

Passo a passo para instalação completa e configuração de máquina virtual com PostgreSQL 12 e PgAdmin4.

Sem trauma, e sem teoria.

Criação de máquina virtual no VirtualBox 6

Download e instalação do Ubuntu 20.04 LTS sem ambiente gráfico
com openssh-server, apache2, samba4 e postgresql-12

Configuração de IP estático no Ubuntu

Configuração do samba4 com compartilhamento de diretórios

Configuração da base de dados PostgreSQL 12

Instalação e configuração do PgAdmin 4

Autor: Viniciusalopes (Vovolinux)

Licença deste documento: MIT

Goiânia, 09/09/2020.

Tópicos:

Número	Assunto	Página
0	Instruções, observações e frases para pensar	3
1	Link para download do VirtualBox	3
2	Links para download da iso de instalação do Ubuntu 20.04 LTS	3
3	Criar máquina virtual	4
4	Instalar Ubuntu (inclui instalação do PostgreSQL database, Samba file server e OpenSSH server)	22
5	Incluir usuário e senha do usuário postgres no Ubuntu e no banco de dados	51
6	Instalar pgAdmin4 (inclui importação de chave GPG e configuração do repositório)	53
7	Configurar IP estático para o servidor	61
8	Configurar /etc/hosts em cliente linux (inclui acesso ao servidor via ssh via terminal)	65
9	Configurar C:\Windows\System32\drivers\etc\hosts (inclui acesso ao servidor via ssh via Windows PowerShell)	69
10	Criar conexão com o servidor de dados PostgreSQL (via PgAdmin4)	72
11	Configurar o compartilhamento Samba4 (via ssh)	75
12	Acessar o compartilhamento utilizando cliente Linux	80
13	Acessar o compartilhamento utilizando cliente Windows (inclui mapeamento de unidade de rede)	83

0. INSTRUÇÕES:

Fazer o download da instalação do VirtualBox para o seu sistema operacional e a imagem de instalação mínima do Ubuntu.

Seguir o passo a passo na sequencia em que aparece no documento.

OBSERVAÇÕES:

- Nomes de entidades como servidor, diretório, compartilhamento e usuários utilizados nos exemplos podem ser alterados a seu critério.
- Senhas devem ser sempre seguras. Evite a senha da nasa.
- Os endereços de IP e máscaras podem variar de acordo com a estrutura da rede local
- Em caso de dúvidas, leia as instruções na tela com o umbigo*. Depois leia com atenção entenda o que está fazendo.

PARA PENSAR:

*Leia com o umbigo. (*Ujeverson Tavares*)

Tudo acaba bem. Se não está bem, é por que não acabou ainda. (*João Caetano*)

Sem trauma, e sem teoria. (*Vovolinux*)

Simples como voar! (*LinuxTips*)

1. Link para download do VirtualBox

<https://www.virtualbox.org/wiki/Downloads>

2. Links para download da iso de instalação do Ubuntu 20.04 LTS

Repositório:

<http://archive.ubuntu.com/ubuntu/dists/focal/main/installer-amd64/current/legacy-images/netboot/>

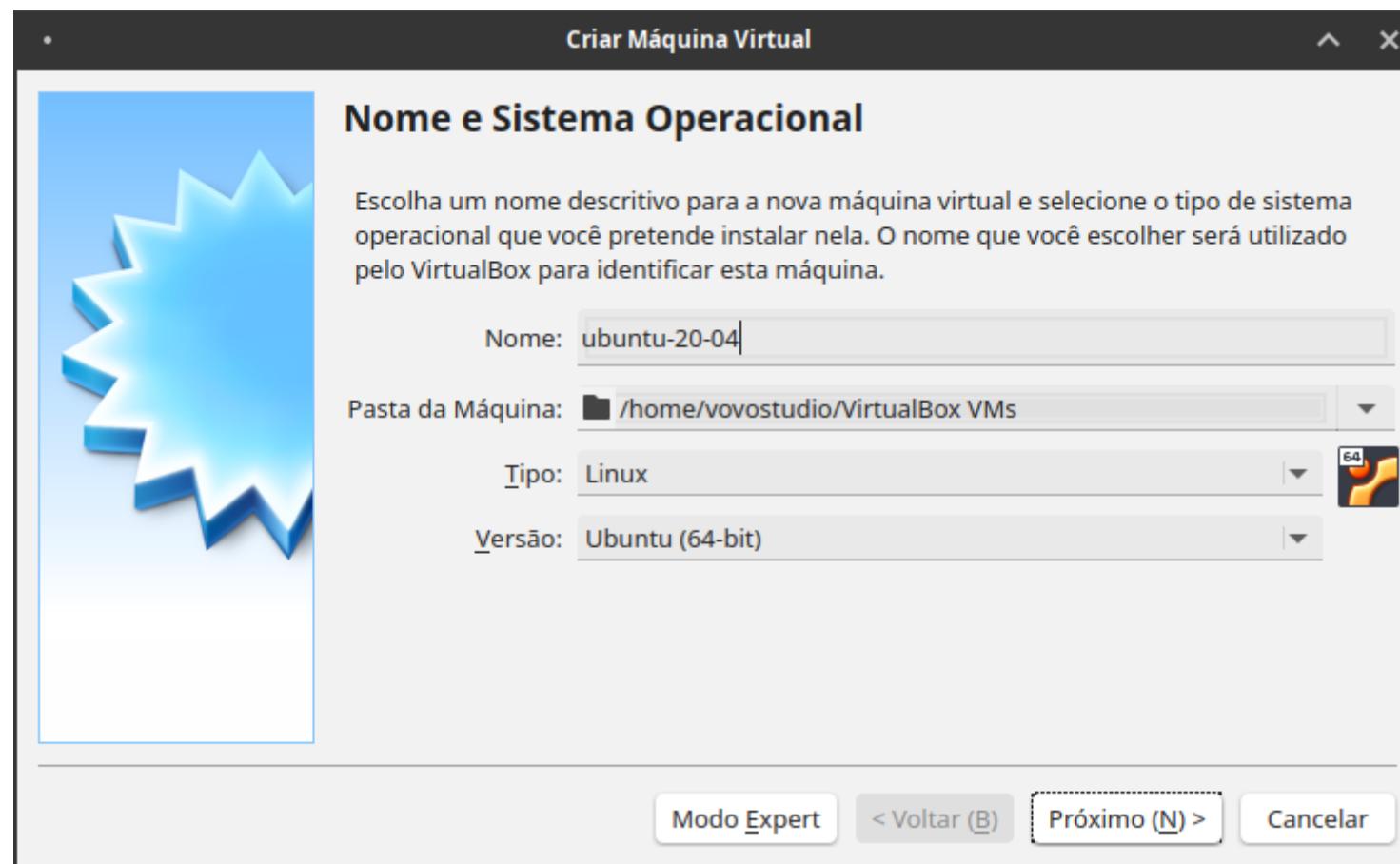
Arquivo:

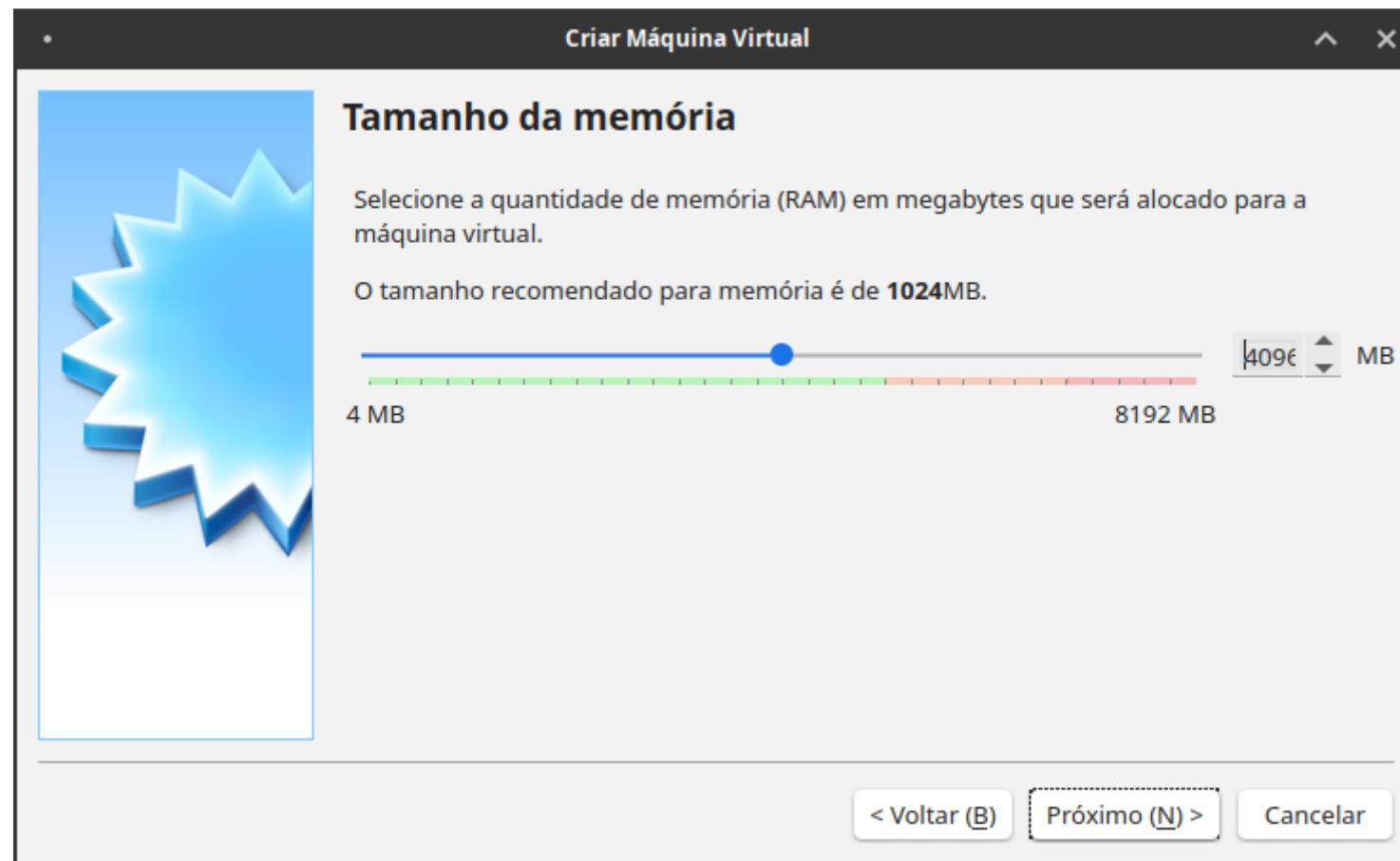
<http://archive.ubuntu.com/ubuntu/dists/focal/main/installer-amd64/current/legacy-images/netboot/mini.iso>

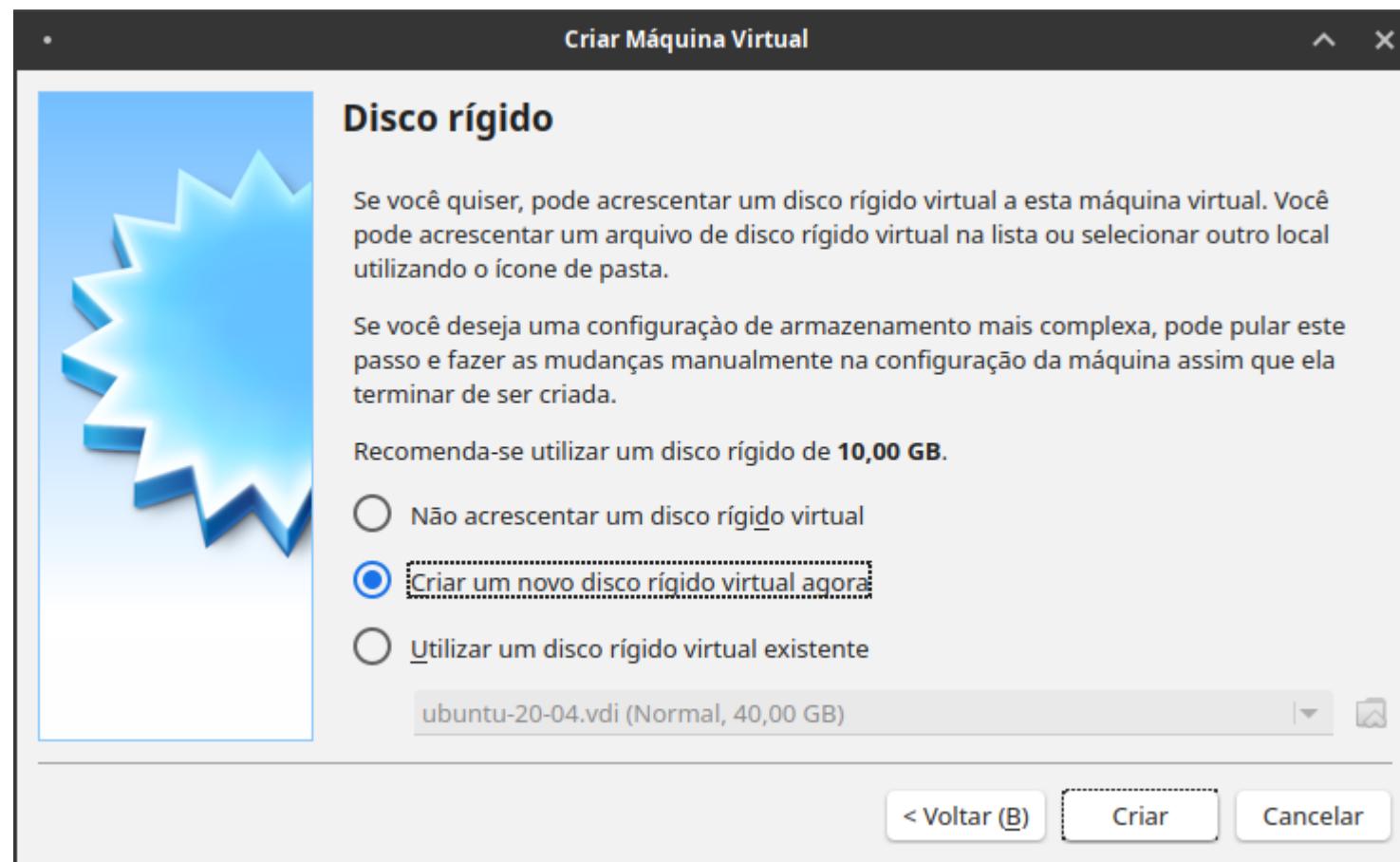
3. Criar máquina virtual

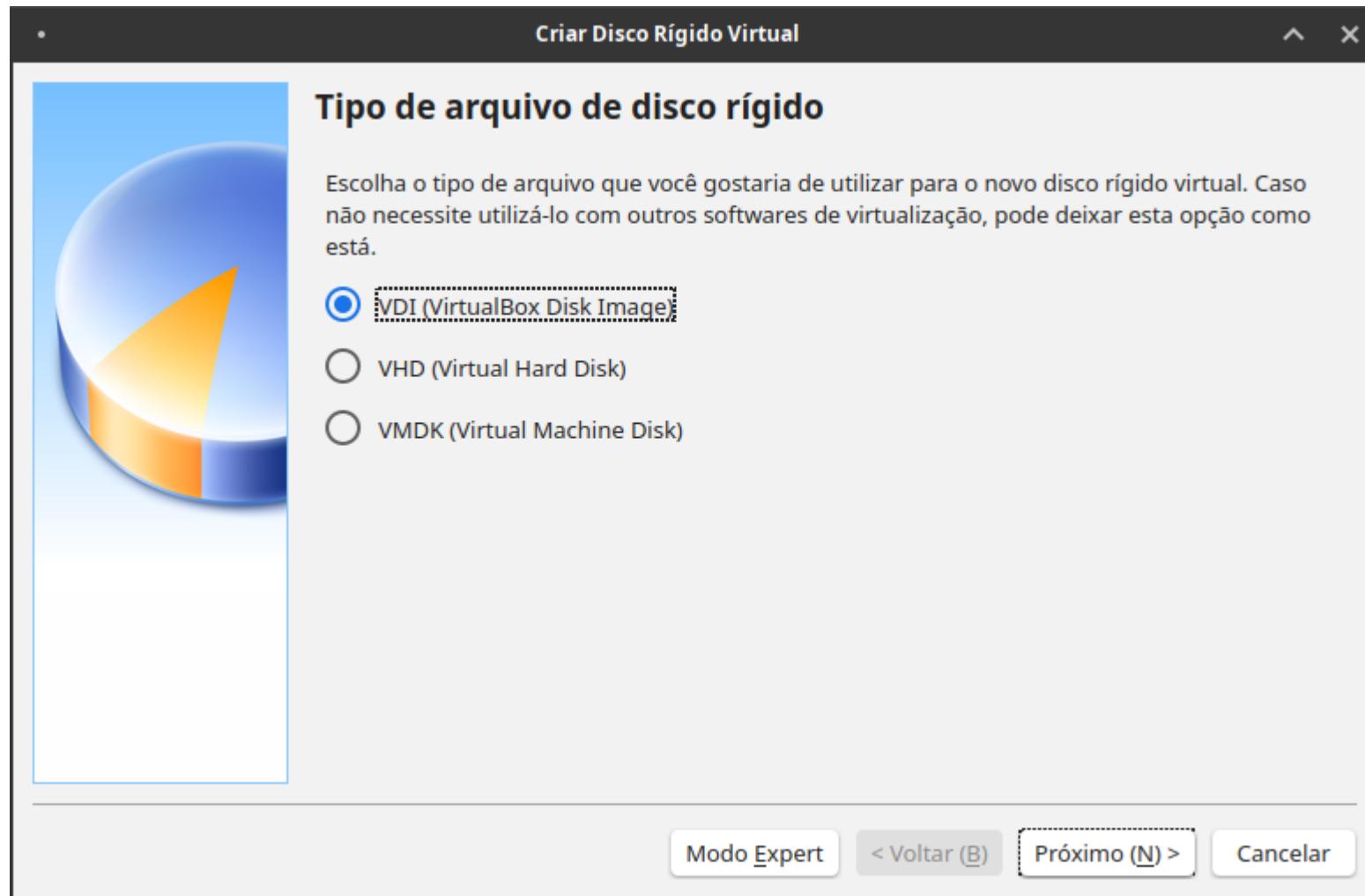
Clique em Novo e crie uma nova máquina virtual configurando-a conforme as imagens a seguir:

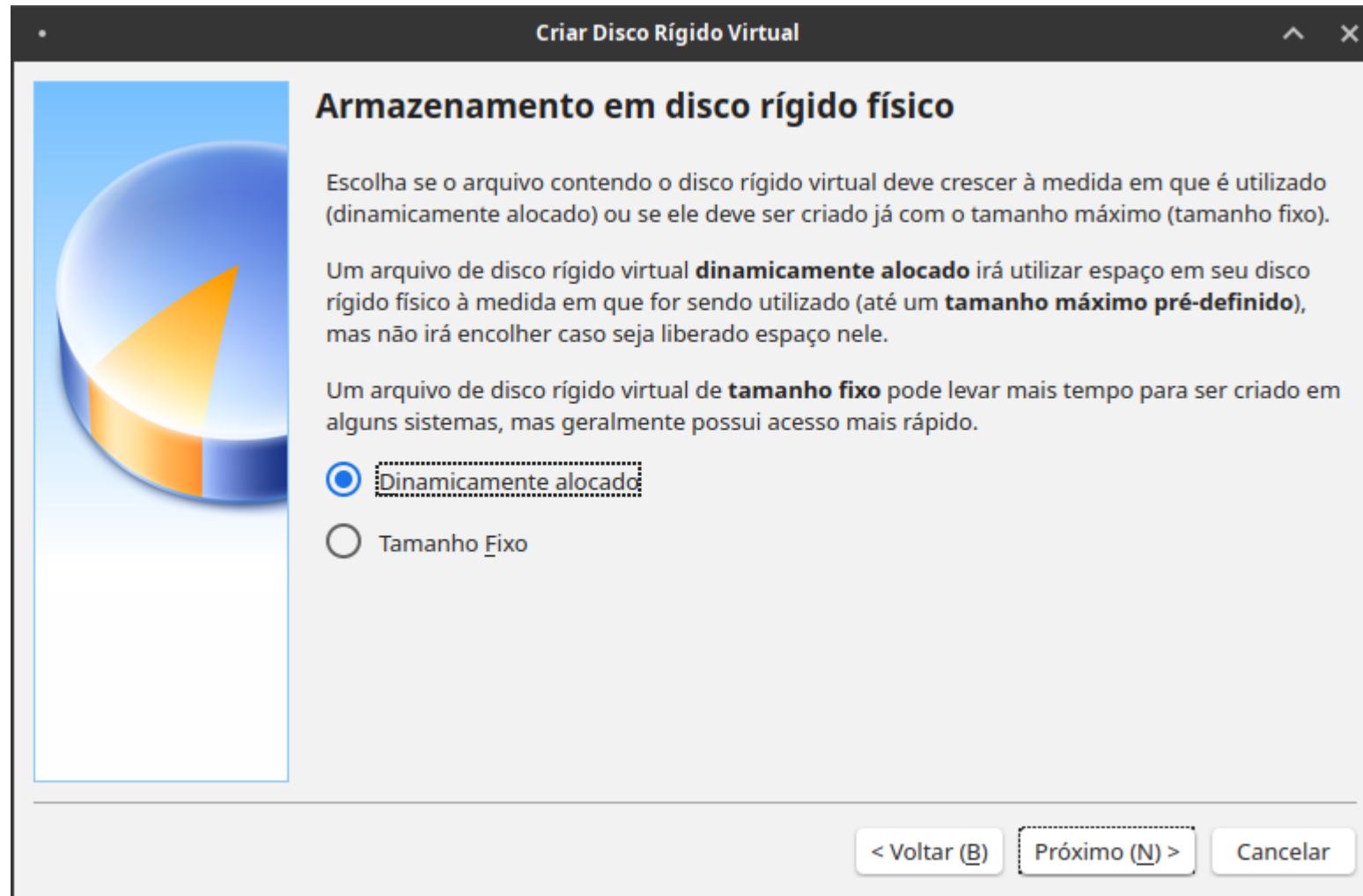


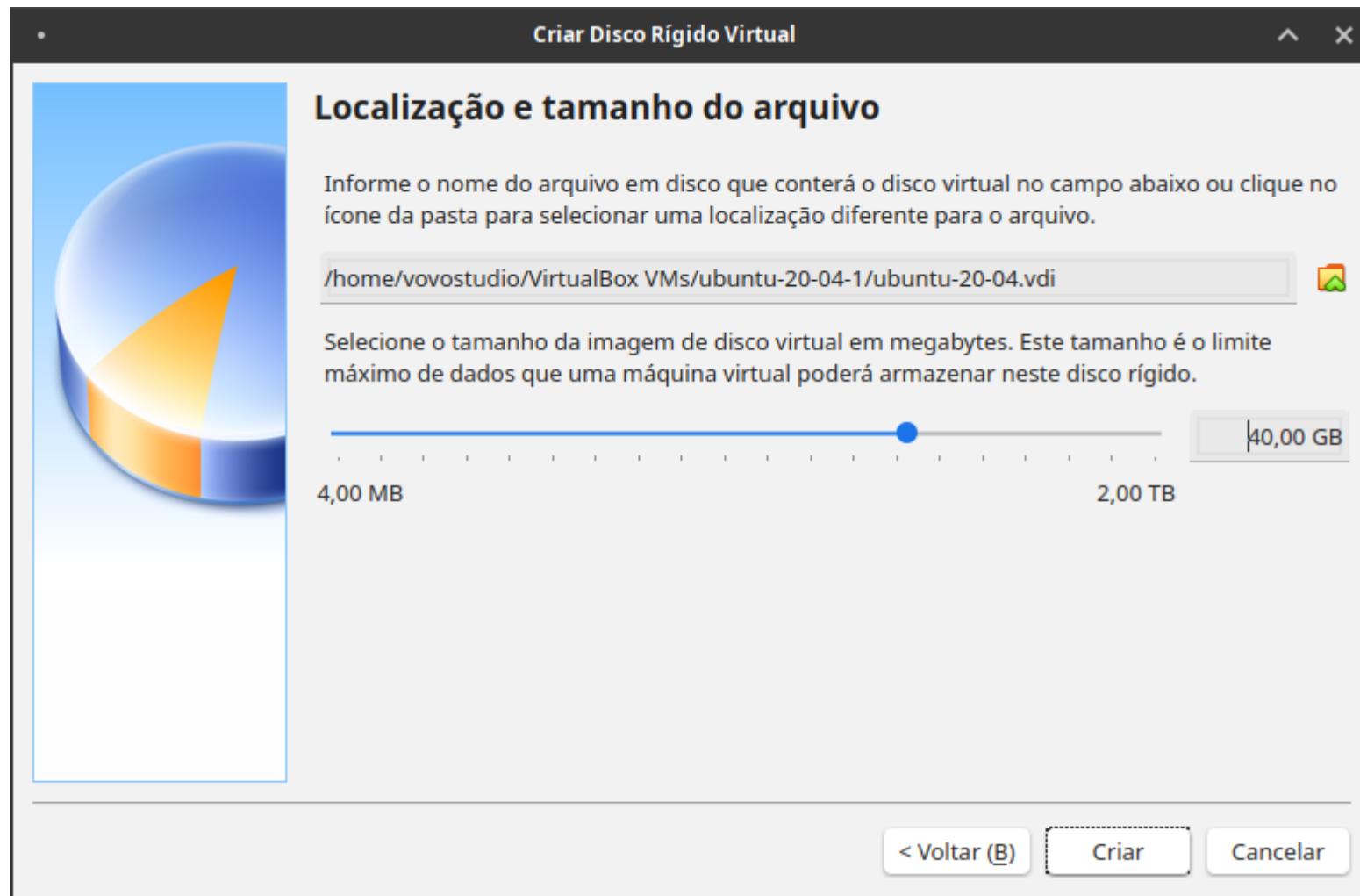






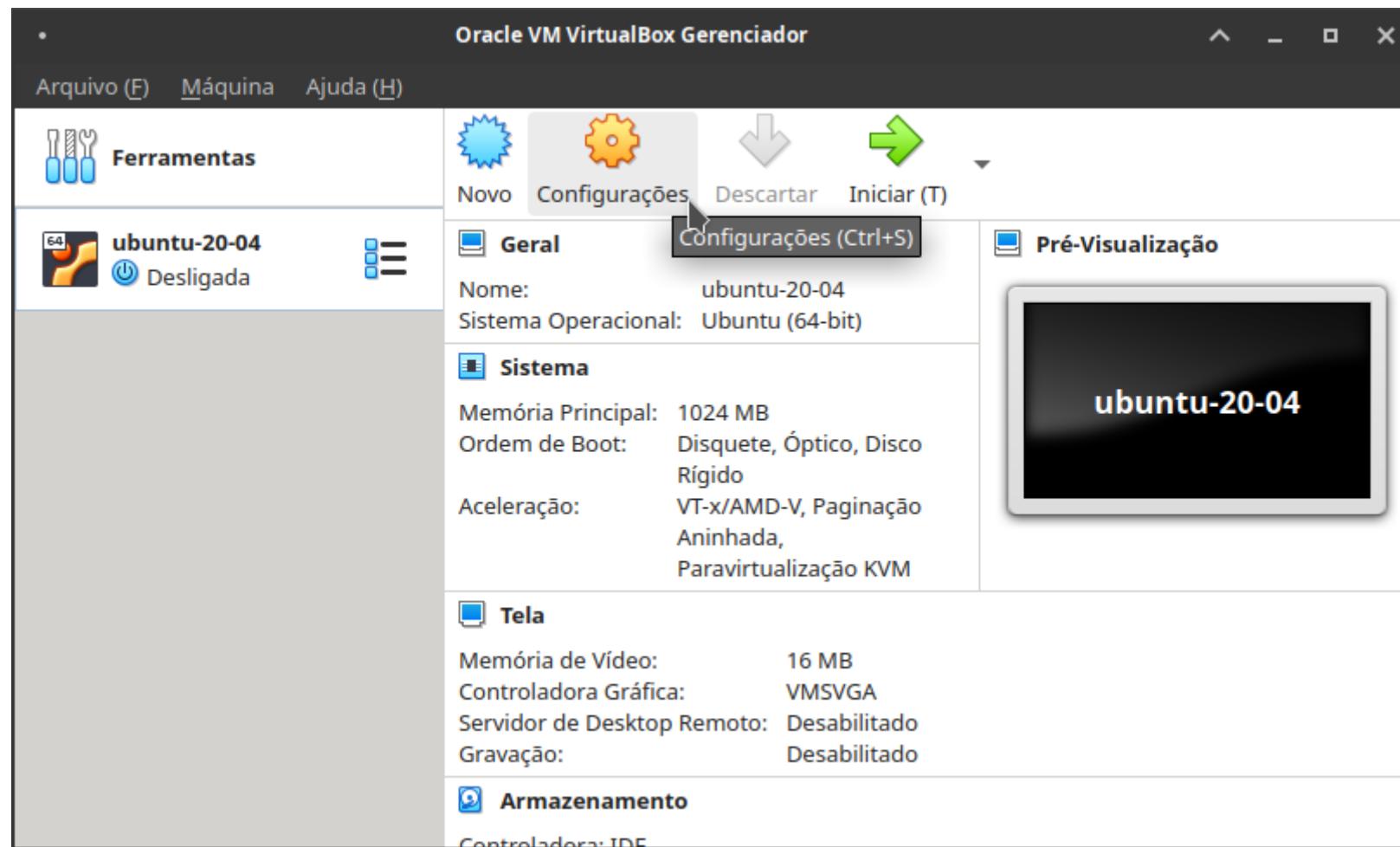


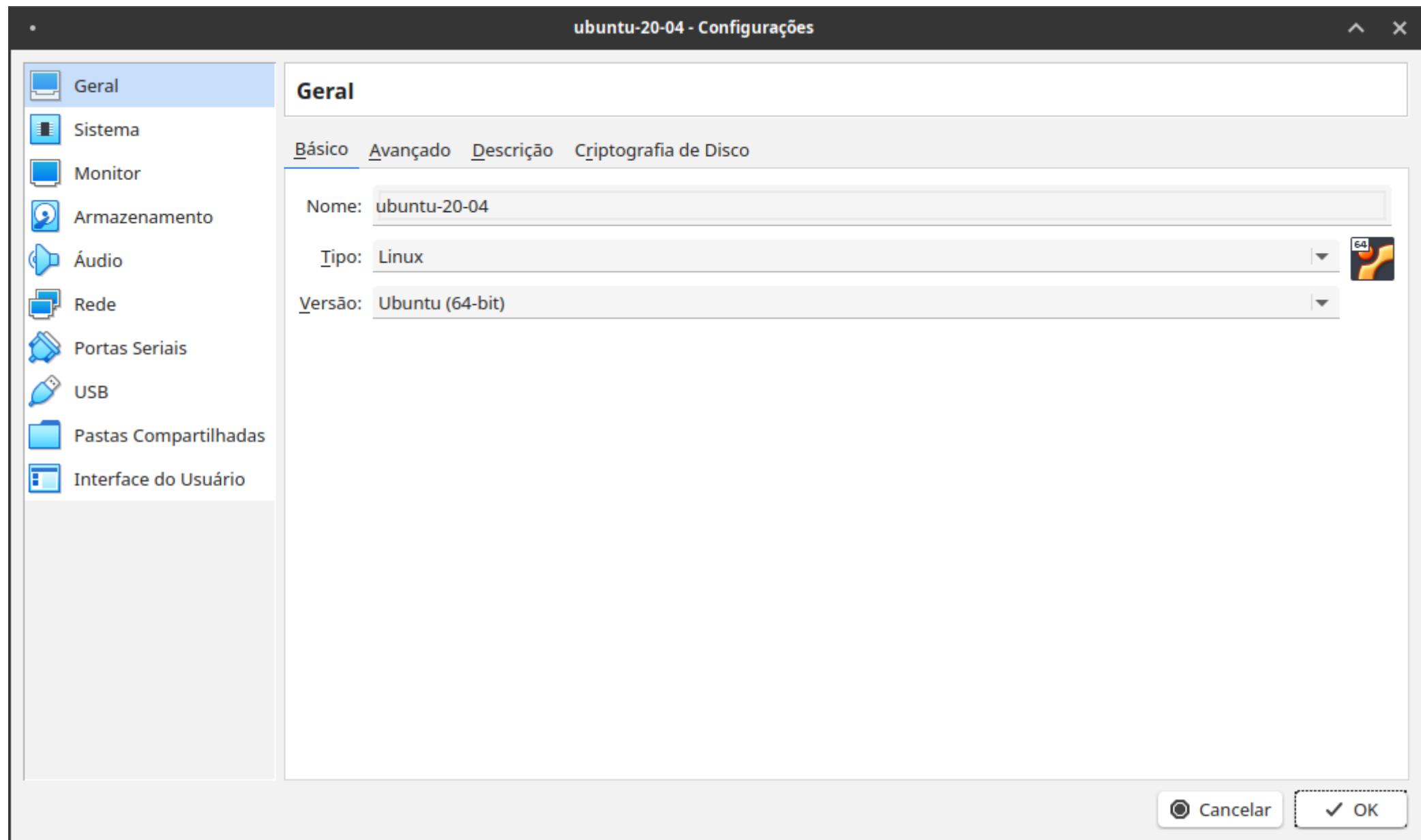


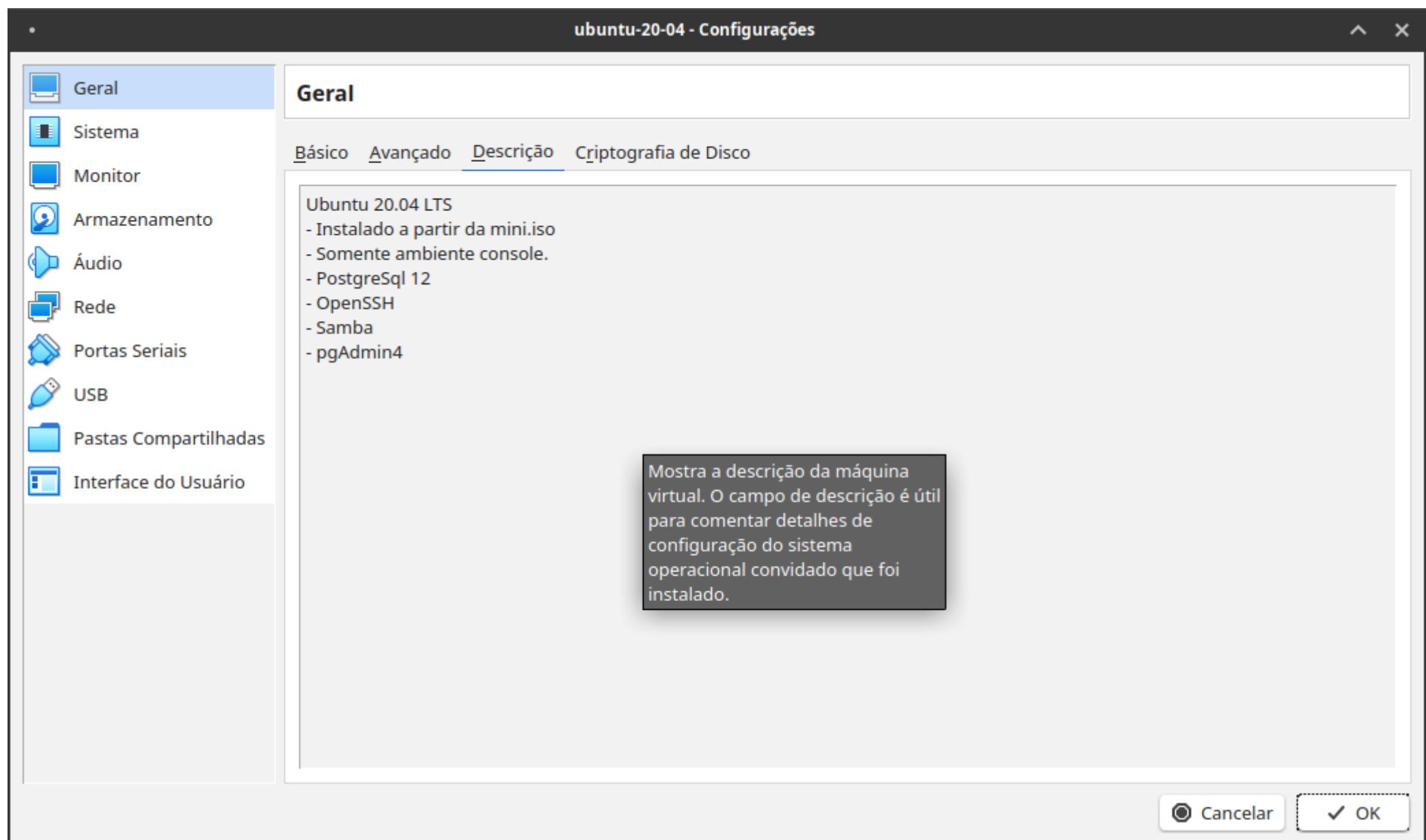


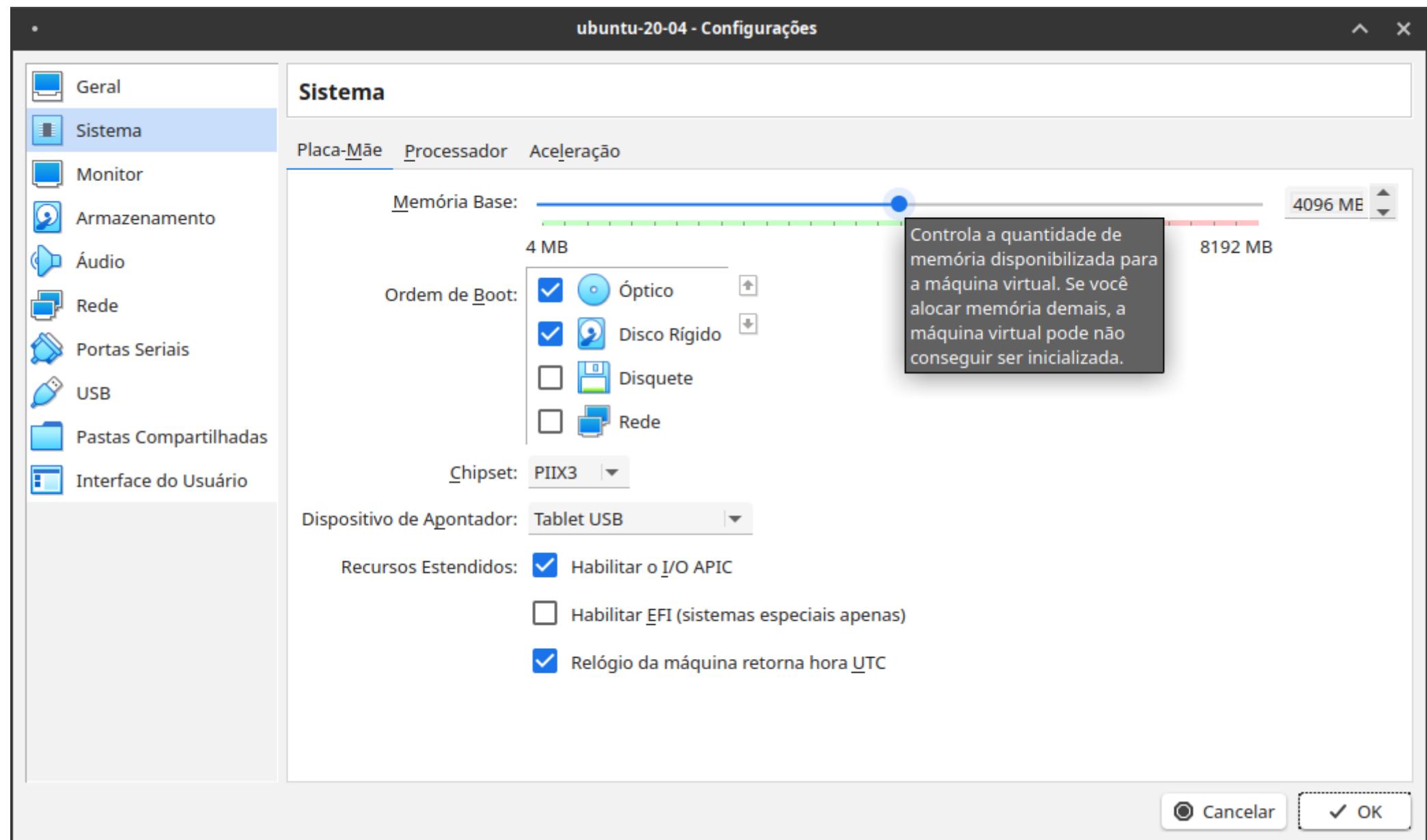
Clique em Criar

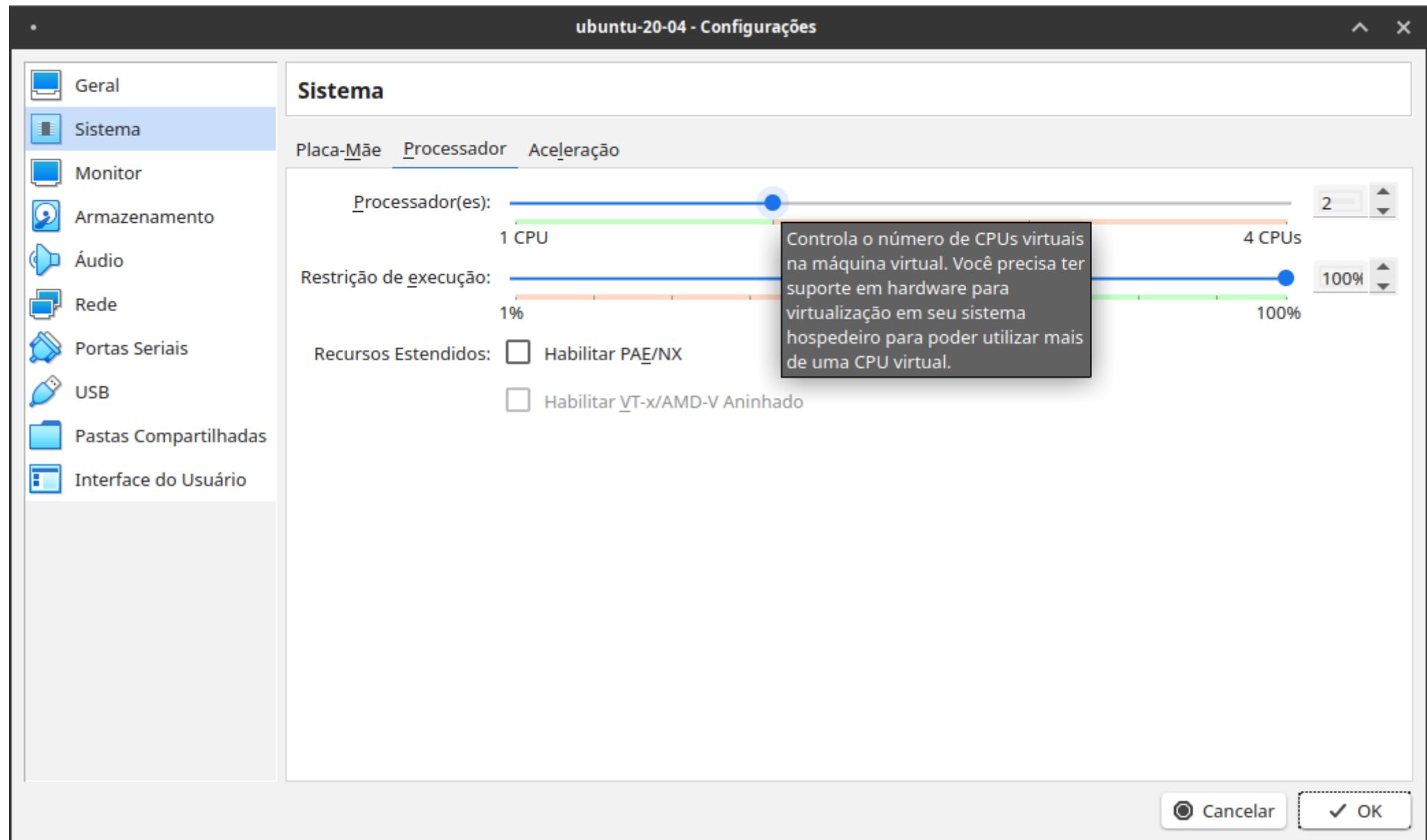
Clique em Configurações e configure a máquina virtual conforme as imagens a seguir:





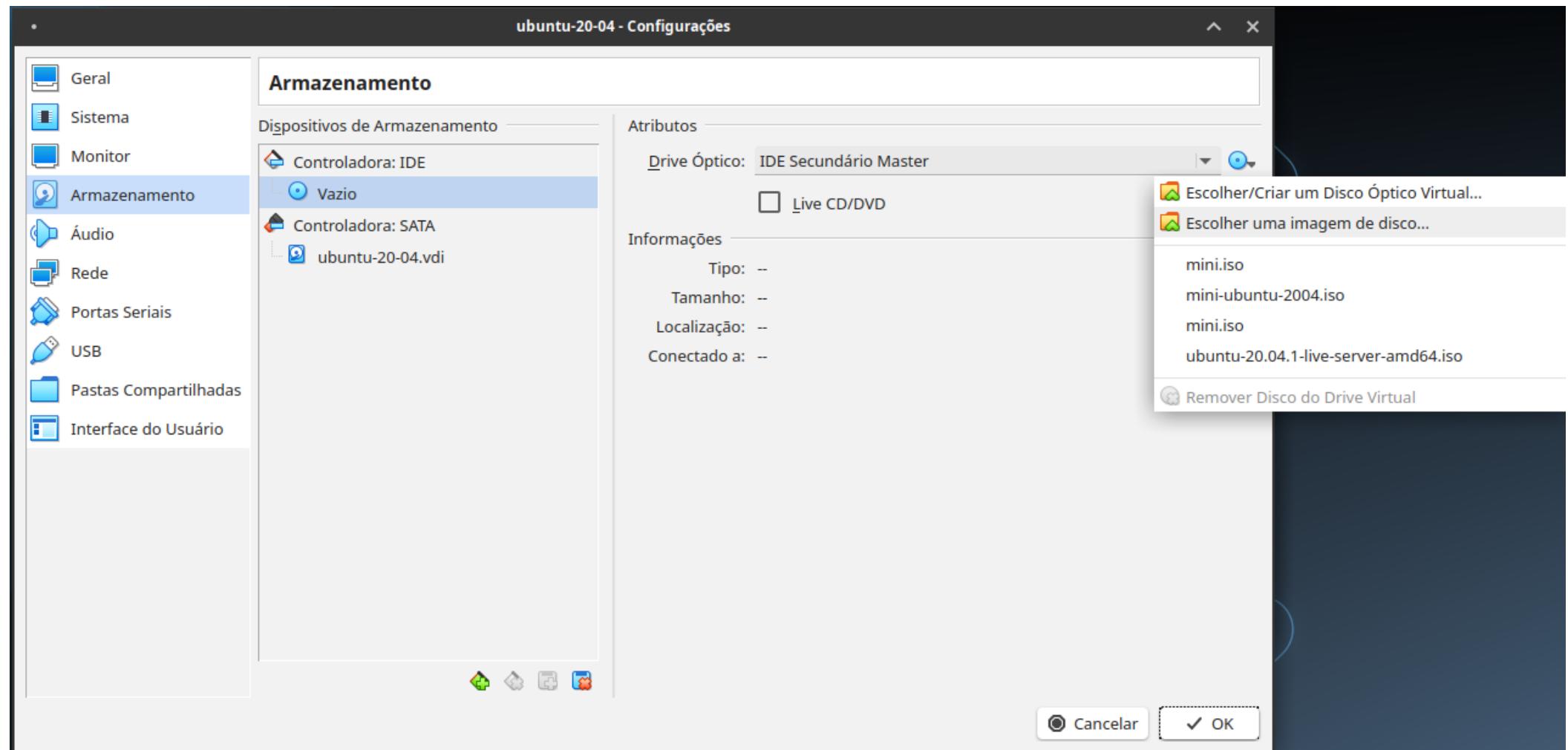




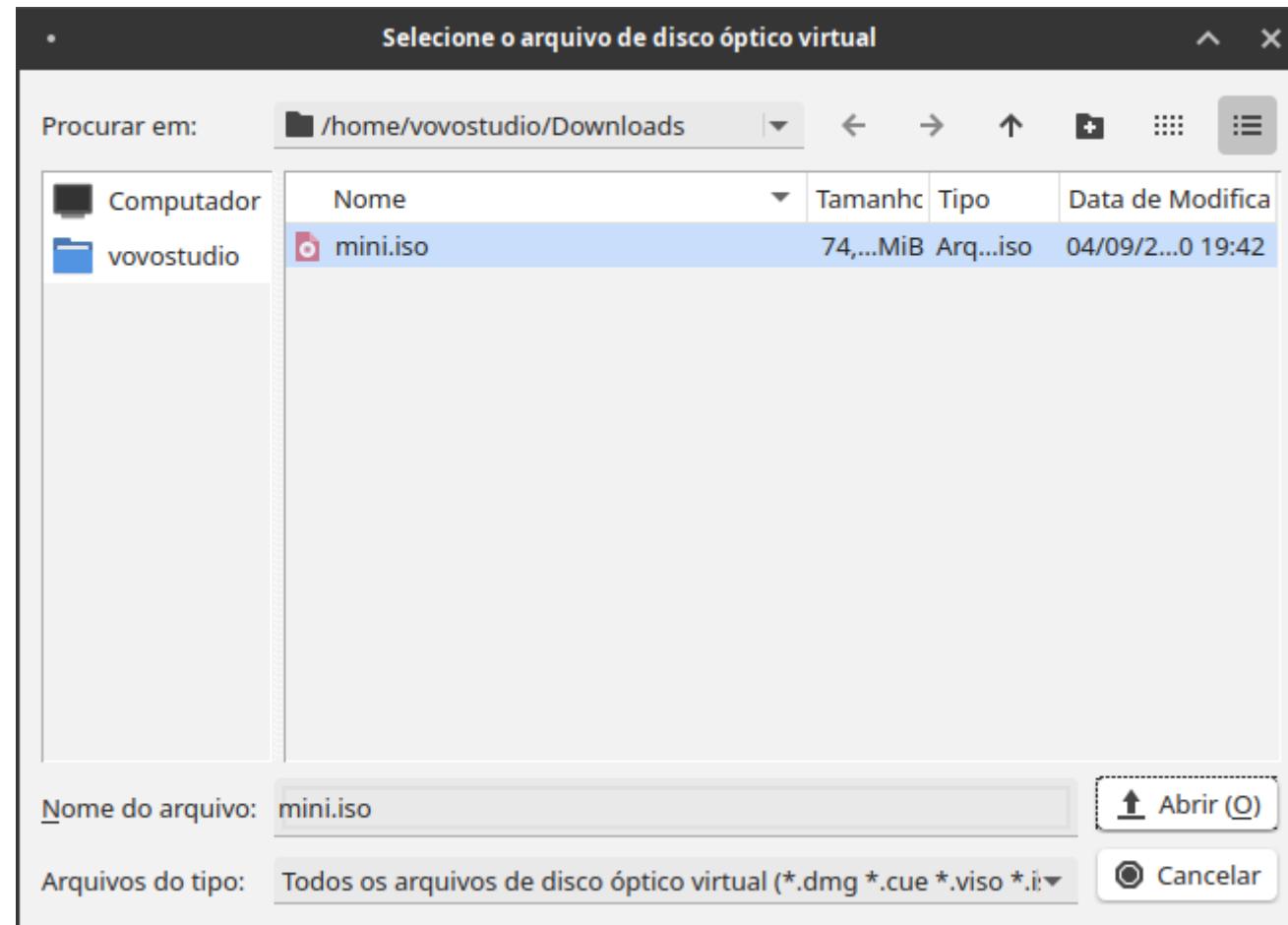


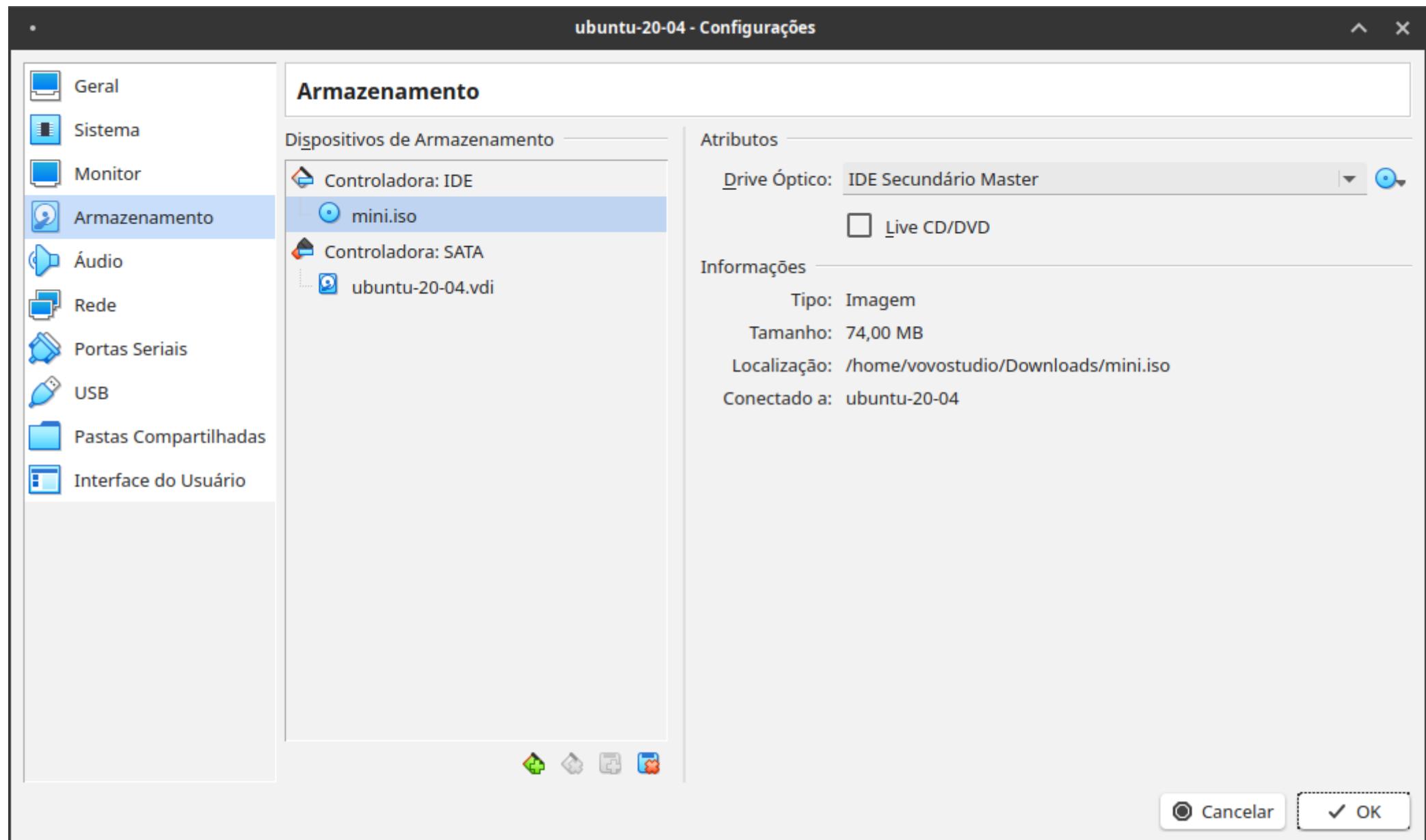


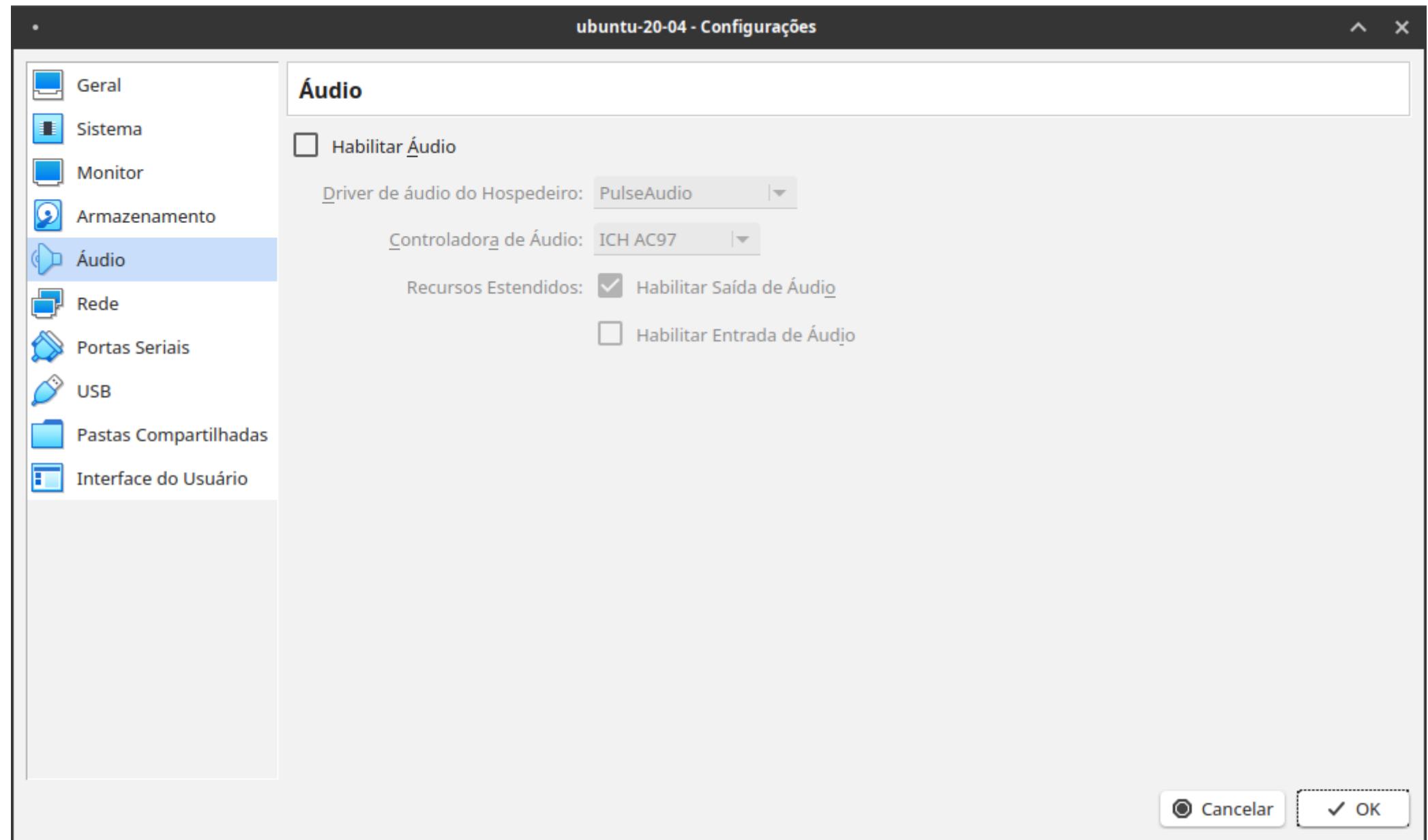
Selecione a unidade de disco vazio na controladora IDE e depois abra o menu no canto superior direito, e em Escolher imagem de disco.



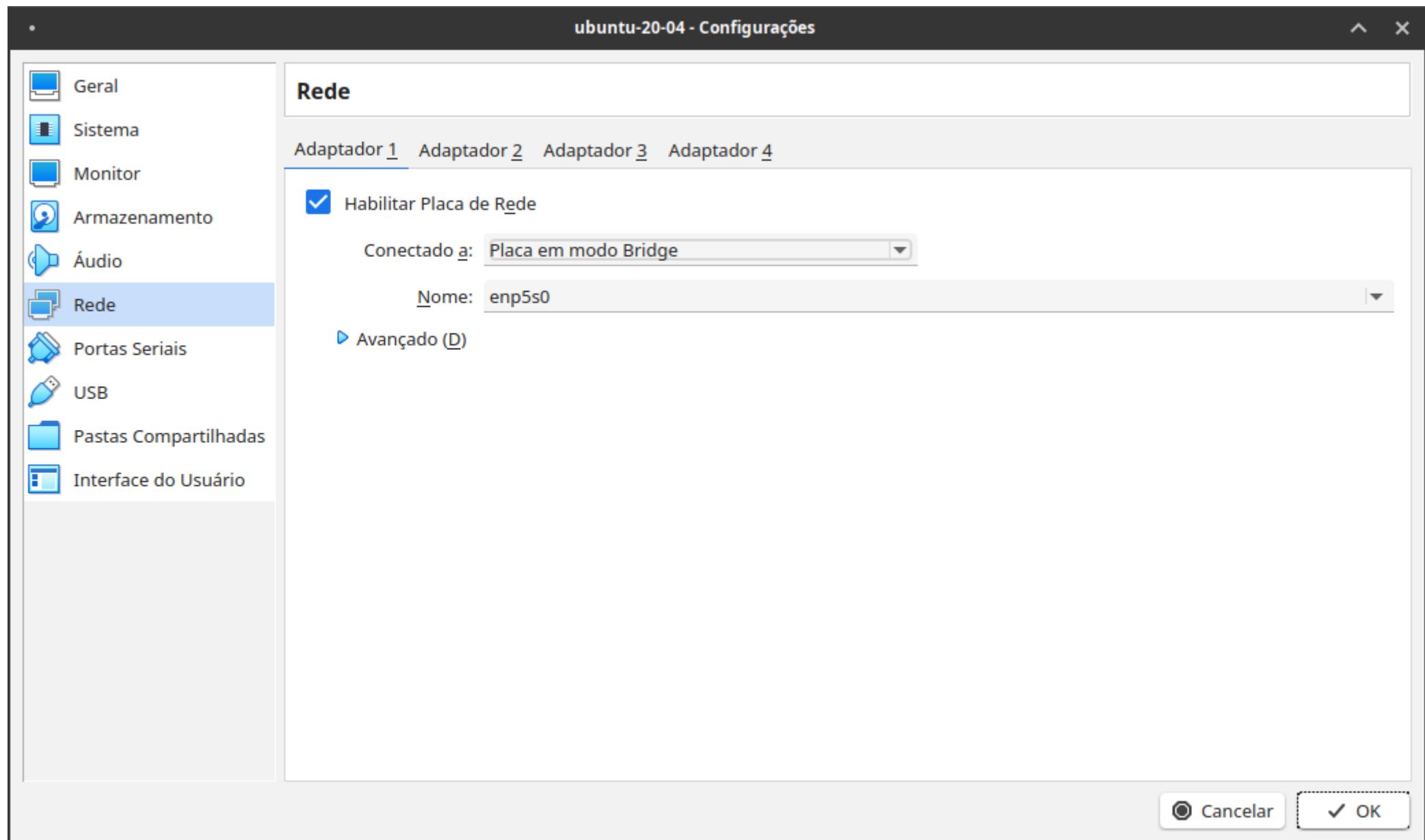
Localize e selecione a imagem mini.iso onde você fez o download,







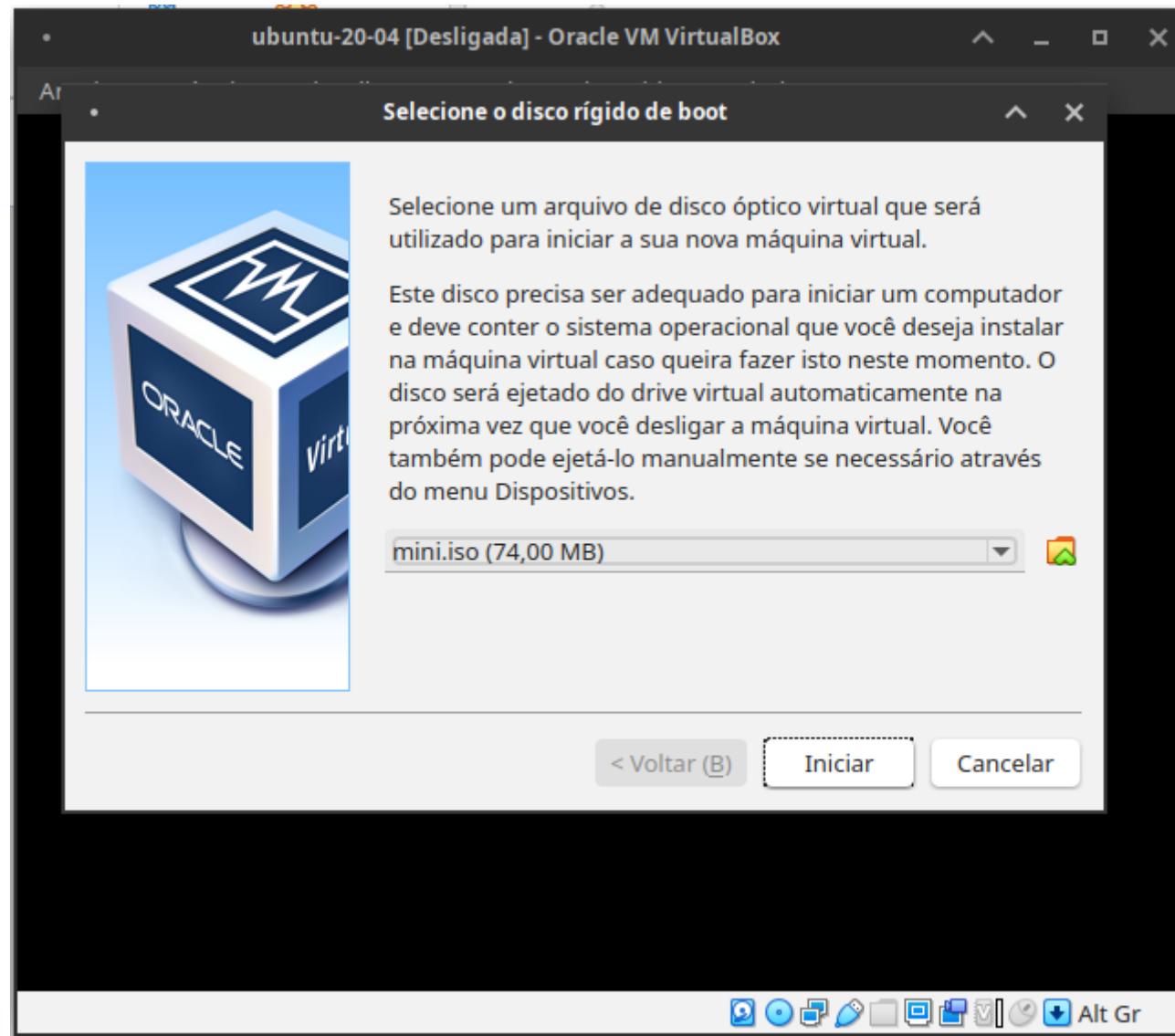
Selecione o mesmo adaptador de rede que a máquina local utiliza para conexão com a internet, e em modo Bridge.



