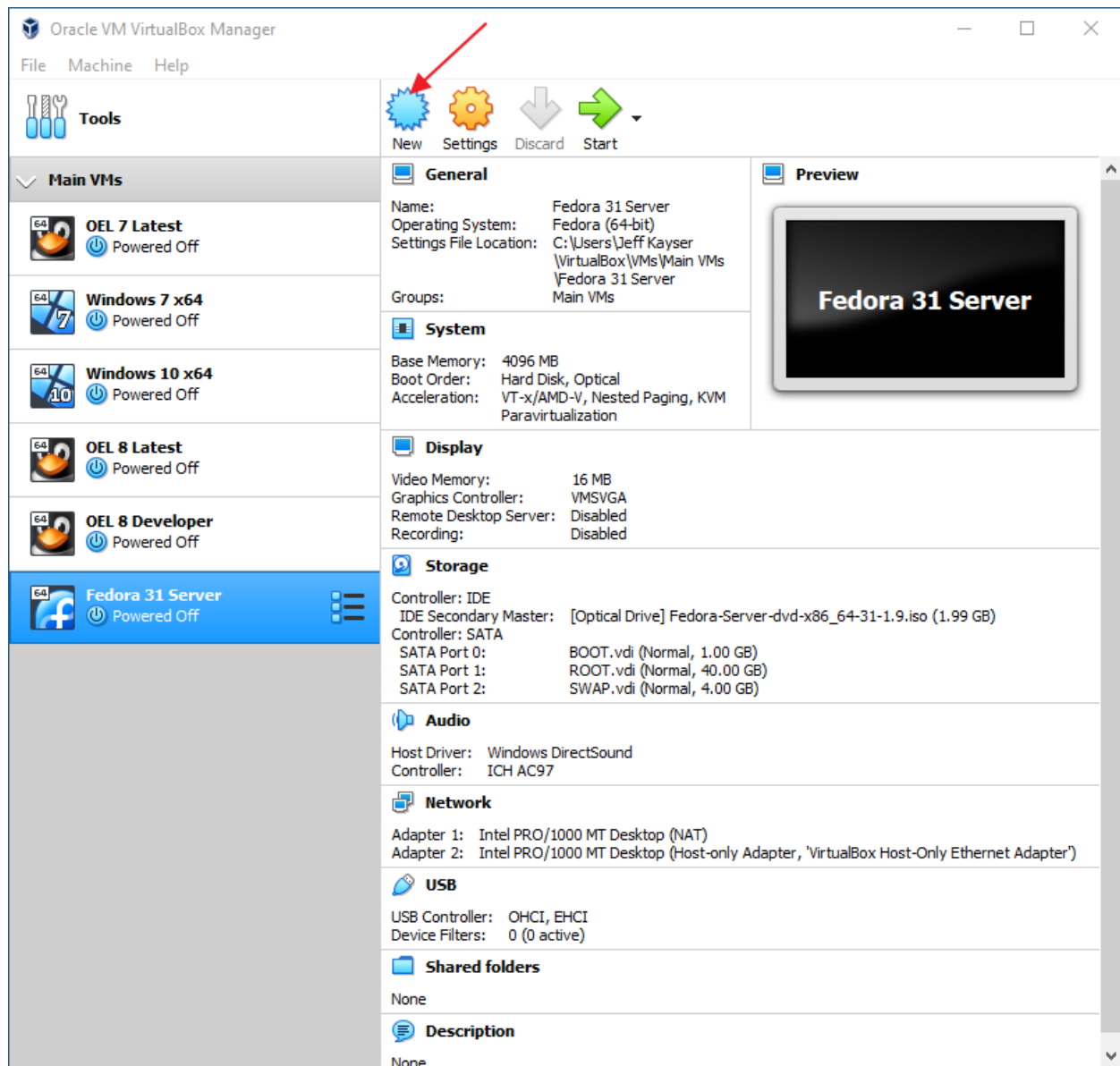


## Step 035 – Create Fedora 31 Workstation VM



Click: New

### Step 035 – Create Fedora 31 Workstation VM

← Create Virtual Machine

Name and operating system

Name: **Fedora 31 Developer**

Machine Folder: **C:\Users\Jeff Kayser\VirtualBox\VMs**

