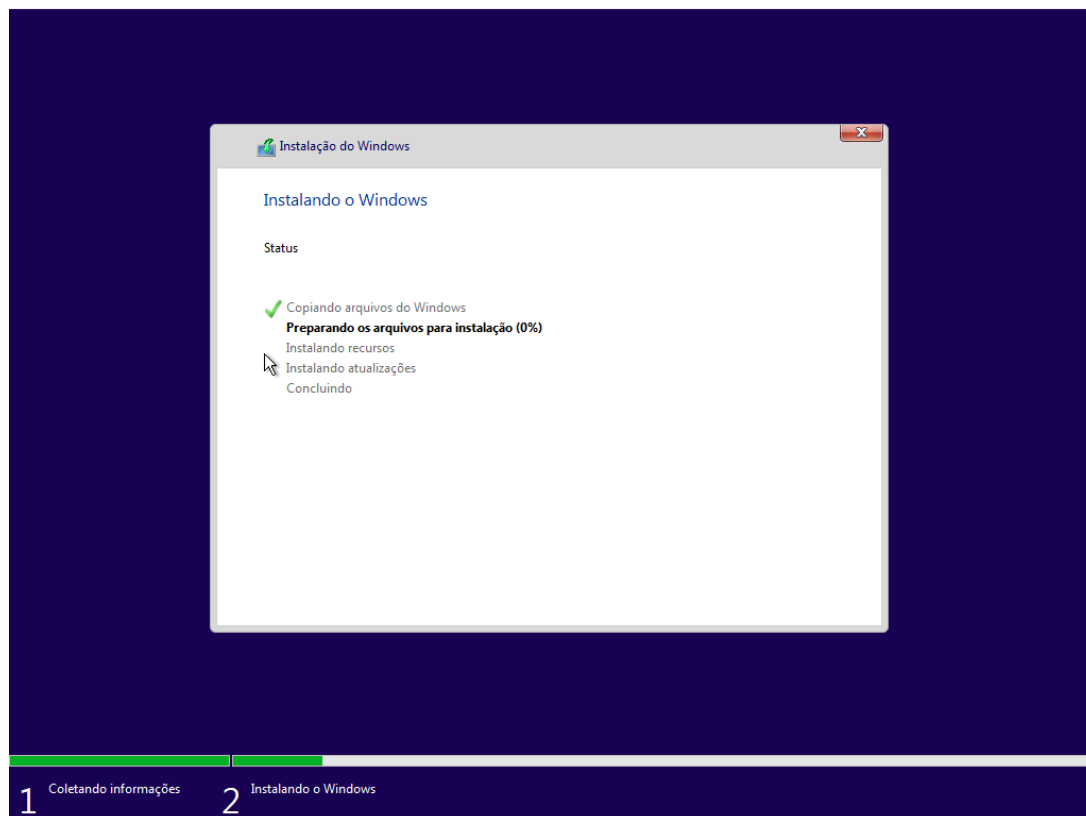
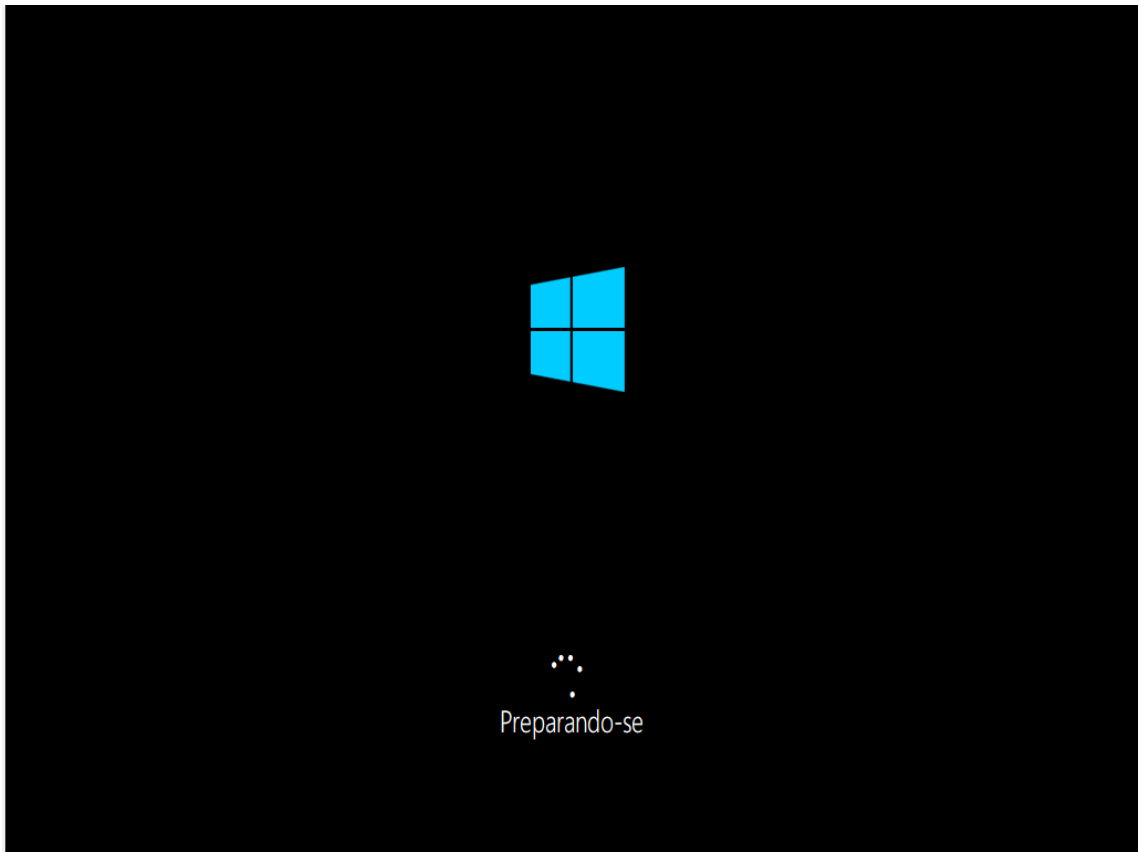
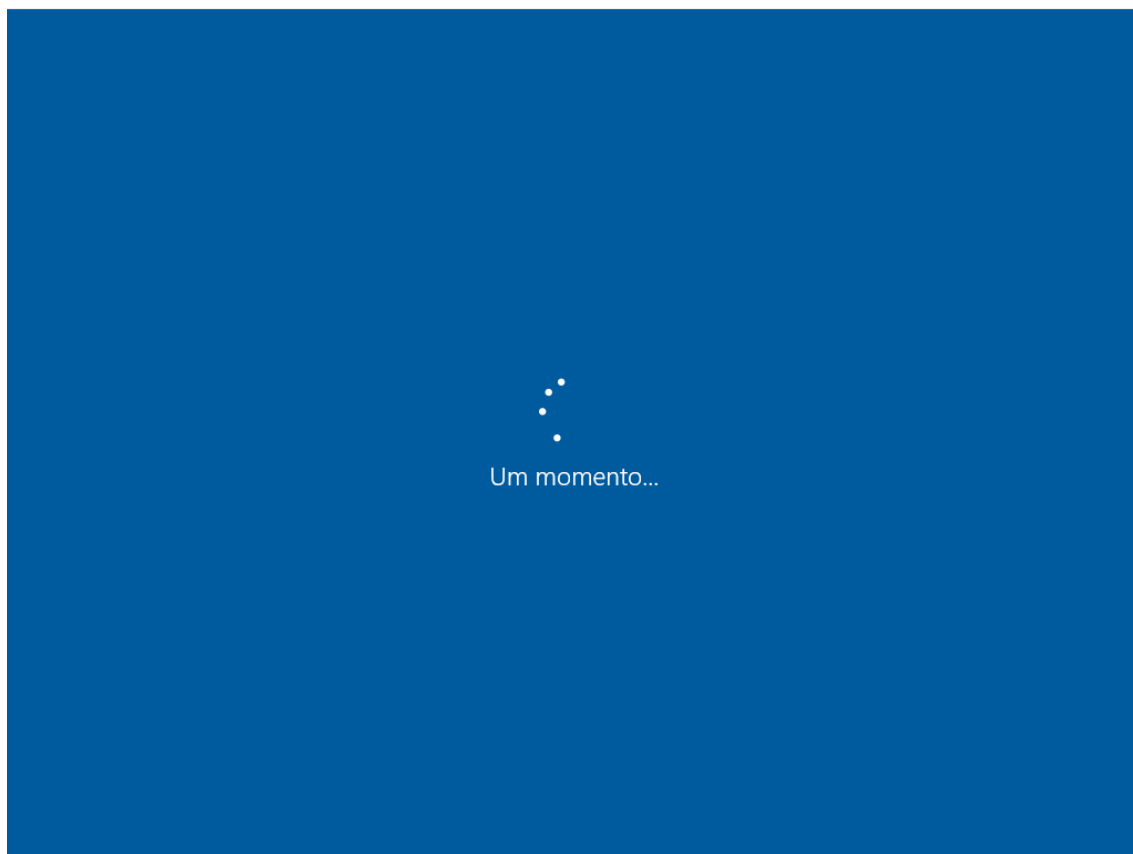