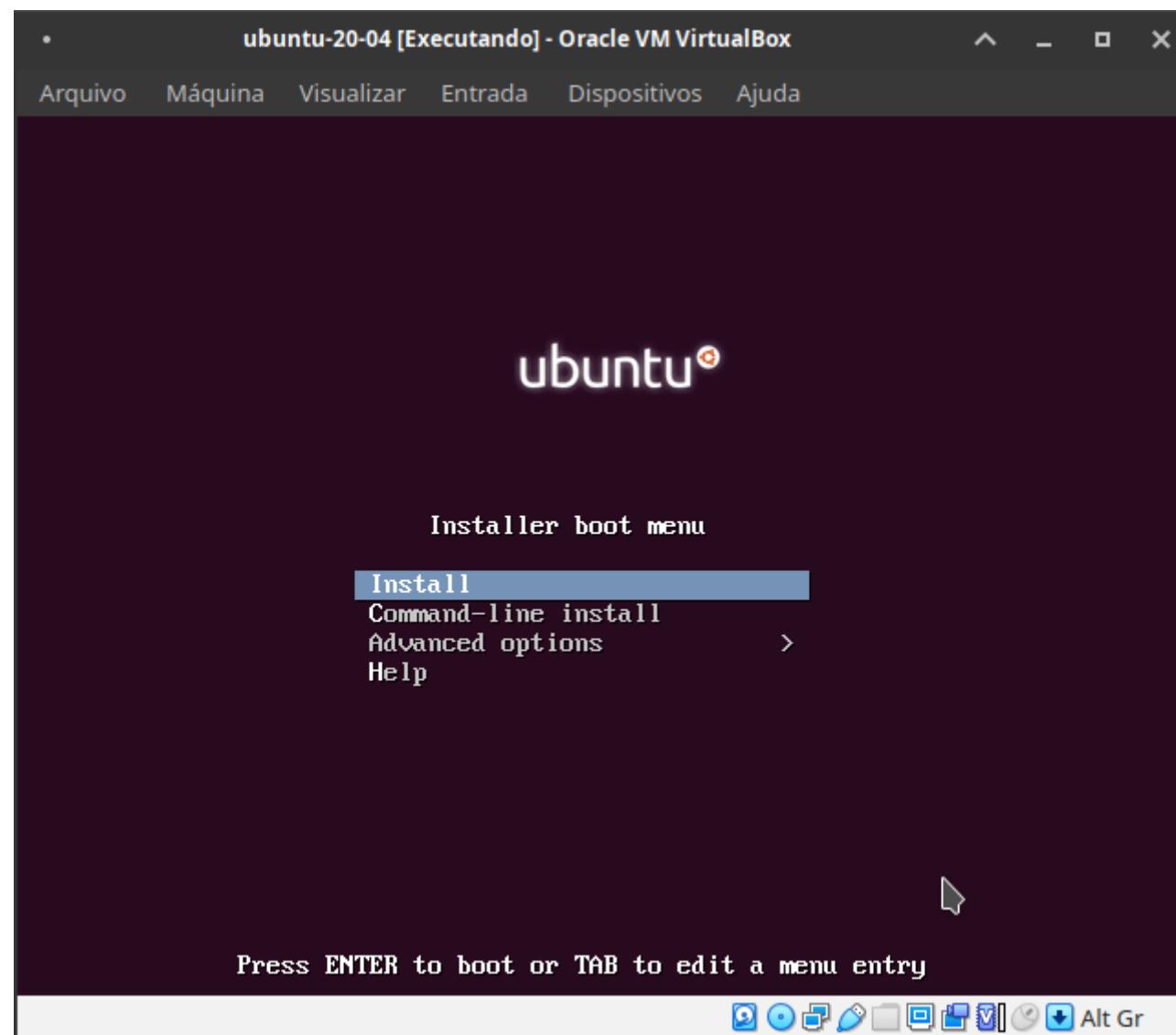
Clique em OK para finalizar a configuração.

4. Instalar Ubuntu

Na primeira execução, será exibida uma opção para selecionar o disco de inicialização. Selecione o mini.iso e clique em Iniciar.



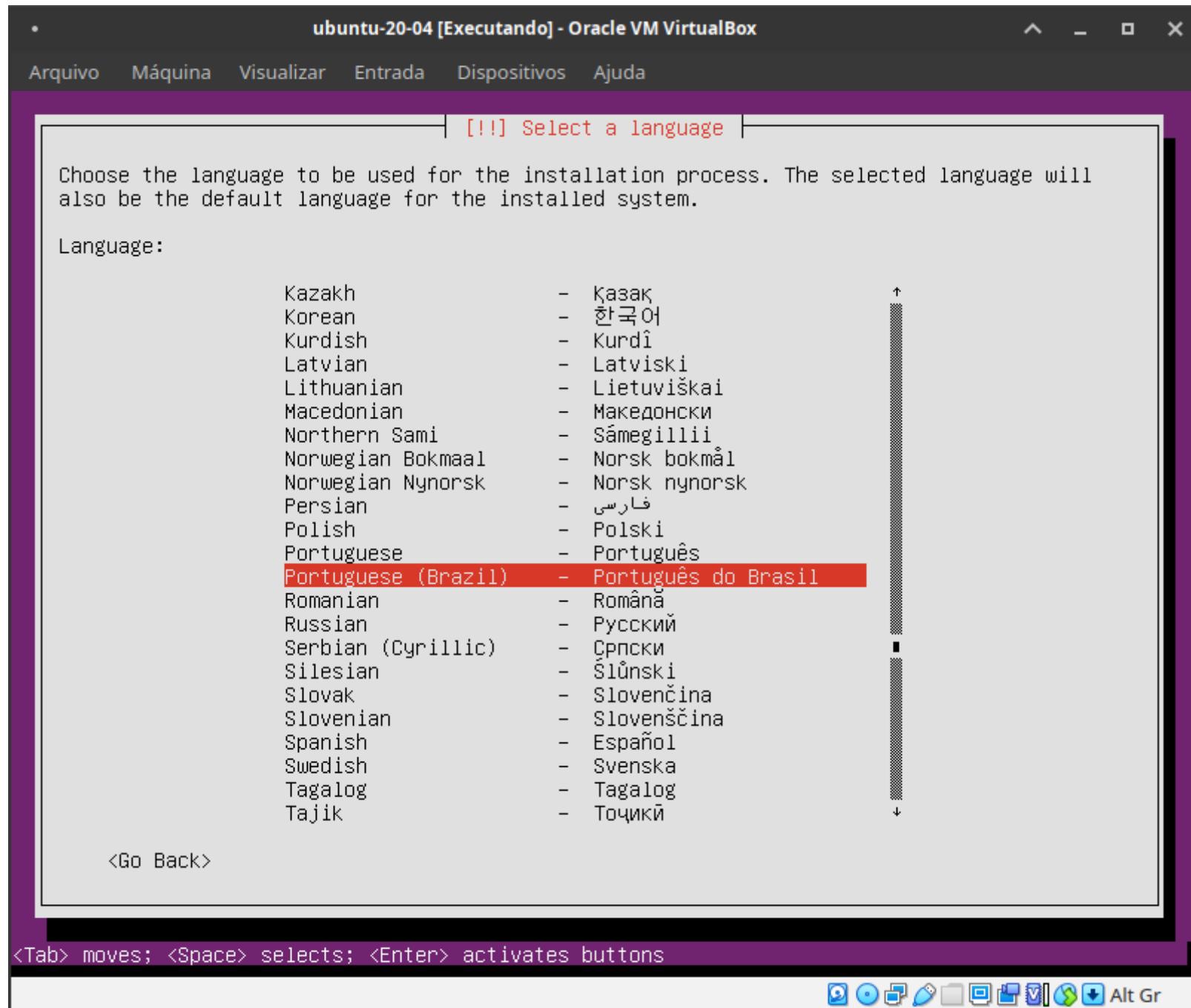
Tecle [Enter] para confirmar a opção ‘Install’.

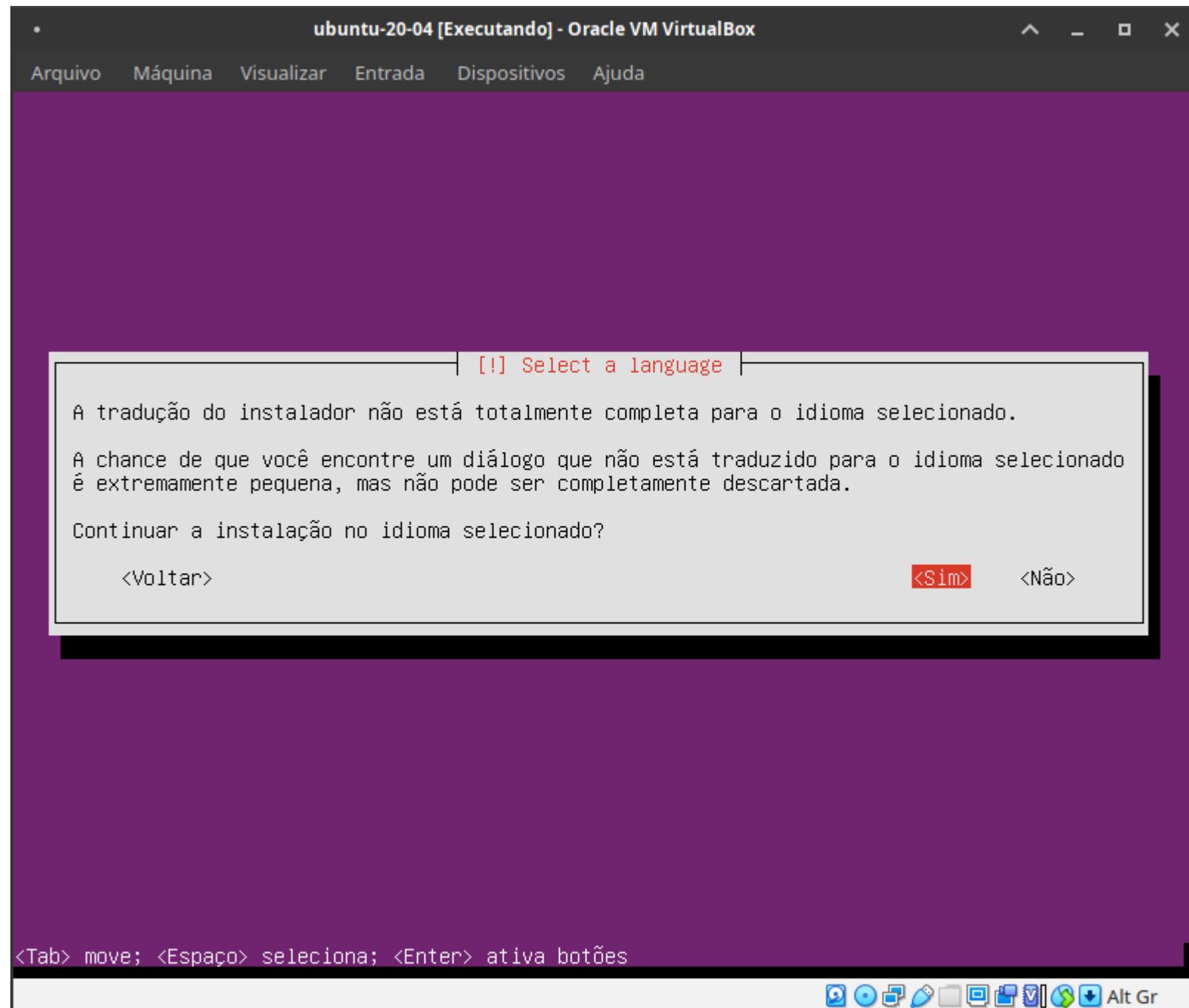


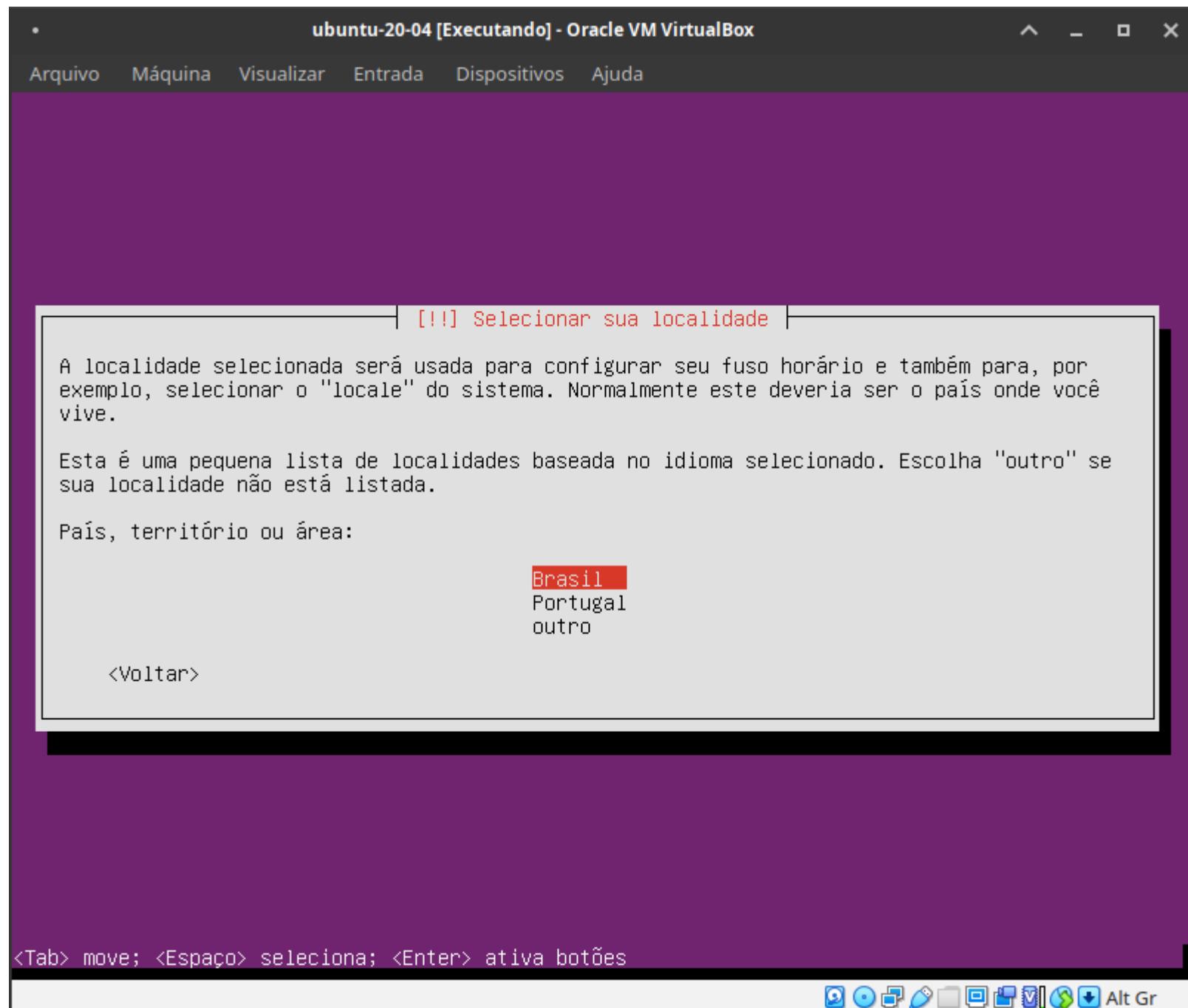
Nas telas a seguir, utilize as teclas:

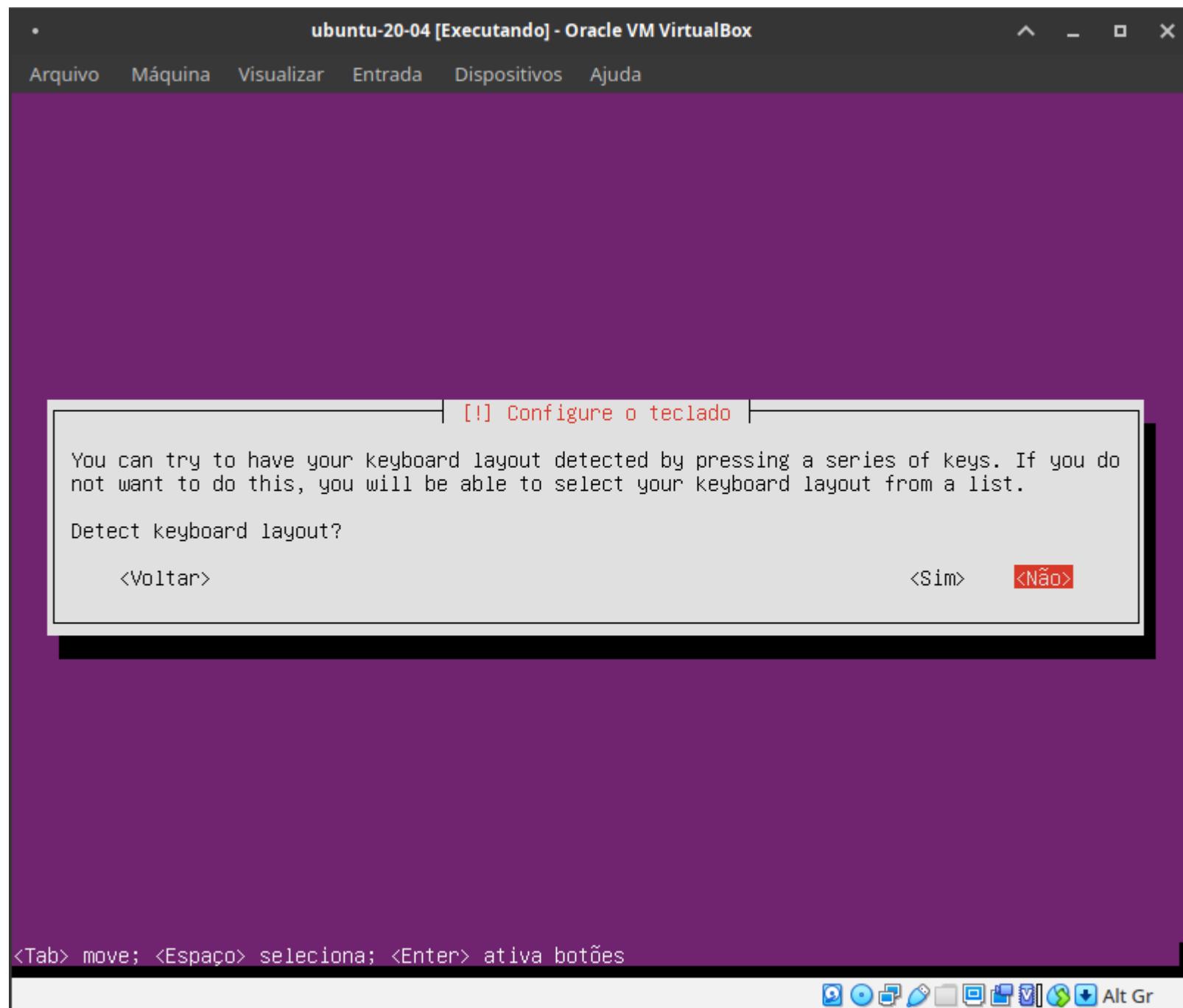
- [Enter] para confirmar ou seguir para a próxima tela
- [TAB] para navegar nos controles
- [Espaço] para selecionar uma opção ou controle
- Setas direcionais para percorrer as linhas e colunas da tela