Type: **Linux**

Version: **Fedora (64-bit)**

Memory size

4 MB 65536 MB

**4096 MB**

Hard disk

☐ Do not add a virtual hard disk

☒ Create a virtual hard disk now

☐ Use an existing virtual hard disk file

**Windows\_7\_x64-disk2.vdi (Normal, 80.00 GB)**

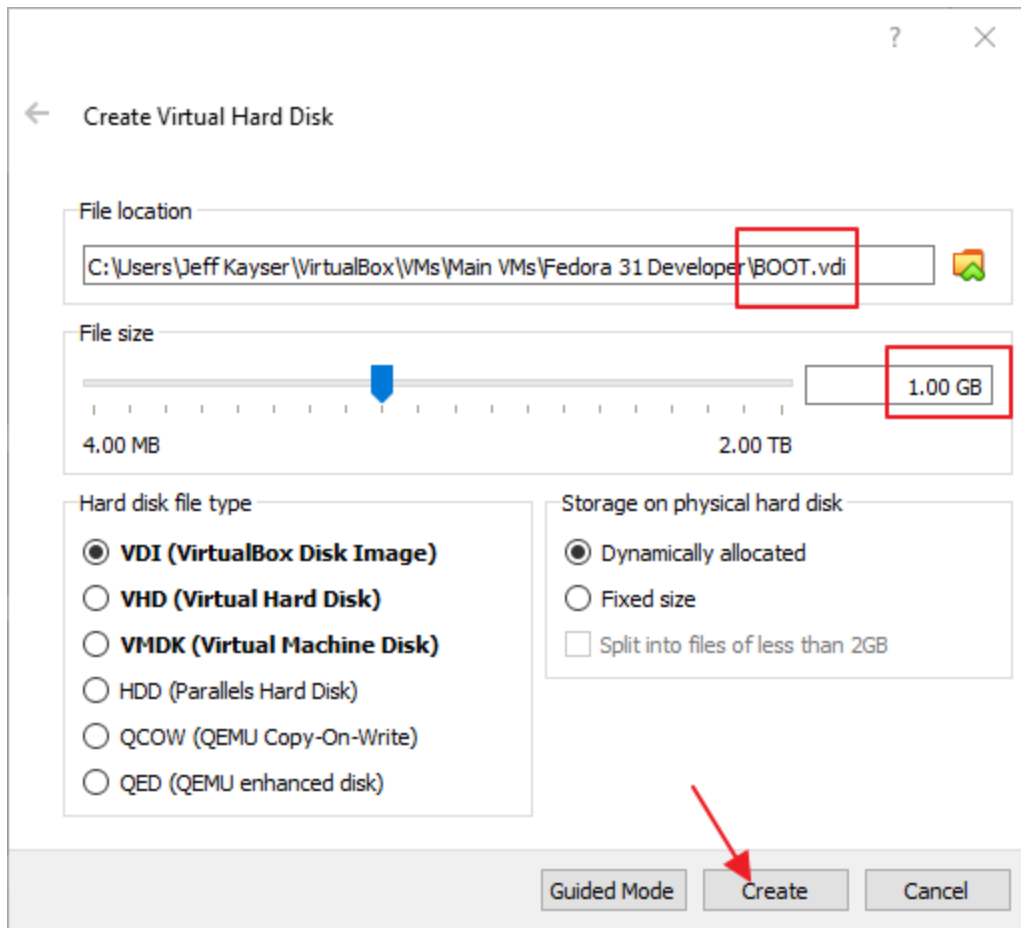
Guided Mode **Create** Cancel

Name: Fedora 31 Developer

Memory Size: 4096

Click: Create

### Step 035 – Create Fedora 31 Workstation VM

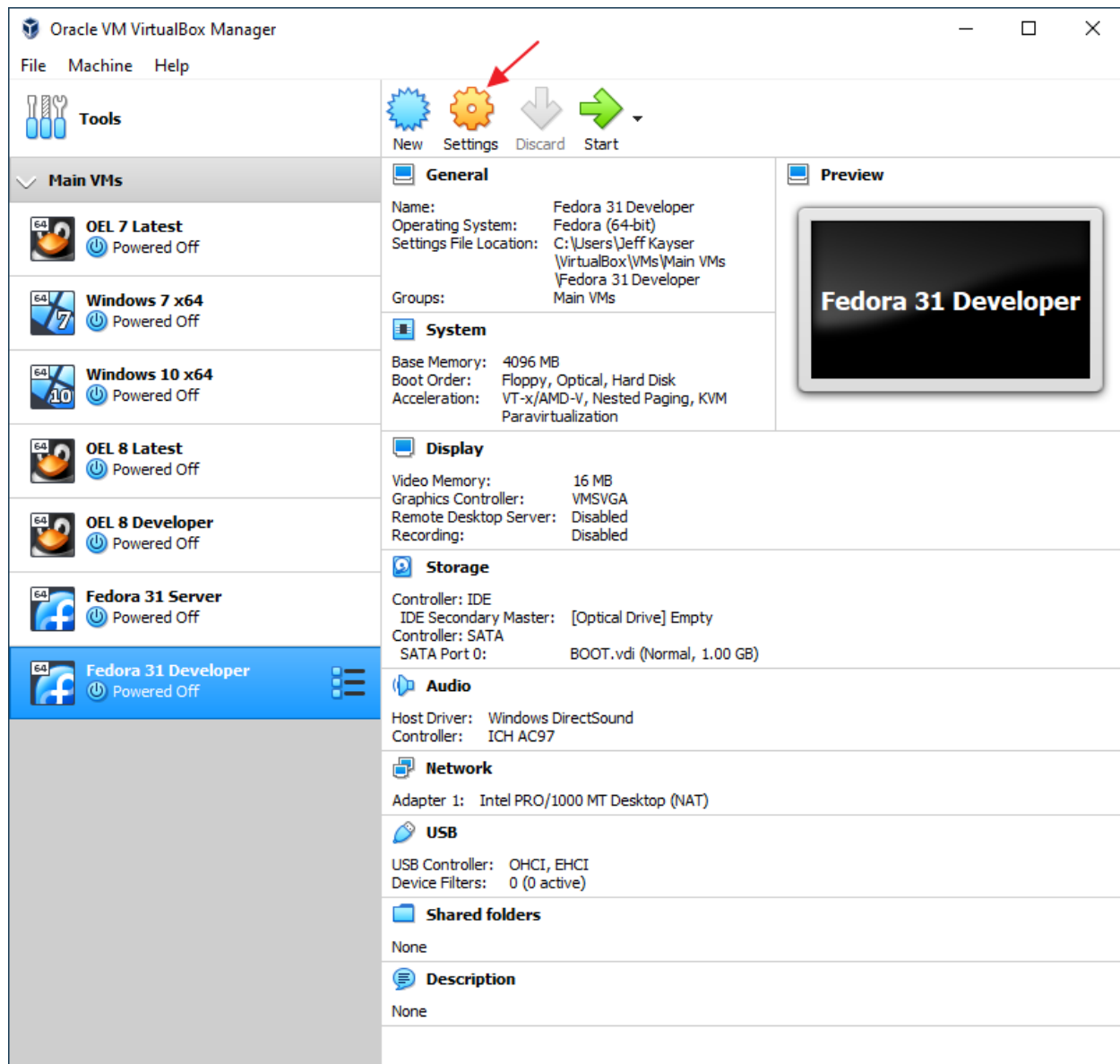


File location: .../BOOT.vdi

Disk size: 1 GB