Figura 11 - Instalação em andamento

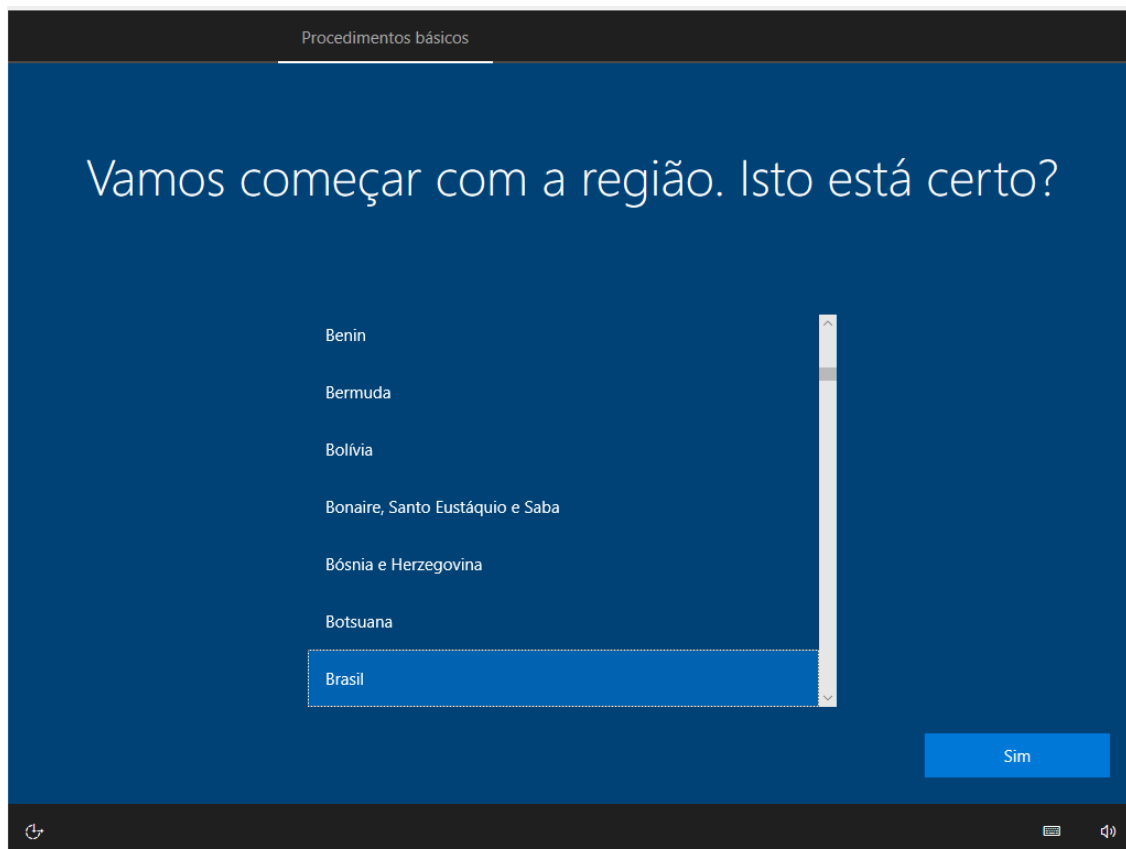


*Figura 12 - Instalação em andamento*





*Figura 13 - Instalação em andamento*



*Figura 14 - Escolhendo a região*

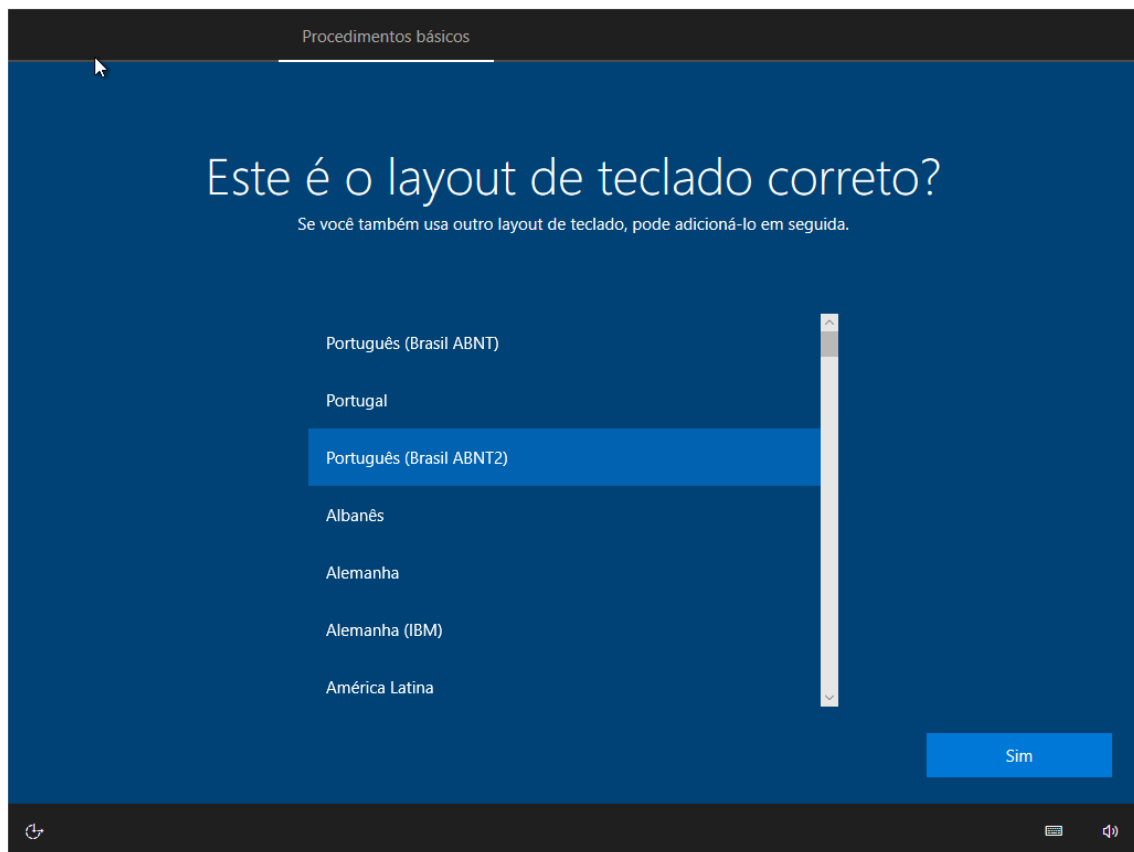


Figura 15 - Escolhendo o teclado

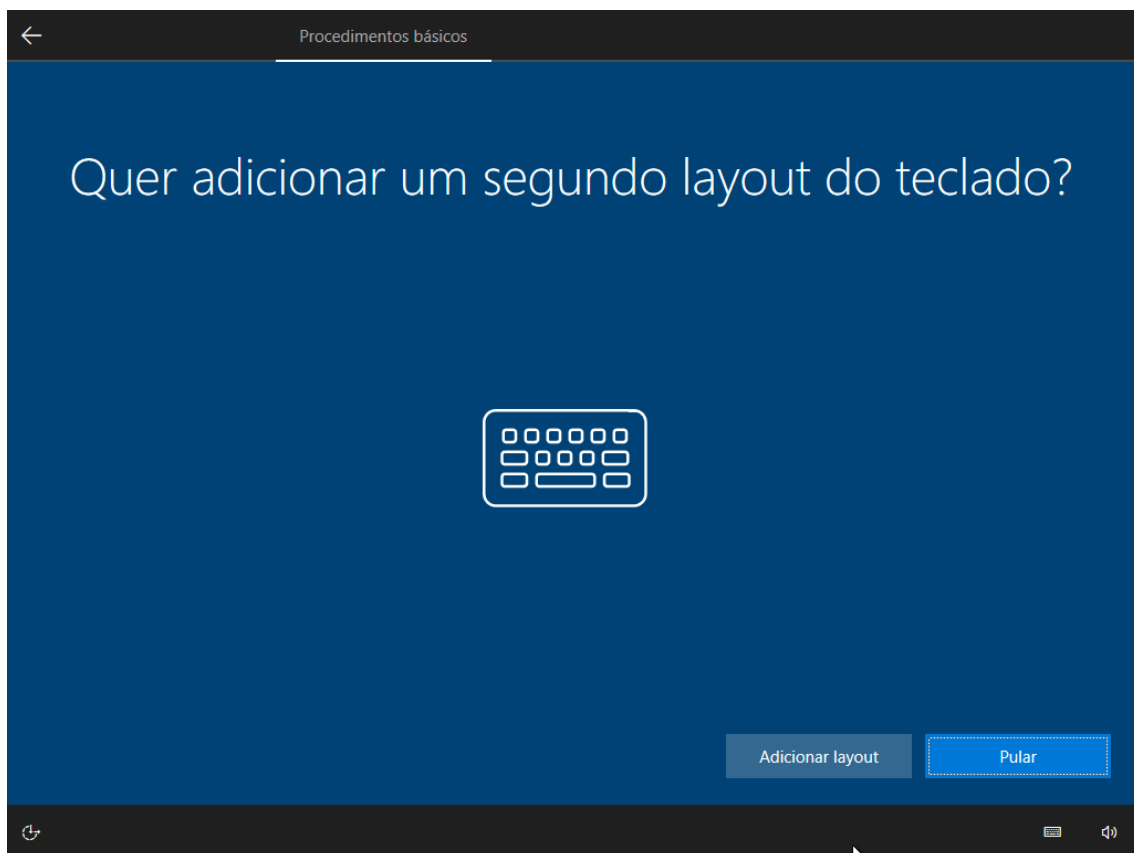


Figura 16 - Decidimos não adicionar um segundo layout

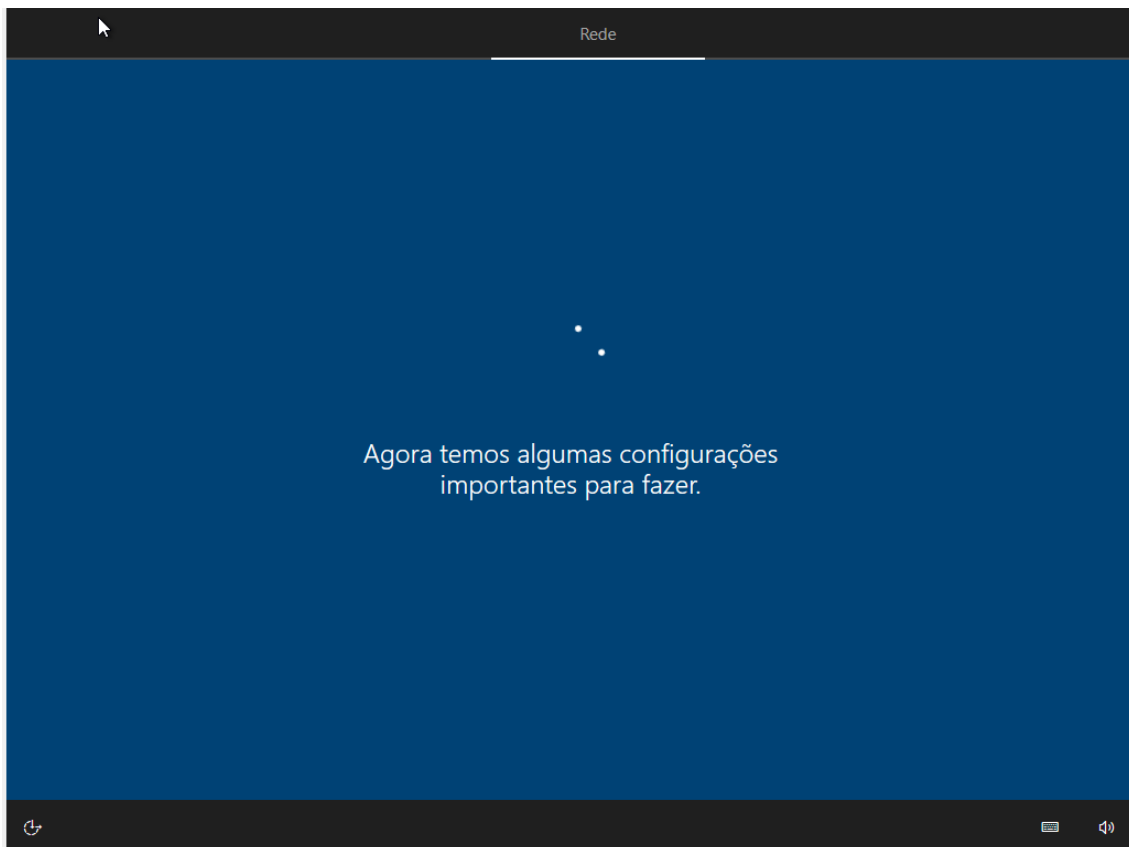


Figura 17 - Configuração em andamento

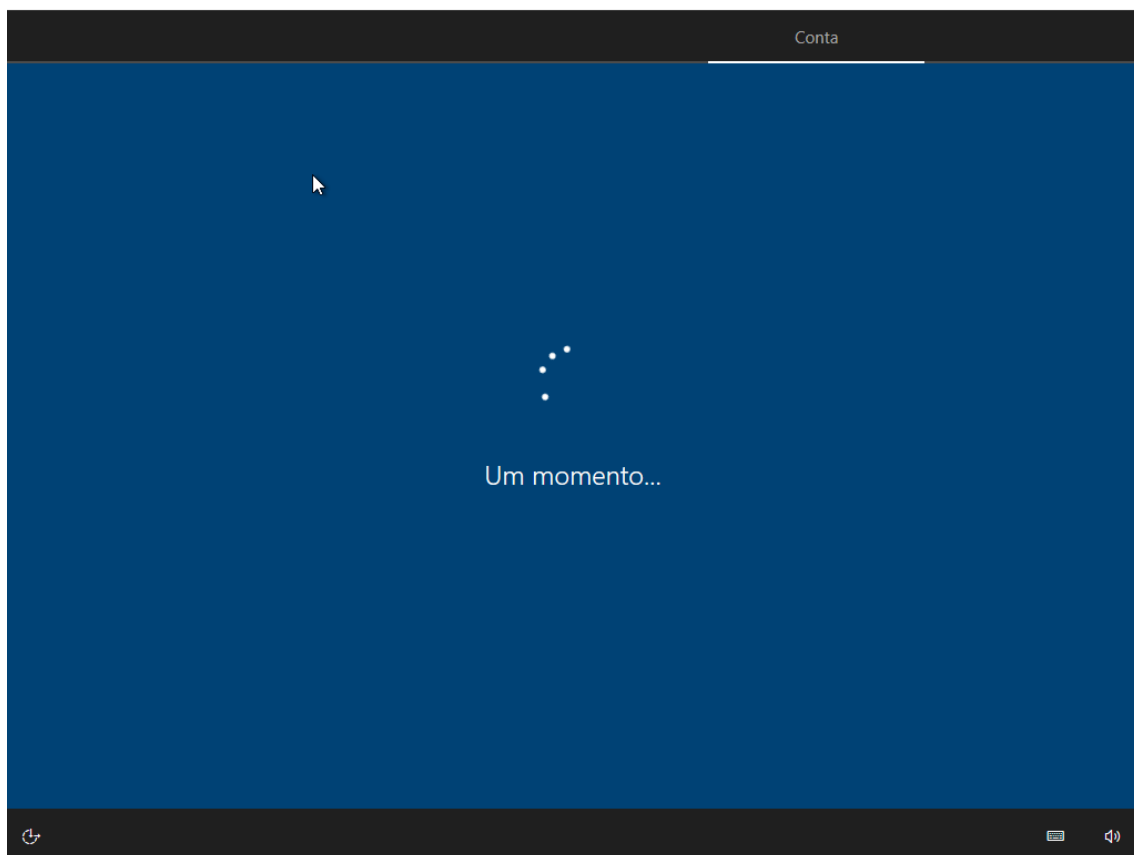


Figura 18 - Configuração em andamento

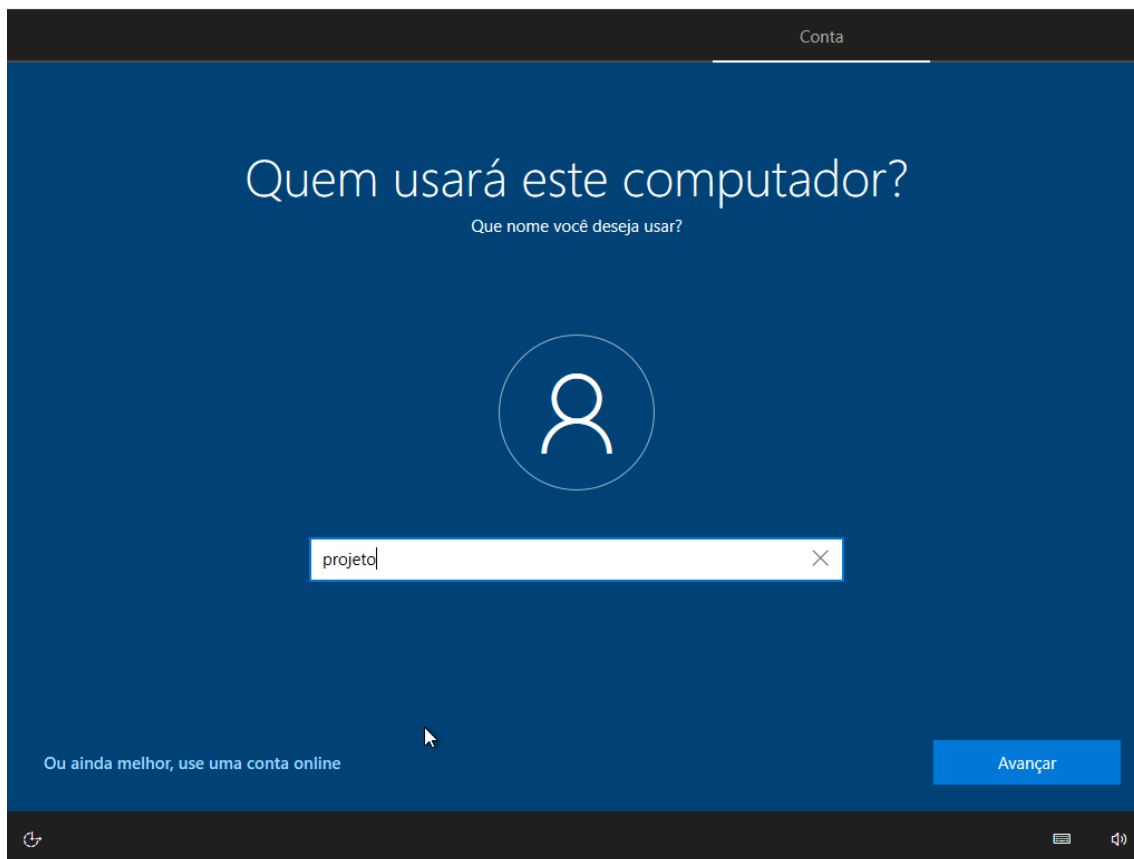


Figura 19 - Configurando o usuário do computador (colocamos o nome de "projeto")

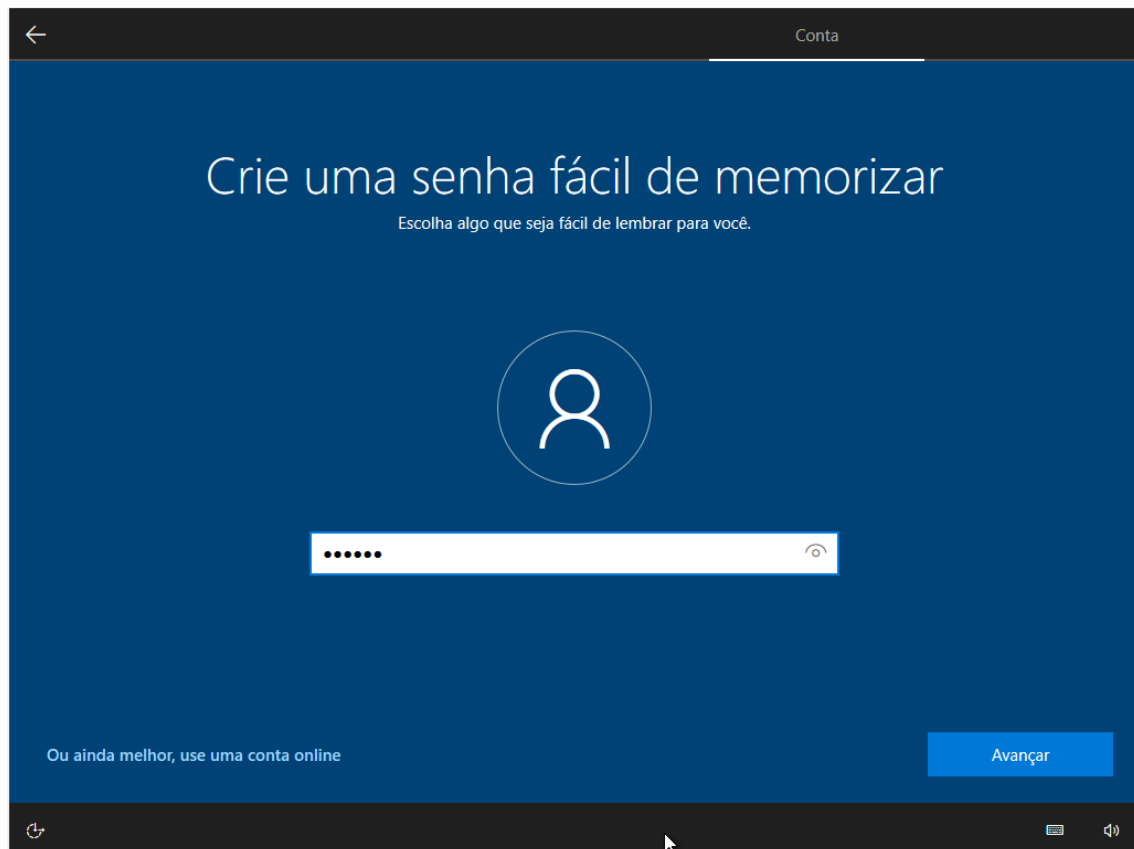


Figura 20 - Configurando a senha do usuário "projeto"