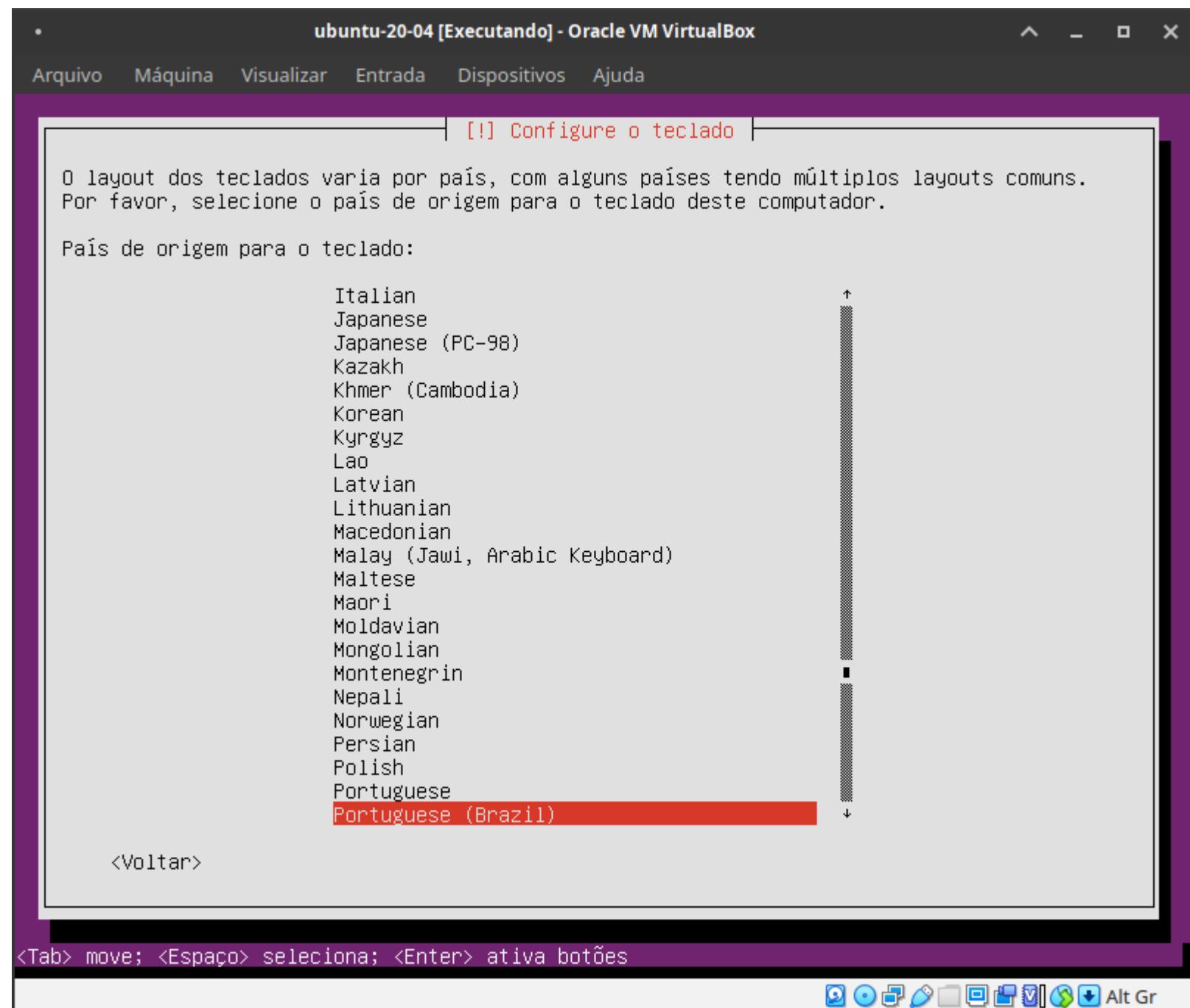


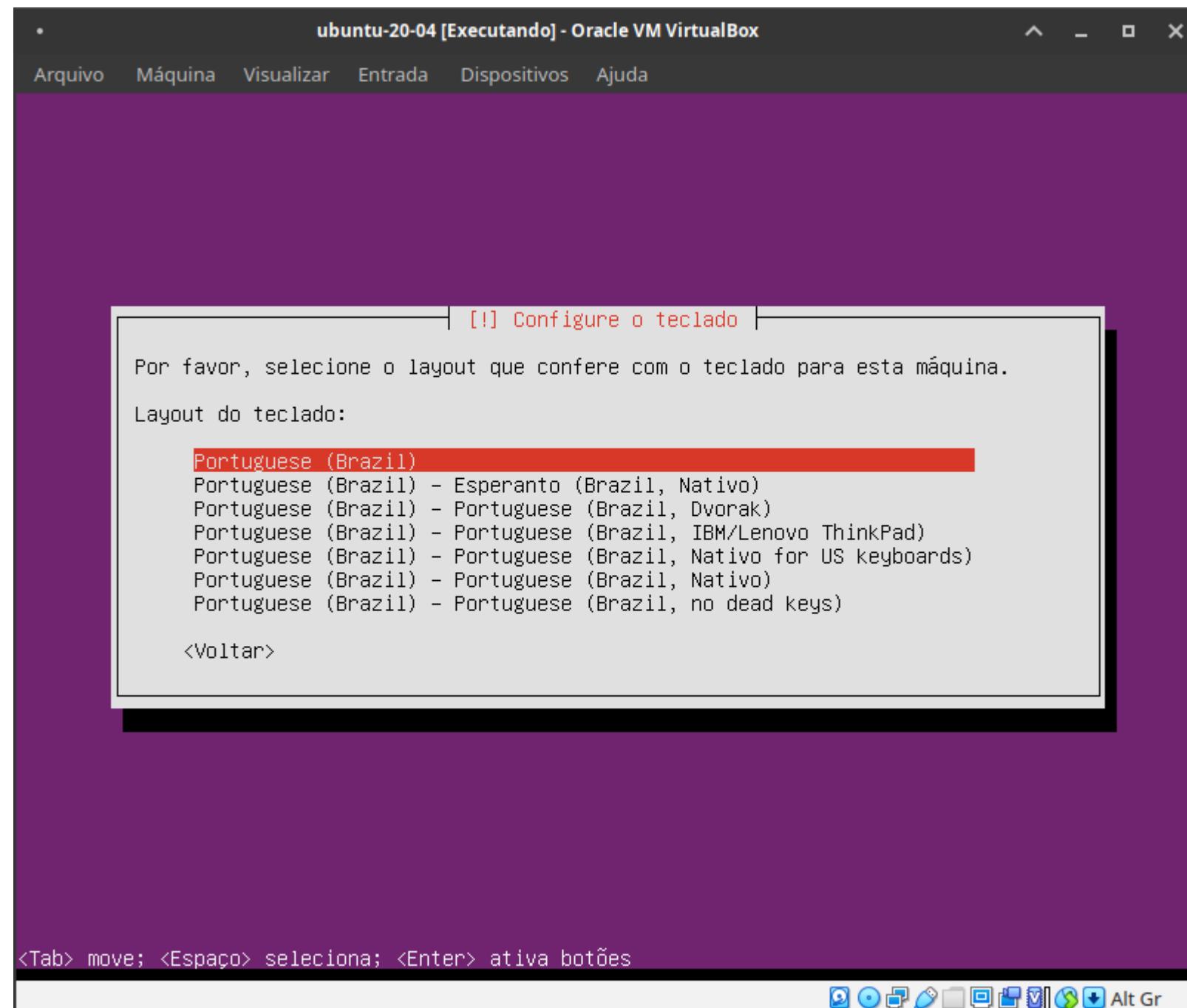


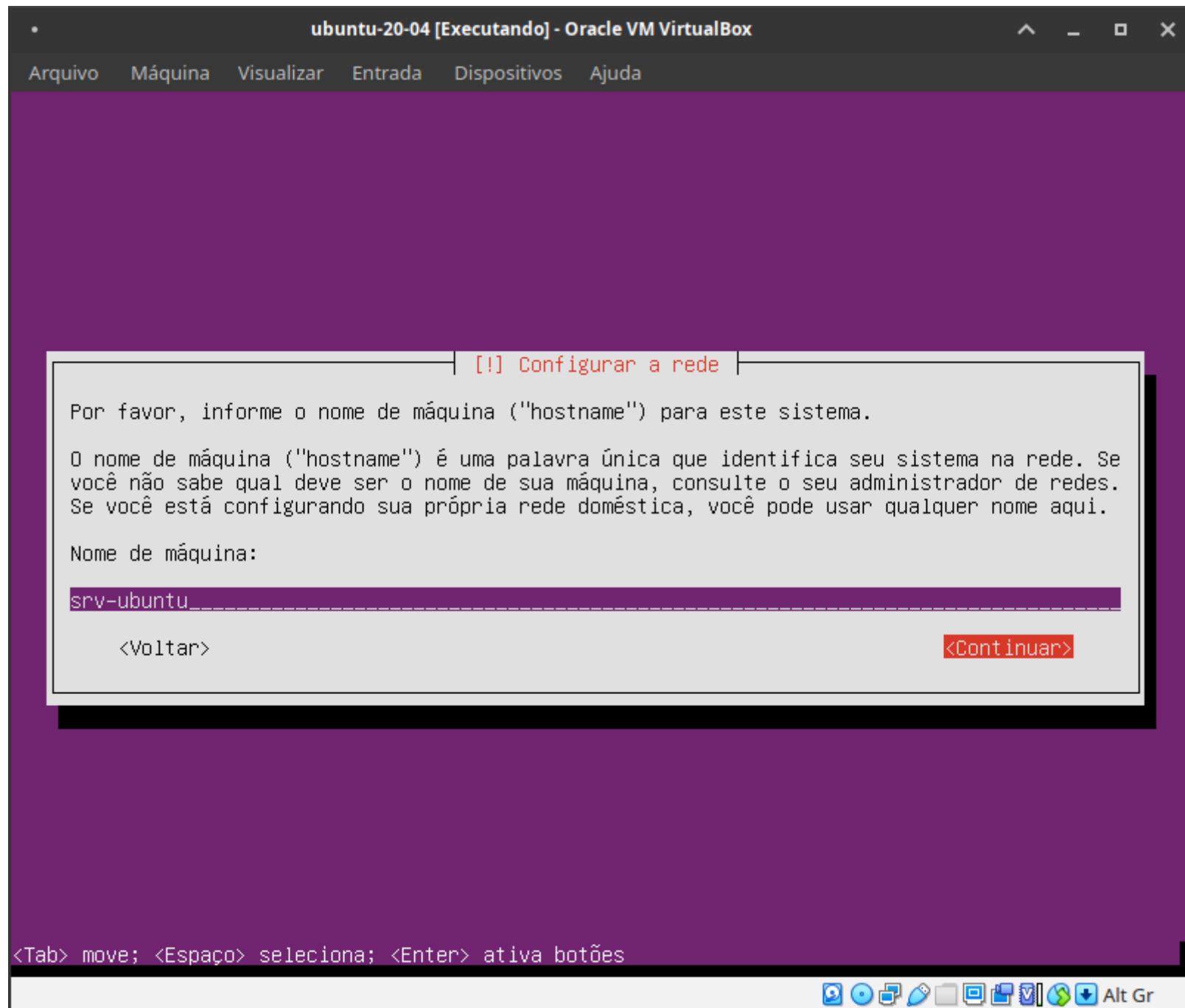


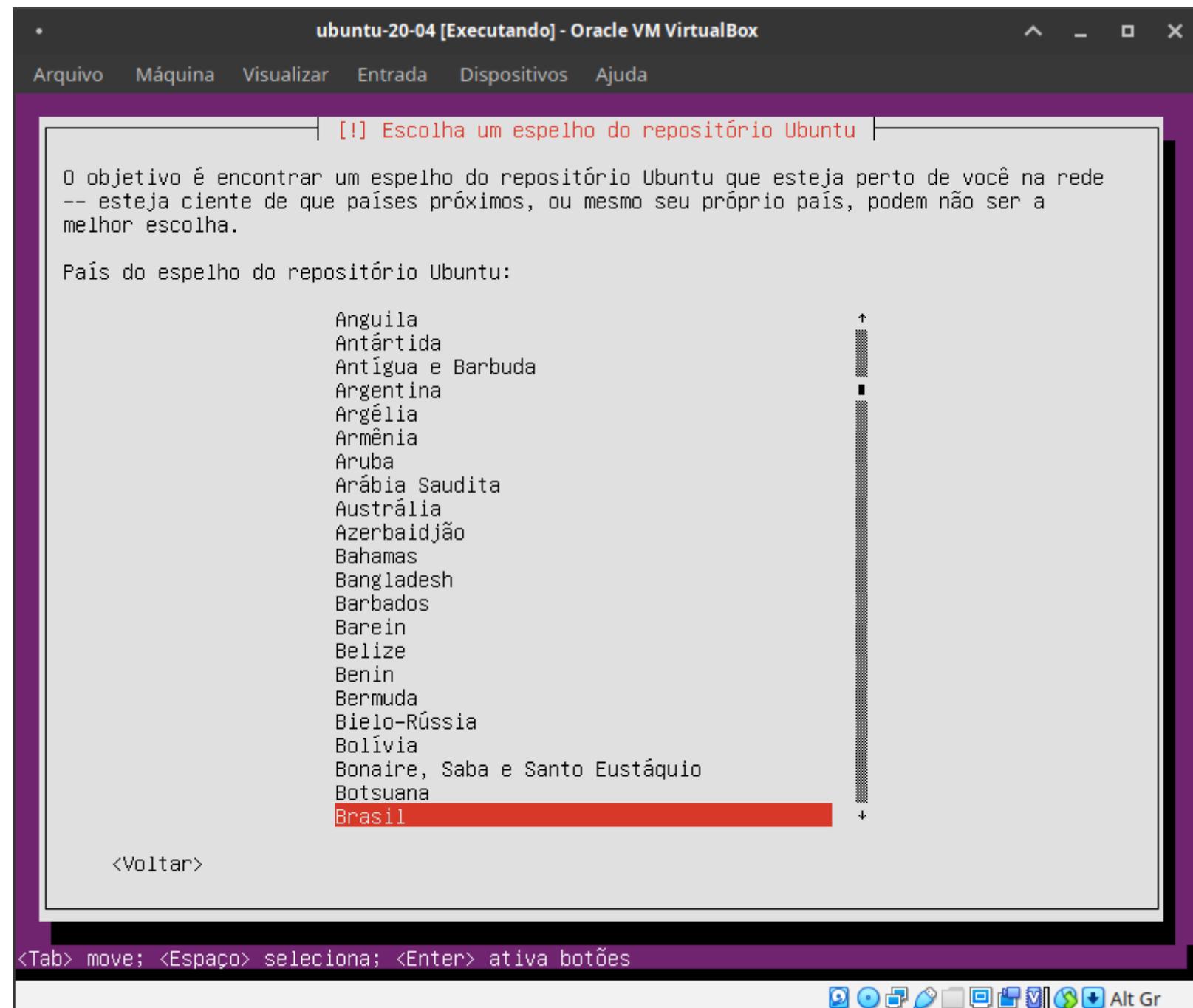


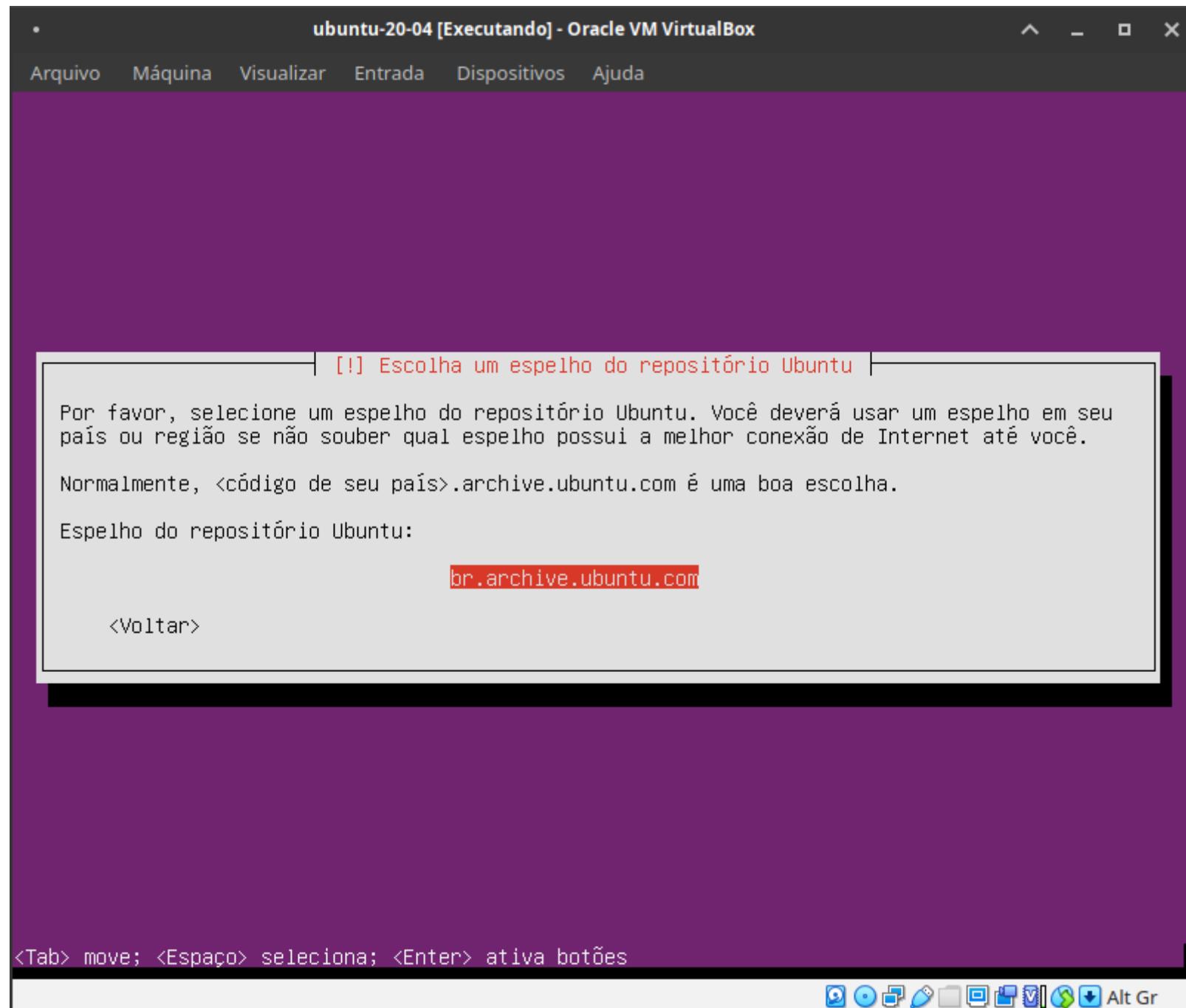


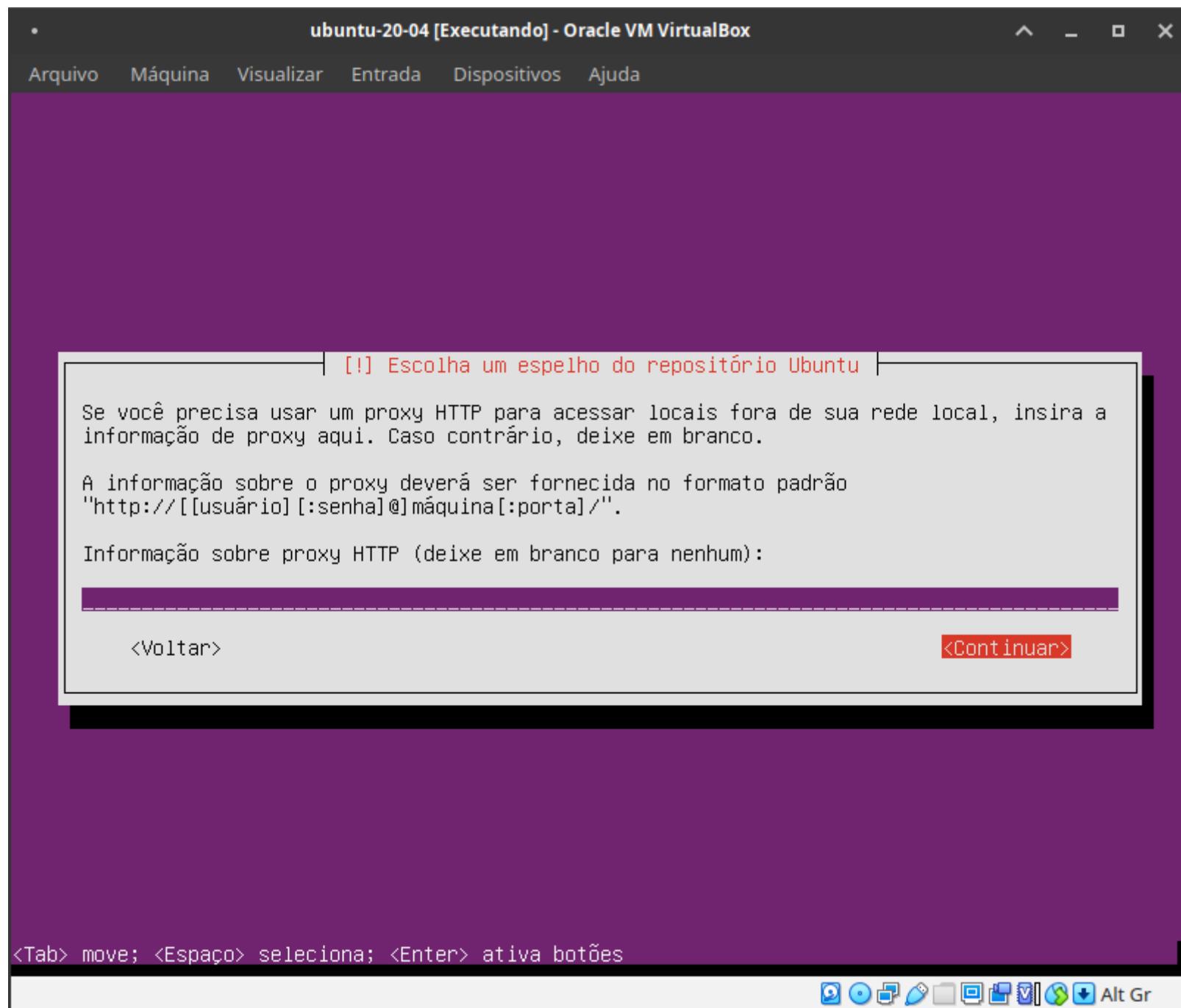


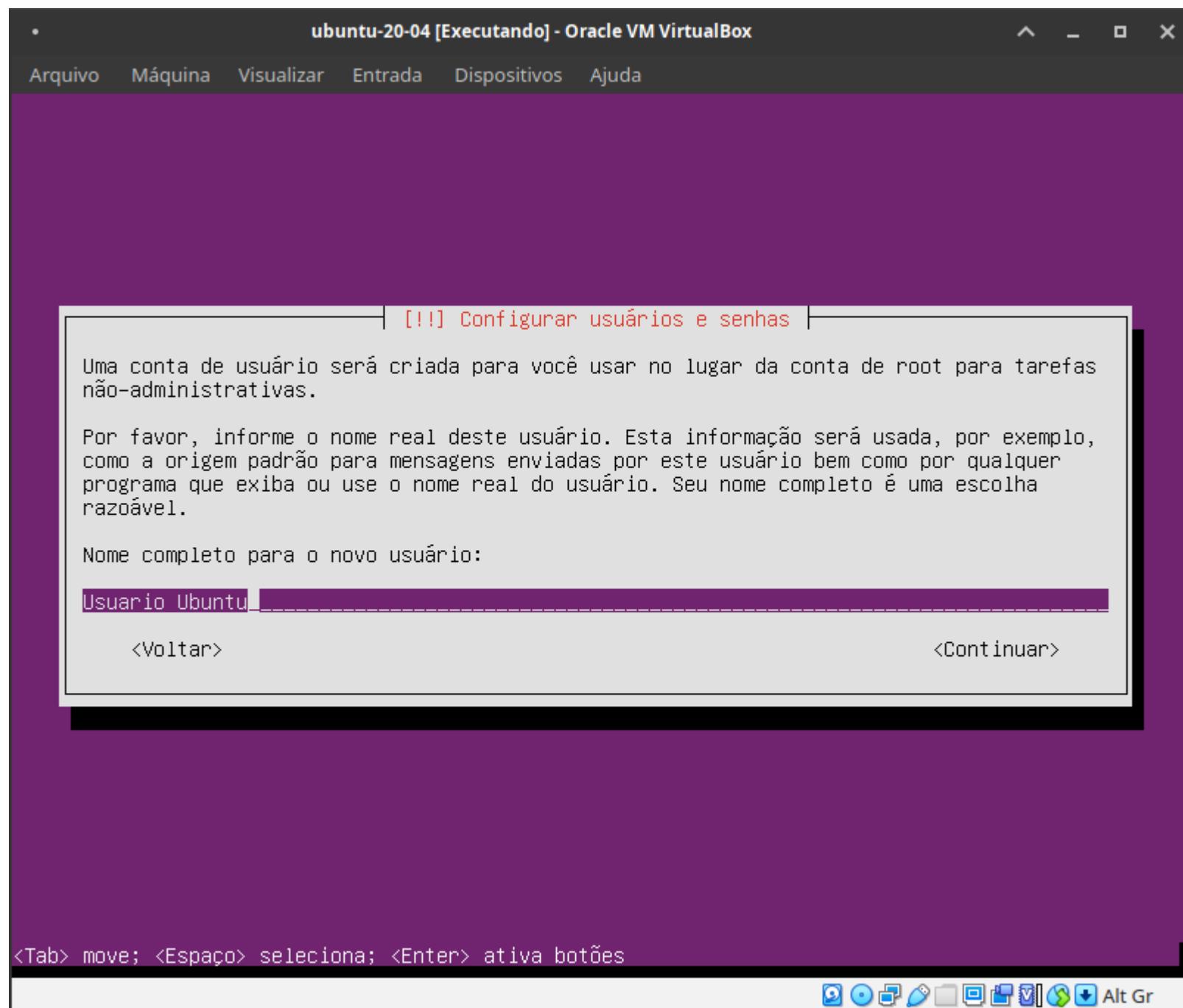


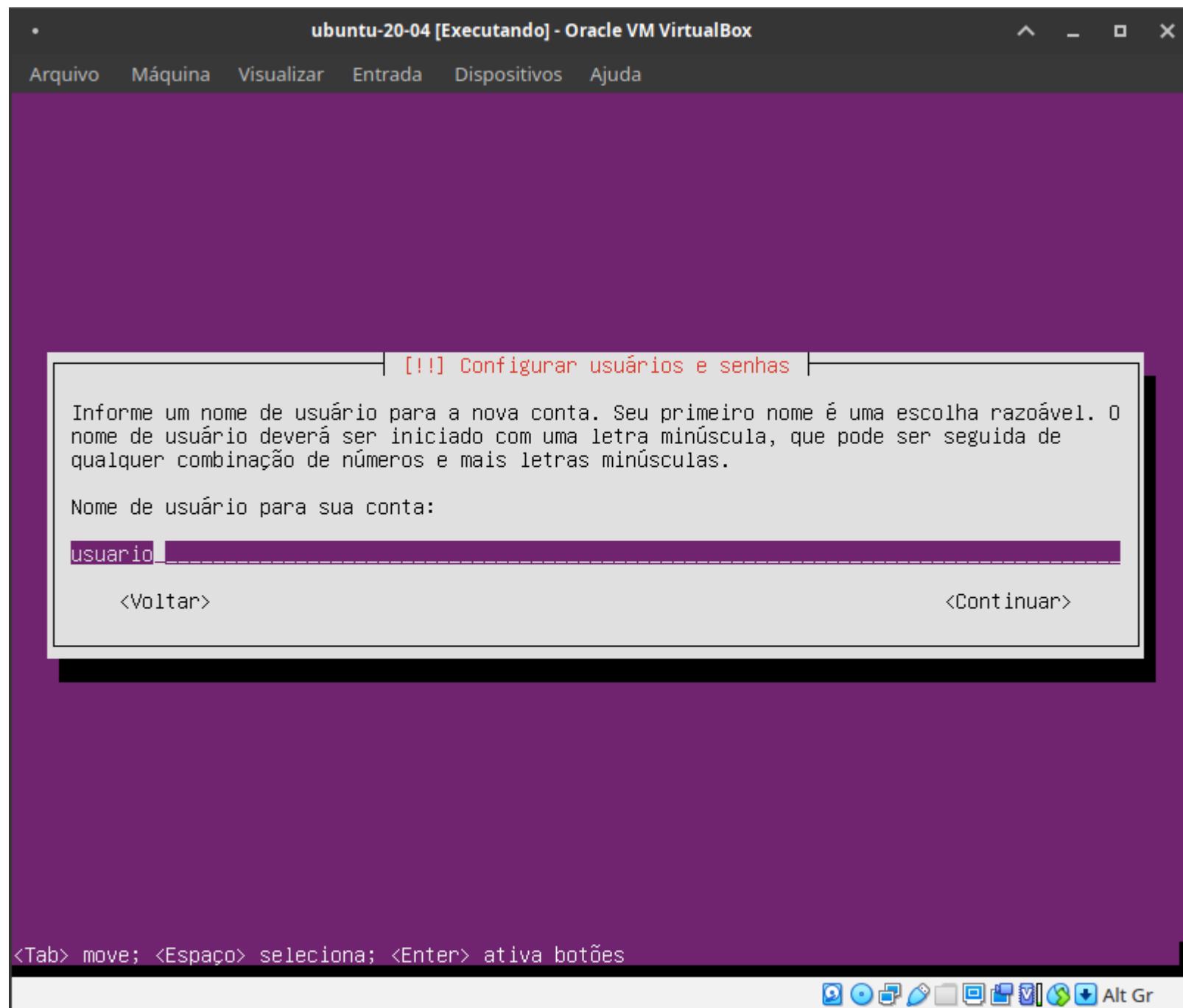




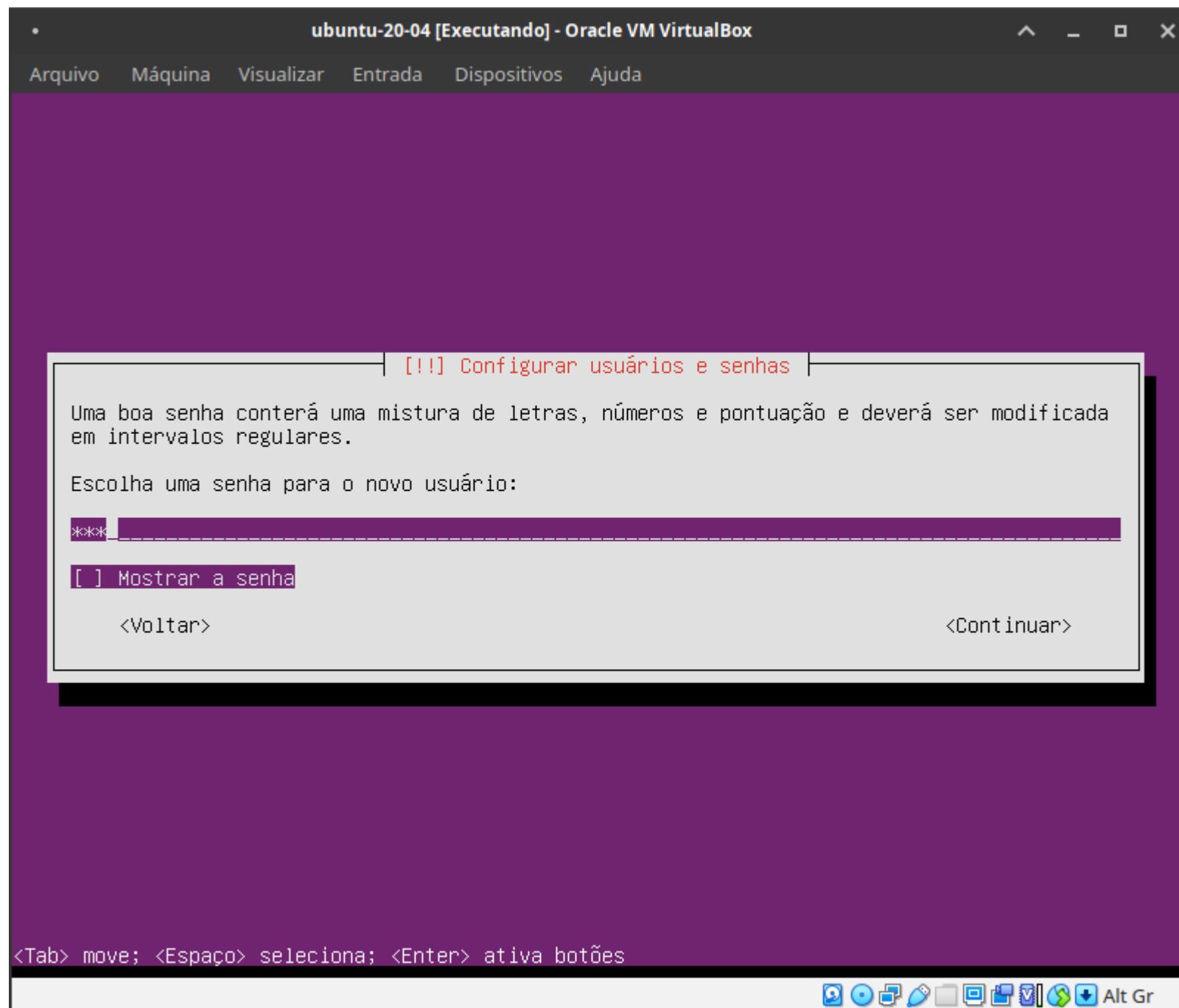


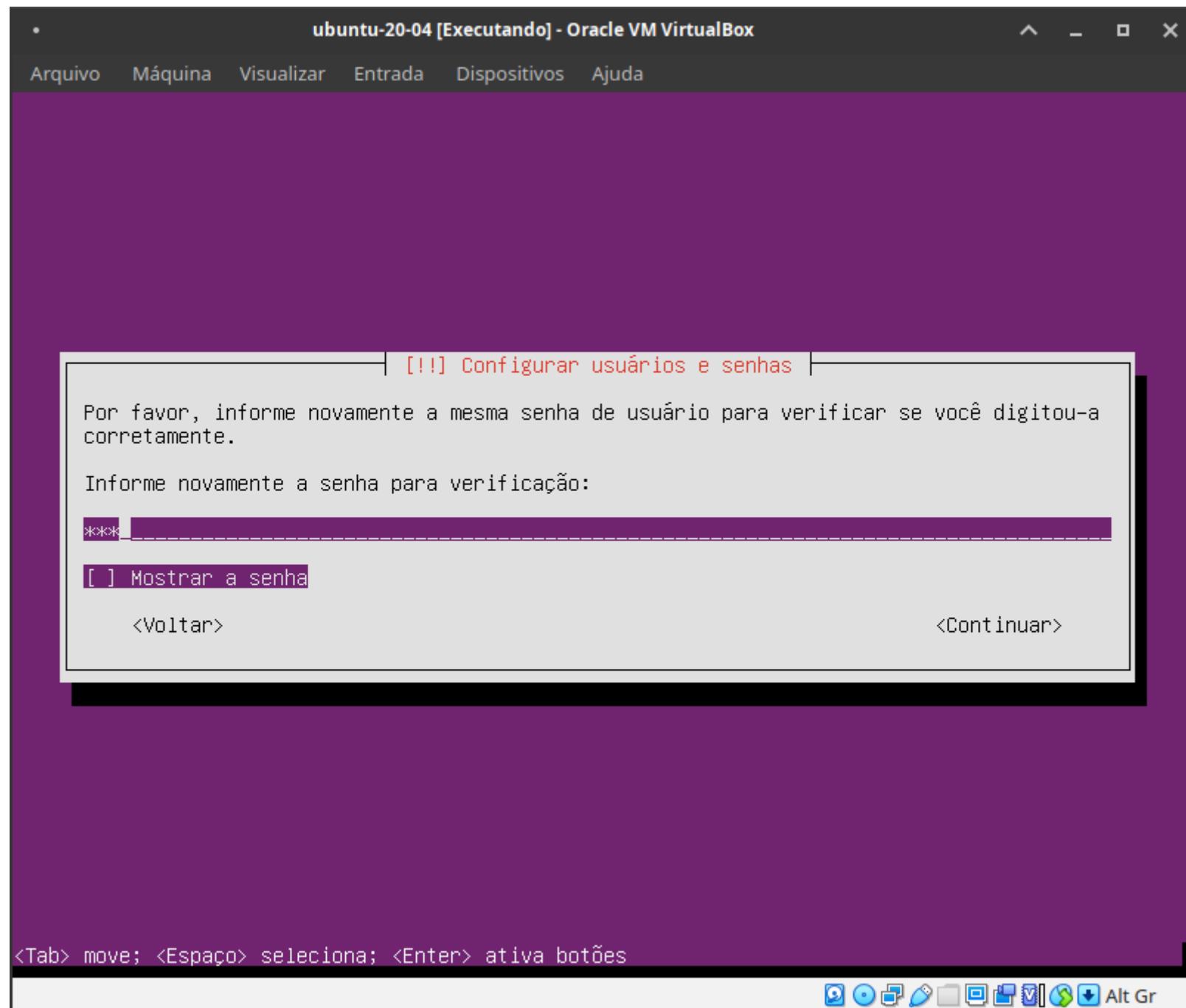




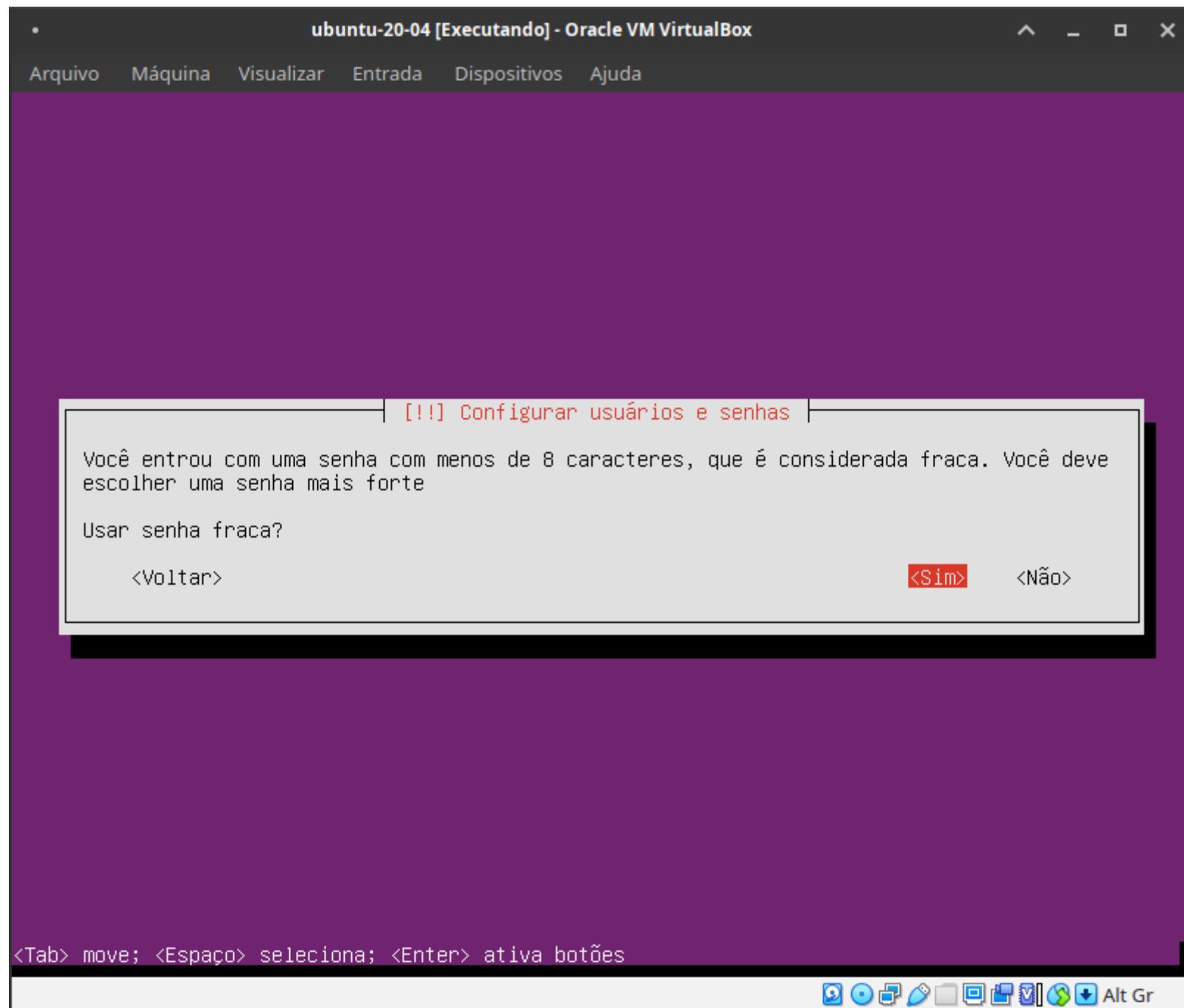


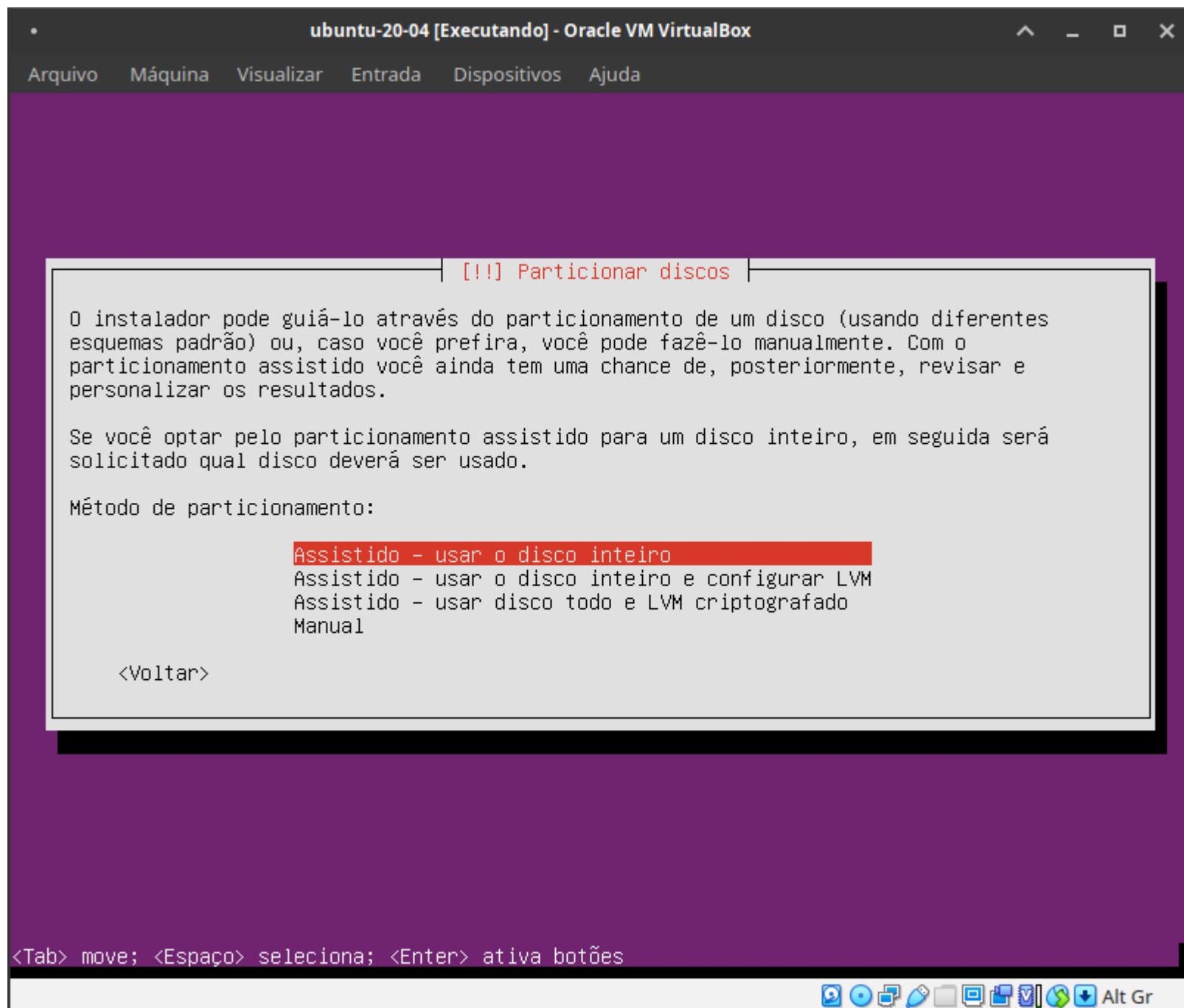
Senha de usuario no Ubuntu: vin (ou outra senha da nasa que você escolher)