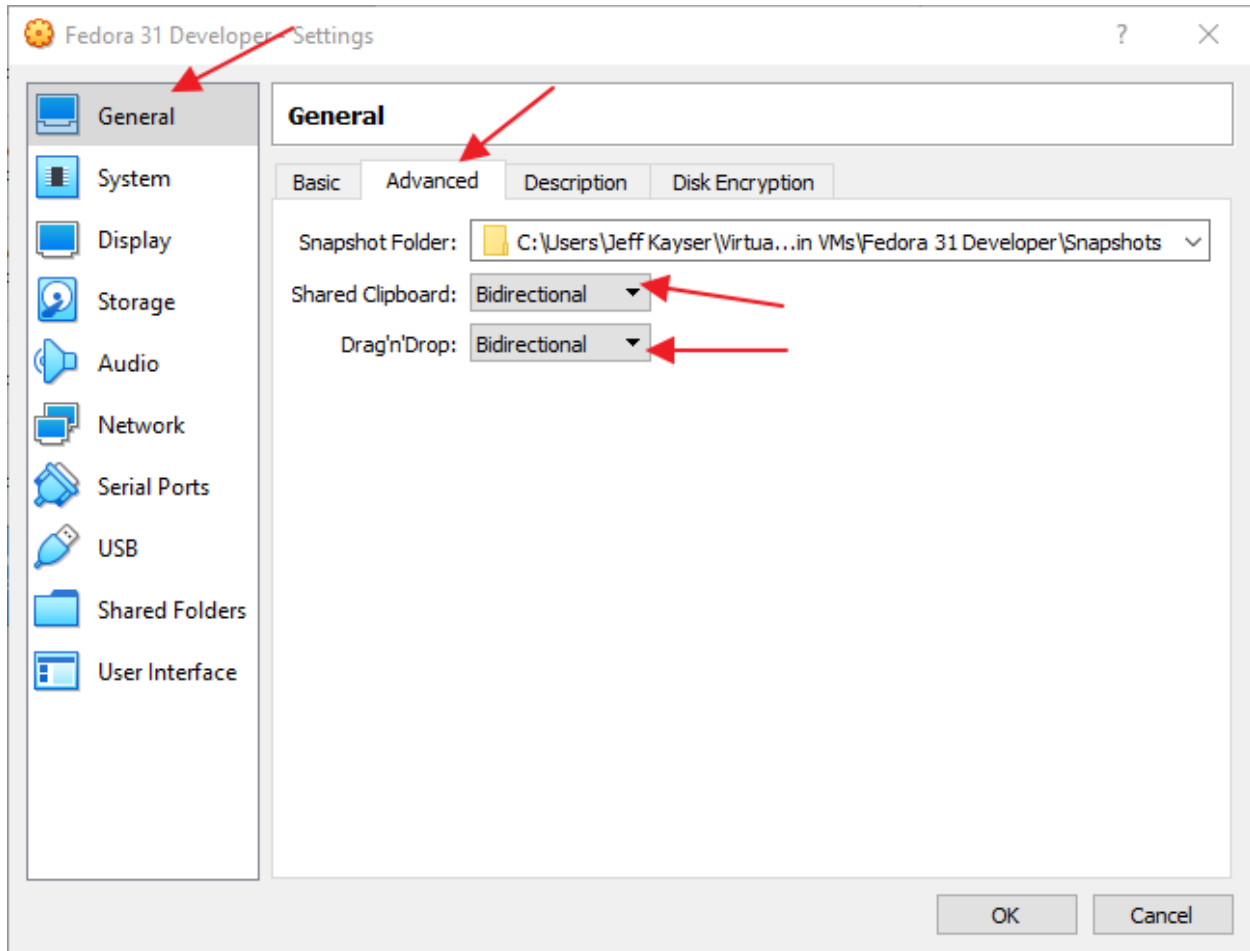
Click: Create

## Step 035 – Create Fedora 31 Workstation VM



Click: Settings

## Step 035 – Create Fedora 31 Workstation VM



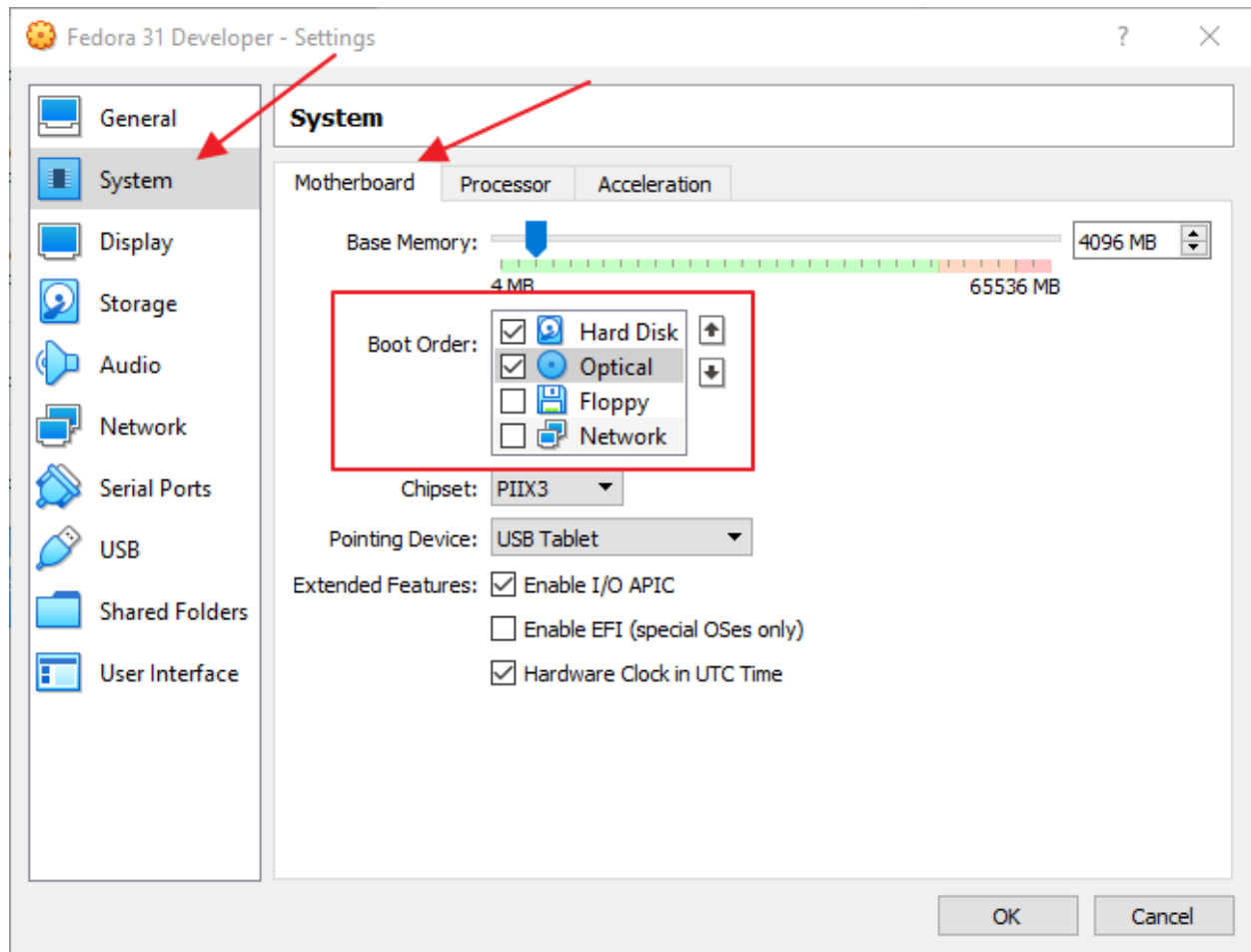
Section: General

Tab: Advanced

Shared Clipboard: Bidirectional