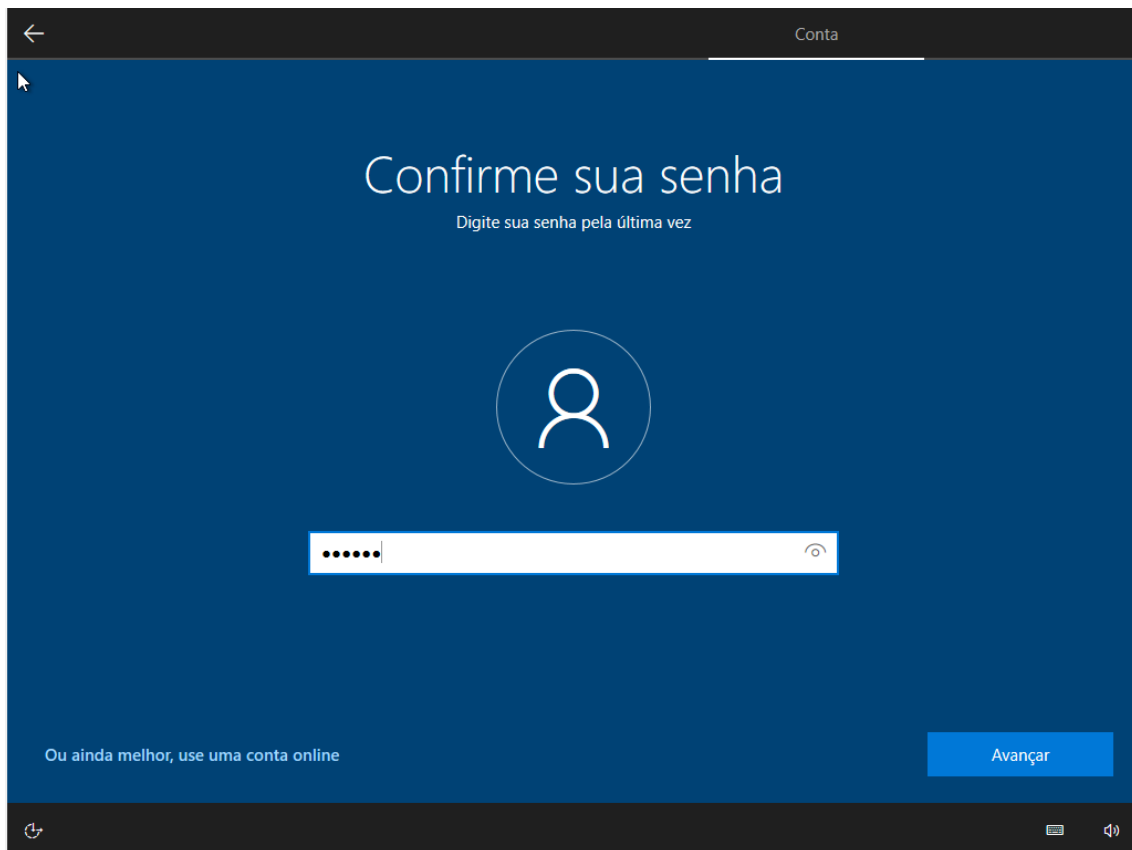


Figura 21 - Confirmando a senha escolhida

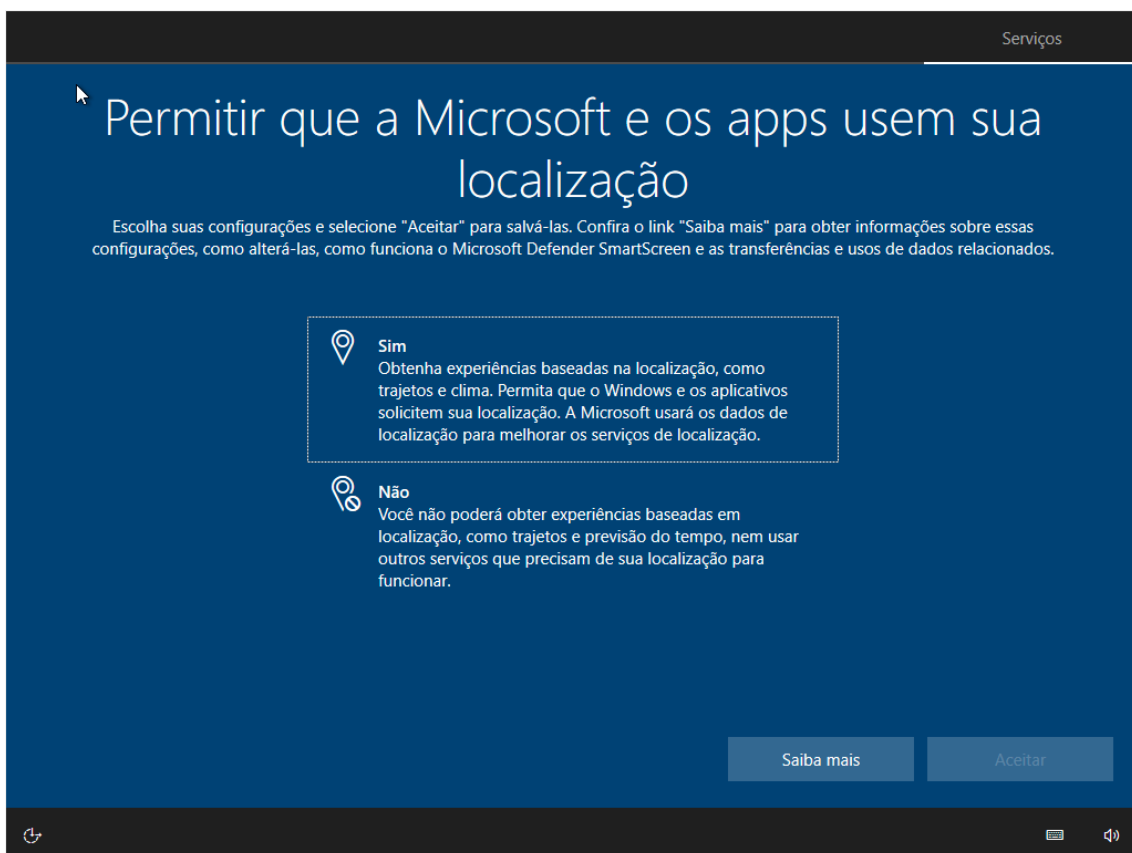


Figura 22 - Negando as confirmações requisitadas pela Microsoft

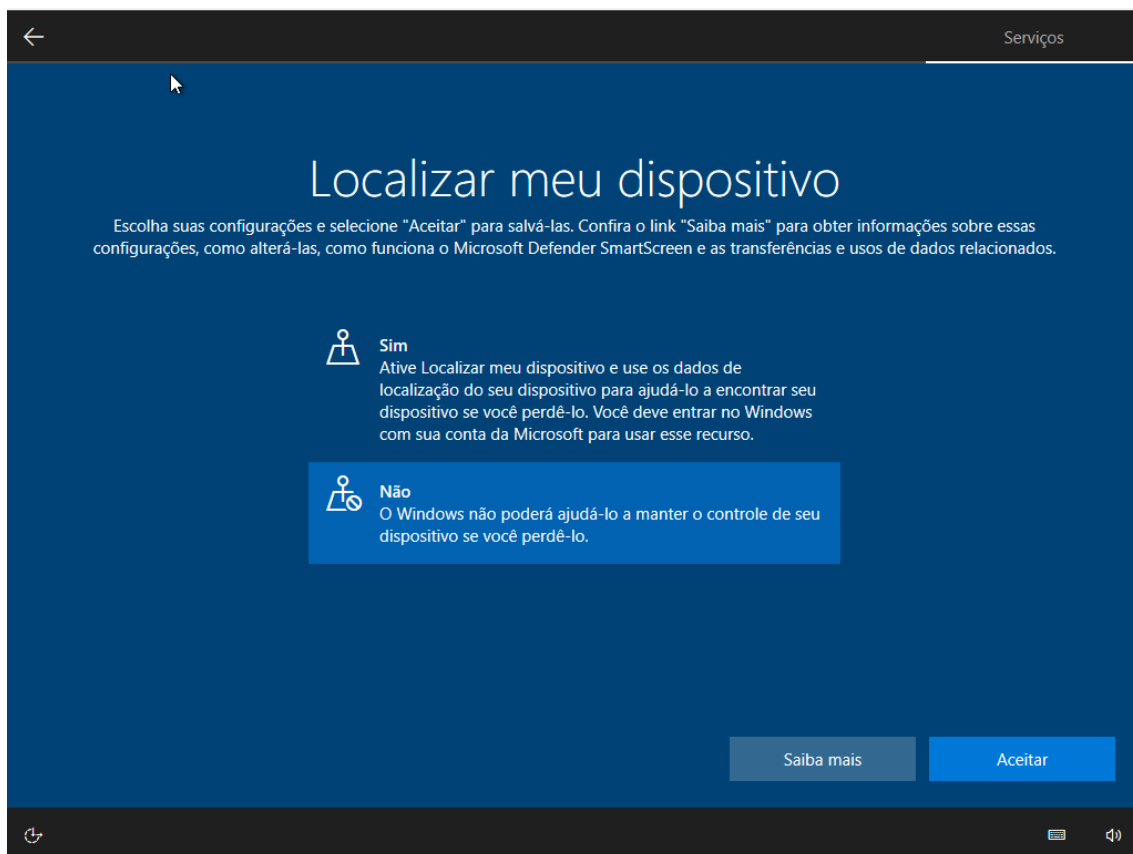


Figura 23 - Negando as confirmações requisitadas pela Microsoft

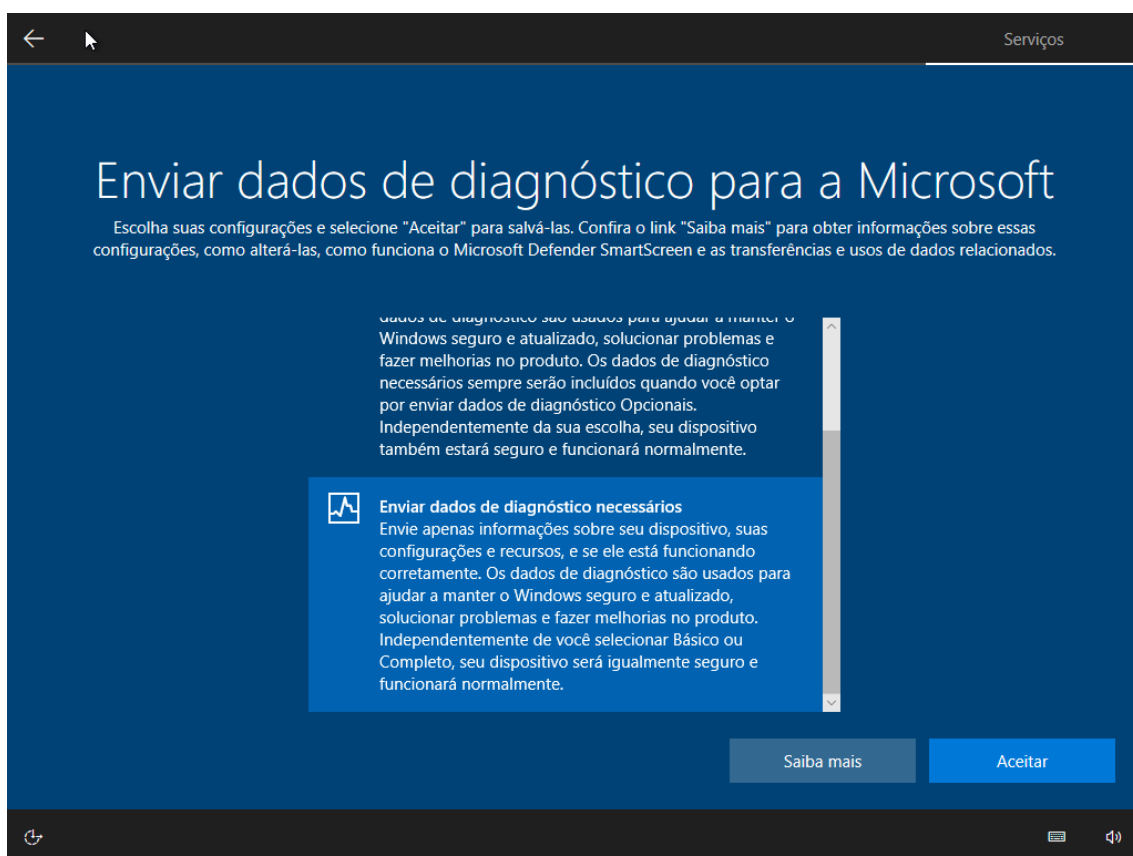


Figura 24 - Negando as confirmações requisitadas pela Microsoft

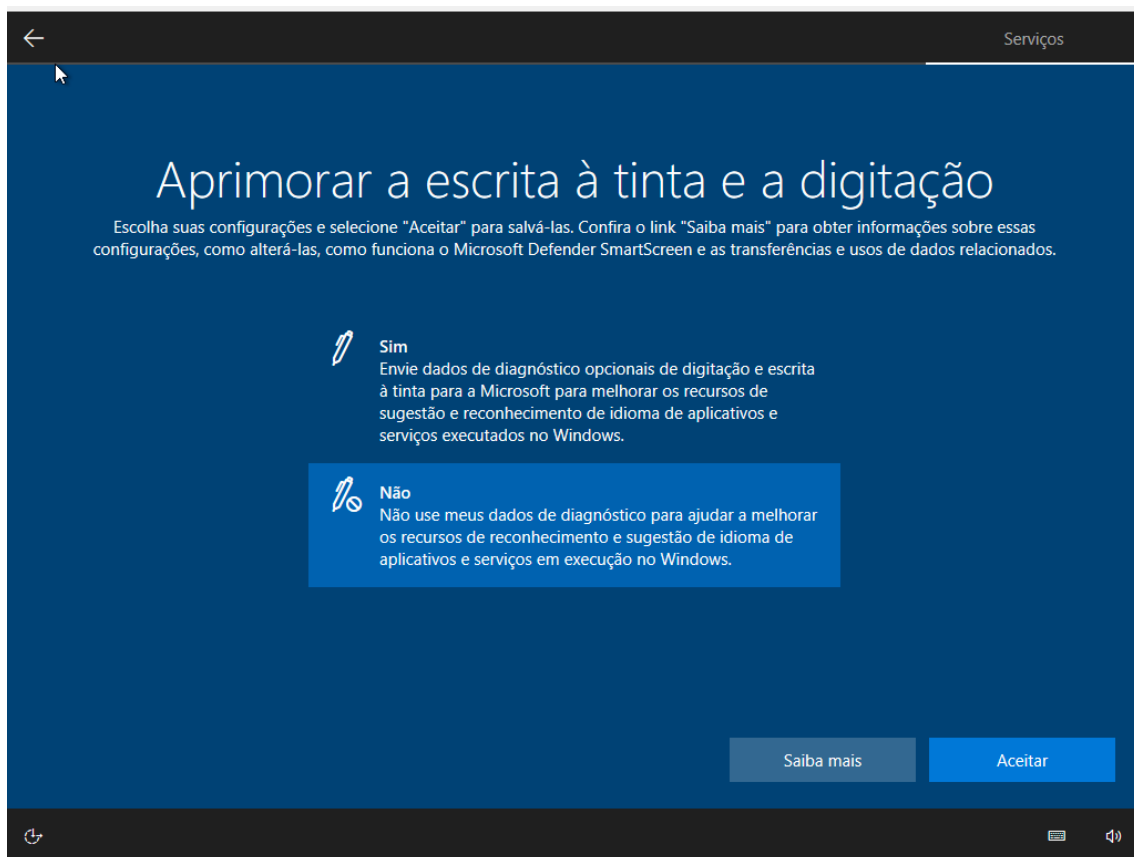


Figura 25 - Negando as confirmações requisitadas pela Microsoft

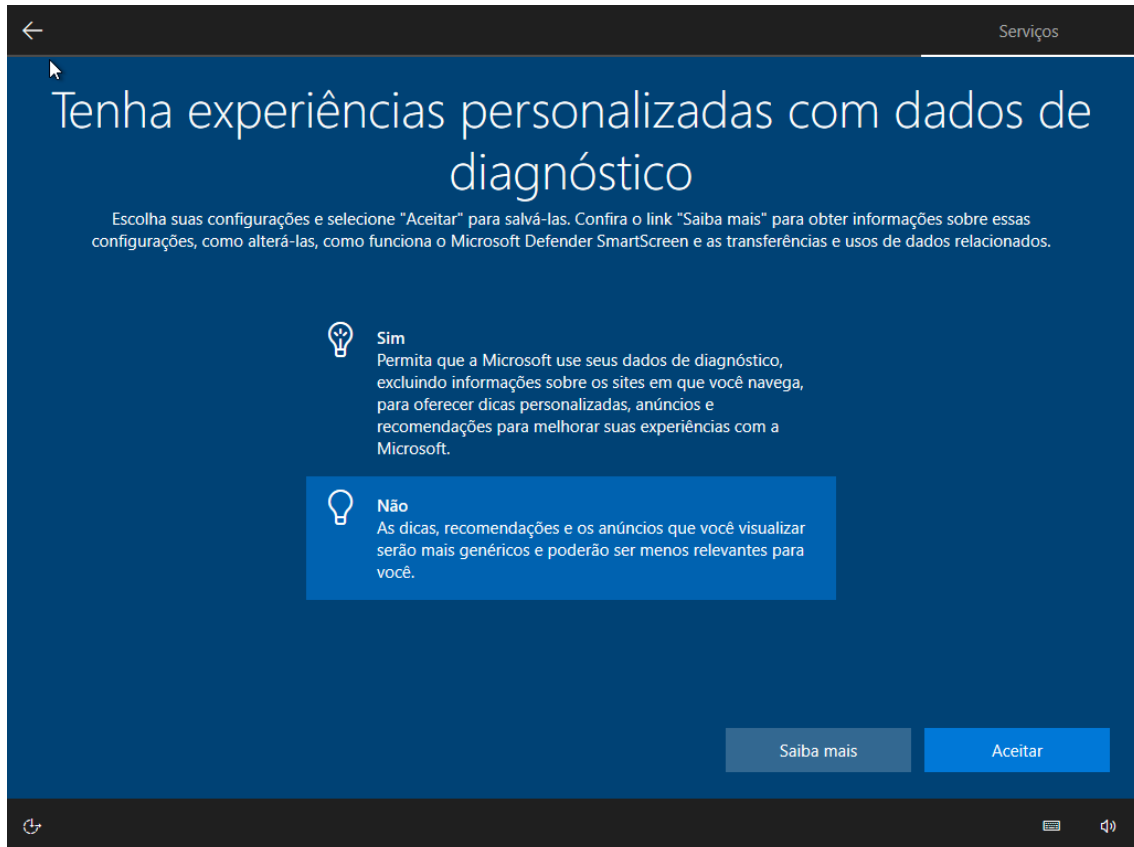


Figura 26 - Negando as confirmações requisitadas pela Microsoft