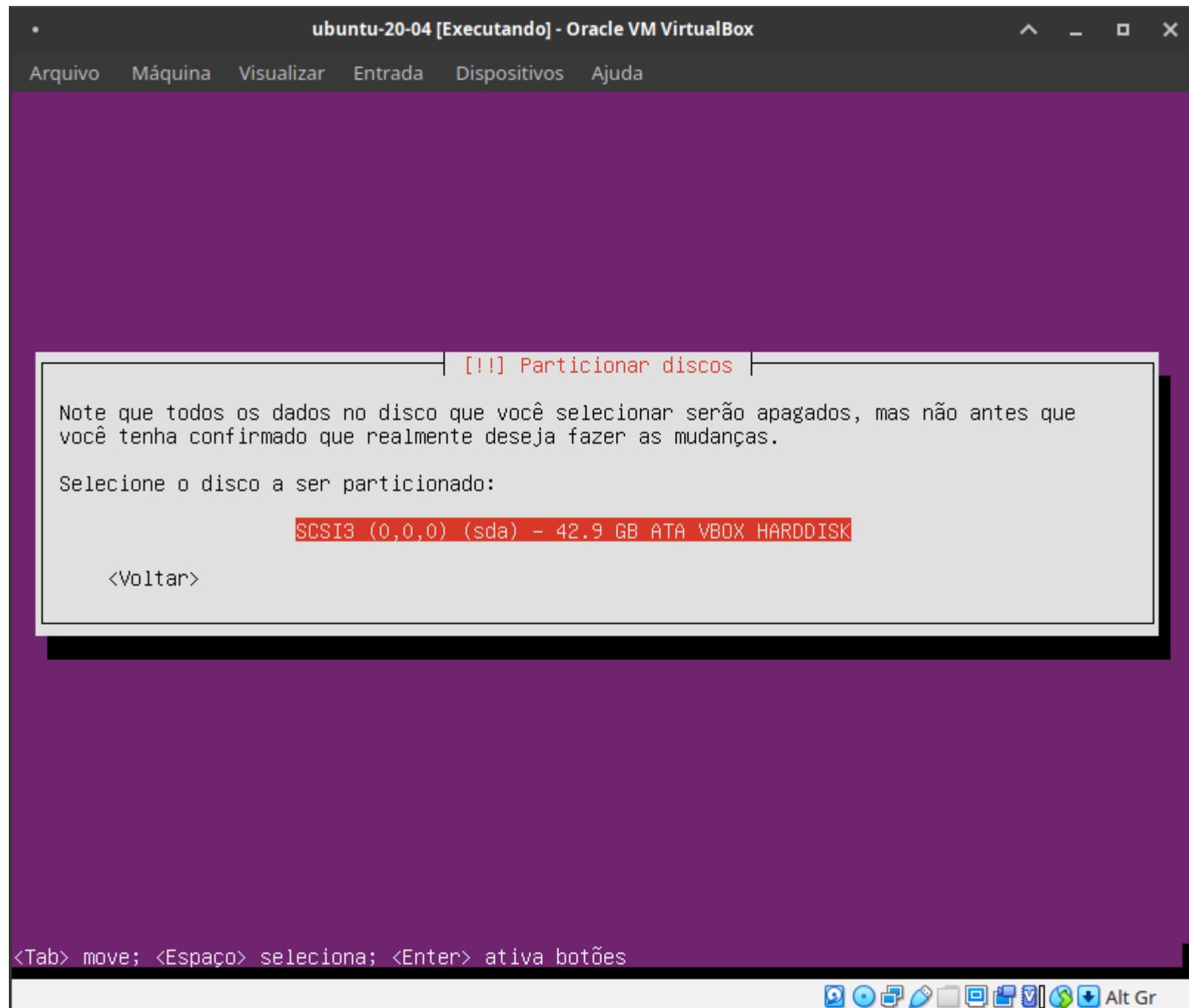


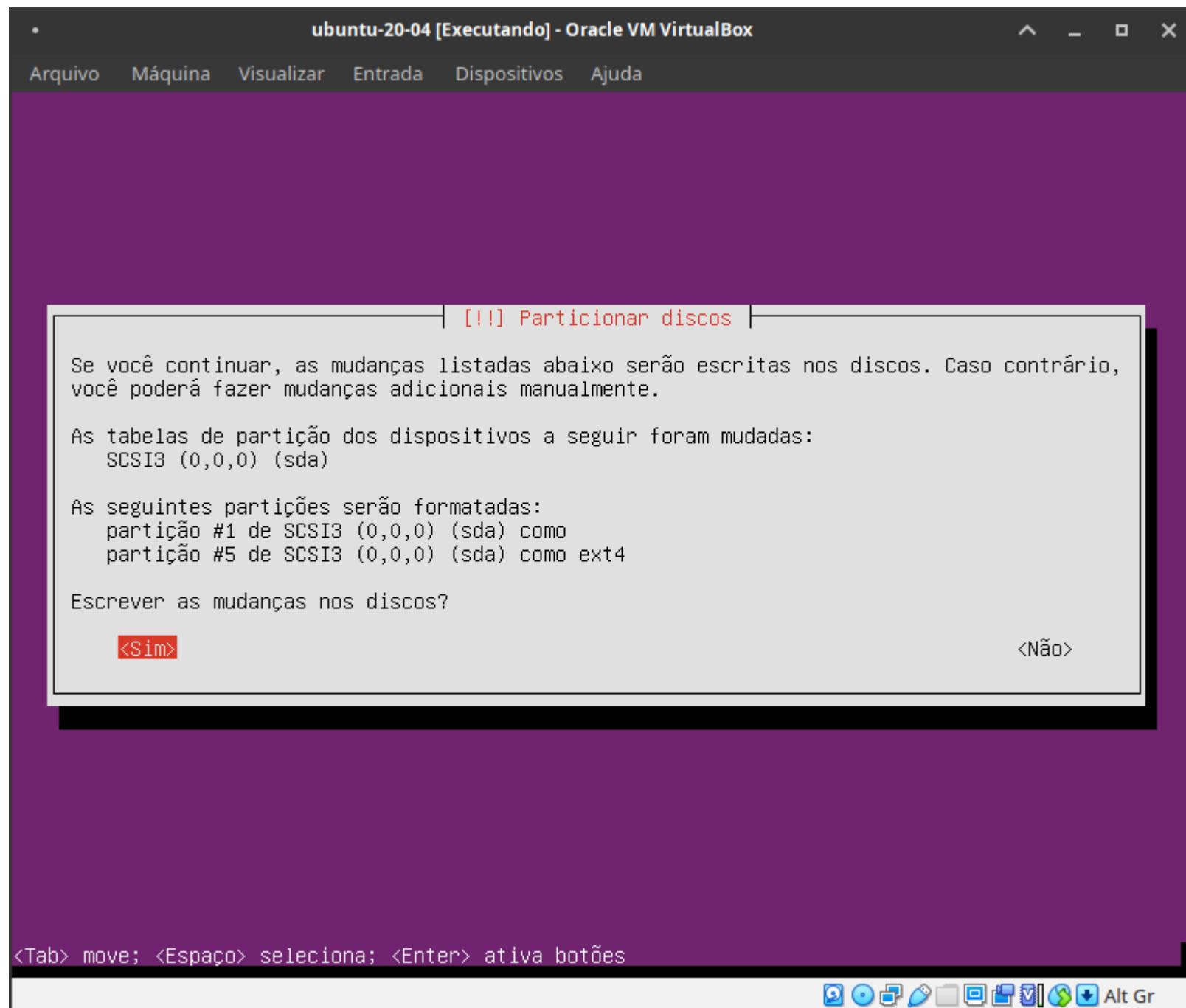


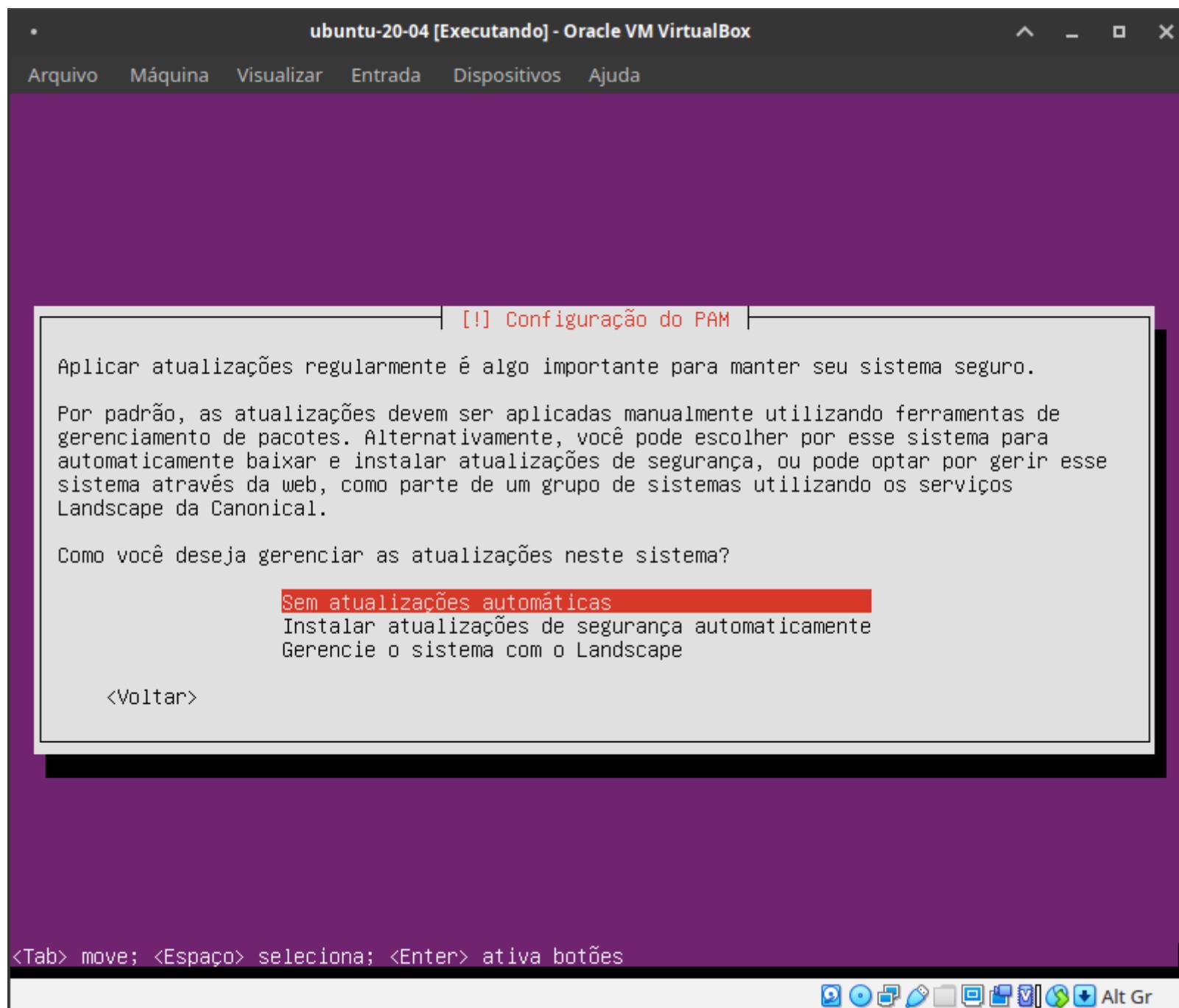
Se você informou uma senha da nasa, confirme para usar senha fraca.











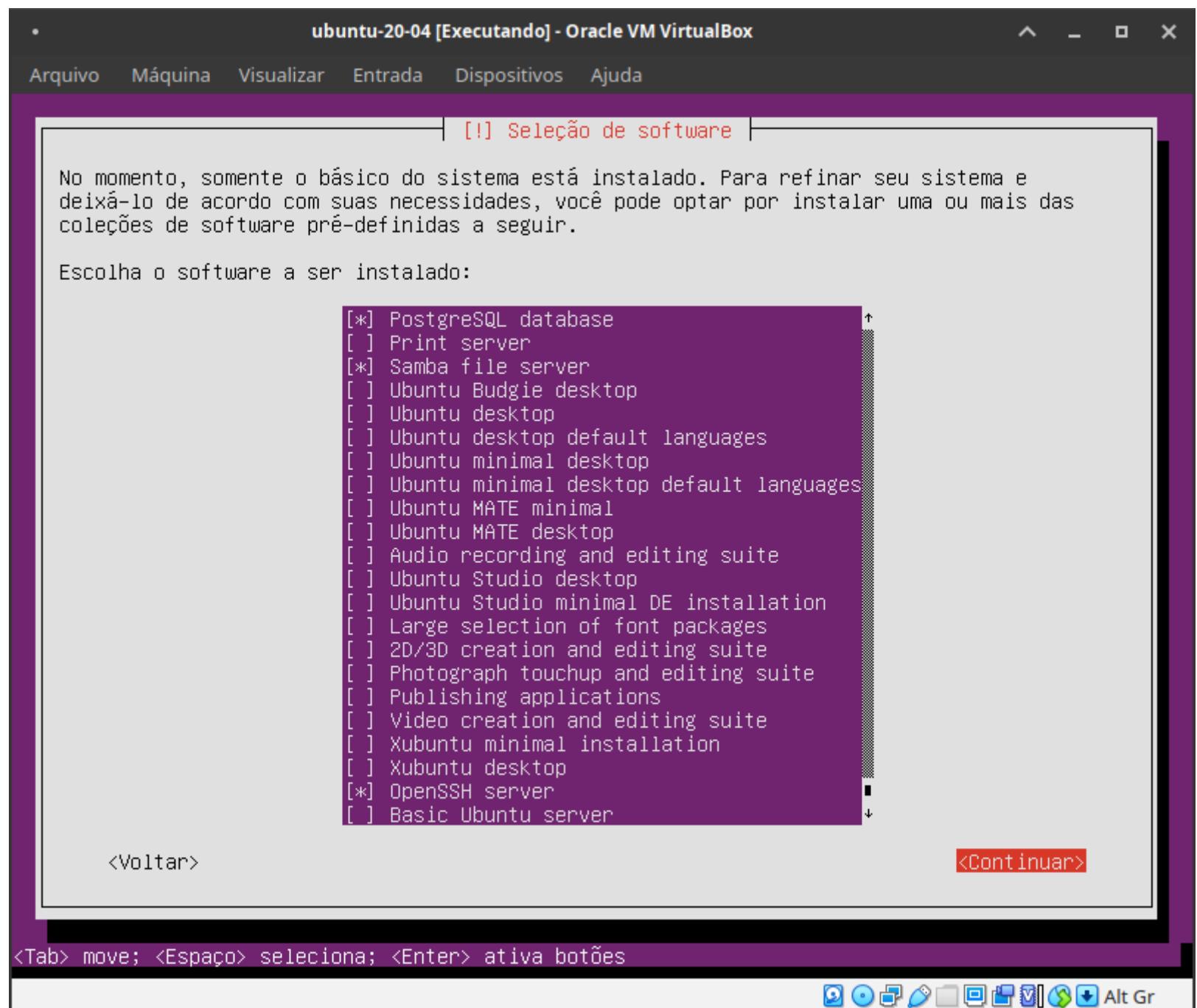
Selecione apenas os softwares:

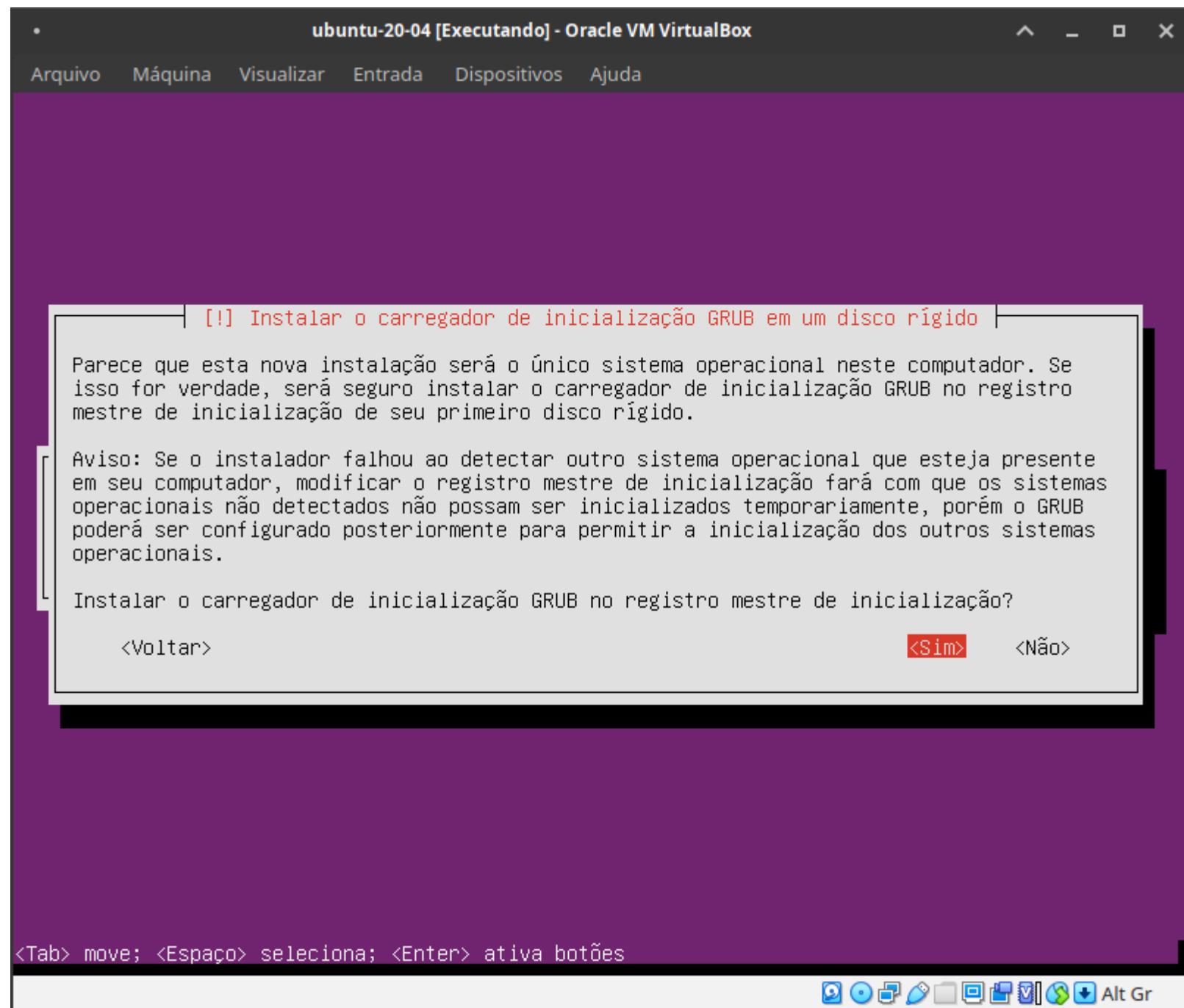
[*] PostgreSQL database

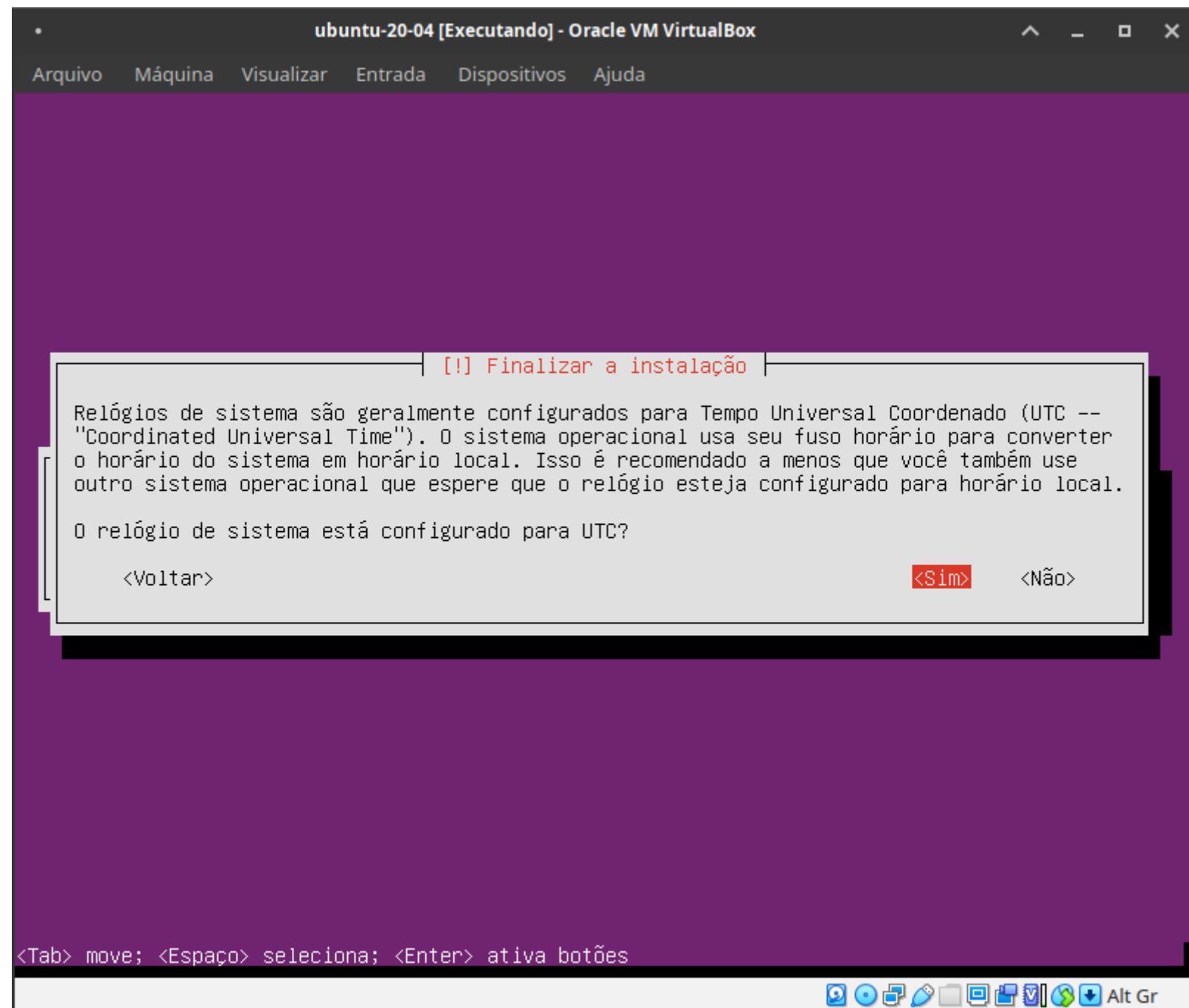
[*] Samba file server

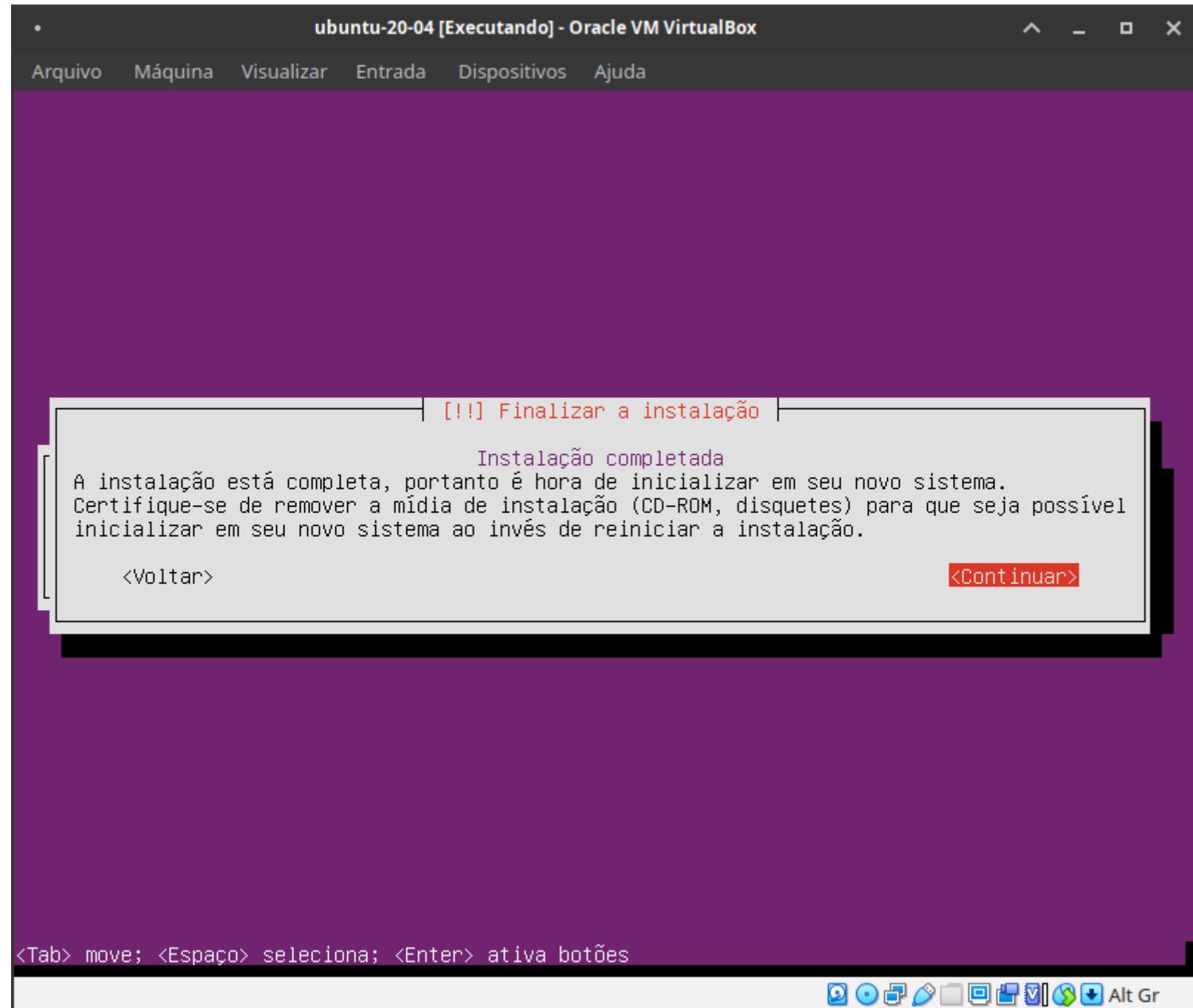
[*] OpenSSH server

e não inventa moda.

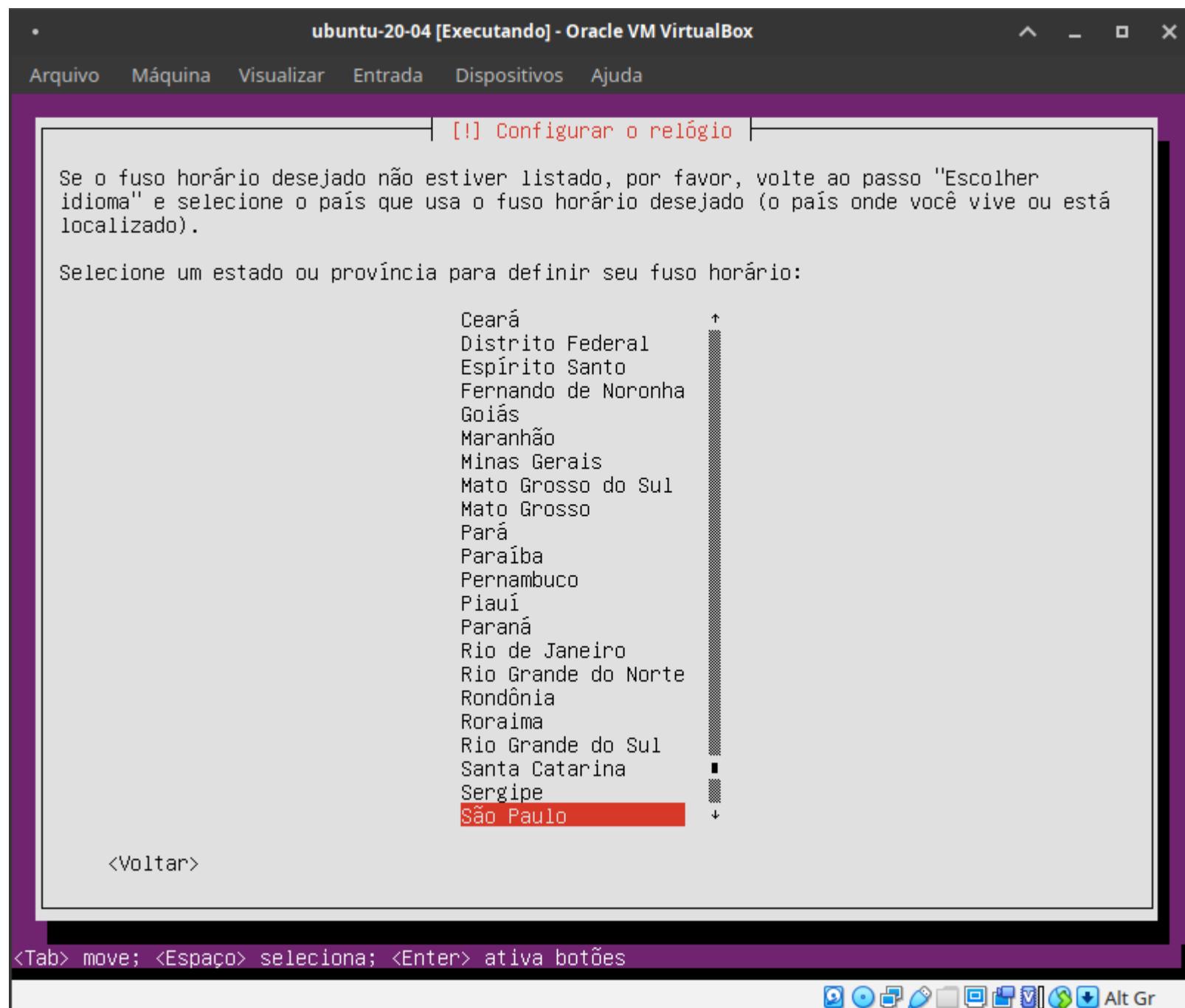


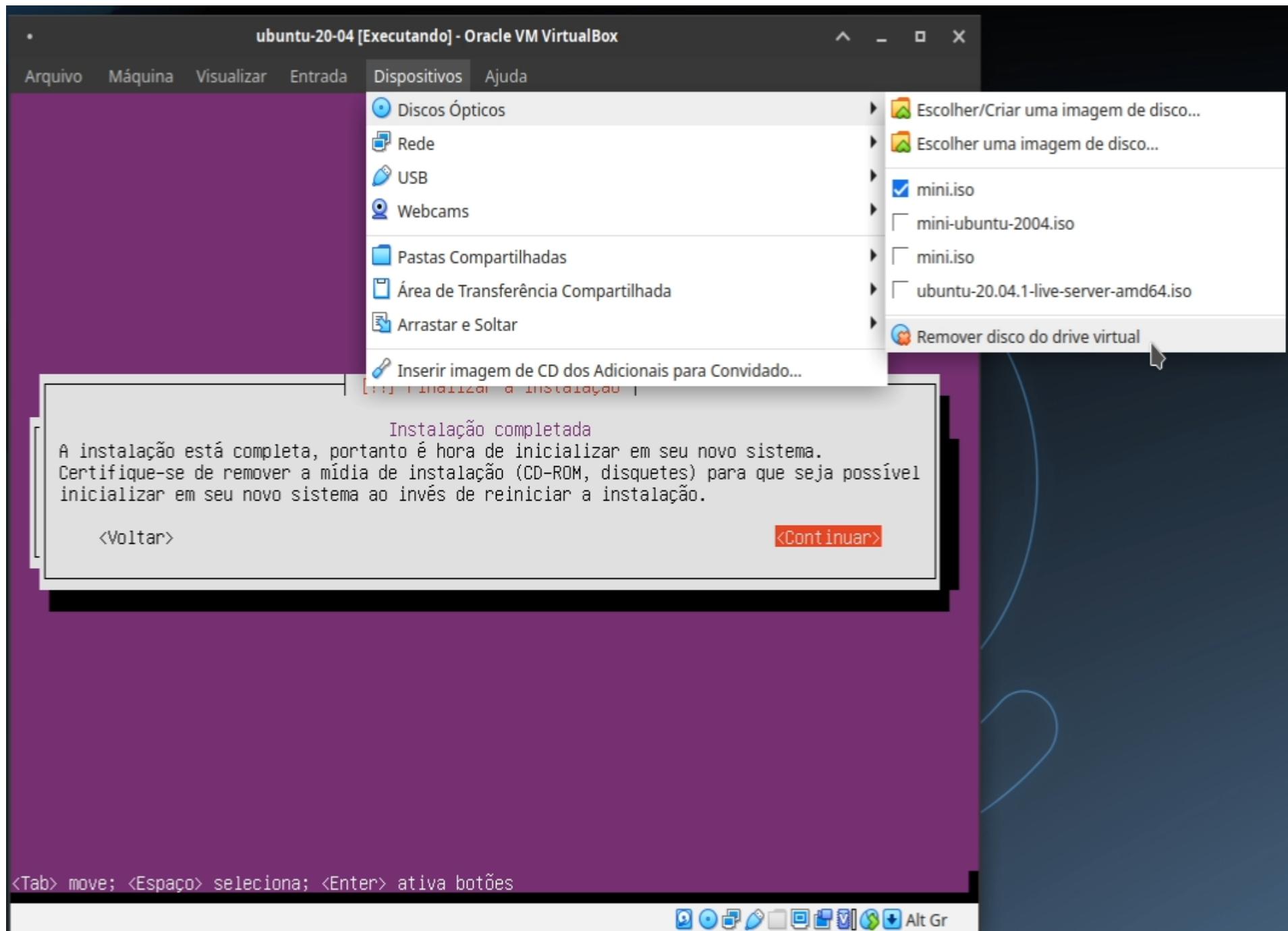


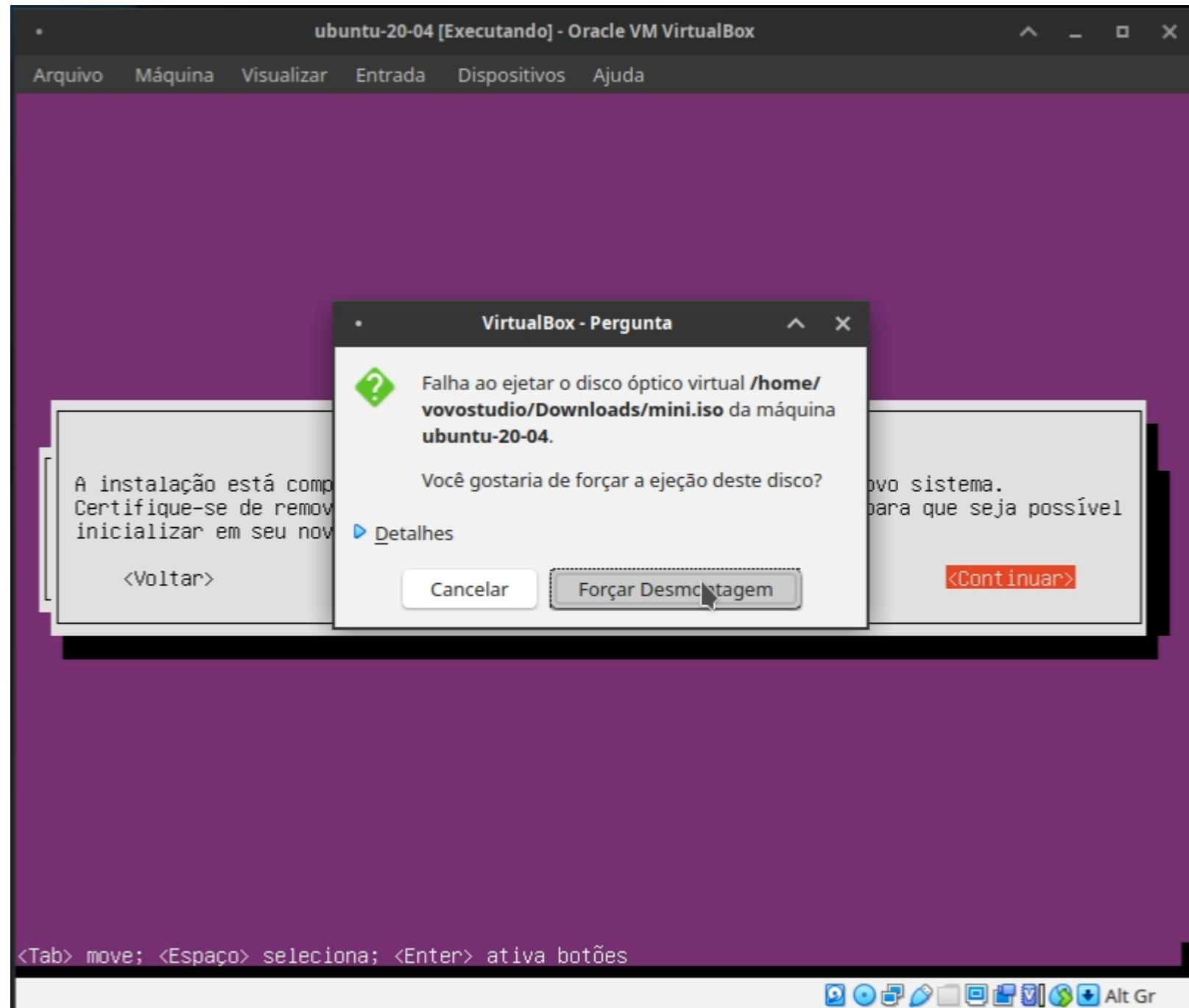




Se essa tela for exibida, selecione sua Unidade da Fferderação







5. Incluir usuário e senha do usuário postgres no Ubuntu e no banco de dados

Fonte: [https://www.vivaolinux.com.br/dica/Alterando-senha-inicial-do-PostgreSQL-\[Ubuntu\]](https://www.vivaolinux.com.br/dica/Alterando-senha-inicial-do-PostgreSQL-[Ubuntu])

Textos com fundo preto são os comandos no terminal ou [teclas]

- Alterar a senha do usuário postgres no Ubuntu

sudo passwd postgres

The screenshot shows a terminal window titled "ubuntu-20-04 [Executando] - Oracle VM VirtualBox". The window has a dark background and white text. At the top, there's a menu bar with options: Arquivo, Máquina, Visualizar, Entrada, Dispositivos, and Ajuda. Below the menu, the terminal prompt shows the user is logged in as "srv-ubuntu" on "tty1". The user enters "sudo passwd postgres" and is prompted for their password. They type a new password and are then prompted to re-enter it. The command "passwd: senha atualizada com sucesso" (password: password updated successfully) is displayed at the end.