Drag'n'Drop: Bidirectional

## Step 035 – Create Fedora 31 Workstation VM



Section: System

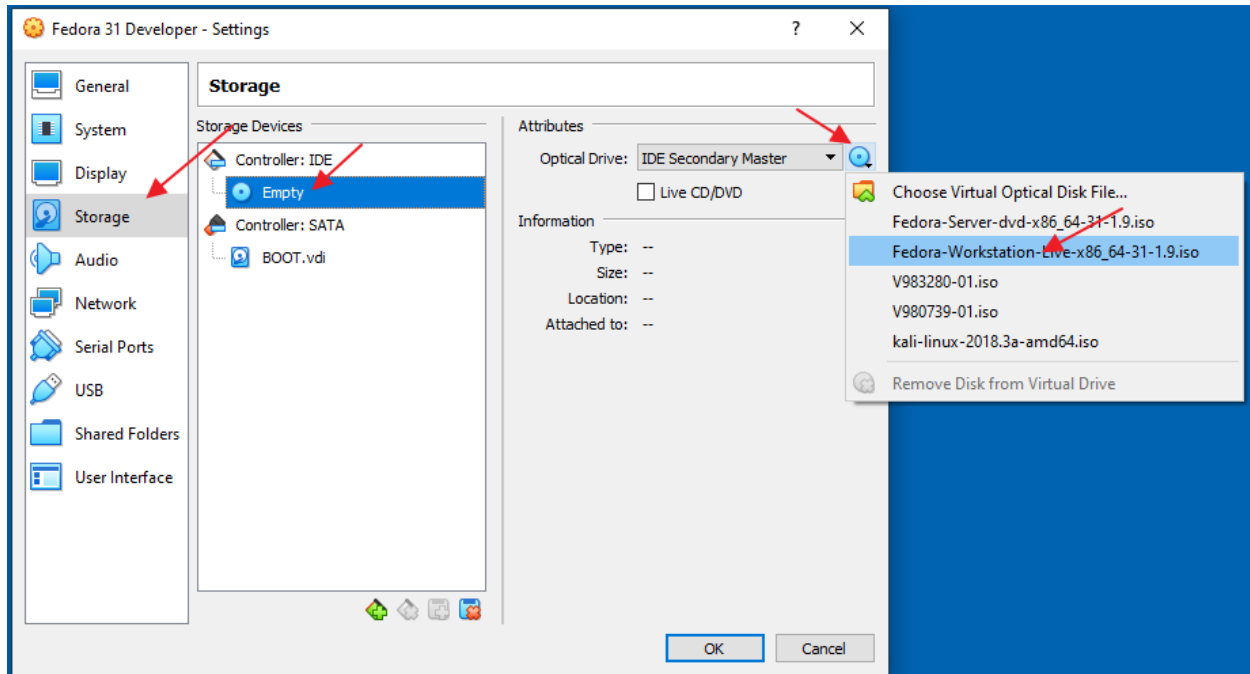
Tab: Motherboard

Boot Order: 1: Hard Disk (checked)

Boot Order: 2: Optical (checked)

Boot Order: 3: Floppy (unchecked)