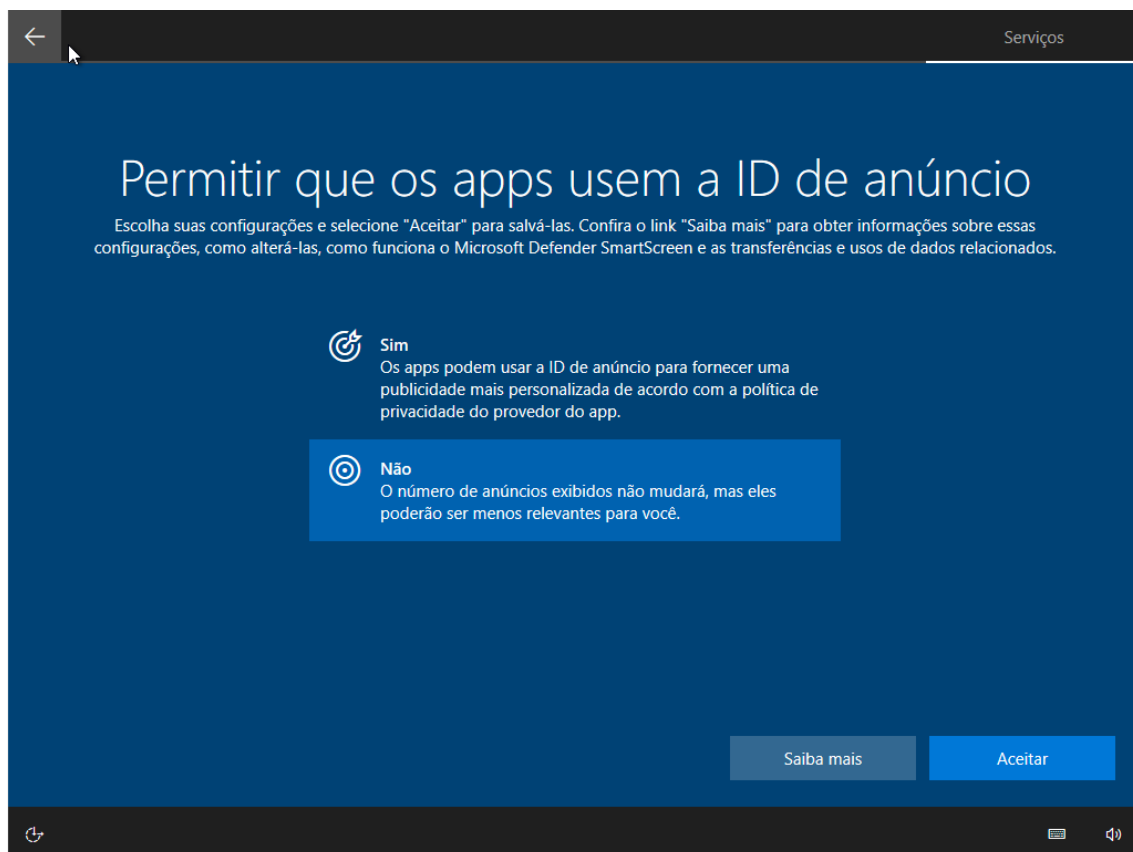


Figura 27 - Negando as confirmações requisitadas pela Microsoft

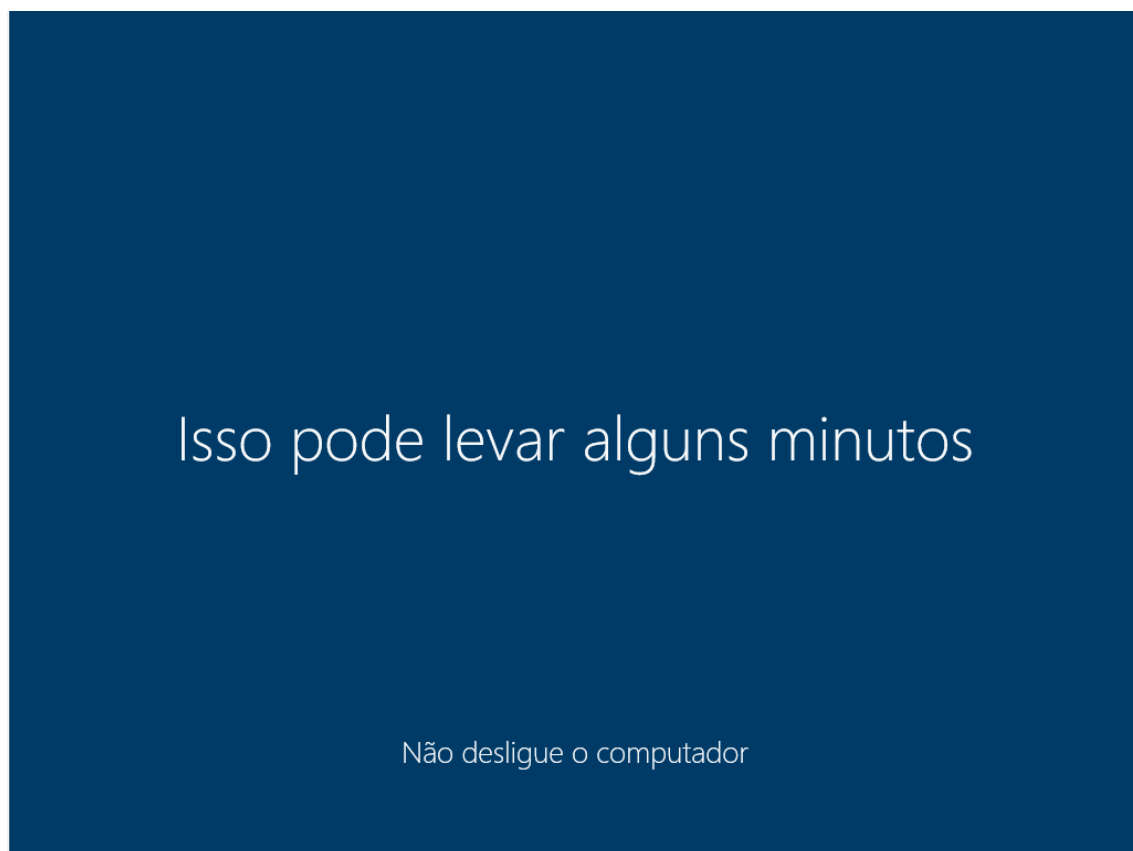


Figura 28 - Configurações finais em andamento



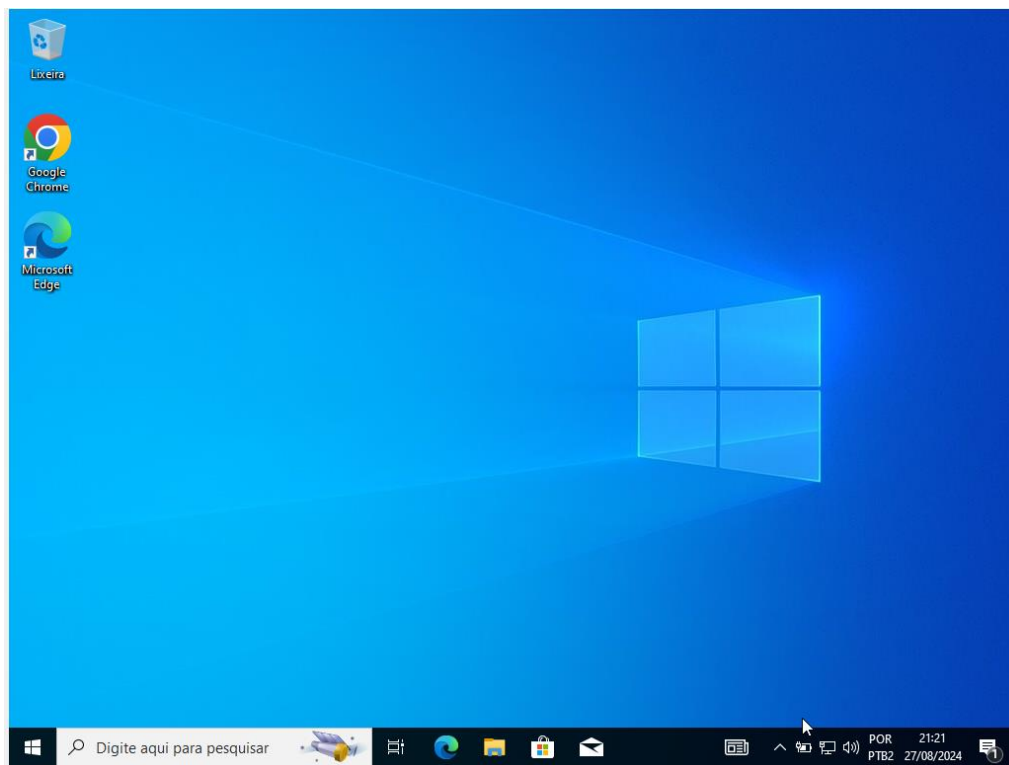


Figura 29 - Instalação concluída

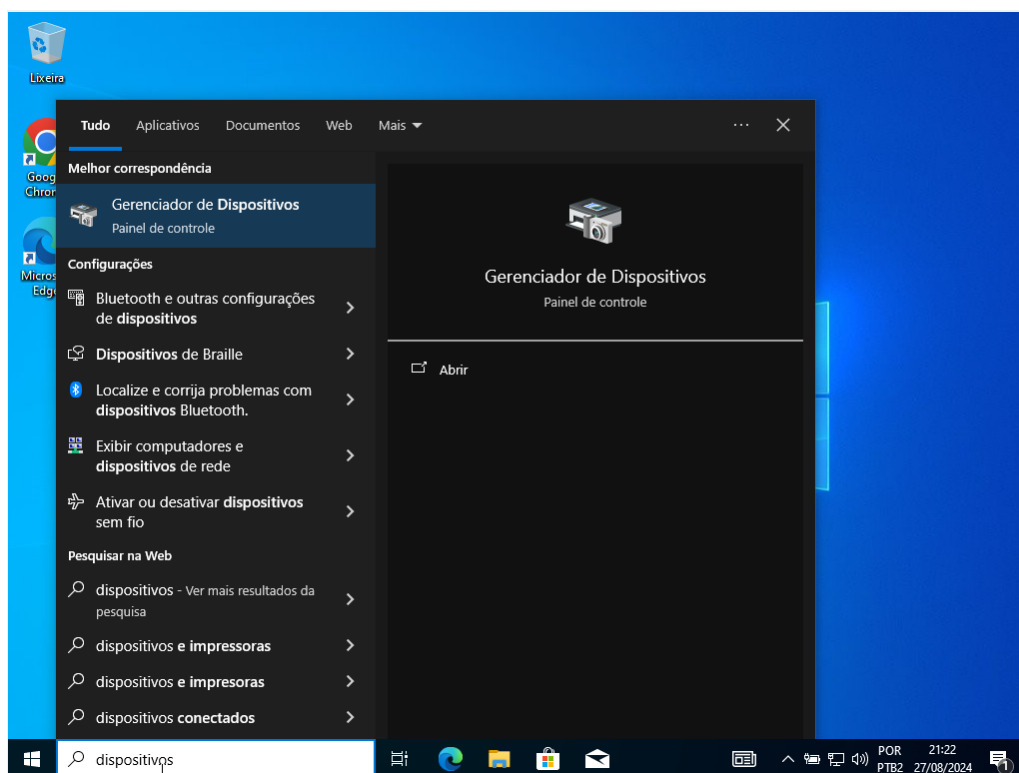


Figura 30 - Abrindo o gerenciador de dispositivos para verificar os drivers

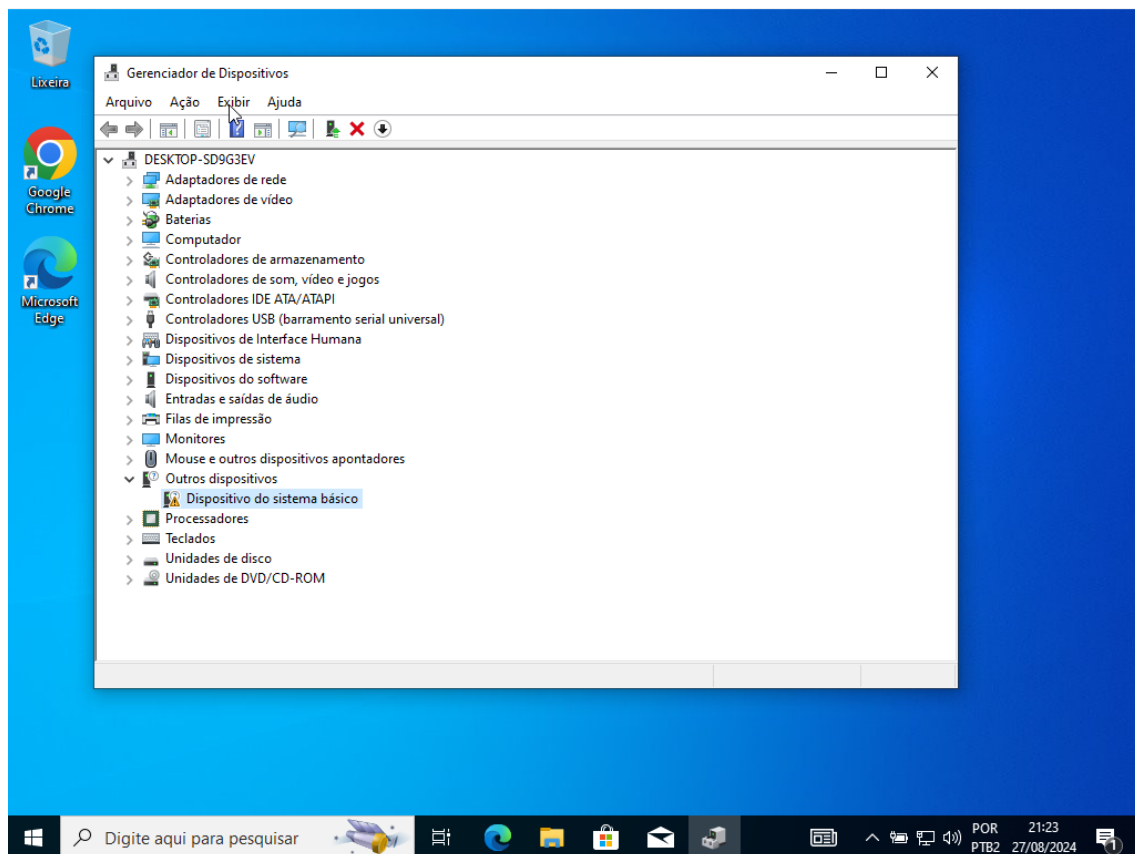


Figura 31 - Um driver aparentemente faltante

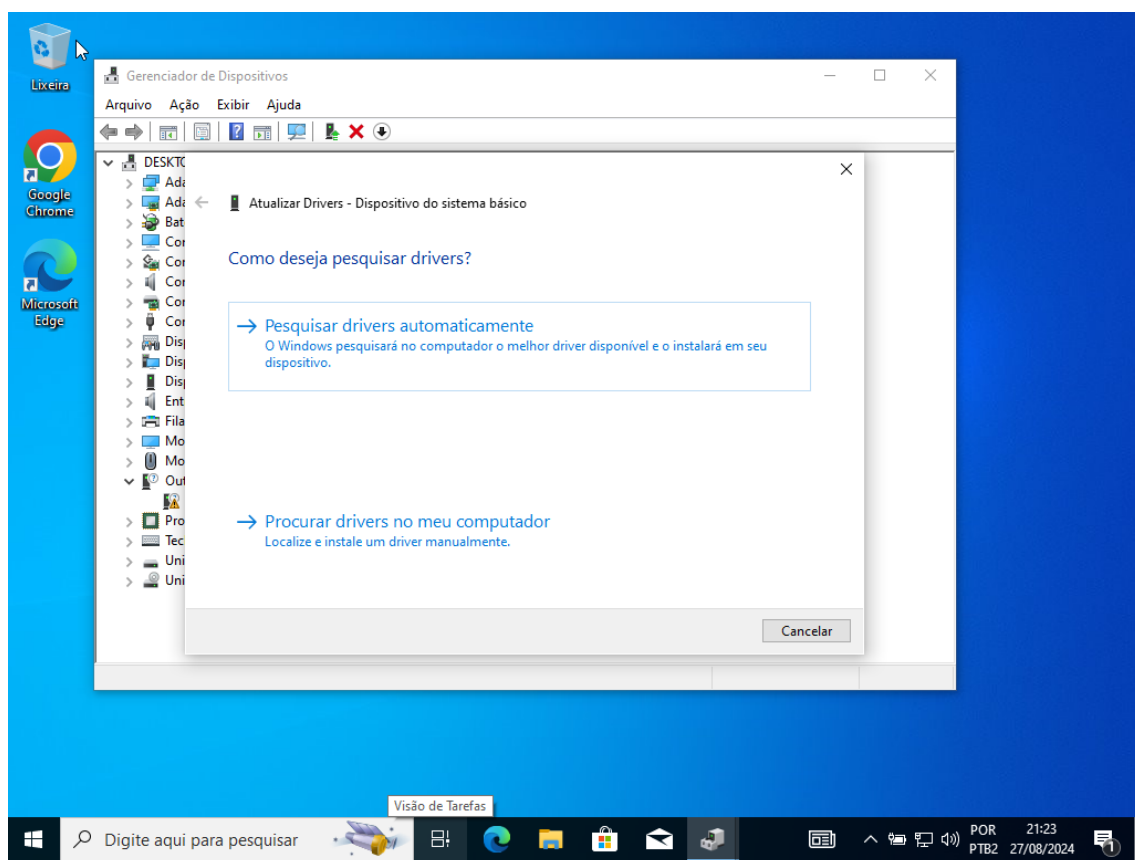


Figura 32 - Pesquisando esse driver no computador. Porém, ele não foi encontrado

Instalando o Ubuntu:



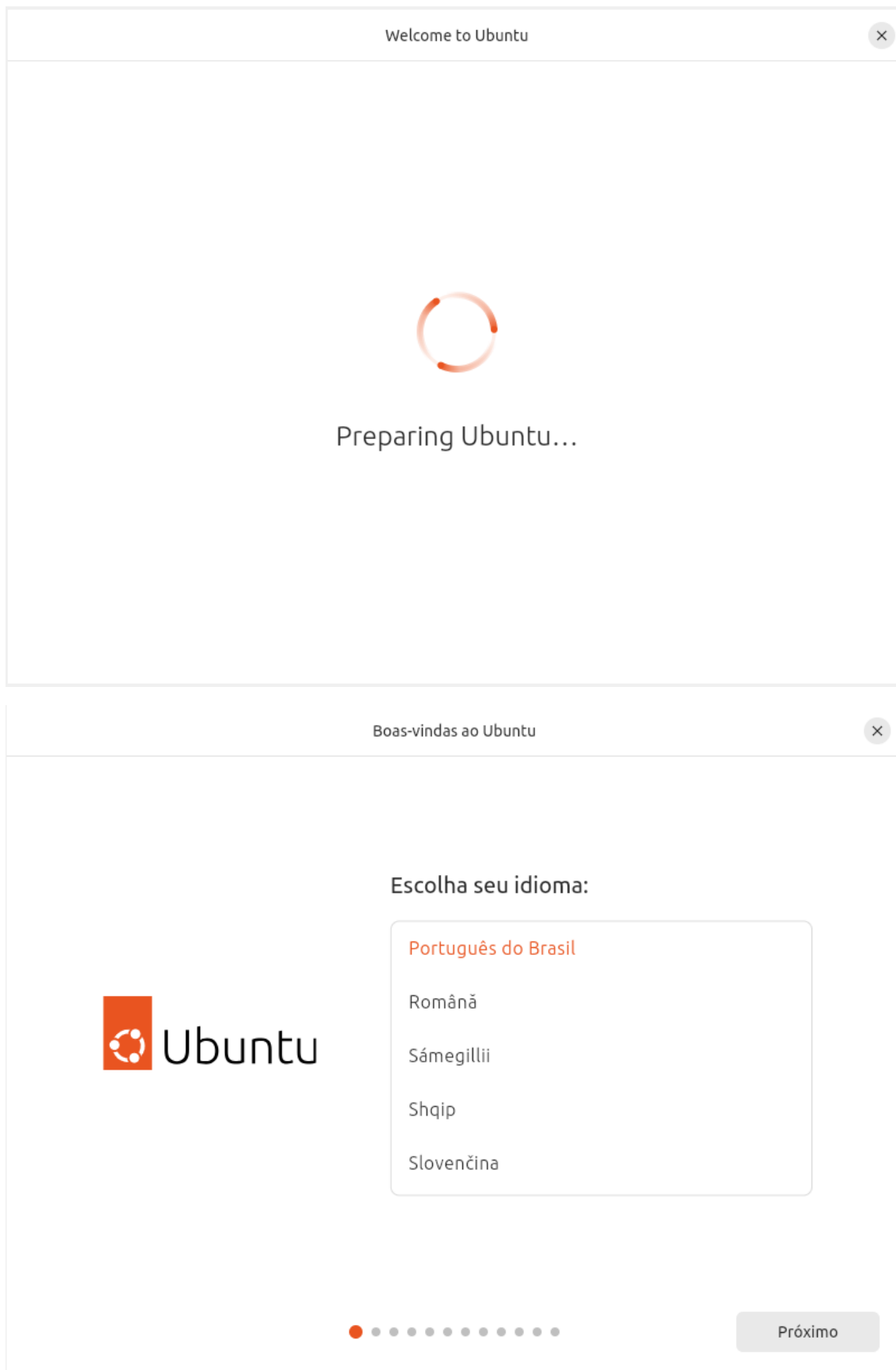


Figura 33: Escolhendo idioma do linux



Configurar sua conta

X



## Configurar sua conta

Seu nome  
projeto ✓

Nome do seu computador  
projeto-VirtualBox ✓

Escolha um nome de usuário  
projeto ✓

Escolha uma senha  
projeto Ocultar Senha fraca

Confirme sua senha  
projeto ✓

☒ Solicitar minha senha para entrar

☐ Usar o Active Directory

VoltarPróximo

*Figura 35: Configurando a nossa conta*

[illegible]

# Fast, free and full of new features

The latest version makes  
computing easier than ever.

Whether you're a developer,  
creator, gamer or administrator  
you'll find new tools to improve  
your productivity and enhance



< || > Copiando archivos...



*Figura 36: Instalando*

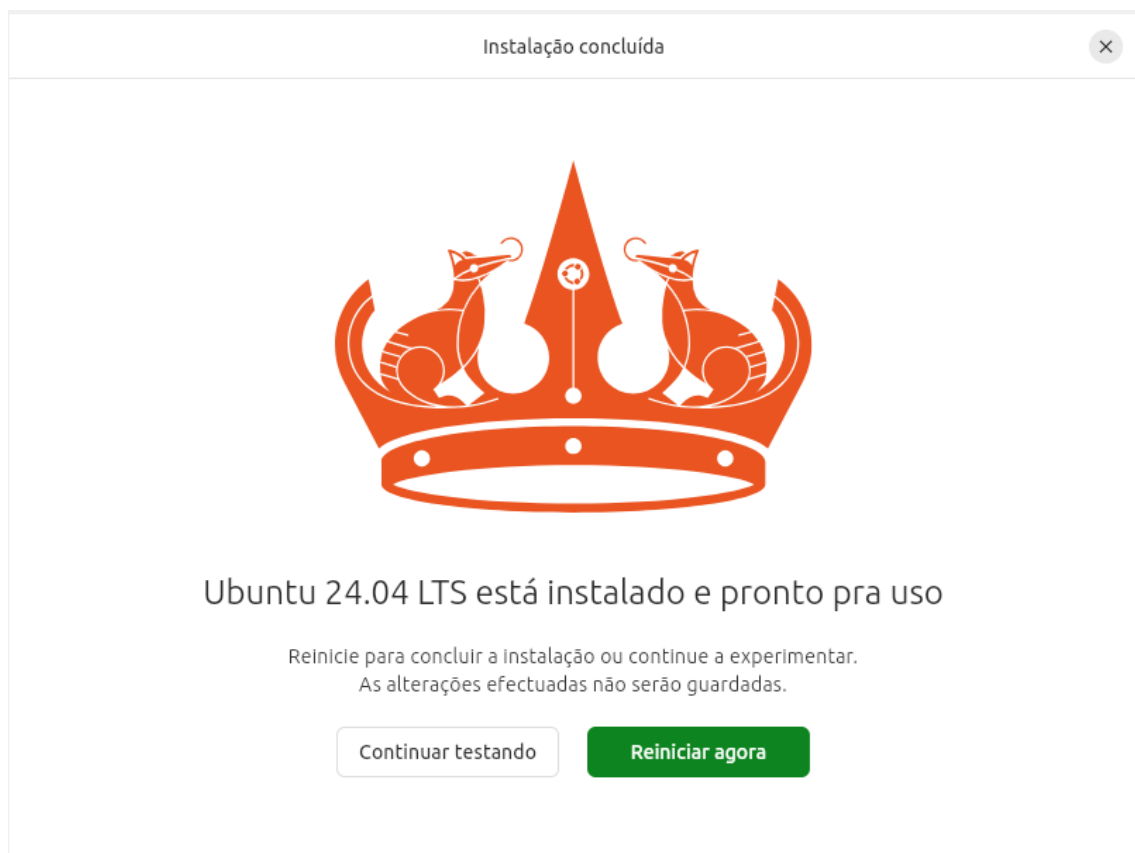
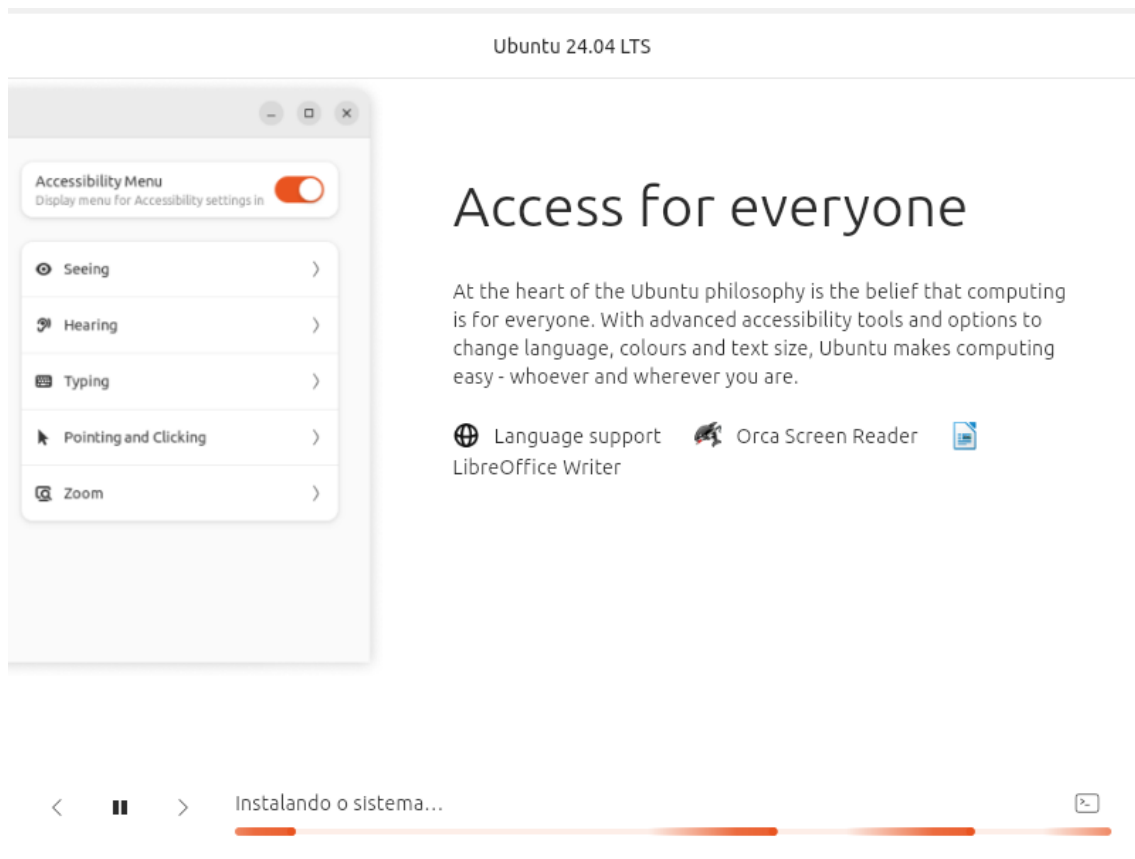
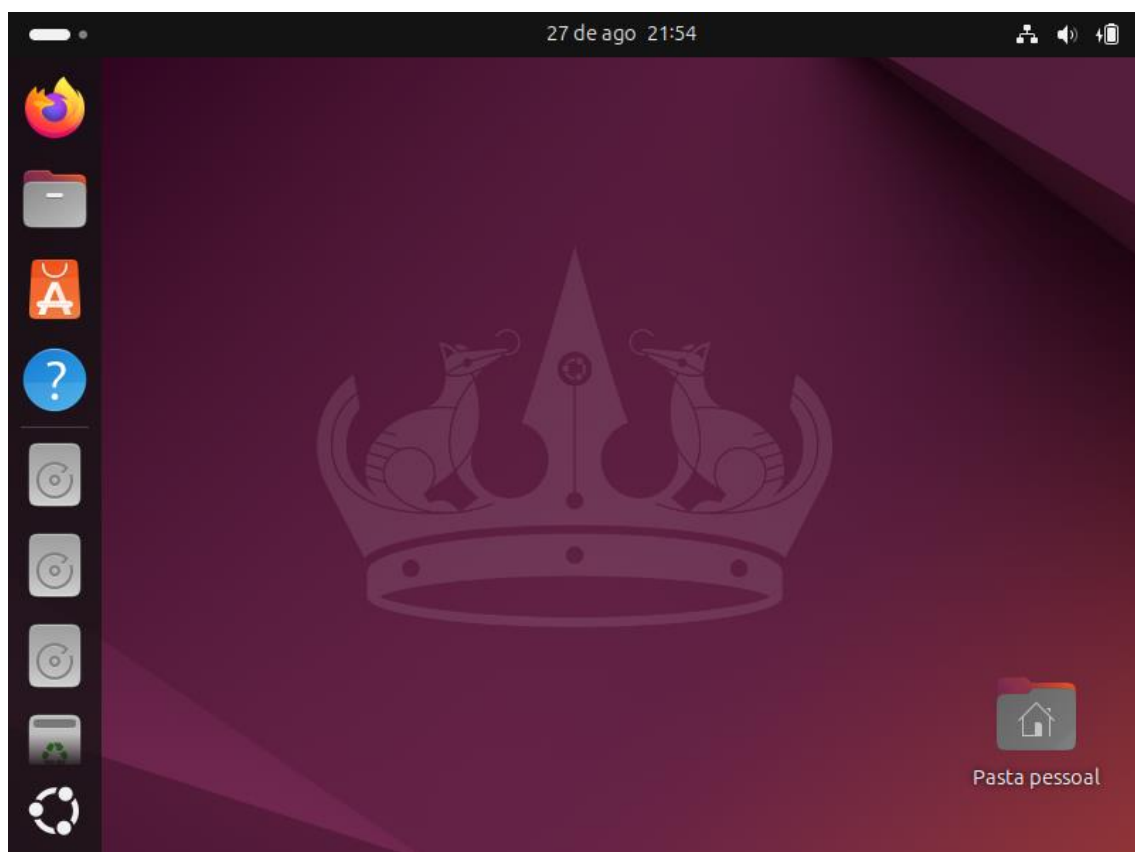