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
Ubuntu 20.04.1 LTS srv-ubuntu tty1
srv-ubuntu login: usuario
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-45-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage
Last login: Wed Sep  9 04:55:37 -03 2020 on tty1
usuario@srv-ubuntu:~$ sudo passwd postgres
[sudo] senha para usuario:
Nova senha:
Redigite a nova senha:
passwd: senha atualizada com sucesso
usuario@srv-ubuntu:~$ _
```

Eu informei a senha: vin, mas você pode informar outra senha da nasa.

- Alterar a senha do usuário postgres do banco de dados

```
su postgres
```

```
psql -c "ALTER USER postgres WITH PASSWORD 'vin'" -d template1
```

The screenshot shows a terminal window titled "ubuntu-20-04 [Executando] - Oracle VM VirtualBox". The window contains the following text:

```
Ubuntu 20.04.1 LTS srv-ubuntu tty1

srv-ubuntu login: usuario
Password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-45-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage
Last login: Fri Sep  4 23:05:34 -03 2020 on tty1
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

usuario@srv-ubuntu:~$ sudo passwd postgres
[sudo] senha para usuario:
Nova senha:
Redigite a nova senha:
passwd: senha atualizada com sucesso
usuario@srv-ubuntu:~$
usuario@srv-ubuntu:~$
usuario@srv-ubuntu:~$ su postgres
Senha:
postgres@srv-ubuntu:/home/usuario$ psql -c "ALTER USER postgres WITH PASSWORD 'vin'" -d template1
ALTER ROLE
postgres@srv-ubuntu:/home/usuario$ _
```

The terminal window has a dark background and light-colored text. The bottom right corner shows a set of small icons for file operations like copy, paste, and save.

6. Instalar pgAdmin4

Fonte: <https://www.pgadmin.org/download/pgadmin-4-apt/>

- Instalar curl e gnupg

```
exit
clear
type curl
type gnupg
sudo apt install curl gnupg -y
curl https://www.pgadmin.org/static/packages_pgadmin_org.pub | sudo apt-key add
```

Neste momento a o *prompt* pode ficar parado aguardando a senha para root.
Se ficar parado, digite a senha de e tecle [ENTER].

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
Lendo informação de estado... Pronto
Pacotes sugeridos:
  parcimonie xloadimage
Os NOVOS pacotes a seguir serão instalados:
  curl gnupg
0 pacotes atualizados, 2 pacotes novos instalados, 0 a serem removidos e 0 não atualizados.
É preciso baixar 420 kB de arquivos.
Depois desta operação, 834 kB adicionais de espaço em disco serão usados.
Obter:1 http://br.archive.ubuntu.com/ubuntu focal-updates/main amd64 curl amd64 7.68.0-1ubuntu2.2 [161 kB]
Obter:2 http://br.archive.ubuntu.com/ubuntu focal/main amd64 gnupg all 2.2.19-3ubuntu2 [259 kB]
Baixados 420 kB em 2s (234 kB/s)
A seleccionar pacote anteriormente não seleccionado curl.
(Lendo banco de dados ... 70181 ficheiros e directórios actualmente instalados.)
A preparar para desempacotar .../curl_7.68.0-1ubuntu2.2_amd64.deb ...
A descompactar curl (7.68.0-1ubuntu2.2) ...
A seleccionar pacote anteriormente não seleccionado gnupg.
A preparar para desempacotar .../gnupg_2.2.19-3ubuntu2_all.deb ...
A descompactar gnupg (2.2.19-3ubuntu2) ...
Configurando gnupg (2.2.19-3ubuntu2) ...
Configurando curl (7.68.0-1ubuntu2.2) ...
A processar 'triggers' para man-db (2.9.1-1) ...
A processar 'triggers' para install-info (6.7.0.dfsg.2-5) ...
usuario@srv-ubuntu:~$ sudo apt install curl gnupg -y
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
gnupg is already the newest version (2.2.19-3ubuntu2).
curl is already the newest version (7.68.0-1ubuntu2.2).
0 pacotes atualizados, 0 pacotes novos instalados, 0 a serem removidos e 0 não atualizados.
usuario@srv-ubuntu:~$ curl https://www.pgadmin.org/static/packages_pgadmin_org.pub | sudo apt-key add
% Total    % Received % Xferd  Average Speed   Time     Time      Current
                                         Dload  Upload   Total   Spent    Left   Speed
100  3935  100  3935    0     0   4486      0  --::--  --::--  --::--  4481
OK
usuario@srv-ubuntu:~$ _
```

- Configurar o repositório para download da instalação

[CTRL+L] ou clear para limpar a tela

```
sudo nano /etc/apt/sources.list.d/pgadmin4.list
```

Incluir a seguinte linha no arquivo:

```
https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/focal pgadmin4 main
```

ctrl+S para salvar

ctrl+X para sair

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
GNU nano 4.8          /etc/apt/sources.list.d/pgadmin4.list
deb https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/focal pgadmin4 main

usuario@srv-ubuntu:~$ sudo apt update_
```

- Download e instalação do pgadmin4

Atualizar o repositório e instalar

```
sudo apt update
```

The screenshot shows a terminal window titled "ubuntu-20-04 [Executando] - Oracle VM VirtualBox". The window has a dark theme with white text. At the top, there is a menu bar with options: Arquivo, Máquina, Visualizar, Entrada, Dispositivos, and Ajuda. On the right side of the title bar are standard window control buttons: a downward arrow, a minus sign, a square, and an X. The main area of the terminal contains the output of the "sudo apt update" command. The output is as follows:

```
usuario@srv-ubuntu:~$ sudo apt update
Atingido:1 http://br.archive.ubuntu.com/ubuntu focal InRelease
Atingido:2 http://br.archive.ubuntu.com/ubuntu focal-updates InRelease
Atingido:3 http://br.archive.ubuntu.com/ubuntu focal-backports InRelease
Atingido:4 http://security.ubuntu.com/ubuntu focal-security InRelease
Obter:5 https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/focal pgadmin4 InRelease [4.217 B]
Obter:6 https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/focal pgadmin4/main all Packages [1.907 B]
Obter:7 https://ftp.postgresql.org/pub/pgadmin/pgadmin4/apt/focal pgadmin4/main amd64 Packages [2.710 B]
Baixados 8.834 B em 3s (3.019 B/s)
Lendo listas de pacotes... Pronto
Construindo árvore de dependências
Lendo informação de estado... Pronto
5 packages can be upgraded. Run 'apt list --upgradable' to see them.
usuario@srv-ubuntu:~$
```

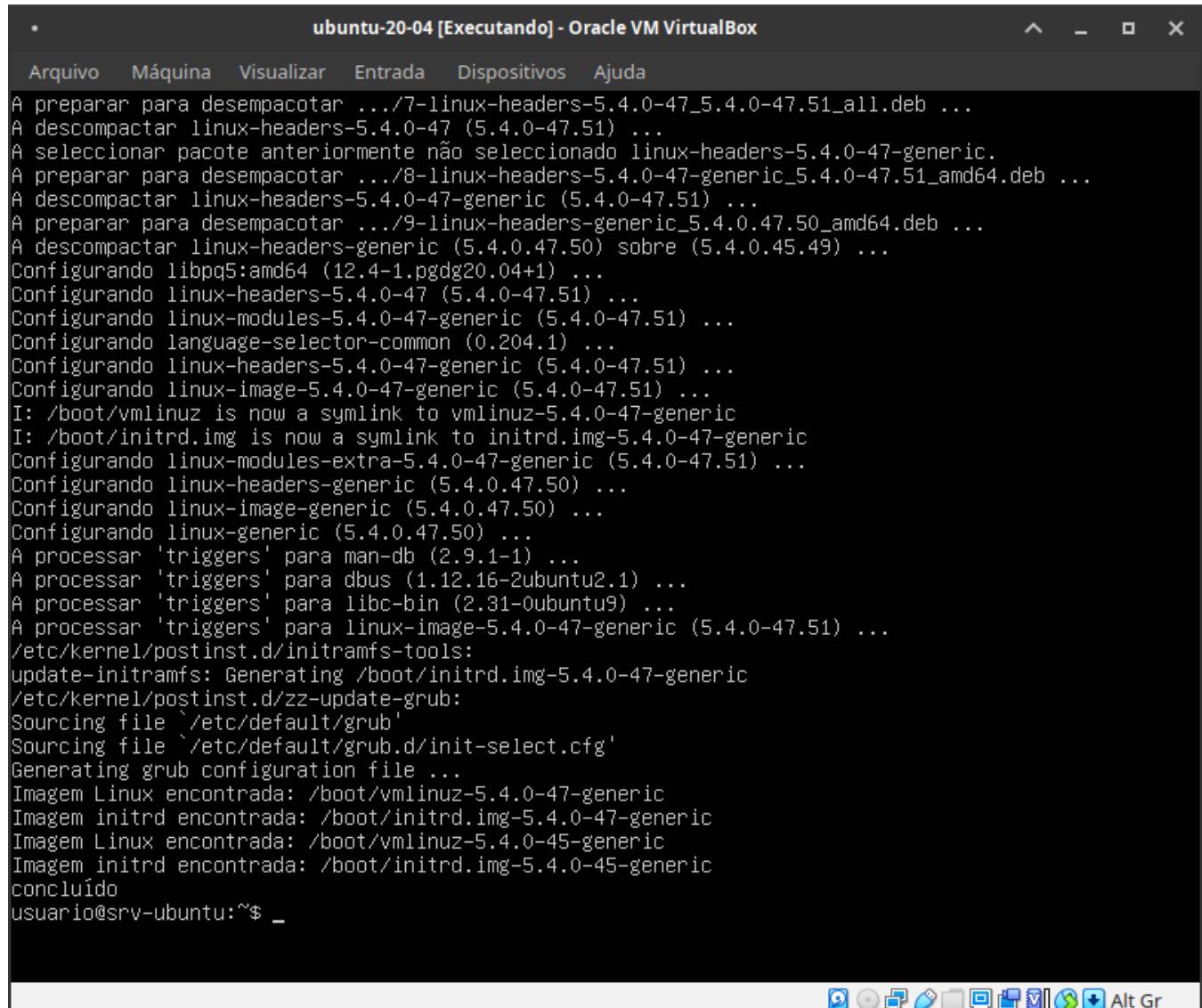
At the bottom of the terminal window, there is a horizontal toolbar with various icons, likely for file operations like copy, paste, and search. To the right of the toolbar, the text "Alt Gr" is visible.

```
sudo apt upgrade -y
```

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
```

Arquivo Máquina Visualizar Entrada Dispositivos Ajuda

```
A preparar para desempacotar .../7-linu...headers-5.4.0-47_5.4.0-47.51_all.deb ...
A descompactar linux-headers-5.4.0-47 (5.4.0-47.51) ...
A seleccionar pacote anteriormente não seleccionado linux-headers-5.4.0-47-generic.
A preparar para desempacotar .../8-linu...headers-5.4.0-47-generic_5.4.0-47.51_amd64.deb ...
A descompactar linux-headers-5.4.0-47-generic (5.4.0-47.51) ...
A preparar para desempacotar .../9-linu...headers-generic_5.4.0-47.50_amd64.deb ...
A descompactar linux-headers-generic (5.4.0-47.50) sobre (5.4.0-45.49) ...
Configurando libpq5:amd64 (12.4-1.pgdg20.04+1) ...
Configurando linux-headers-5.4.0-47 (5.4.0-47.51) ...
Configurando linux-modules-5.4.0-47-generic (5.4.0-47.51) ...
Configurando language-selector-common (0.204.1) ...
Configurando linux-headers-5.4.0-47-generic (5.4.0-47.51) ...
Configurando linux-image-5.4.0-47-generic (5.4.0-47.51) ...
I: /boot/vmlinuz is now a symlink to vmlinuz-5.4.0-47-generic
I: /boot/initrd.img is now a symlink to initrd.img-5.4.0-47-generic
Configurando linux-modules-extra-5.4.0-47-generic (5.4.0-47.51) ...
Configurando linux-headers-generic (5.4.0-47.50) ...
Configurando linux-image-generic (5.4.0-47.50) ...
Configurando linux-generic (5.4.0-47.50) ...
Configurando triggers para man-db (2.9.1-1) ...
Configurando triggers para dbus (1.12.16-2ubuntu2.1) ...
Configurando triggers para libc-bin (2.31-0ubuntu9) ...
Configurando triggers para linux-image-5.4.0-47-generic (5.4.0-47.51) ...
/etc/kernel/postinst.d/initramfs-tools:
update-initramfs: Generating /boot/initrd.img-5.4.0-47-generic
/etc/kernel/postinst.d/zz-update-grub:
Sourcing file `/etc/default/grub'
Sourcing file `/etc/default/grub.d/init-select.cfg'
Generating grub configuration file ...
Imagem Linux encontrada: /boot/vmlinuz-5.4.0-47-generic
Imagem initrd encontrada: /boot/initrd.img-5.4.0-47-generic
Imagem Linux encontrada: /boot/vmlinuz-5.4.0-45-generic
Imagem initrd encontrada: /boot/initrd.img-5.4.0-45-generic
concluído
usuario@srv-ubuntu:~$ _
```



```
sudo apt install pgadmin4 pgadmin4-web -y
```

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service → /lib/systemd/system/apache2.service.
Created symlink /etc/systemd/system/multi-user.target.wants/apache-htcacheclean.service → /lib/systemd/system/apache-htcacheclean.service.
Configurando libqt5gui5:amd64 (5.12.8+dfsg-0ubuntu1) ...
Configurando libqt5widgets5:amd64 (5.12.8+dfsg-0ubuntu1) ...
Configurando libapache2-mod-wsgi-py3 (4.6.8-1ubuntu3) ...
apache2_invoke: Enable module wsgi
Configurando librsvg2-2:amd64 (2.48.7-1ubuntu0.20.04.1) ...
Configurando pgadmin4-desktop (4.25) ...
Configurando librsvg2-common:amd64 (2.48.7-1ubuntu0.20.04.1) ...
Configurando pgadmin4-web (4.25) ...
Configurando libqt5svg5:amd64 (5.12.8-0ubuntu1) ...
Configurando pgadmin4 (4.25) ...
Configurando adwaita-icon-theme (3.36.1-2ubuntu0.20.04.2) ...
update-alternatives: a usar /usr/share/icons/Adwaita/cursor.theme para disponibilizar /usr/share/icons/default/index.theme (x-cursor-theme) em modo auto
Configurando humanity-icon-theme (0.6.15) ...
Configurando ubuntu-mono (19.04-0ubuntu3) ...
A processar 'triggers' para ufw (0.36-6) ...
A processar 'triggers' para systemd (245.4-4ubuntu3.2) ...
A processar 'triggers' para man-db (2.9.1-1) ...
A processar 'triggers' para mime-support (3.64ubuntu1) ...
A processar 'triggers' para libglib2.0-0:amd64 (2.64.3-1~ubuntu20.04.1) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
Configurando glib-networking:amd64 (2.64.2-1ubuntu0.1) ...
Configurando libsoup2.4-1:amd64 (2.70.0-1) ...
Configurando libsoup-gnome2.4-1:amd64 (2.70.0-1) ...
Configurando librest-0.7-0:amd64 (0.8.1-1) ...
Configurando libgtk-3-0:amd64 (3.24.20-0ubuntu1) ...
Configurando libgtk-3-bin (3.24.20-0ubuntu1) ...
Configurando qt5-gtk-platformtheme:amd64 (5.12.8+dfsg-0ubuntu1) ...
A processar 'triggers' para libgdk-pixbuf2.0-0:amd64 (2.40.0+dfsg-3) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
usuario@srv-ubuntu:~$ _
```

- Configurar o pgAdmin4

- ```
sudo /usr/pgadmin4/bin/setup-web.sh
```

Será solicitado um endereço de e-mail e uma senha.

Eu informei como senha: vinvin

Fica mais seguro assim, com a senha da mesma digitada duas vezes.

Após digitar a senha pela segunda vez, pode haver uma pequena demora.  
Aguardar ser exibida uma pergunta.

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
Configurando pgadmin4 (4.25) ...
Configurando adwaita-icon-theme (3.36.1-2ubuntu0.20.04.2) ...
update-alternatives: a usar /usr/share/icons/Adwaita/cursor.theme para disponibilizar /usr/share/icons/default/index.theme (x-cursor-theme) em modo auto
Configurando humanity-icon-theme (0.6.15) ...
Configurando ubuntu-mono (19.04-0ubuntu3) ...
A processar 'triggers' para ufw (0.36-6) ...
A processar 'triggers' para systemd (245.4-4ubuntu3.2) ...
A processar 'triggers' para man-db (2.9.1-1) ...
A processar 'triggers' para mime-support (3.64ubuntu1) ...
A processar 'triggers' para libglib2.0-0:amd64 (2.64.3-1~ubuntu20.04.1) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
Configurando glib-networking:amd64 (2.64.2-1ubuntu0.1) ...
Configurando libsoup2.4-1:amd64 (2.70.0-1) ...
Configurando libsoup-gnome2.4-1:amd64 (2.70.0-1) ...
Configurando librest-0.7-0:amd64 (0.8.1-1) ...
Configurando libgtk-3-0:amd64 (3.24.20-0ubuntu1) ...
Configurando libgtk-3-bin (3.24.20-0ubuntu1) ...
Configurando qt5-gtk-platformtheme:amd64 (5.12.8+dfsg-0ubuntu1) ...
A processar 'triggers' para libgdk-pixbuf2.0-0:amd64 (2.40.0+dfsg-3) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
usuario@srv-ubuntu:~$ sudo /usr/pgadmin4/bin/setup-web.sh
Setting up pgAdmin 4 in web mode on a Debian platform...
Creating configuration database...
NOTE: Configuring authentication for SERVER mode.

Enter the email address and password to use for the initial pgAdmin user account:

Email address: suporte@vovolinux.com.br
Password:
Retype password:
pgAdmin 4 - Application Initialisation
=====

Creating storage and log directories...
We can now configure the Apache Web server for you. This involves enabling the wsgi module and configuring the pgAdmin 4 application to mount at /pgadmin4. Do you wish to continue (y/n)? _
```



Responder **y** para as duas perguntas

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
Configurando ubuntu-mono (19.04-0ubuntu3) ...
A processar 'triggers' para ufw (0.36-6) ...
A processar 'triggers' para systemd (245.4-4ubuntu3.2) ...
A processar 'triggers' para man-db (2.9.1-1) ...
A processar 'triggers' para mime-support (3.64ubuntu1) ...
A processar 'triggers' para libglib2.0-0:amd64 (2.64.3-1~ubuntu20.04.1) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
Configurando glib-networking:amd64 (2.64.2-1ubuntu0.1) ...
Configurando libsoup2.4-1:amd64 (2.70.0-1) ...
Configurando libsoup-gnome2.4-1:amd64 (2.70.0-1) ...
Configurando librest-0.7-0:amd64 (0.8.1-1) ...
Configurando libgtk-3-0:amd64 (3.24.20-0ubuntu1) ...
Configurando libgtk-3-bin (3.24.20-0ubuntu1) ...
Configurando qt5-gtk-platformtheme:amd64 (5.12.8+dfsg-0ubuntu1) ...
A processar 'triggers' para libgdk-pixbuf2.0-0:amd64 (2.40.0+dfsg-3) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
usuario@srv-ubuntu:~$ sudo /usr/pgadmin4/bin/setup-web.sh
Setting up pgAdmin 4 in web mode on a Debian platform...
Creating configuration database...
NOTE: Configuring authentication for SERVER mode.

Enter the email address and password to use for the initial pgAdmin user account:

Email address: suporte@vovolinux.com.br
Password:
Retype password:
pgAdmin 4 - Application Initialisation
=====
Creating storage and log directories...
We can now configure the Apache Web server for you. This involves enabling the wsgi module and configuring the pgAdmin 4 application to mount at /pgadmin4. Do you wish to continue (y/n)? y
The Apache web server is running and must be restarted for the pgAdmin 4 installation to complete. Continue (y/n)? y
Apache successfully restarted. You can now start using pgAdmin 4 in web mode at http://127.0.0.1/pgadmin4
usuario@srv-ubuntu:~$
```



- Verificar se o serviço postgresql está ativo

```
systemctl status postgresql
```

ubuntu-20-04 [Executando] - Oracle VM VirtualBox

Arquivo Máquina Visualizar Entrada Dispositivos Ajuda

```
Configurando libgtk-3-0:amd64 (3.24.20-0ubuntu1) ...
Configurando libgtk-3-bin (3.24.20-0ubuntu1) ...
Configurando qt5-gtk-platformtheme:amd64 (5.12.8+dfsg-0ubuntu1) ...
A processar 'triggers' para libgdk-pixbuf2.0-0:amd64 (2.40.0+dfsg-3) ...
A processar 'triggers' para libc-bin (2.31-0ubuntu9) ...
usuario@srv-ubuntu:~$ sudo /usr/pgadmin4/bin/setup-web.sh
Setting up pgAdmin 4 in web mode on a Debian platform...
Creating configuration database...
NOTE: Configuring authentication for SERVER mode.

Enter the email address and password to use for the initial pgAdmin user account:

Email address: suporte@vovolinux.com.br
Password:
Retype password:
pgAdmin 4 - Application Initialisation
=====

Creating storage and log directories...
We can now configure the Apache Web server for you. This involves enabling the wsgi module and configuring the pgAdmin 4 application to mount at /pgadmin4. Do you wish to continue (y/n)? y
The Apache web server is running and must be restarted for the pgAdmin 4 installation to complete. Continue (y/n)? y
Apache successfully restarted. You can now start using pgAdmin 4 in web mode at http://127.0.0.1/pgadmin4
usuario@srv-ubuntu:~$ systemctl status postgresql
● postgresql.service - PostgreSQL RDBMS
 Loaded: loaded (/lib/systemd/system/postgresql.service; enabled; vendor preset: enabled)
 Active: active (exited) since Wed 2020-09-09 05:02:49 -03; 38min ago
 Main PID: 449 (code=exited, status=0/SUCCESS)
 Tasks: 0 (limit: 2318)
 Memory: 0B
 CGroup: /system.slice/postgresql.service

set 09 05:02:49 srv-ubuntu systemd[1]: Starting PostgreSQL RDBMS...
set 09 05:02:49 srv-ubuntu systemd[1]: Finished PostgreSQL RDBMS.
usuario@srv-ubuntu:~$
```

Alt Gr

## 7. Configurar IP estático para o servidor

`hostname -I` para saber o ip atual

The screenshot shows a terminal window titled "ubuntu-20-04 [Executando] - Oracle VM VirtualBox". The window menu bar includes "Arquivo", "Máquina", "Visualizar", "Entrada", "Dispositivos", and "Ajuda". The terminal content displays the command "hostname -I" followed by its output: "192.168.1.52 2804:18:1841:2546:a00:27ff:fe55:6608". The bottom right corner of the terminal window features a set of small icons.

```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
usuario@srv-ubuntu:~$ hostname -I
192.168.1.52 2804:18:1841:2546:a00:27ff:fe55:6608
usuario@srv-ubuntu:~$ _
```

- Editar o arquivo de configuração do adaptador de rede

```
sudo cp -v /etc/netplan/01-netcfg.yaml /etc/netplan/01-netcfg.yaml.old
```

```
sudo nano /etc/netplan/01-netcfg.yaml
```

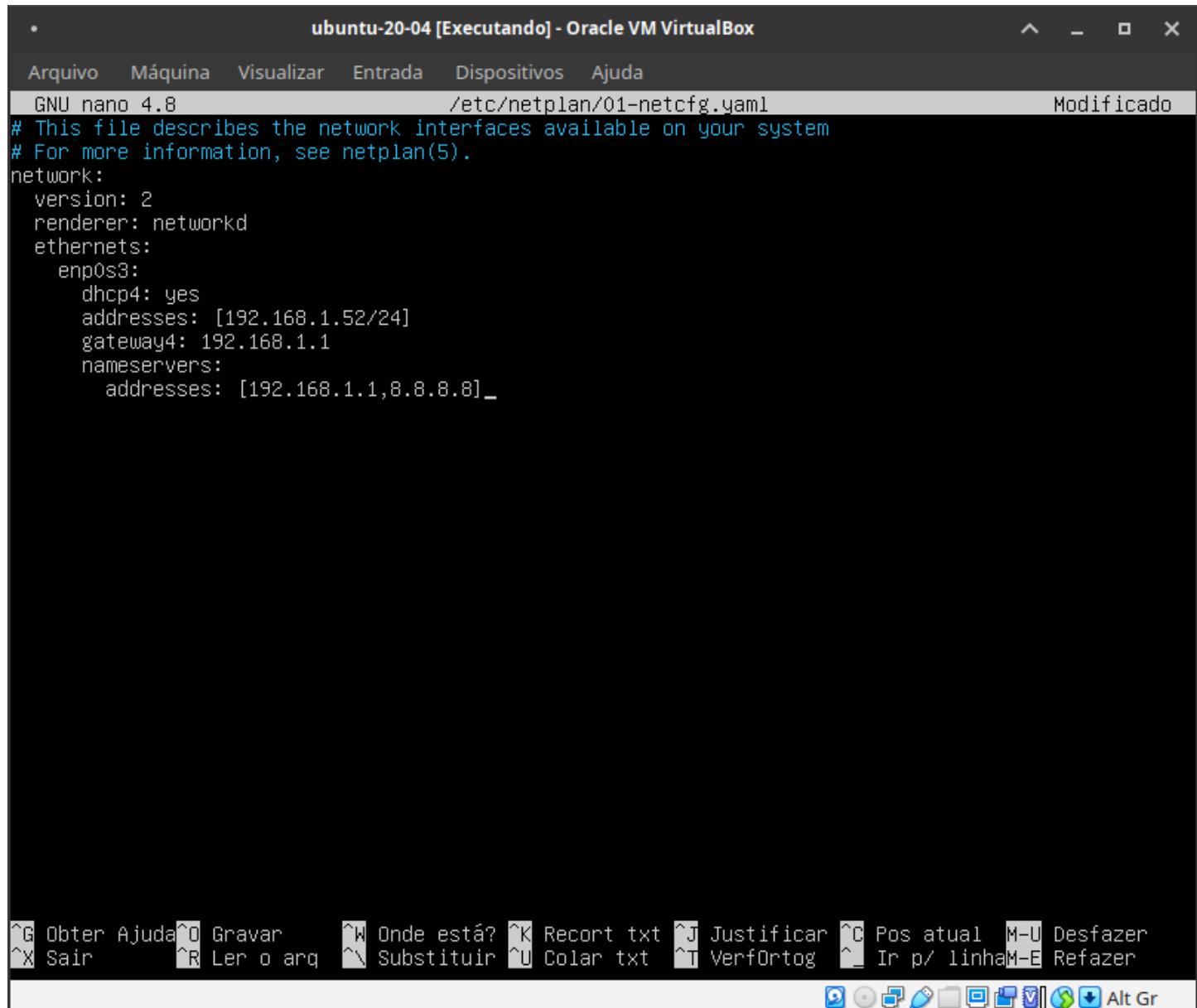
antes:

The screenshot shows a terminal window titled "ubuntu-20-04 [Executando] - Oracle VM VirtualBox". The menu bar includes "Arquivo", "Máquina", "Visualizar", "Entrada", "Dispositivos", and "Ajuda". The main area displays the contents of the /etc/netplan/01-netcfg.yaml file:

```
GNU nano 4.8 /etc/netplan/01-netcfg.yaml
This file describes the network interfaces available on your system
For more information, see netplan(5).
network:
 version: 2
 renderer: networkd
 ethernets:
 enp0s3:
 dhcp4: yes
 dhcp6: yes
```

The status bar at the bottom shows keyboard shortcuts for various operations like paste, cut, and search, along with icons for file operations.

depois:



```
ubuntu-20-04 [Executando] - Oracle VM VirtualBox
Arquivo Máquina Visualizar Entrada Dispositivos Ajuda
GNU nano 4.8 /etc/netplan/01-netcfg.yaml Modificado
This file describes the network interfaces available on your system
For more information, see netplan(5).
network:
 version: 2
 renderer: networkd
 ethernets:
 enp0s3:
 dhcp4: yes
 addresses: [192.168.1.52/24]
 gateway4: 192.168.1.1
 nameservers:
 addresses: [192.168.1.1,8.8.8.8]
```

^G Obter Ajuda ^O Gravar ^W Onde está? ^K Recort txt ^J Justificar ^C Pos atual M-U Desfazer  
^X Sair ^R Ler o arq ^S Substituir ^U Colar txt ^T VerfOrtag ^\_ Ir p/ linha M-E Refazer

Alt Gr

**ctrl+S** para salvar

**ctrl+X** para sair

- Testar a validade da configuração e confirmar as alterações

**sudo netplan try** e depois **[ENTER]** para confirmar a configuração

The screenshot shows a terminal window with the title "ubuntu-20-04 [Executando] - Oracle VM VirtualBox". The menu bar includes "Arquivo", "Máquina", "Visualizar", "Entrada", "Dispositivos", and "Ajuda". The terminal content displays network configuration details:

```
addresses: [192.168.1.52/24]
gateway4: 192.168.1.1
nameservers:
 addresses: [192.168.1.1,8.8.8.8]
```

Below this, a user prompt is shown:

```
usuario@srv-ubuntu:~$ sudo netplan try
Do you want to keep these settings?
```

Followed by a timeout message:

```
Press ENTER before the timeout to accept the new configuration
```

And finally, confirmation messages:

```
Changes will revert in 111 seconds
Configuration accepted.
usuario@srv-ubuntu:~$ _
```

The bottom of the terminal window features a toolbar with various icons, and the text "Alt Gr" is visible on the right side.

## 8. Configurar /etc/hosts em cliente linux

- Editar o arquivo de hosts na máquina local

`sudo nano /etc/hosts`

```

sudo nano /etc/hosts
GNU nano 4.8 /etc/hosts Modificado
127.0.0.1 localhost
127.0.1.1 VINICIUS-NB
127.0.0.1 intranet.com.br

Servidor VM Apache2, MySql e PHP
192.168.43.249 debian-dev

Servidor Fisico Apache2, MySql e PHP
192.168.15.3 srv-debian

Servidor VM postgreSQL 12, pgAdmin4
192.168.1.52 srv-ubuntu

The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters

^G Obter Ajud^O Gravar ^W Onde está?^K Recort txt^J Justificar^C Pos atual
^X Sair ^R Ler o arq ^\ Substituir^U Colar txt ^T Verf0rtog ^_ Ir p/ linha

```

`ctrl+S` para salvar

`ctrl+X` para sair

- Adicionar o host do servidor como host conhecido na máquina local

ssh usuario@srv-ubuntu

Digitar o conteúdo da linha abaixo de remove with: no terminal

A minha ficou assim. No seu computador o nome do usuário pode ser diferente.