## Step 035 – Create Fedora 31 Workstation VM



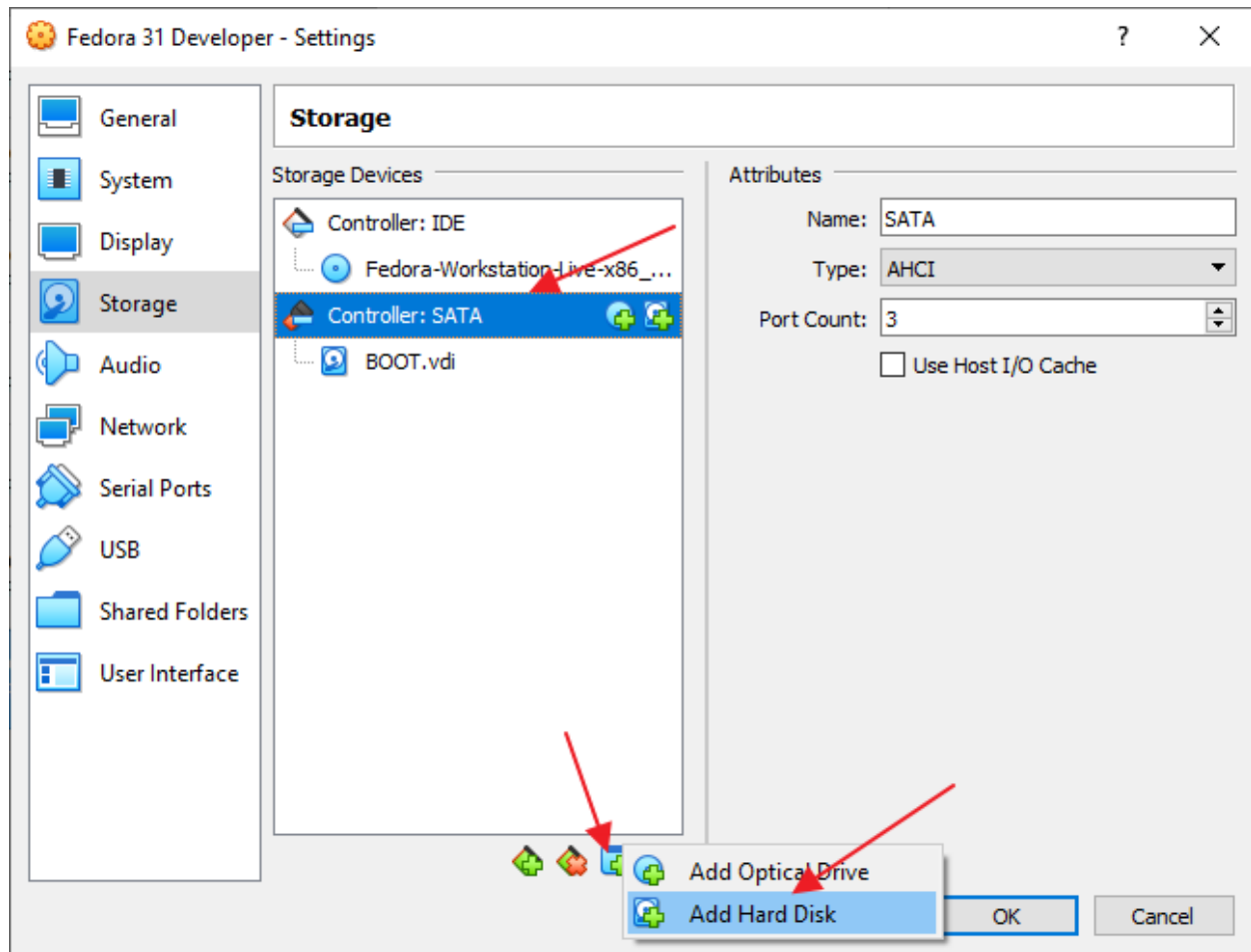
Section: Storage

Click: Optical drive (Empty)

Attributes: Click disk chooser

Click: Fedora Workstation 31 x86\_64 ISO file.

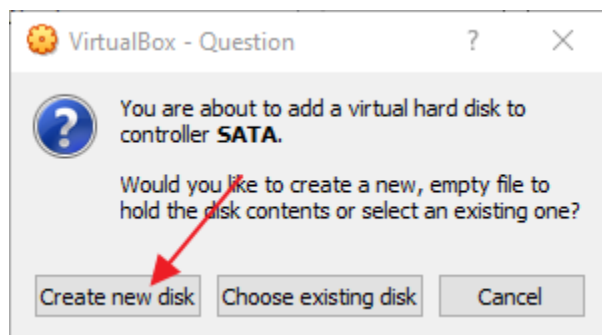
### Step 035 – Create Fedora 31 Workstation VM