Figura 37: Reiniciando para concluir a instalação





*Figura 38: Tela do Ubuntu*

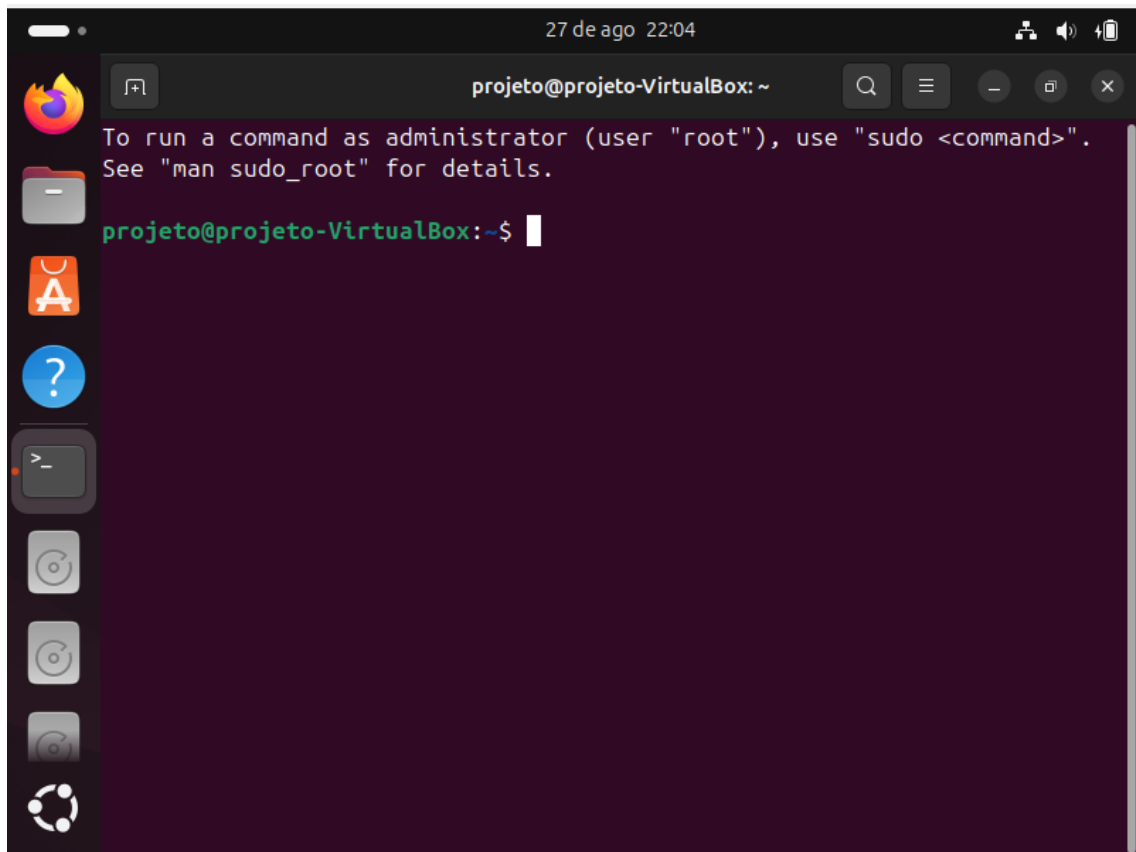
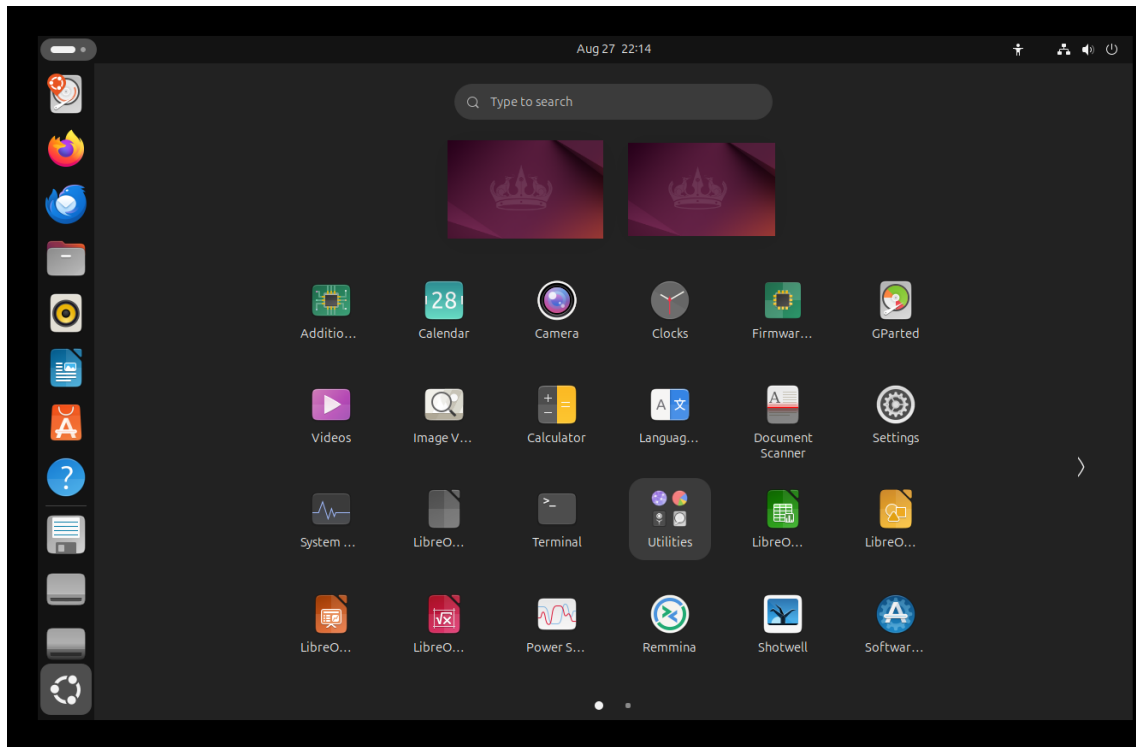


Figura 39: Abrindo o terminal

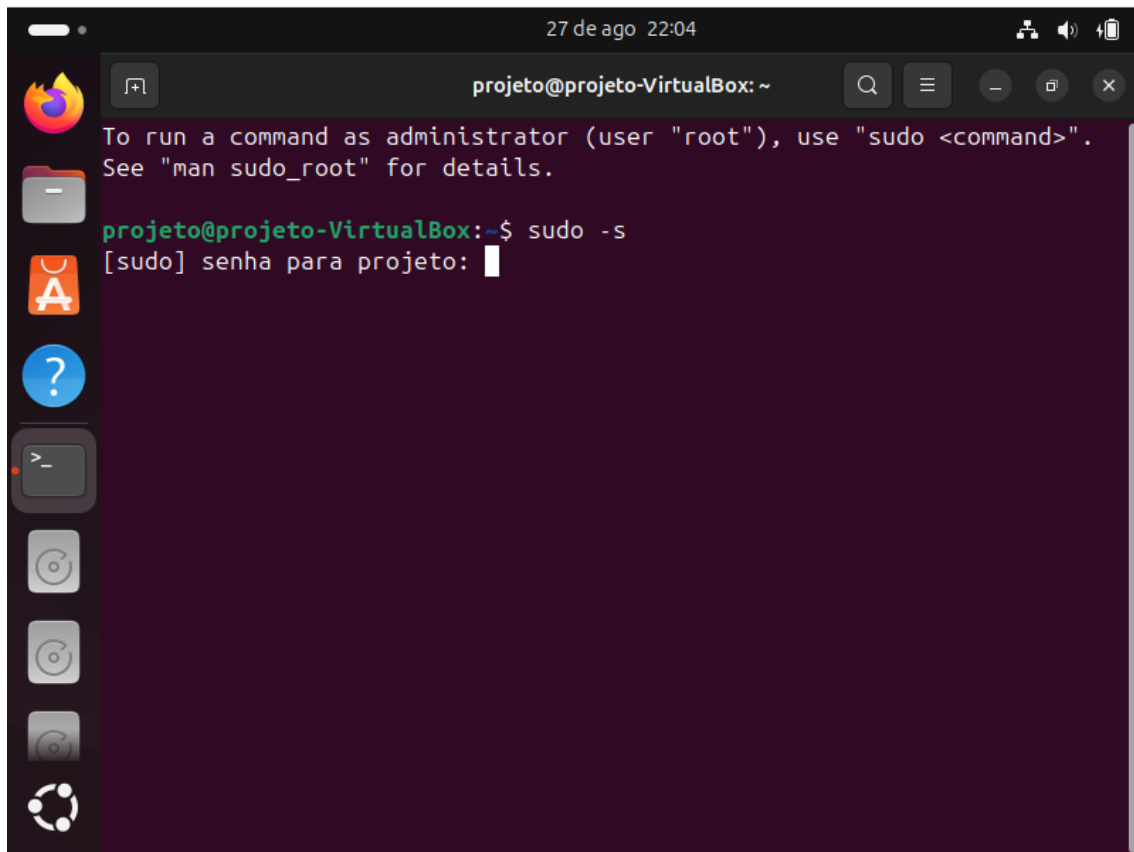


Figura 40: Entrando no projeto

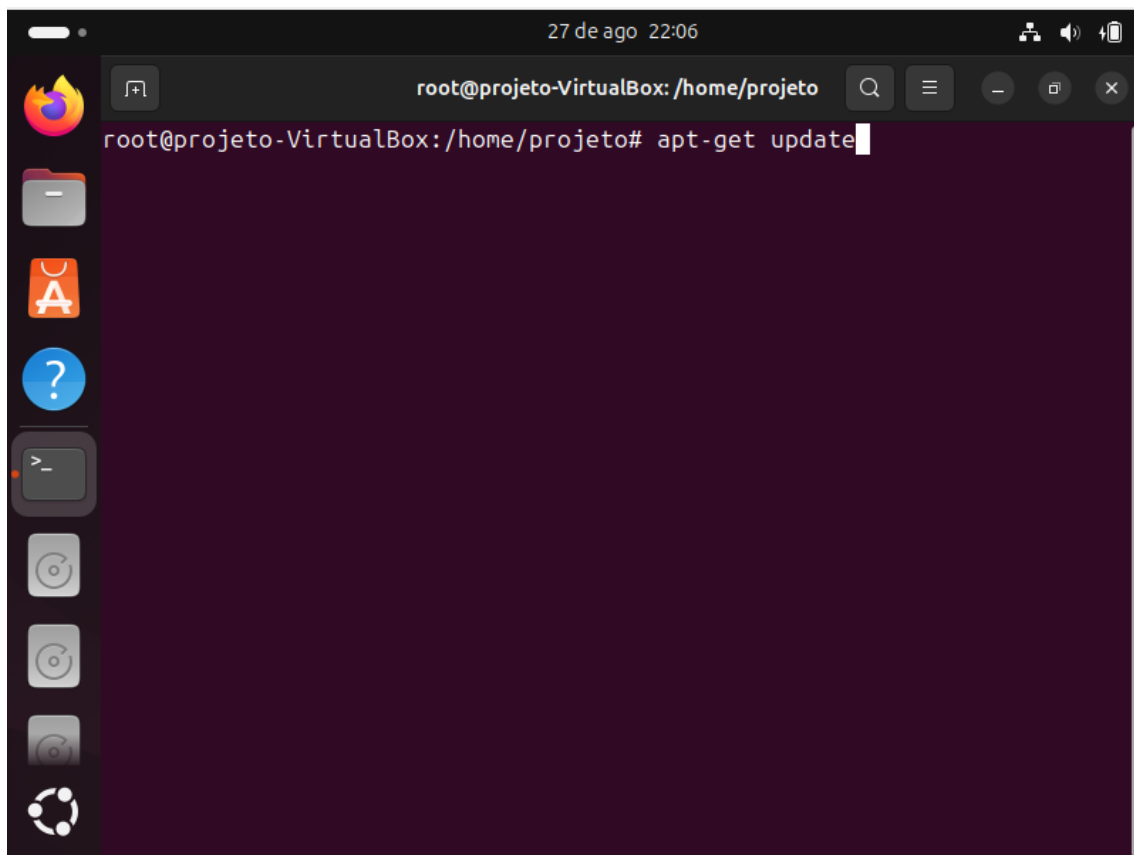
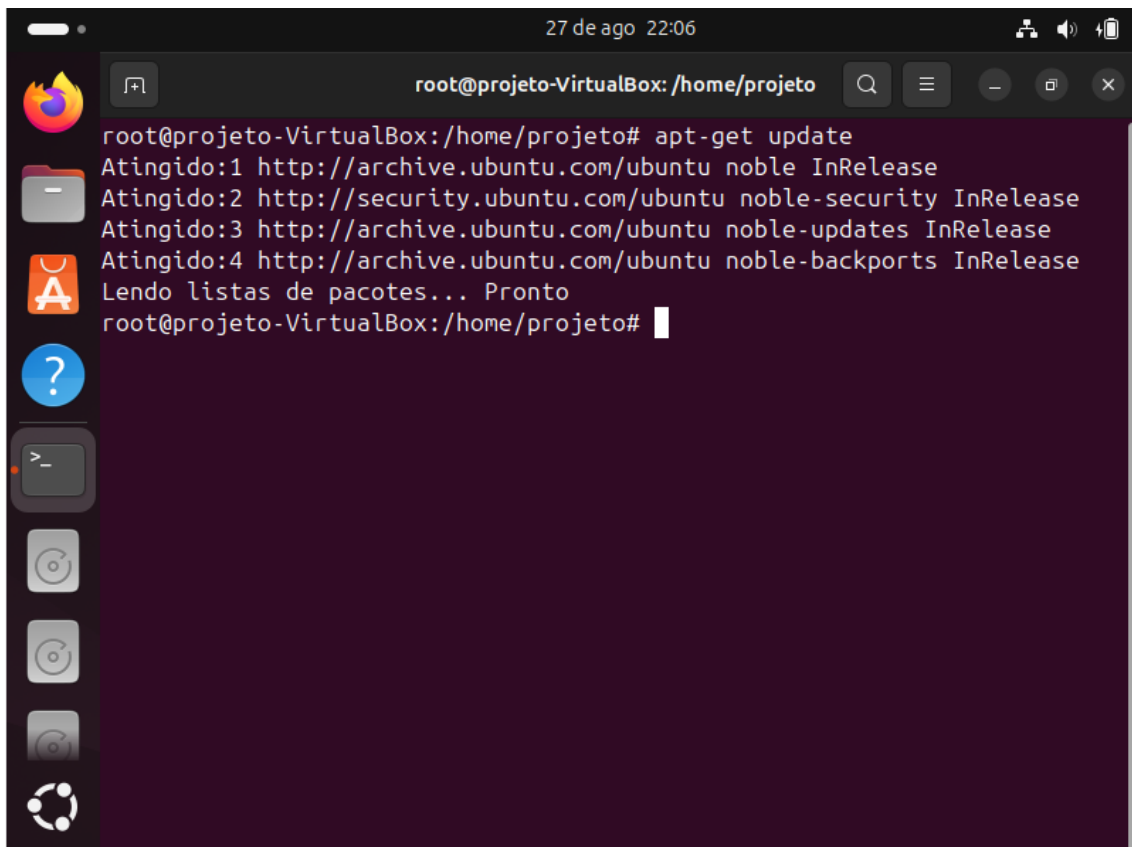
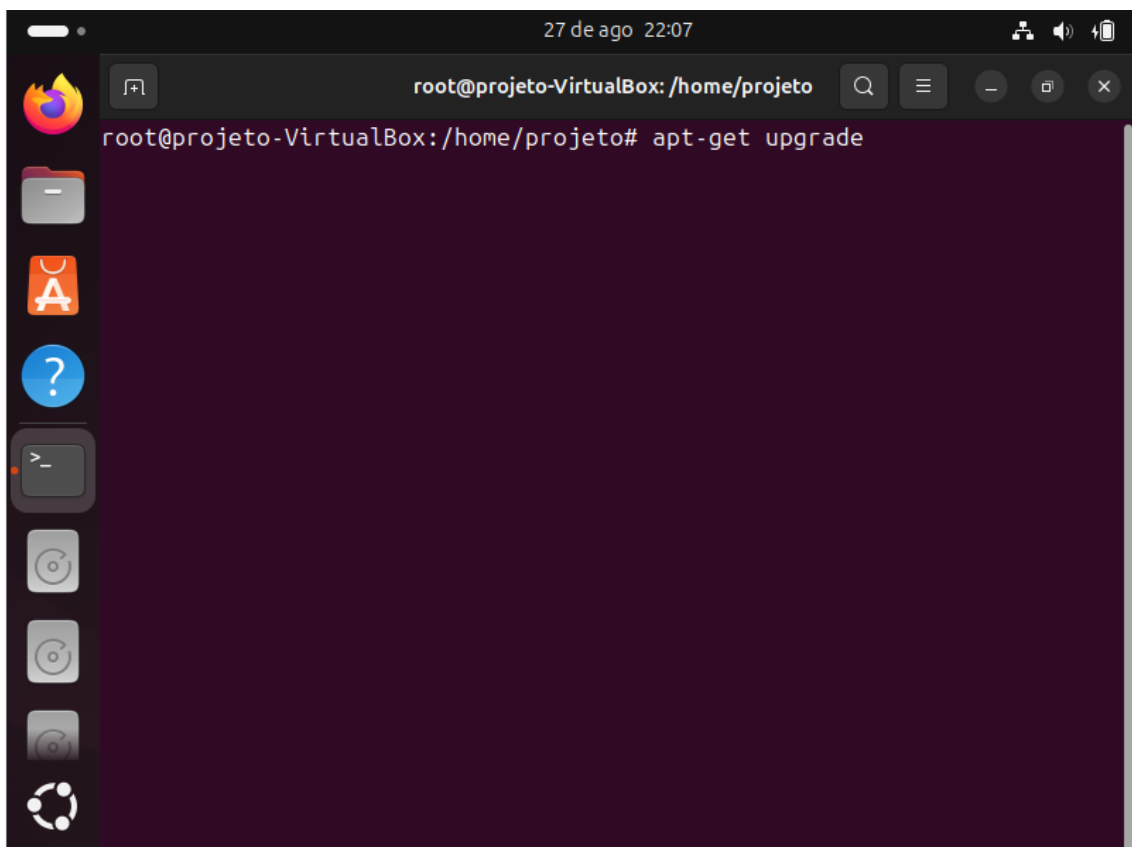