```
ssh-keygen -f "/home/vovostudio/.ssh/known_hosts" -R "srv-ubuntu"
```

```
vovostudio@VINICIUS-NB:~
```

```
vovostudio at VINICIUS-NB in ~ using
└ ssh usuario@srv-ubuntu
@@@@@@@ WARNING: POSSIBLE DNS SPOOFING DETECTED! @@@
The ECDSA host key for srv-ubuntu has changed,
and the key for the corresponding IP address 192.168.1.52
is unchanged. This could either mean that
DNS SPOOFING is happening or the IP address for the host
and its host key have changed at the same time.
Offending key for IP in /home/vovostudio/.ssh/known_hosts:35
remove with:
 ssh-keygen -f "/home/vovostudio/.ssh/known_hosts" -R "192.168.1.52"
@@@@@@@ WARNING: REMOTE HOST IDENTIFICATION HAS CHANGED! @@@
IT IS POSSIBLE THAT SOMEONE IS DOING SOMETHING NASTY!
Someone could be eavesdropping on you right now (man-in-the-middle attack)!
It is also possible that a host key has just been changed.
The fingerprint for the ECDSA key sent by the remote host is
SHA256:zEWXMecl8dS6HK9NgIYKLLM0t8RTDBILtTqz/mhyyEY.
Please contact your system administrator.
Add correct host key in /home/vovostudio/.ssh/known_hosts to get rid of this message.
Offending ECDSA key in /home/vovostudio/.ssh/known_hosts:34
remove with:
 ssh-keygen -f "/home/vovostudio/.ssh/known_hosts" -R "srv-ubuntu"
ECDSA host key for srv-ubuntu has changed and you have requested strict checking.
Host key verification failed.
vovostudio at VINICIUS-NB in ~ using
└ ssh-keygen -f "/home/vovostudio/.ssh/known_hosts" -R "srv-ubuntu"
Host srv-ubuntu found: line 34
/home/vovostudio/.ssh/known_hosts updated.
Original contents retained as /home/vovostudio/.ssh/known_hosts.old
vovostudio at VINICIUS-NB in ~ using
└ └
```

- Acessar o servidor srv-ubuntu via terminal

**ssh usuario@ubuntu**

**yes** para confirmar

**hostname -I** para confirmar o IP do servidor

```

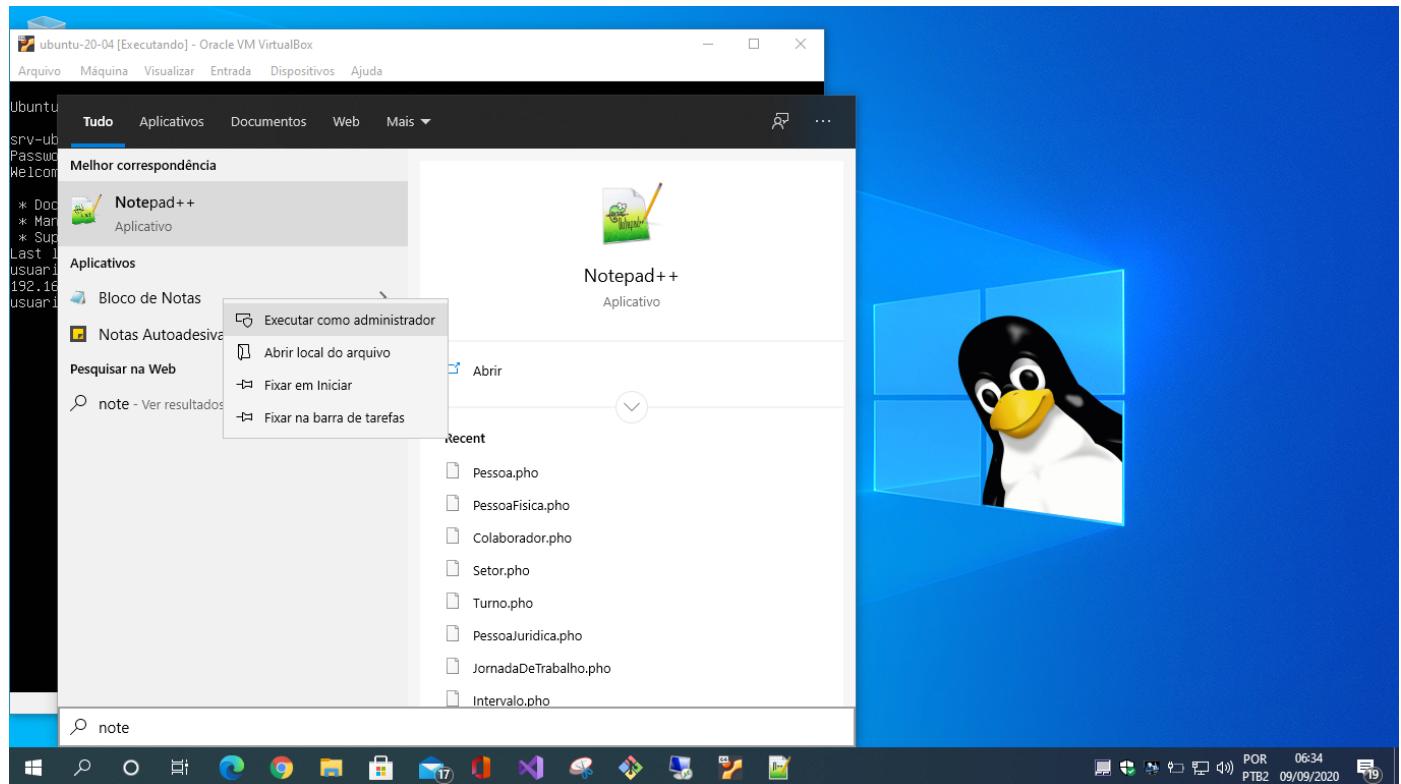
usuario@srv-ubuntu: ~
usuario@srv-ubuntu: ~ 120x35
@ WARNING: REMOTE HOST IDENTIFICATION HAS CHANGED! @
@eee
IT IS POSSIBLE THAT SOMEONE IS DOING SOMETHING NASTY!
Someone could be eavesdropping on you right now (man-in-the-middle attack)!
It is also possible that a host key has just been changed.
The fingerprint for the ECDSA key sent by the remote host is
SHA256:zEWXMecl8dS6HK9NgIYKLLM0t8RTDBILtTqz/mhyEY.
Please contact your system administrator.
Add correct host key in /home/vovostudio/.ssh/known_hosts to get rid of this message.
Offending ECDSA key in /home/vovostudio/.ssh/known_hosts:34
remove with:
 ssh-keygen -f "/home/vovostudio/.ssh/known_hosts" -R "srv-ubuntu"
ECDSA host key for srv-ubuntu has changed and you have requested strict checking.
Host key verification failed.
[vovostudio at VINICIUS-NB in ~ using
 ssh-keygen -f "/home/vovostudio/.ssh/known_hosts" -R "srv-ubuntu"
Host srv-ubuntu found: line 34
/home/vovostudio/.ssh/known_hosts updated.
Original contents retained as /home/vovostudio/.ssh/known_hosts.old
[vovostudio at VINICIUS-NB in ~ using
 ssh usuario@srv-ubuntu
The authenticity of host 'srv-ubuntu (192.168.1.52)' can't be established.
ECDSA key fingerprint is SHA256:zEWXMecl8dS6HK9NgIYKLLM0t8RTDBILtTqz/mhyEY.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'srv-ubuntu' (ECDSA) to the list of known hosts.
usuario@srv-ubuntu's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-45-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Sep 9 06:09:35 2020 from 192.168.1.50
usuario@srv-ubuntu:~$ hostname -I
192.168.1.52 2804:18:1841:2546:a00:27ff:fe55:6608
usuario@srv-ubuntu:~$
```

**exit**

## 9. Configurar C:\Windows\System32\drivers\etc\hosts

- Abrir Notepad como Administrador



- Menu Arquivo > Abrir
  - C:\Windows\System32\drivers\etc\hosts

The screenshot shows a Windows Notepad window titled "hosts - Bloco de Notas". The menu bar includes "Arquivo", "Editar", "Formatar", "Exibir", and "Ajuda". The main content area displays the hosts file with the following content:

```
Copyright (c) 1993-2009 Microsoft Corp.
#
This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
#
This file contains the mappings of IP addresses to host names. Each
entry should be kept on an individual line. The IP address should
be placed in the first column followed by the corresponding host name.
The IP address and the host name should be separated by at least one
space.
#
Additionally, comments (such as these) may be inserted on individual
lines or following the machine name denoted by a '#' symbol.
#
For example:
#
102.54.94.97 rhino.acme.com # source server
38.25.63.10 x.acme.com # x client host
#
localhost name resolution is handled within DNS itself.
127.0.0.1 localhost
::1 localhost
192.168.1.52| srv-ubuntu
```

The bottom status bar shows "Ln 22, Col 13", "100%", "Windows (CRLF)", and "UTF-8".

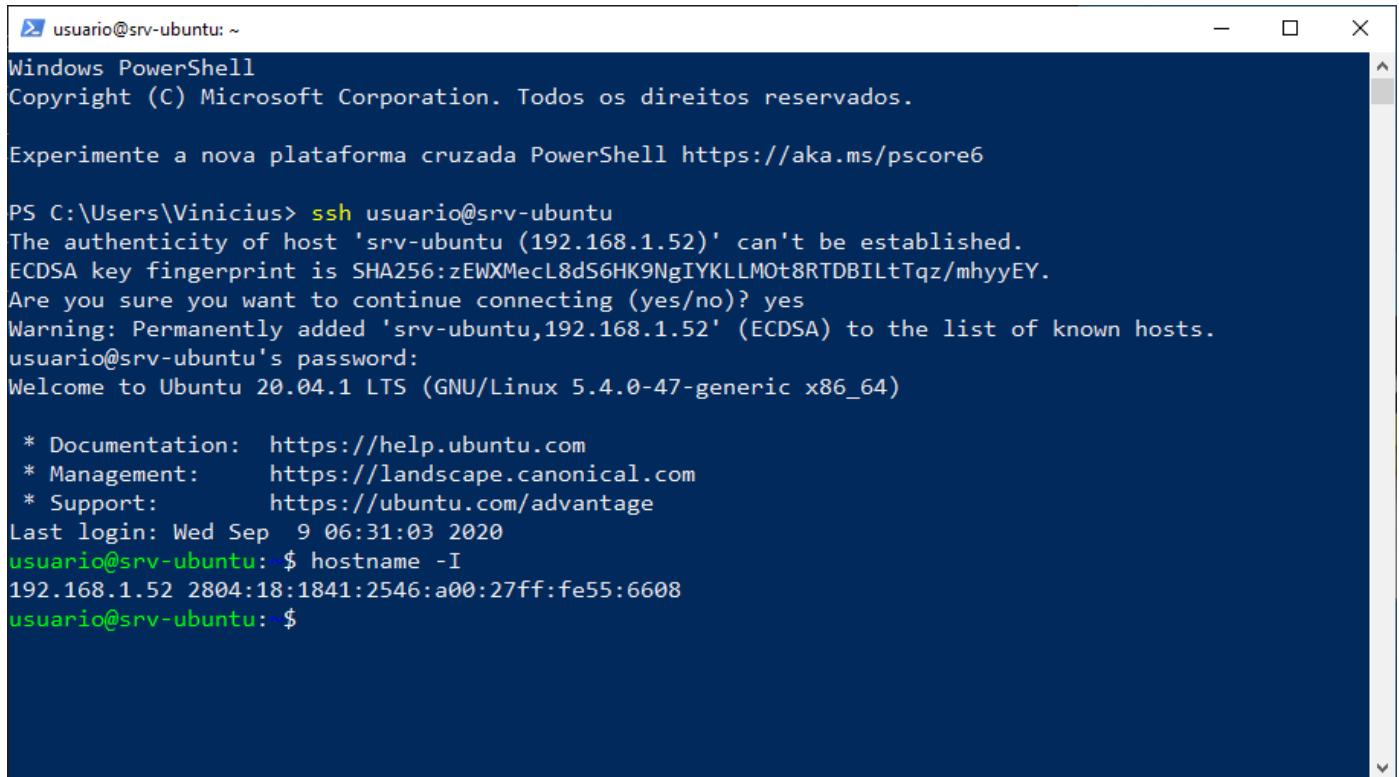
[ctrl+S] para salvar

Menu Arquivo > Sair

## Abrir o Windows PowerShell

**ssh usuario@srv-ubuntu**

**yes** para confirmar



A screenshot of a Windows PowerShell window titled "usuario@srv-ubuntu: ~". The window shows the command "ssh usuario@srv-ubuntu" being run. It displays the SSH connection process, including the fingerprint verification and password prompt. The output ends with a welcome message from the Ubuntu server.

```
usuario@srv-ubuntu: ~
Windows PowerShell
Copyright (C) Microsoft Corporation. Todos os direitos reservados.

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

PS C:\Users\Vinicius> ssh usuario@srv-ubuntu
The authenticity of host 'srv-ubuntu (192.168.1.52)' can't be established.
ECDSA key fingerprint is SHA256:zEWXMecL8dS6HK9NgIYKLLM0t8RTDBILtTqz/mhyEY.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'srv-ubuntu,192.168.1.52' (ECDSA) to the list of known hosts.
usuario@srv-ubuntu's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-47-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Sep 9 06:31:03 2020
usuario@srv-ubuntu:~$ hostname -I
192.168.1.52 2804:18:1841:2546:a00:27ff:fe55:6608
usuario@srv-ubuntu:~$
```

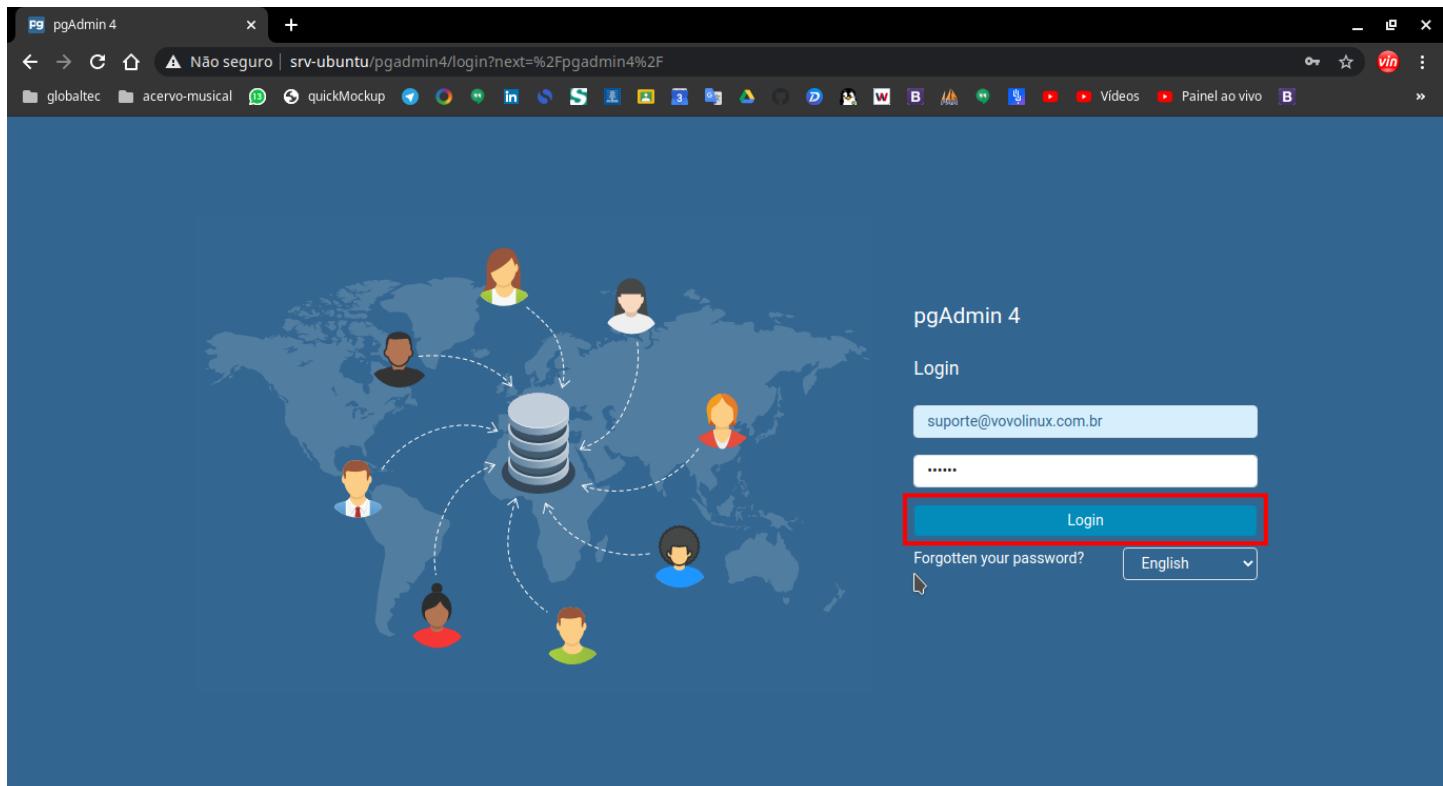
**hostname -I** para confirmar o IP do servidor

## 10.Criar conexão com o servidor de dados PostgreSQL

- Acesse o endereço do pgadmin4 no navegador

<http://srv-ubuntu/pgadmin4>

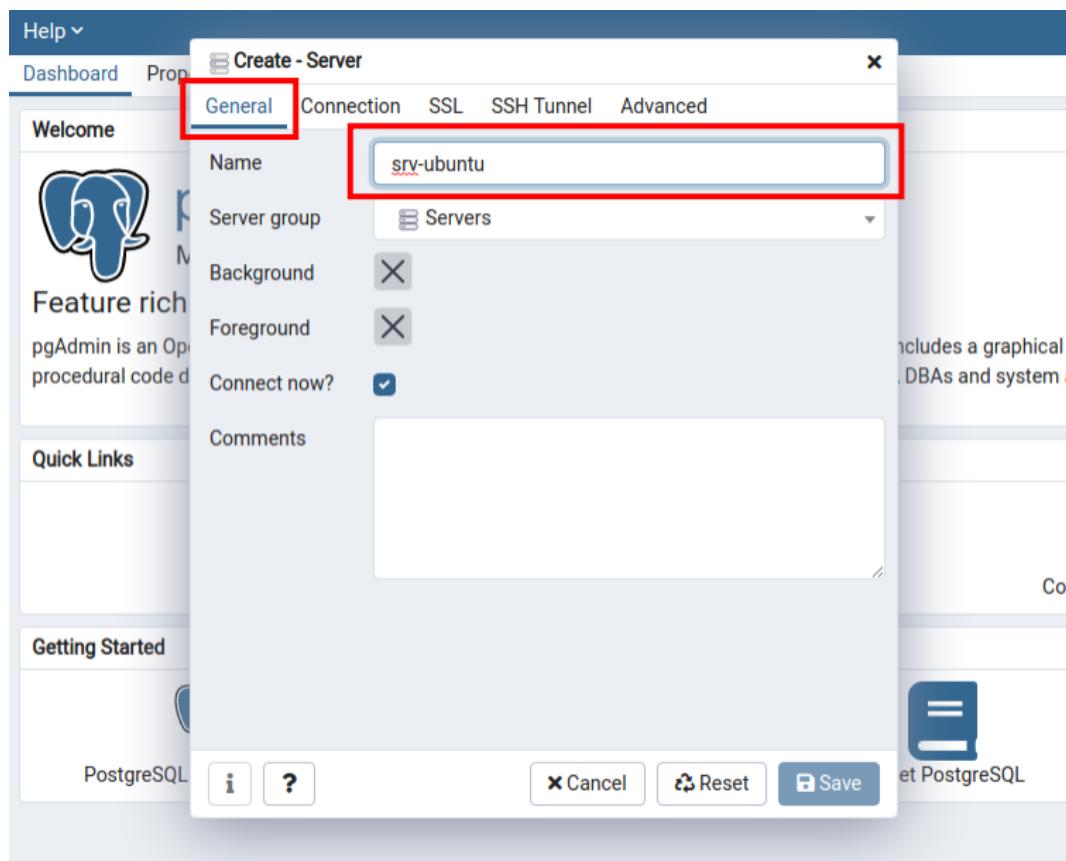
- Efetue o login:



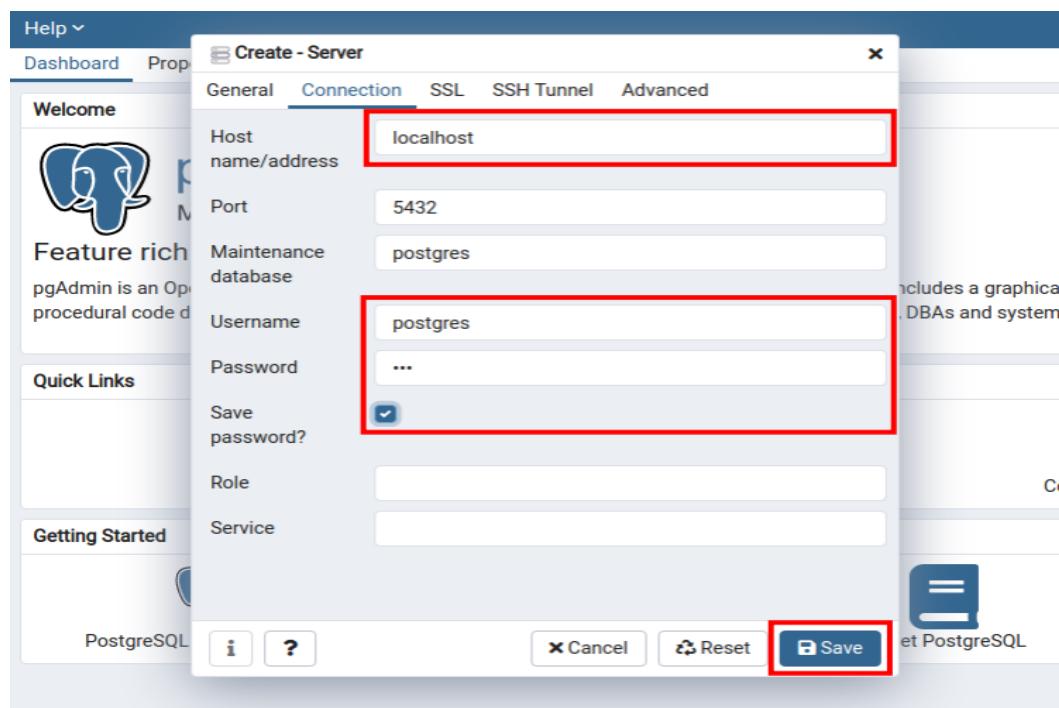
- Clique em Add New Server para adicionar a conexão com o servidor onde está instalado o postgresql

The screenshot shows the pgAdmin 4 interface. At the top, there's a navigation bar with 'File', 'Object', 'Tools', and 'Help'. Below it, a toolbar with various icons like 'Dashboard', 'Properties', 'SQL', etc. On the left, a sidebar shows 'Servers'. The main content area is titled 'Welcome' and features the pgAdmin logo and a brief description of the tool. Under 'Quick Links', there's a button labeled 'Add New Server' which is highlighted with a red box. To the right of this, there's a 'Configure pgAdmin' link with a gear icon. At the bottom, there are links for 'PostgreSQL Documentation', 'pgAdmin Website', 'Planet PostgreSQL', and 'Community Support'.

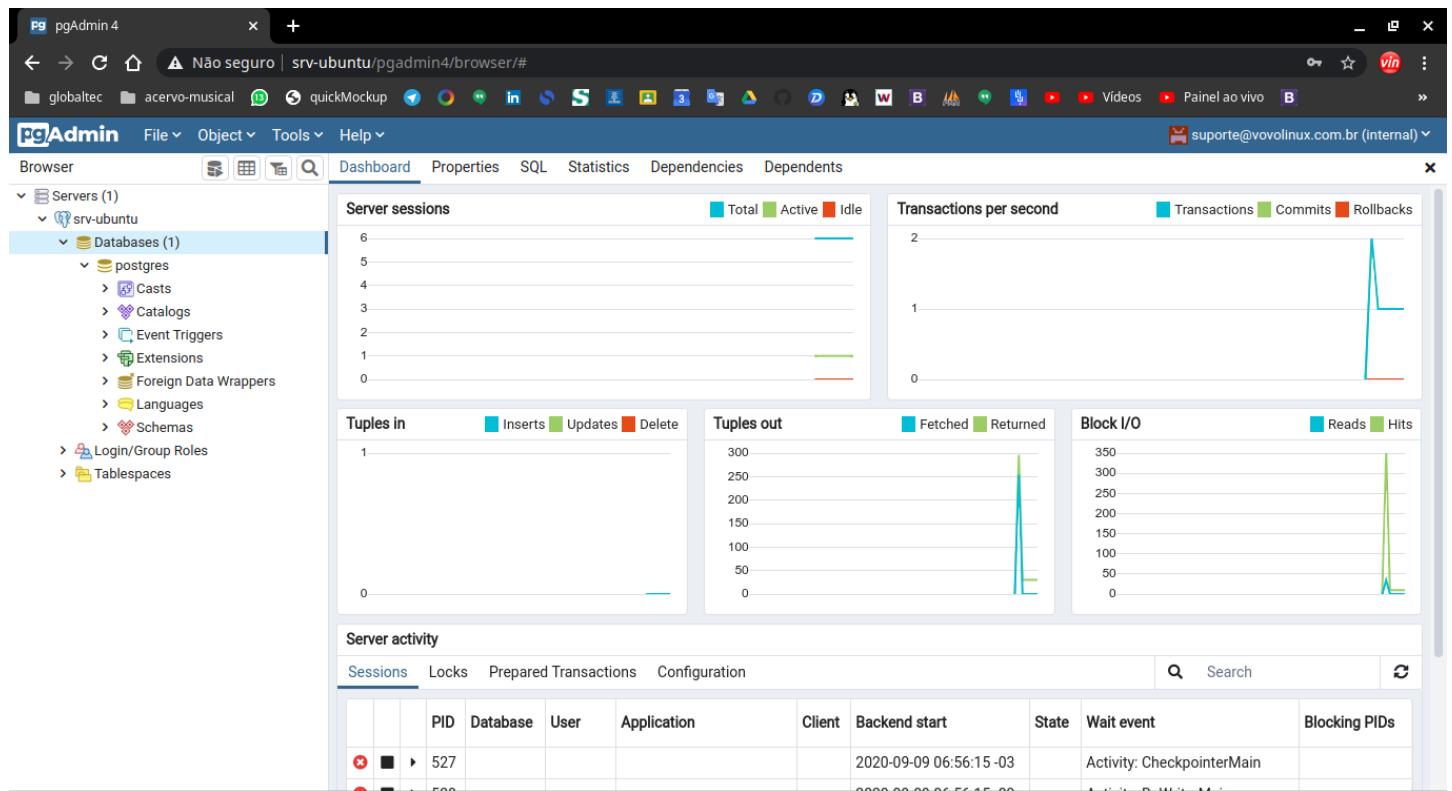
- Informe o nome do servidor



- Informe o endereço do servidor, nesse caso, **localhost**. Informe o usuário e a senha, sendo que o usuário padrão é **postgres**



Se tudo acabar bem, a imagem do sucesso é essa:

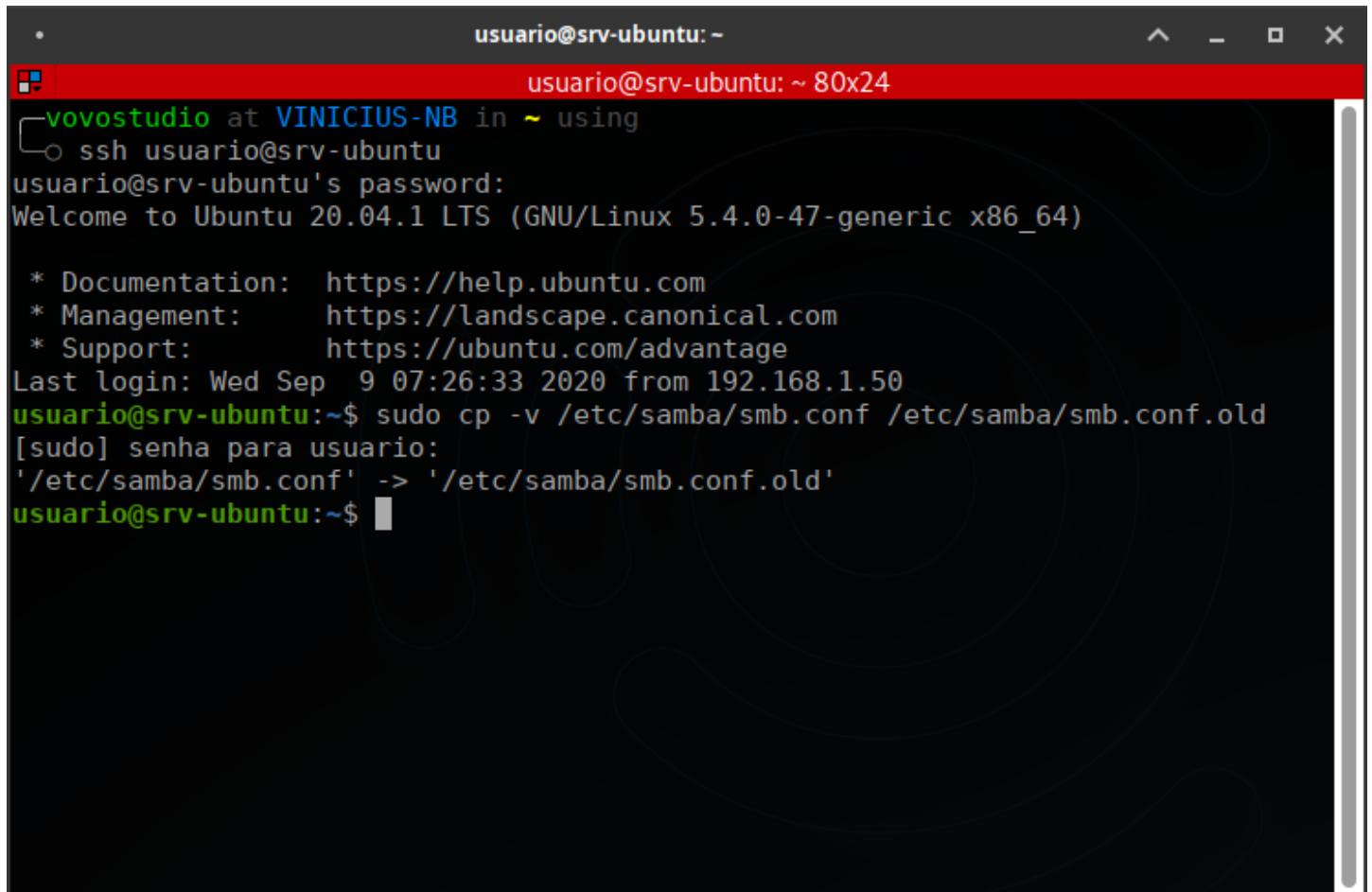


## 11. Configurar o compartilhamento Samba4

Os próximos passos podem ser executados diretamente no terminal do srv-ubuntu ou via ssh no terminal da máquina local. Para Windows, pode ser no Windows PowerShell.

- Fazer o backup do arquivo de configurações do samba

```
sudo cp -v /etc/samba/smb.conf /etc/samba/smb.conf.old
```



A screenshot of a terminal window titled "usuario@srv-ubuntu:~". The window shows a red header bar with the title and a red status bar below it. The main terminal area displays the following text:

```
usuario@srv-ubuntu:~ 80x24
vovostudio at VINICIUS-NB in ~ using
ssh usuario@srv-ubuntu
usuario@srv-ubuntu's password:
Welcome to Ubuntu 20.04.1 LTS (GNU/Linux 5.4.0-47-generic x86_64)

 * Documentation: https://help.ubuntu.com
 * Management: https://landscape.canonical.com
 * Support: https://ubuntu.com/advantage
Last login: Wed Sep 9 07:26:33 2020 from 192.168.1.50
usuario@srv-ubuntu:~$ sudo cp -v /etc/samba/smb.conf /etc/samba/smb.conf.old
[sudo] senha para usuario:
'/etc/samba/smb.conf' -> '/etc/samba/smb.conf.old'
usuario@srv-ubuntu:~$
```

- Incluir as linhas abaixo do server string

```
Nome NetBIOS
netbios name = srv-ubuntu
```

```
usuario@srv-ubuntu:~
usuario@srv-ubuntu: ~ 80x24
GNU nano 4.8 /etc/samba/smb.conf Modificado

#===== Global Settings =====

[global]

Browsing/Identification ###

Change this to the workgroup/NT-domain name your Samba server will part of
workgroup = WORKGROUP

server string is the equivalent of the NT Description field
server string = %h server (Samba, Ubuntu)

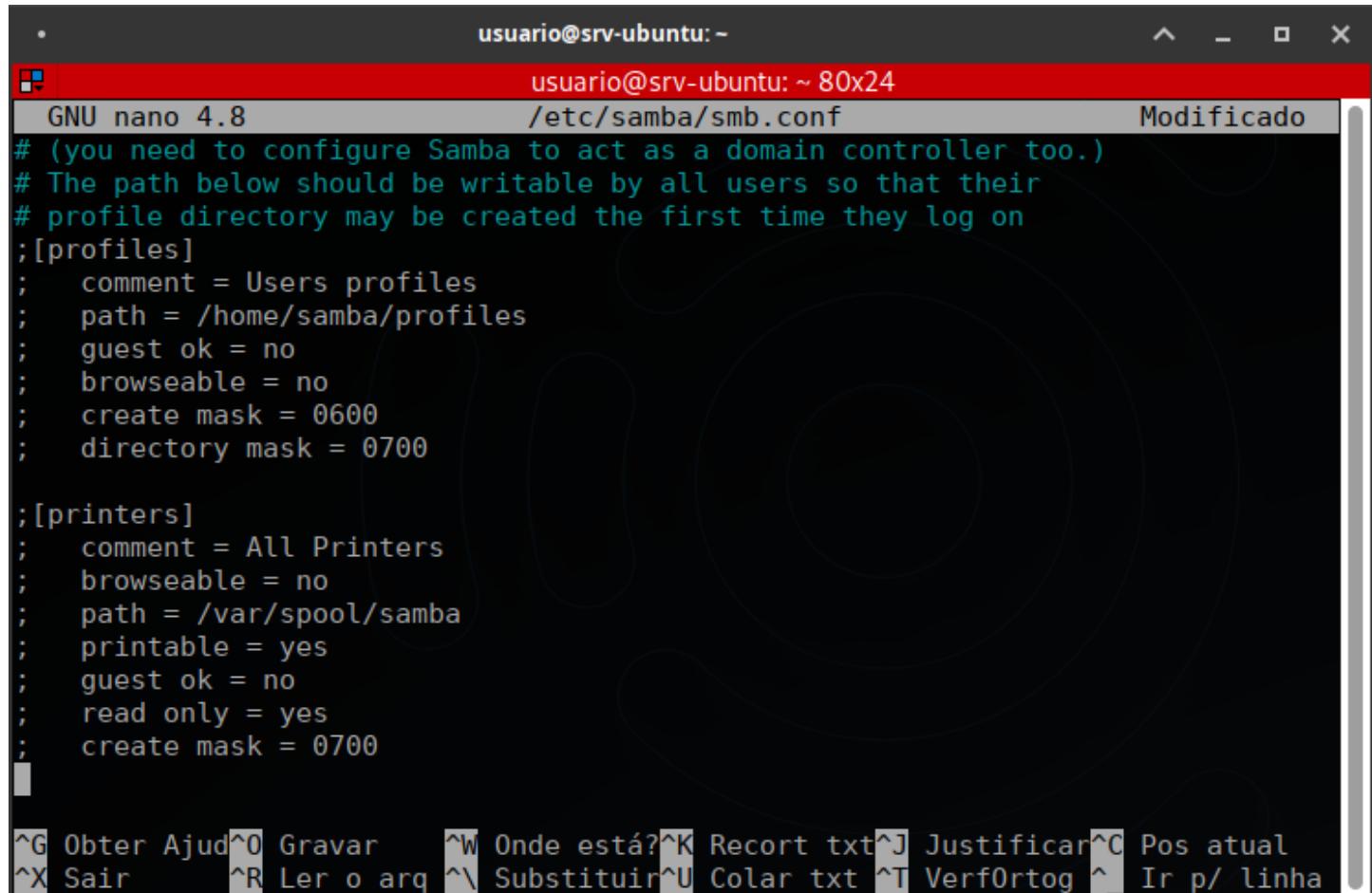
Nome NetBIOS
netbios name = srv-ubuntu

Networking ####

The specific set of interfaces / networks to bind to
This can be either the interface name or an IP address/netmask;

^G Obter Ajud^O Gravar ^W Onde está?^K Recort txt^J Justificar^C Pos atual
^X Sair ^R Ler o arq ^\ Substituir^U Colar txt ^T Verf0rtog ^ Ir p/ linha
```

- Comentar as sessões `[printers]` e `[print$]`, inserindo ; (ponto-e-vírgula) no início das linhas



```
usuario@srv-ubuntu: ~ 80x24
GNU nano 4.8 /etc/samba/smb.conf Modificado
(you need to configure Samba to act as a domain controller too.)
The path below should be writable by all users so that their
profile directory may be created the first time they log on
;[profiles]
; comment = Users profiles
; path = /home/samba/profiles
; guest ok = no
; browseable = no
; create mask = 0600
; directory mask = 0700

;[printers]
; comment = All Printers
; browseable = no
; path = /var/spool/samba
; printable = yes
; guest ok = no
; read only = yes
; create mask = 0700
```

^G Obter Ajud ^O Gravar ^W Onde está? ^K Recort txt ^J Justificar ^C Pos atual  
^X Sair ^R Ler o arq ^\ Substituir ^U Colar txt ^T VerfOrtog ^ Ir p/ linha

- Incluir compartilhamento [pga-storage]

**[pga-storage]**

```
path = /var/lib/pgadmin/storage
browseable = yes
writable = yes
create mask = 0660
admin users = www-data
valid users = www-data
```

```
usuario@srv-ubuntu: ~
usuario@srv-ubuntu: ~ 80x24
GNU nano 4.8
/etc/samba/smb.conf

; read only = yes
; guest ok = no
Uncomment to allow remote administration of Windows print drivers.
You may need to replace 'lpadmin' with the name of the group your
admin users are members of.
Please note that you also need to set appropriate Unix permissions
to the drivers directory for these users to have write rights in it
; write list = root, @lpadmin

[pga-storage]
comment = Storage de usuários do PgAdmin 4
path = /var/lib/pgadmin/storage/
browseable = yes
readonly = no
writable = yes
create mask = 0660
admin users = www-data
valid users = www-data

[Escritas 254 linhas]
^G Obter Ajud^O Gravar ^W Onde está?^K Recort txt^J Justificar^C Pos atual
^X Sair ^R Ler o arq ^\ Substituir^U Colar txt ^T VerfOrtog ^_ Ir p/ linha
```

[ctrl+S] para salvar

[ctrl+X] para sair

- Incluir usuário www-data no samba

```
sudo smbpasswd -a www-data
```

The screenshot shows a terminal window titled "usuario@srv-ubuntu: ~". The command "sudo smbpasswd -a www-data" is being run. The terminal asks for a new SMB password and then re-prompts for confirmation. The user has entered the password twice. The terminal then displays the message "Added user www-data.".