Click: Controller: SATA

Click: icon to add storage attachment

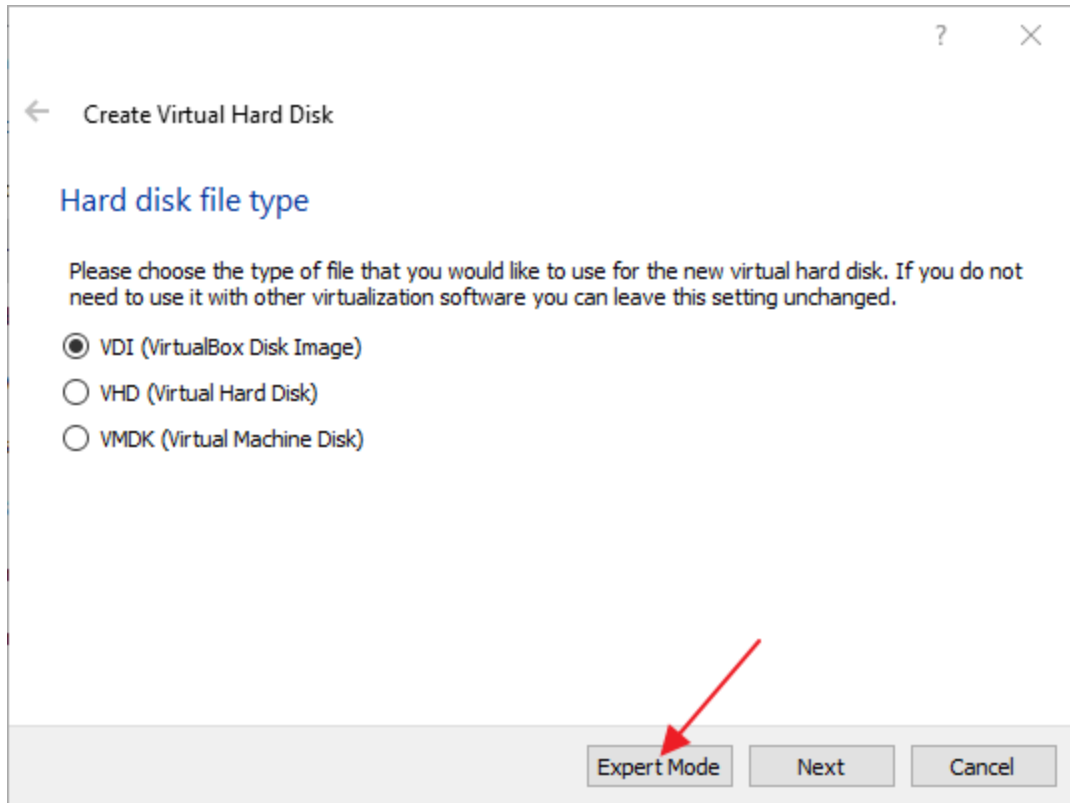
Click: Add Hard Disk



Click: Create new disk