Figura 41: Atualizando o repositório



A terminal window titled 'root@projeto-VirtualBox: /home/projeto' with a timestamp of '27 de ago 22:06'. The terminal shows the command 'apt-get update' being executed. The output lists four sources and their release status: 'Atingido:1 http://archive.ubuntu.com/ubuntu noble InRelease', 'Atingido:2 http://security.ubuntu.com/ubuntu noble-security InRelease', 'Atingido:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease', and 'Atingido:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease'. It then says 'Lendo listas de pacotes... Pronto' and returns to the prompt 'root@projeto-VirtualBox:/home/projeto#'. The terminal has a dark purple background and a sidebar with icons for file manager, application store, help, and other system utilities.

```
root@projeto-VirtualBox:/home/projeto# apt-get update
Atingido:1 http://archive.ubuntu.com/ubuntu noble InRelease
Atingido:2 http://security.ubuntu.com/ubuntu noble-security InRelease
Atingido:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Atingido:4 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Lendo listas de pacotes... Pronto
root@projeto-VirtualBox:/home/projeto#
```



A terminal window titled 'root@projeto-VirtualBox: /home/projeto' with a timestamp of '27 de ago 22:07'. The terminal shows the command 'apt-get upgrade' being entered. The terminal has a dark purple background and a sidebar with icons for file manager, application store, help, and other system utilities.

```
root@projeto-VirtualBox:/home/projeto# apt-get upgrade
```

Figura 42: Atualizando o sistema com o comando 'apt-get-upgrade'

```
27 de ago 22:10
root@projeto-VirtualBox: /home/projeto

python3-problem-report rfkill snapd systemd systemd-dev systemd-oomd
systemd-resolved systemd-sysv systemd-timesyncd tzdata
ubuntu-pro-client ubuntu-pro-client-l10n
ubuntu-release-upgrader-core ubuntu-release-upgrader-gtk
ubuntu-settings udev util-linux uuid-runtime vim-common vim-tiny
xdg-desktop-portal xdg-desktop-portal-gnome xkb-data xxd xz-utils
zlib1g zstd

164 pacotes atualizados, 0 pacotes novos instalados, 0 a serem removidos
e 4 não atualizados.
É preciso baixar 166 MB de arquivos.
Depois desta operação, 1.126 kB adicionais de espaço em disco serão usad
os.
Você quer continuar? [S/n] S
Obter:1 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 base-f
iles amd64 13ubuntu10.1 [73,2 kB]
Obter:2 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 bsdtu
ls amd64 1:2.39.3-9ubuntu6.1 [95,4 kB]
Obter:3 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 util-l
inux amd64 2.39.3-9ubuntu6.1 [1.127 kB]
Obter:4 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libpan
thg amd64 1.5.3-5ubuntu5.1 [67,7 kB]
Obter:5 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 system
d-timesyncd amd64 255.4-1ubuntu8.4 [35,3 kB]
Obter:6 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 libe
```

```
27 de ago 22:10
root@projeto-VirtualBox: /home/projeto

A processar 'triggers' para hicolor-icon-theme (0.17-2) ...
Configurando xdg-desktop-portal-gnome (46.2-0ubuntu1) ...
A processar 'triggers' para gnome-menus (3.36.0-1.1ubuntu3) ...
Configurando gnome-online-accounts (3.50.4-0ubuntu2) ...
A processar 'triggers' para libc-bin (2.39-0ubuntu8.3) ...
A processar 'triggers' para rsyslog (8.2312.0-3ubuntu9) ...
Configurando ubuntu-settings (24.04.4) ...
Configurando libebook-contacts-1.2-4t64:amd64 (3.52.3-0ubuntu1) ...
Configurando libebook-1.2-11t64:amd64 (3.52.3-0ubuntu1) ...
Configurando libecal-2.0-3:amd64 (3.52.3-0ubuntu1) ...
Configurando libedata-cal-2.0-2t64:amd64 (3.52.3-0ubuntu1) ...
Configurando libedata-book-1.2-27t64:amd64 (3.52.3-0ubuntu1) ...
Configurando libedataserverui-1.2-4t64:amd64 (3.52.3-0ubuntu1) ...
Configurando gnome-shell (46.0-0ubuntu6~24.04.4) ...
Configurando gnome-shell-extension-appindicator (58-1) ...
Configurando libebook-1.2-21t64:amd64 (3.52.3-0ubuntu1) ...
Configurando gnome-shell-extension-ubuntu-tiling-assistant (46-1ubuntu1.
1) ...
Configurando evolution-data-server (3.52.3-0ubuntu1) ...
A processar 'triggers' para initramfs-tools (0.142ubuntu25.1) ...
update-initramfs: Generating /boot/initrd.img-6.8.0-41-generic
A processar 'triggers' para libc-bin (2.39-0ubuntu8.3) ...
root@projeto-VirtualBox: /home/projeto#
```

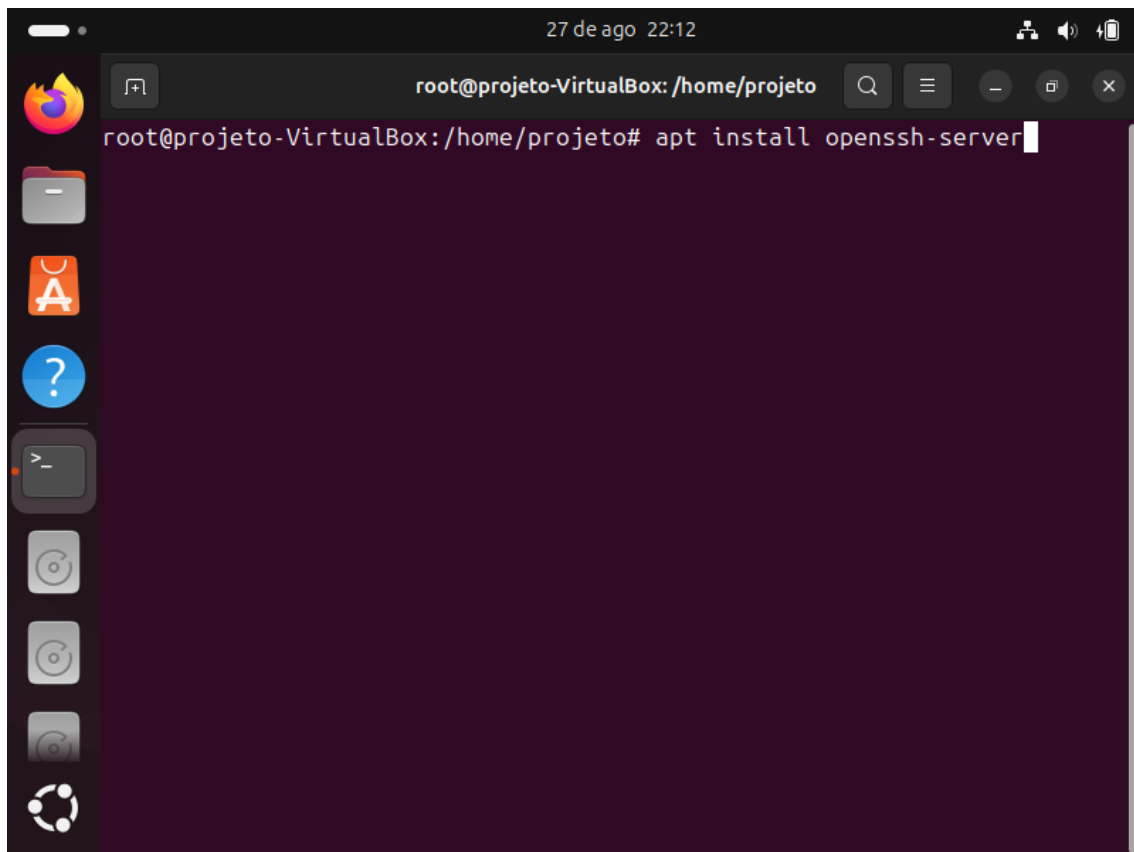


Figura 43: Instalando o pacote SSH, para acessara máquina externamente

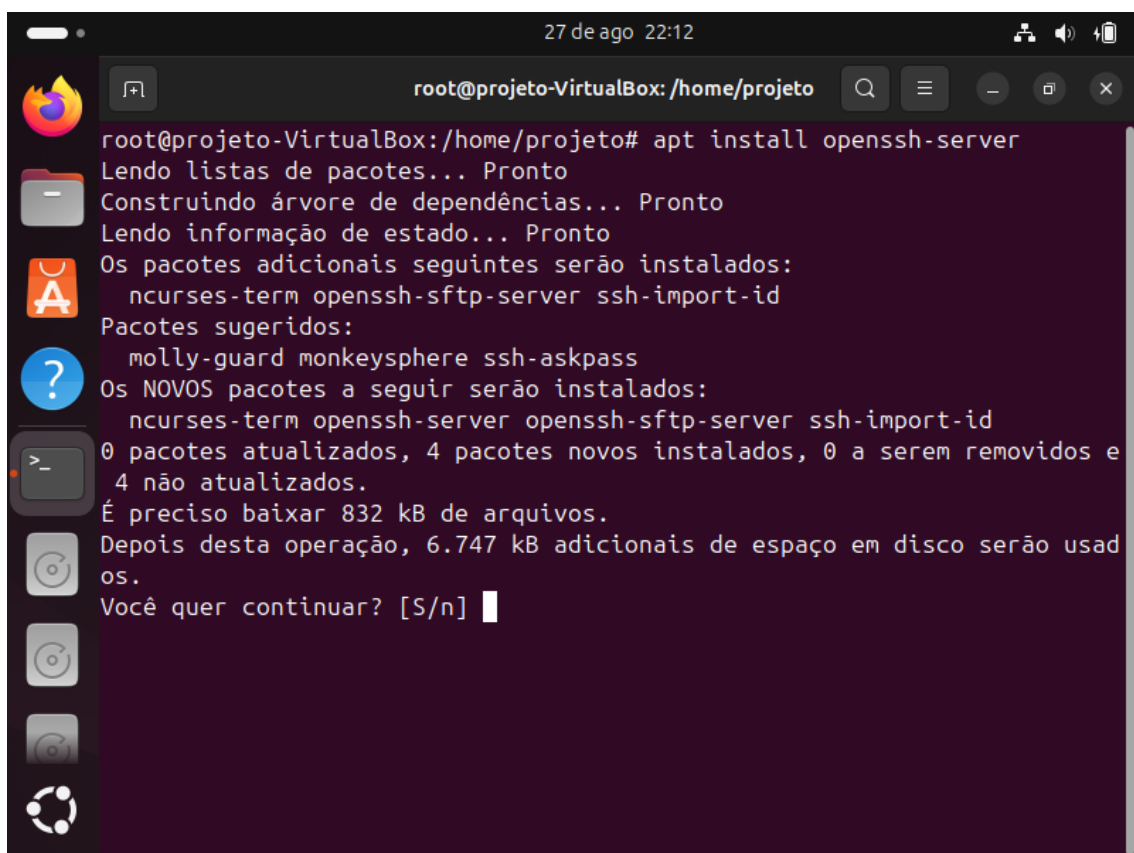
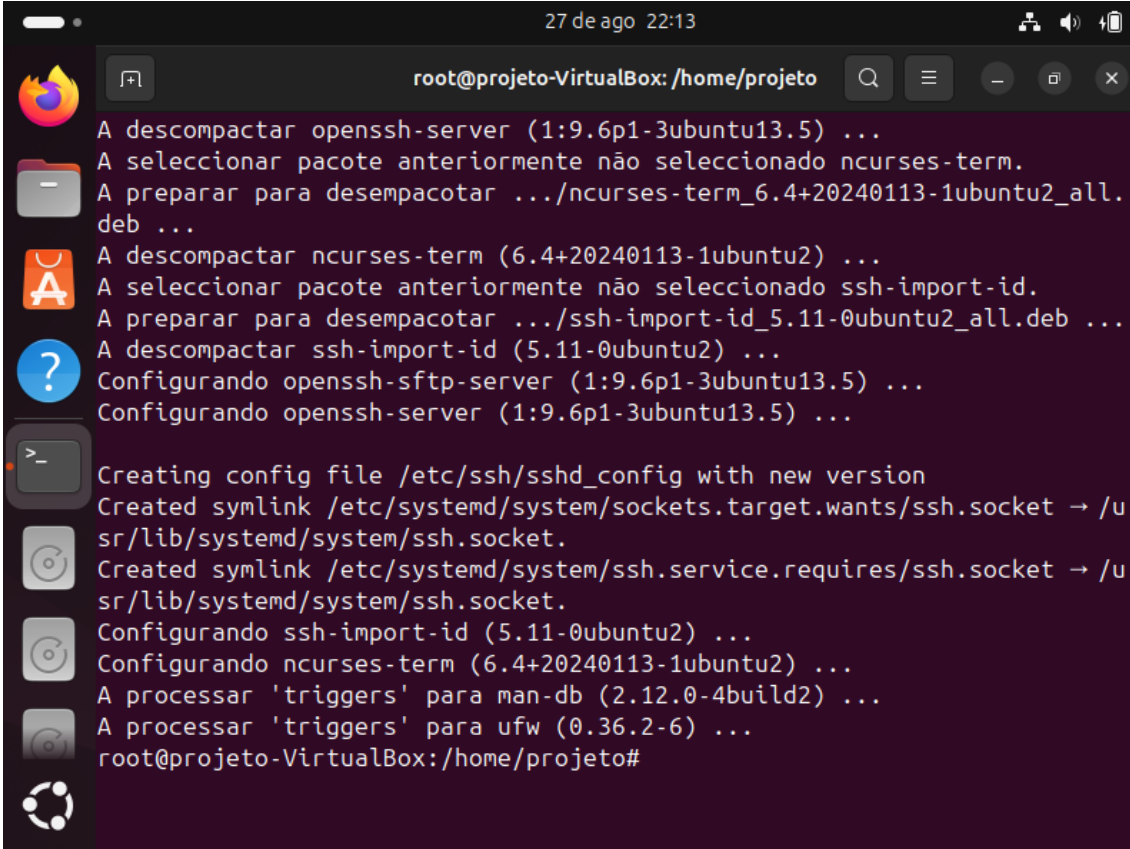