```
usuario@srv-ubuntu:~$ sudo smbpasswd -a www-data
New SMB password:
Retype new SMB password:
Added user www-data.
usuario@srv-ubuntu:~$
```

- Reiniciar o serviço do samba

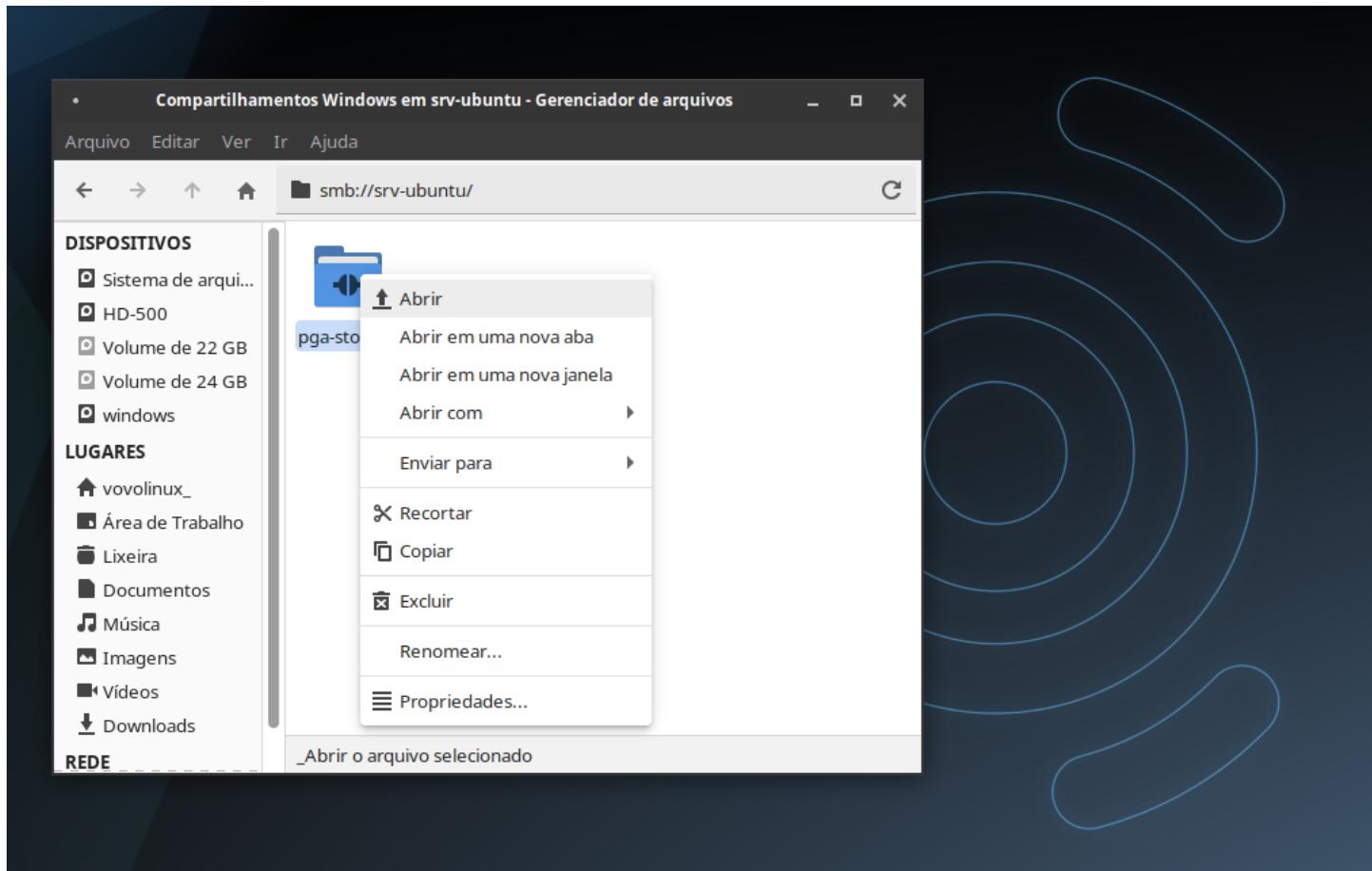
```
sudo systemctl restart smbd.service
```

## 12.Acessar o compartilhamento utilizando cliente Linux

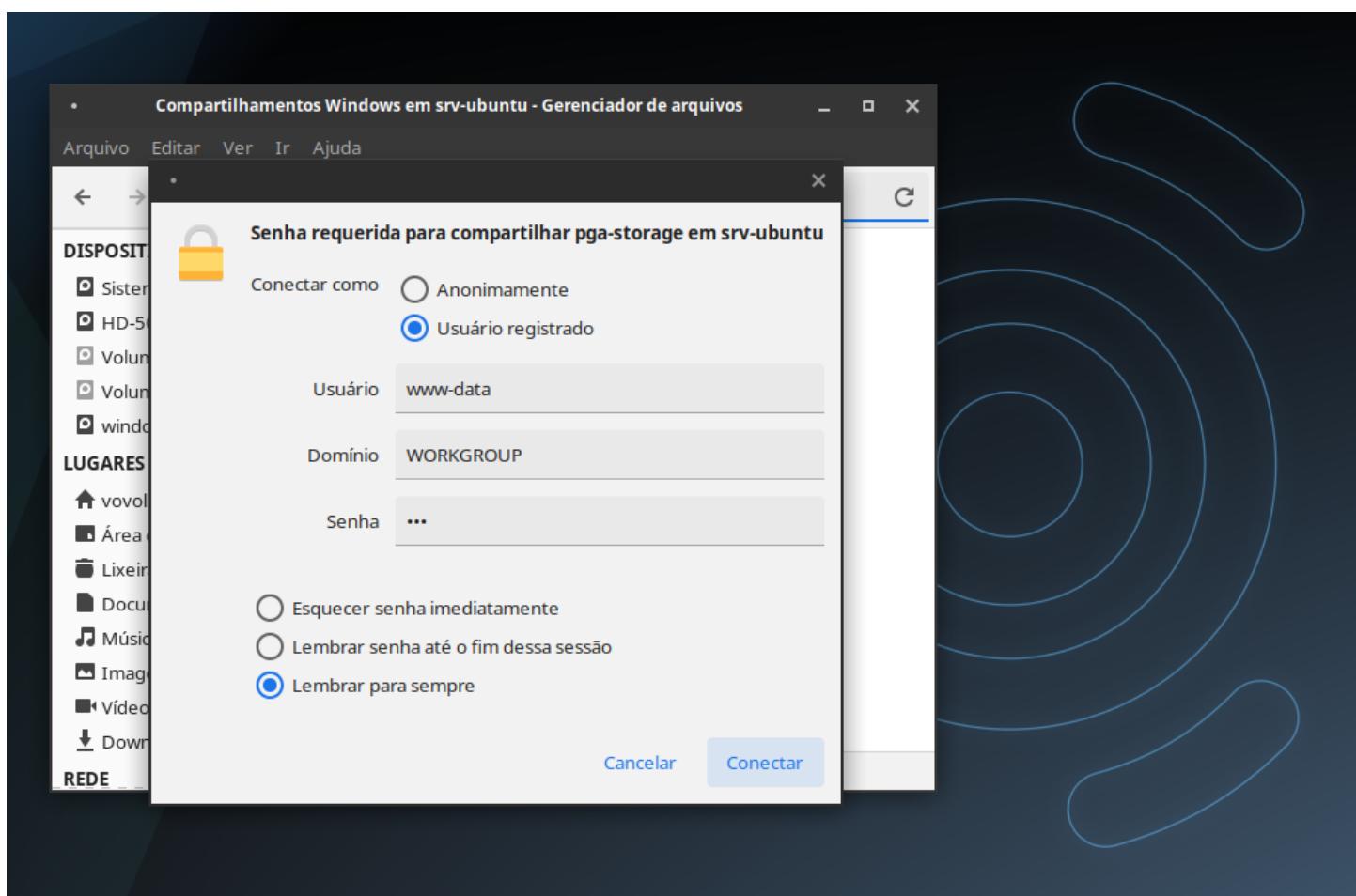
- Digite o endereço do servidor no gerenciador de arquivos

smb://srv-ubuntu/

- Clique direito no diretório pga-storage, depois em Abrir

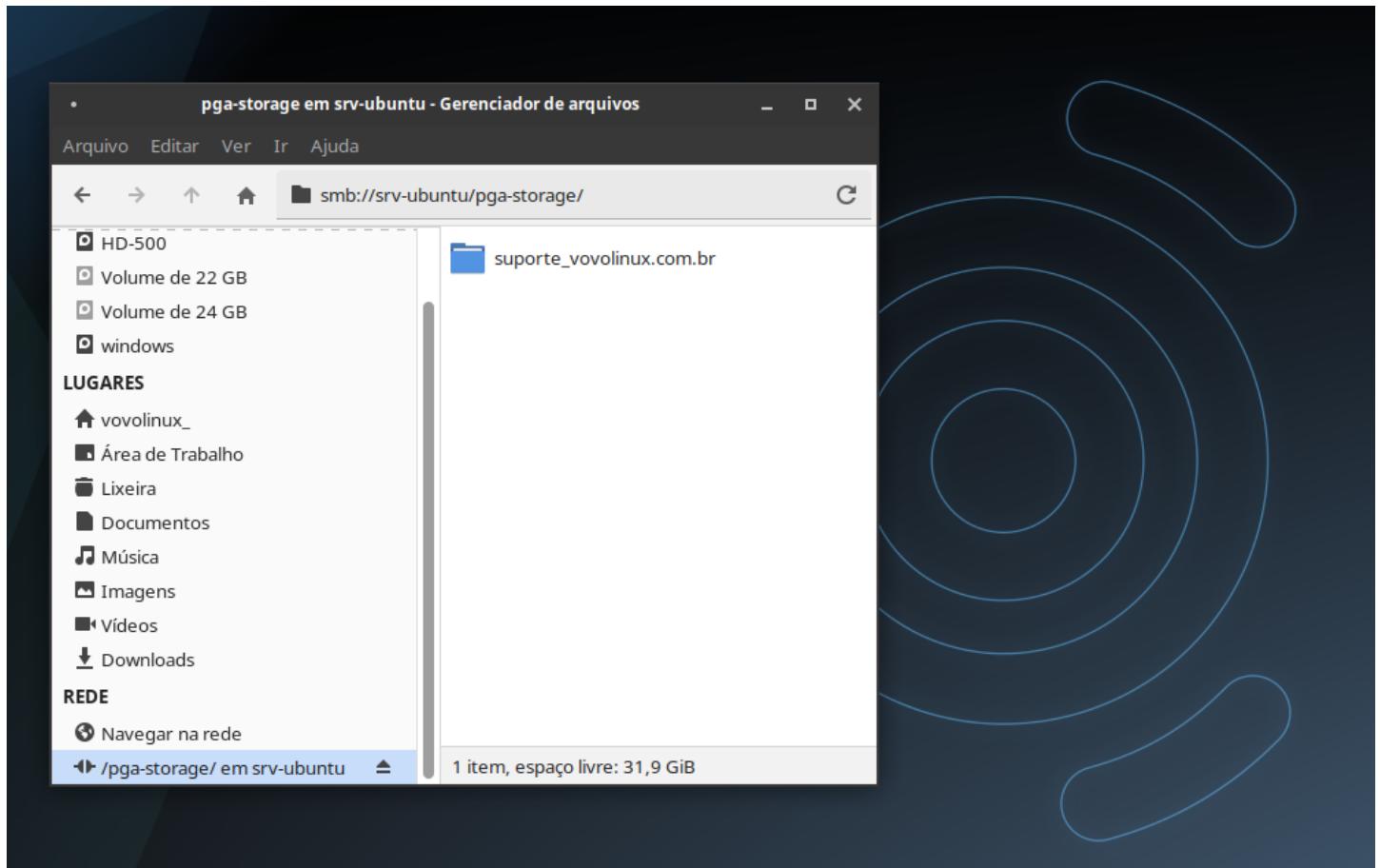


- Informe as credenciais de rede, marcando a opção para lembrar, depois clique em Conectar



Serão exibidos os diretórios dos usuários do PgAdmin4.

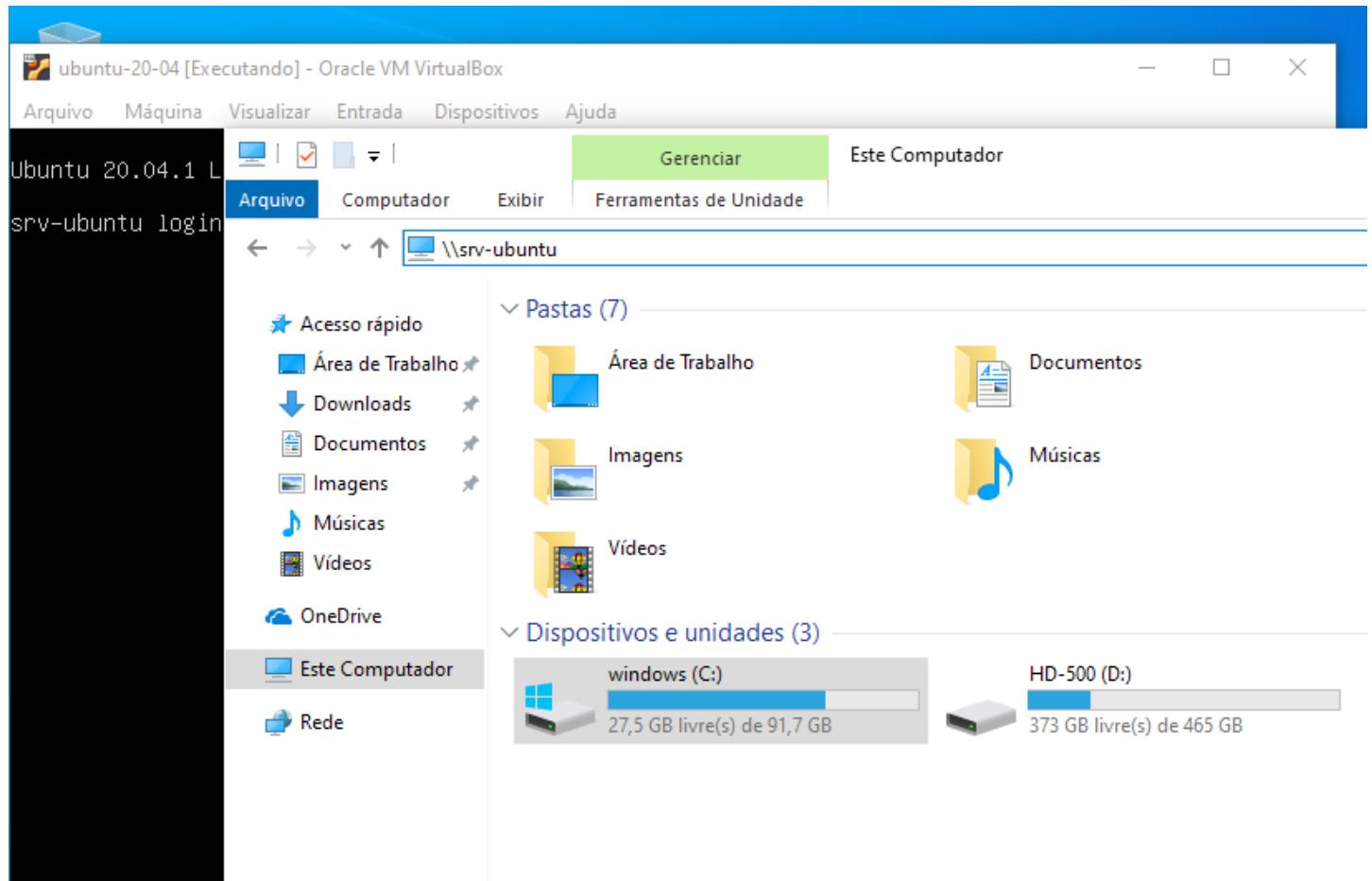
Os diretórios serão utilizados para fazer uploads e execuções de scripts pelo Query Tools do PgAdmin4.



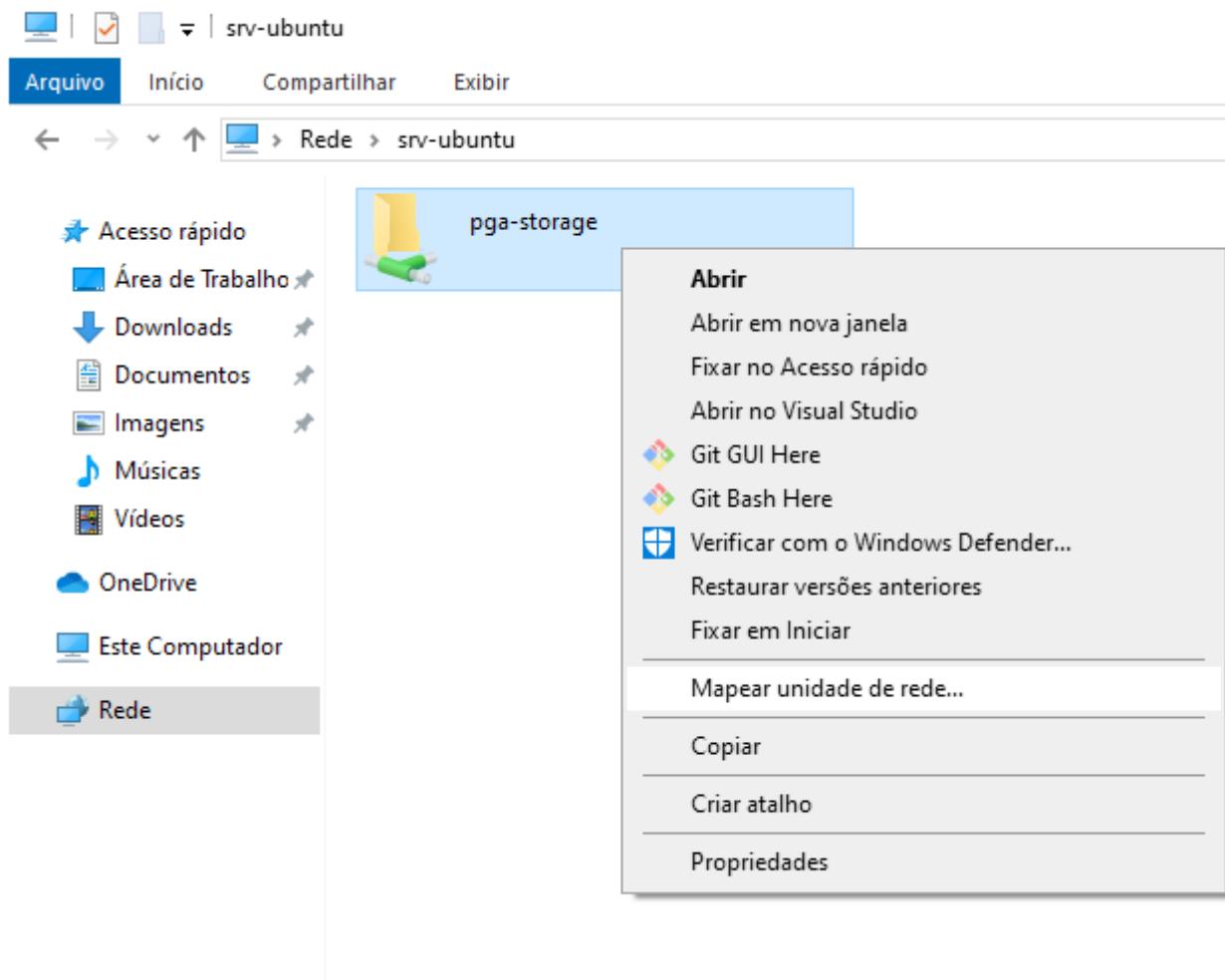
## 13.Acessar o compartilhamento utilizando cliente Windows

- Digite o endereço do servidor no gerenciador de arquivos

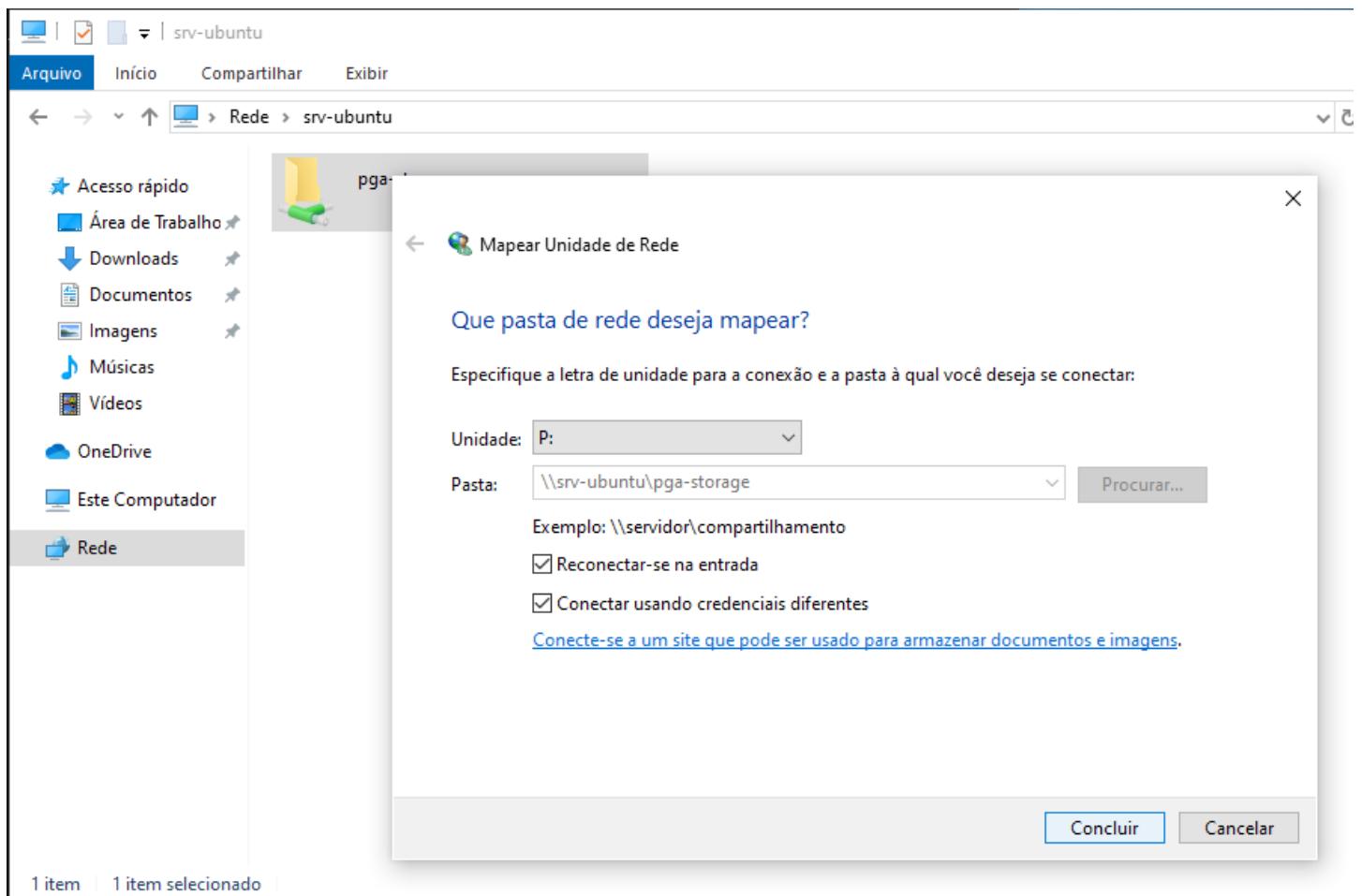
**\\\sr&v-ubuntu**



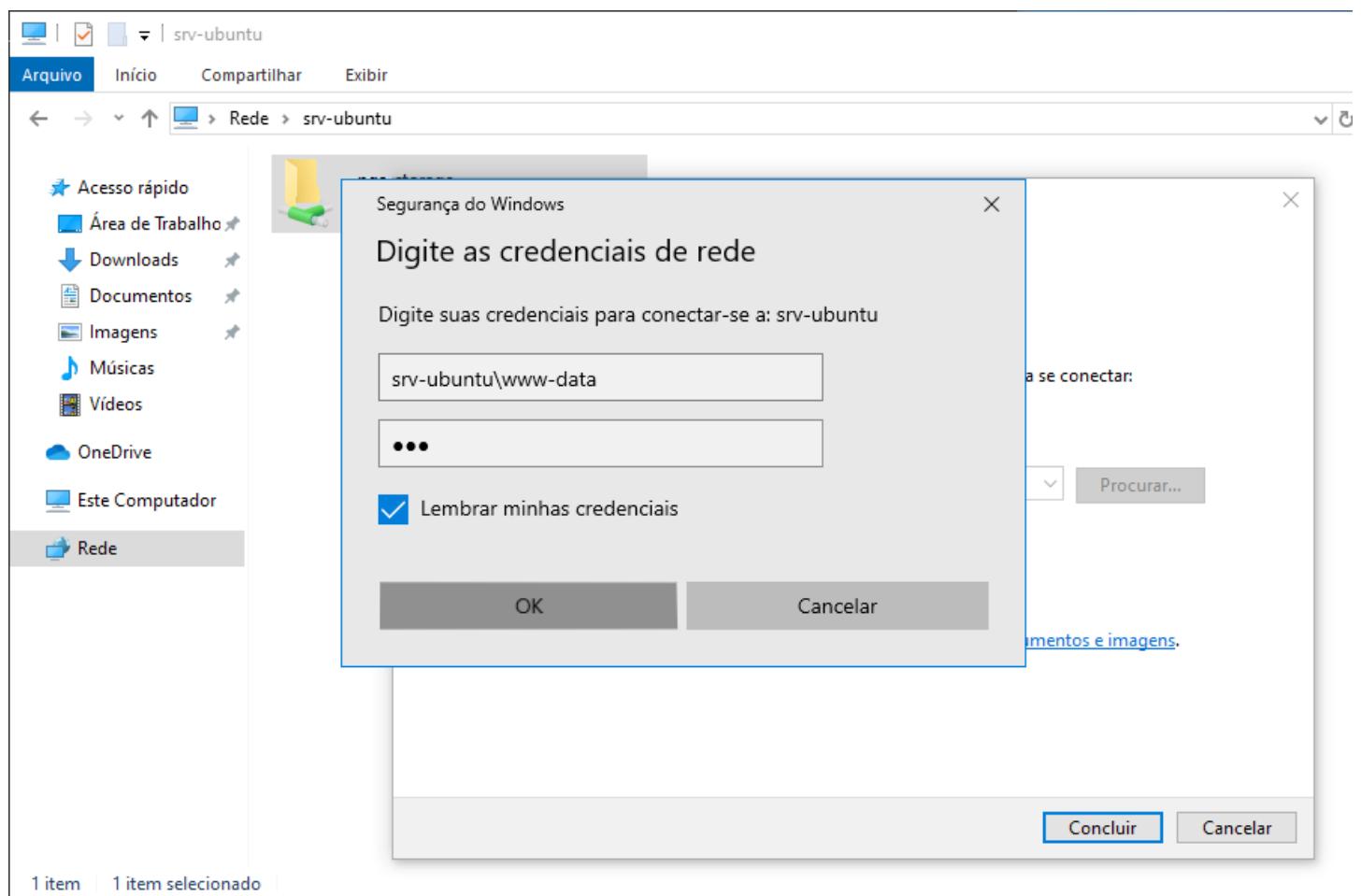
- Clique direito no diretório **pga-storage**, depois em Mapear unidade de rede...



- Selecione a letra da unidade, e marque as opções de **Reconectar-se na entrada** e **Conectar usando credenciais diferentes**

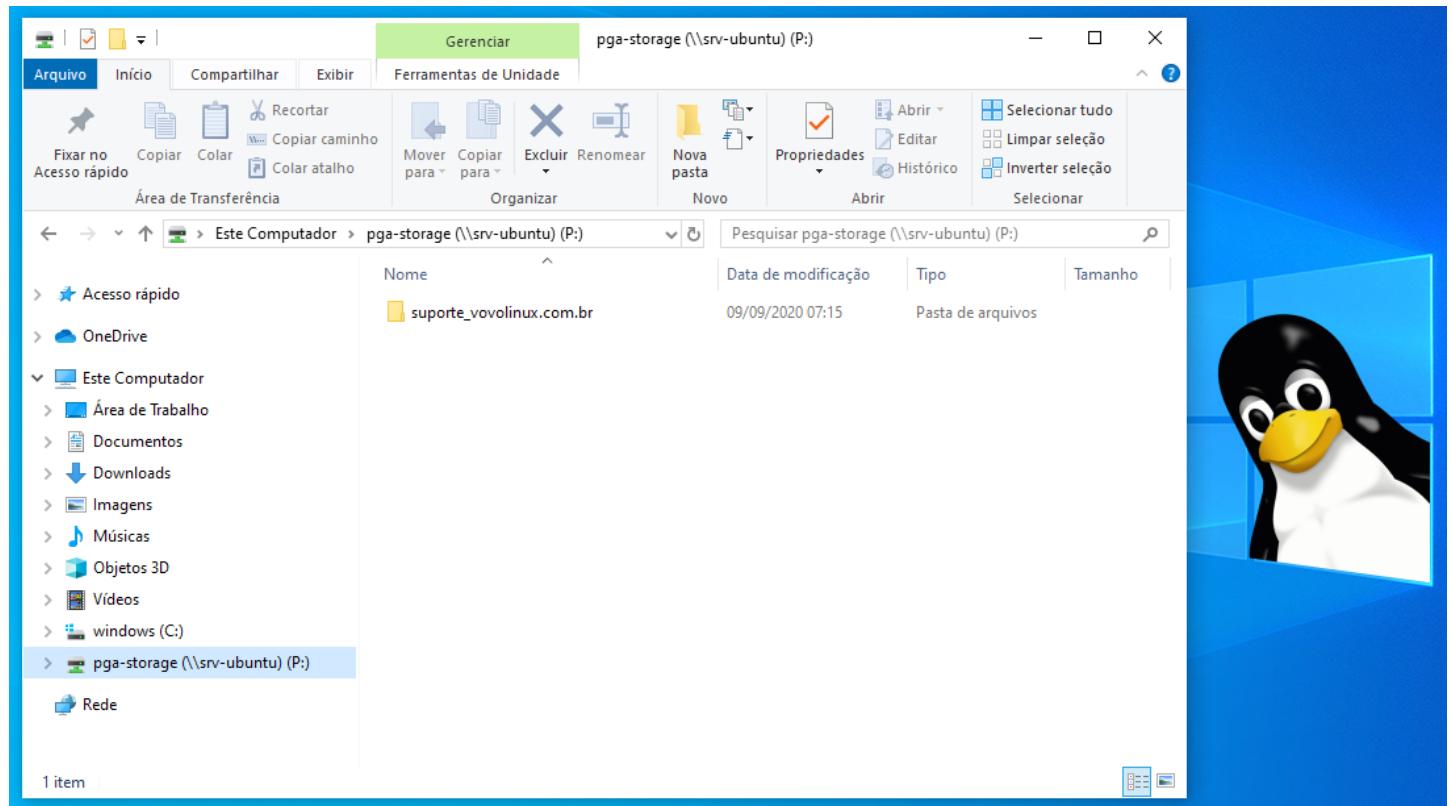


- Informe as credenciais de rede, marcando a opção para lembrar, depois clique em **OK**



Serão exibidos os diretórios dos usuários do PgAdmin4.

Os diretórios serão utilizados para fazer uploads e execuções de scripts pelo Query Tools do PgAdmin4.



**Só isso.**

**Simples como voar, sem trauma e sem teoria.**

**Compartilhar o conhecimento é aprender.**

**(Vovolinux, ou alguém que não me lembro agora)**

GitHub:

<https://github.com/vinicioalopes>

Youtube:

<https://www.youtube.com/vovolinux>

<https://www.youtube.com/user/vinicioalopesGO>