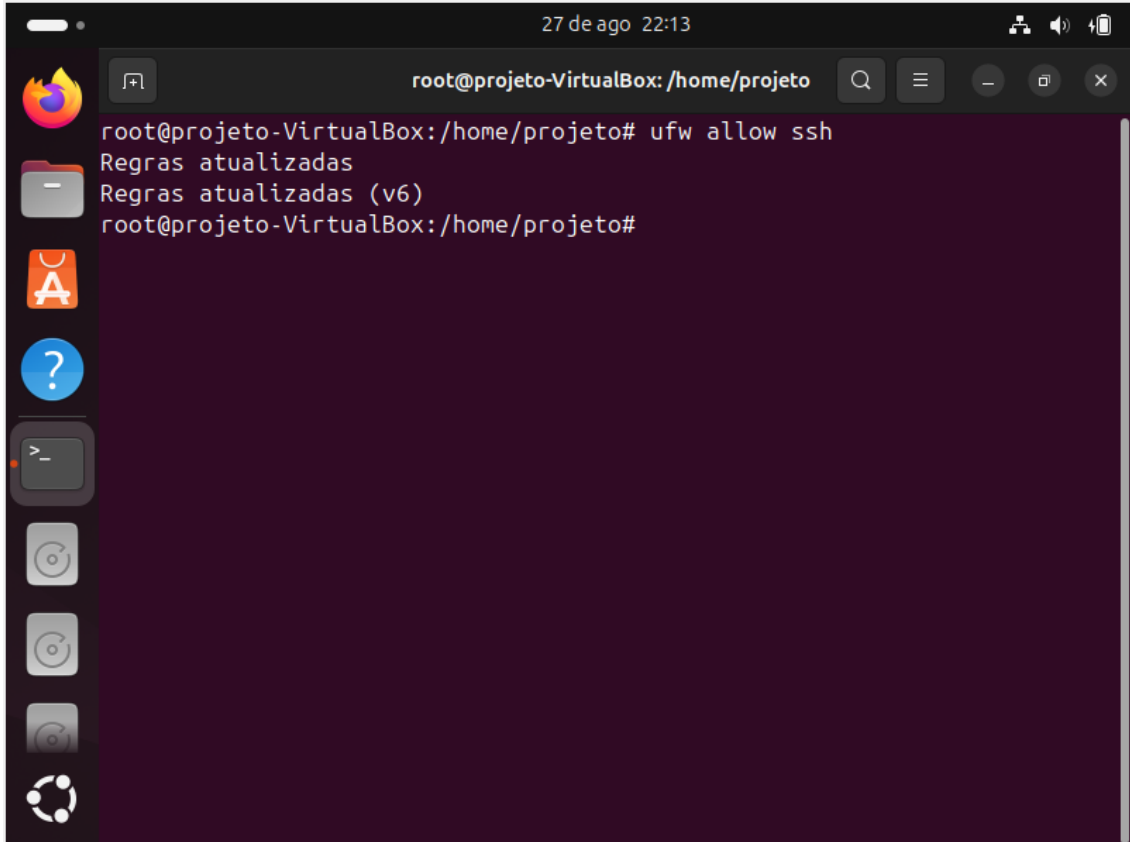
Figura 44: Confermando



27 de ago 22:13

root@projeto-VirtualBox: /home/projeto

```
A descompactar openssh-server (1:9.6p1-3ubuntu13.5) ...  
A seleccionar pacote anteriormente não seleccionado ncurses-term.  
A preparar para desempacotar .../ncurses-term_6.4+20240113-1ubuntu2_all.deb ...  
A descompactar ncurses-term (6.4+20240113-1ubuntu2) ...  
A seleccionar pacote anteriormente não seleccionado ssh-import-id.  
A preparar para desempacotar .../ssh-import-id_5.11-0ubuntu2_all.deb ...  
A descompactar ssh-import-id (5.11-0ubuntu2) ...  
Configurando openssh-sftp-server (1:9.6p1-3ubuntu13.5) ...  
Configurando openssh-server (1:9.6p1-3ubuntu13.5) ...  
  
Creating config file /etc/ssh/sshd_config with new version  
Created symlink /etc/systemd/system/sockets.target.wants/ssh.socket → /usr/lib/systemd/system/ssh.socket.  
Created symlink /etc/systemd/system/ssh.service.requires/ssh.socket → /usr/lib/systemd/system/ssh.socket.  
Configurando ssh-import-id (5.11-0ubuntu2) ...  
Configurando ncurses-term (6.4+20240113-1ubuntu2) ...  
A processar 'triggers' para man-db (2.12.0-4build2) ...  
A processar 'triggers' para ufw (0.36.2-6) ...  
root@projeto-VirtualBox:/home/projeto#
```



27 de ago 22:13

root@projeto-VirtualBox: /home/projeto

```
root@projeto-VirtualBox:/home/projeto# ufw allow ssh  
Regras atualizadas  
Regras atualizadas (v6)  
root@projeto-VirtualBox:/home/projeto#
```

Figura 45: Habilitando o tráfego do SSH no firewall da máquina

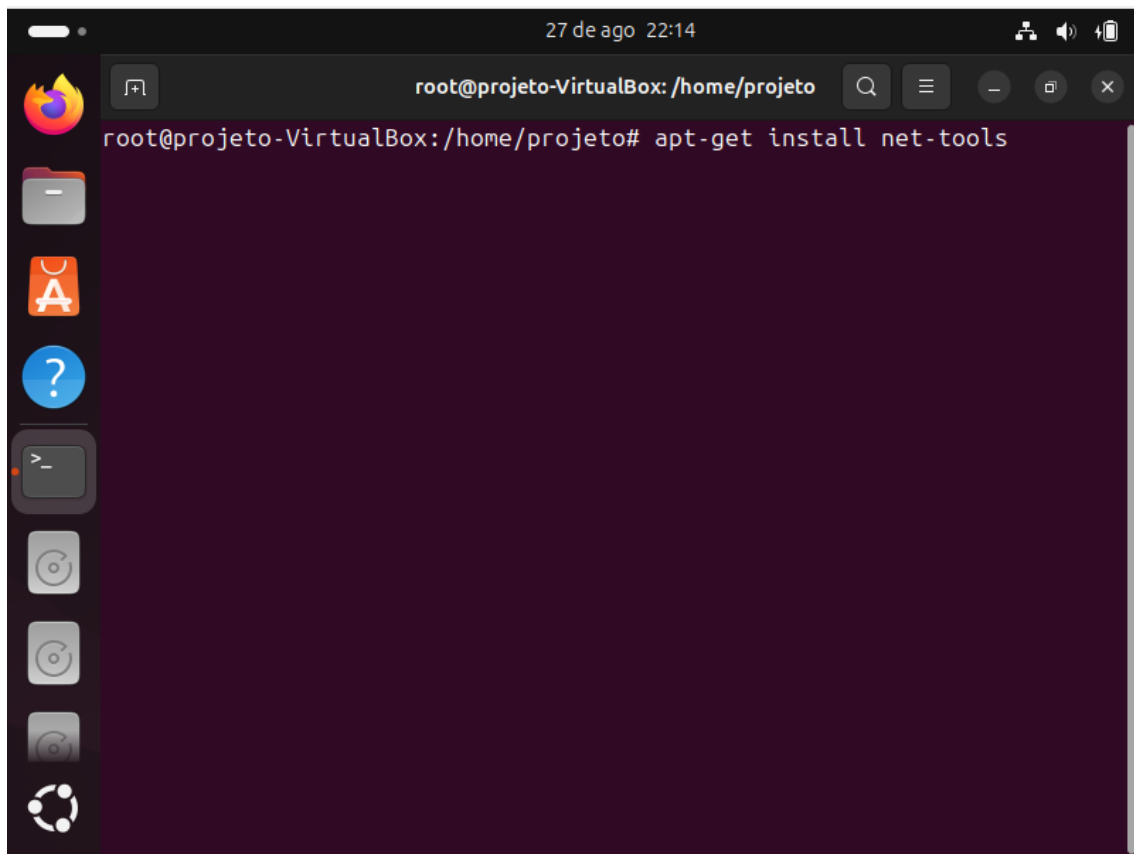
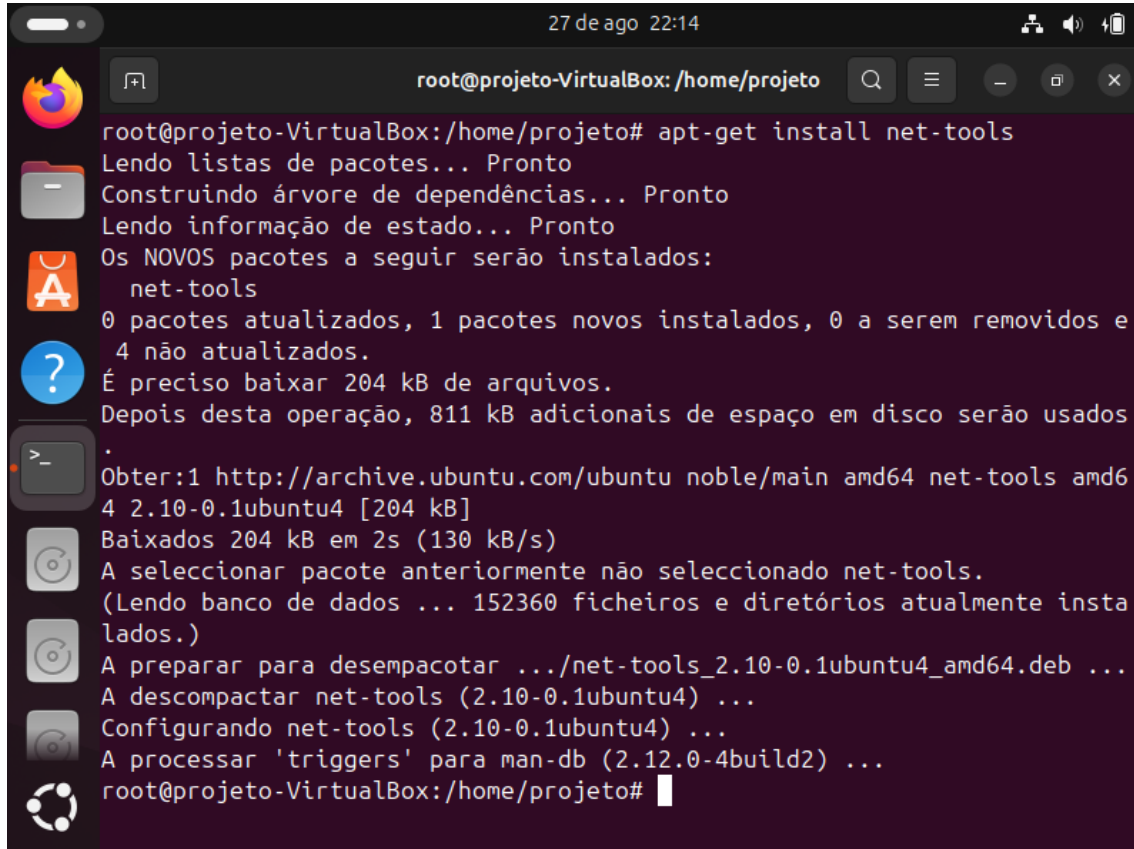
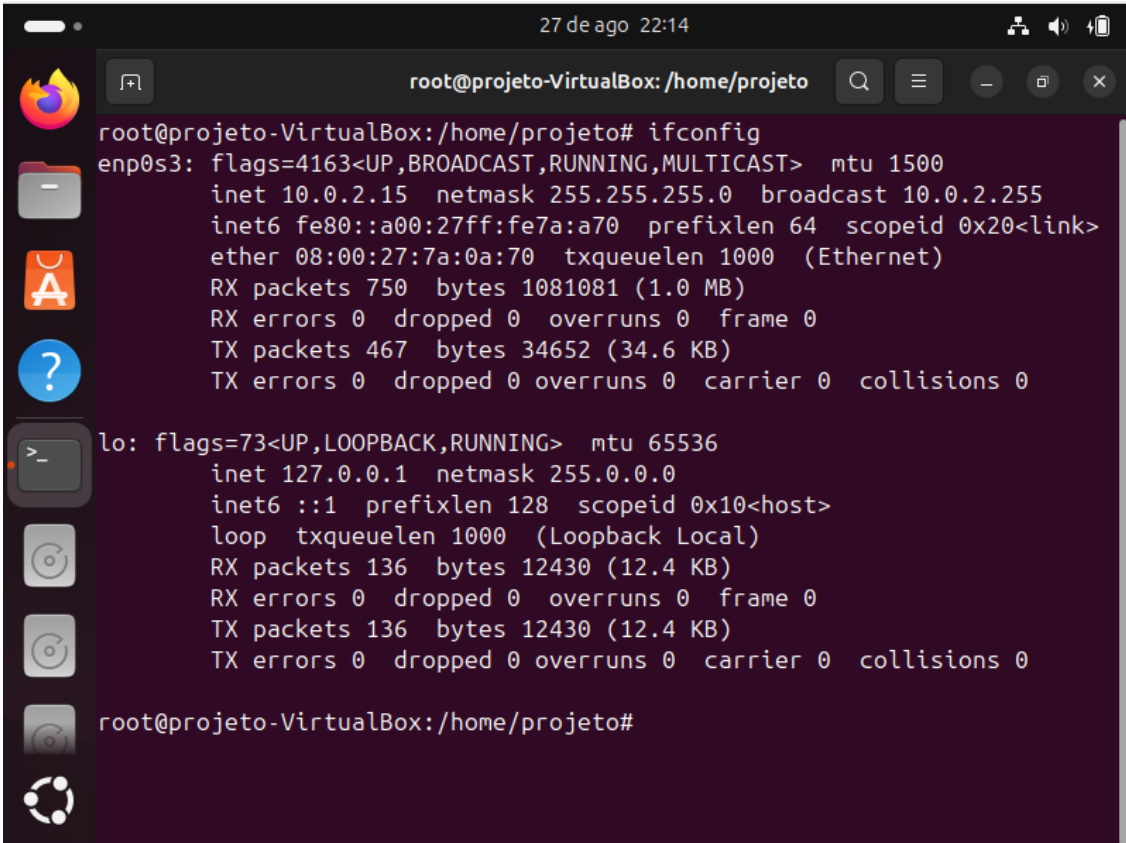


Figura 46: Instalando o pacote para utilizar o comando "iconfig"







The image shows a terminal window titled "root@projeto-VirtualBox: /home/projeto". The terminal output displays the configuration for two network interfaces: `enp0s3` and `lo`. The `enp0s3` interface is an Ethernet card with IP `10.0.2.15`, netmask `255.255.255.0`, and broadcast `10.0.2.255`. The `lo` interface is a loopback device with IP `127.0.0.1` and netmask `255.0.0.0`. The terminal also shows statistics for RX and TX packets and errors for both interfaces.

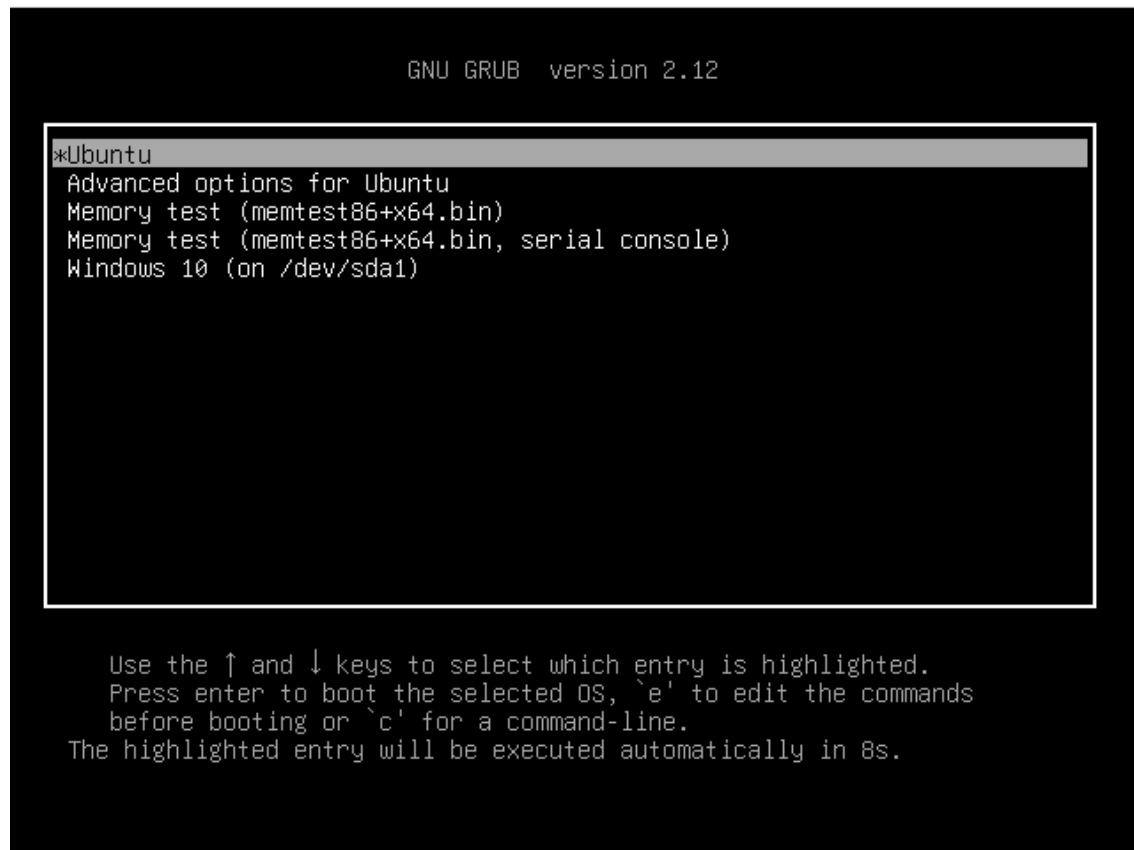
```
root@projeto-VirtualBox: /home/projeto# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 10.0.2.15  netmask 255.255.255.0  broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fe7a:a70  prefixlen 64  scopeid 0x20<link>
    ether 08:00:27:7a:0a:70  txqueuelen 1000  (Ethernet)
    RX packets 750  bytes 1081081 (1.0 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 467  bytes 34652 (34.6 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop txqueuelen 1000  (Loopback Local)
    RX packets 136  bytes 12430 (12.4 KB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 136  bytes 12430 (12.4 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

root@projeto-VirtualBox: /home/projeto#
```

Figura 47: Verificando o IP da VM

Dual Boot Concluído:



**Observações:** Começamos utilizando a VMware para a instalação, porém a máquina virtual estava travando muito sempre que começávamos, com isso mudamos para a Virtual Box e o processo facilitou muito. E foi muito mais fácil a instalação do Dual Boot começando pelo Windows.

**Dificuldades:** Muita das vezes a VM travava, também o PC da universidade não colaborava e tivemos dificuldades na parte de entrar na BIOS.