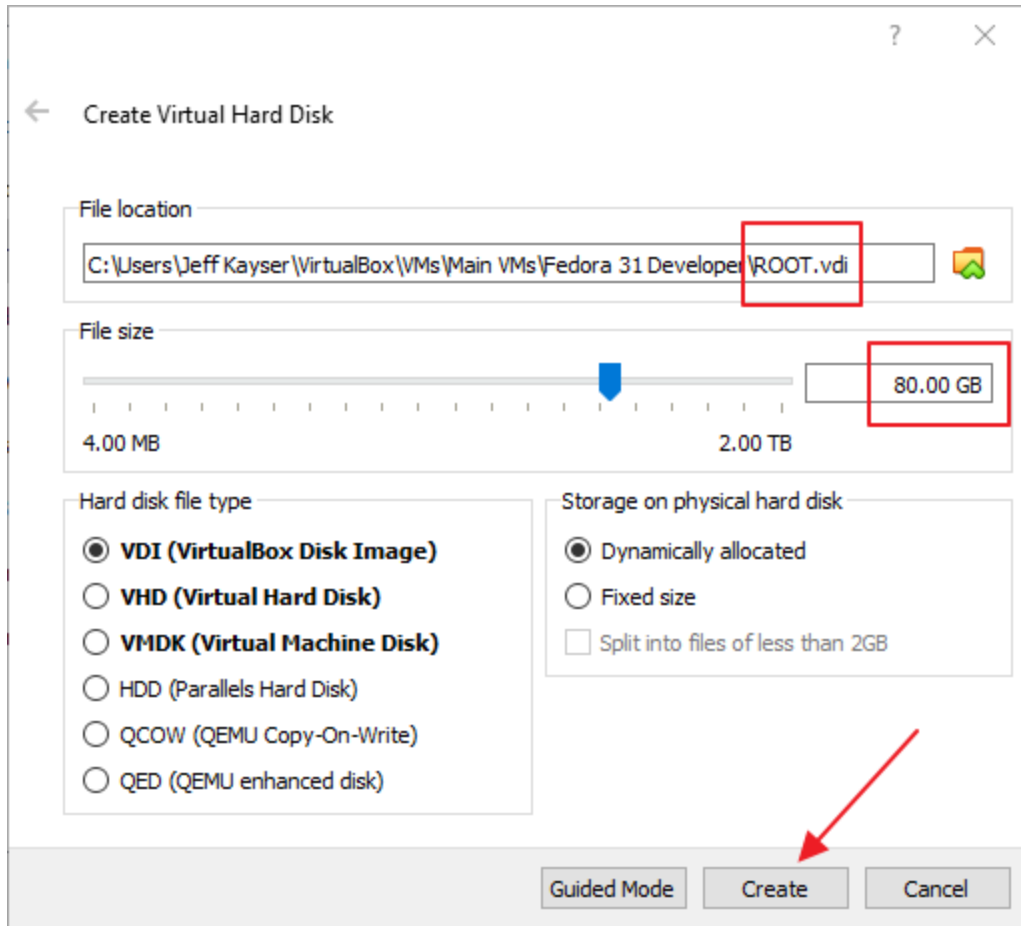


## Step 035 – Create Fedora 31 Workstation VM



Click: Expert Mode

### Step 035 – Create Fedora 31 Workstation VM

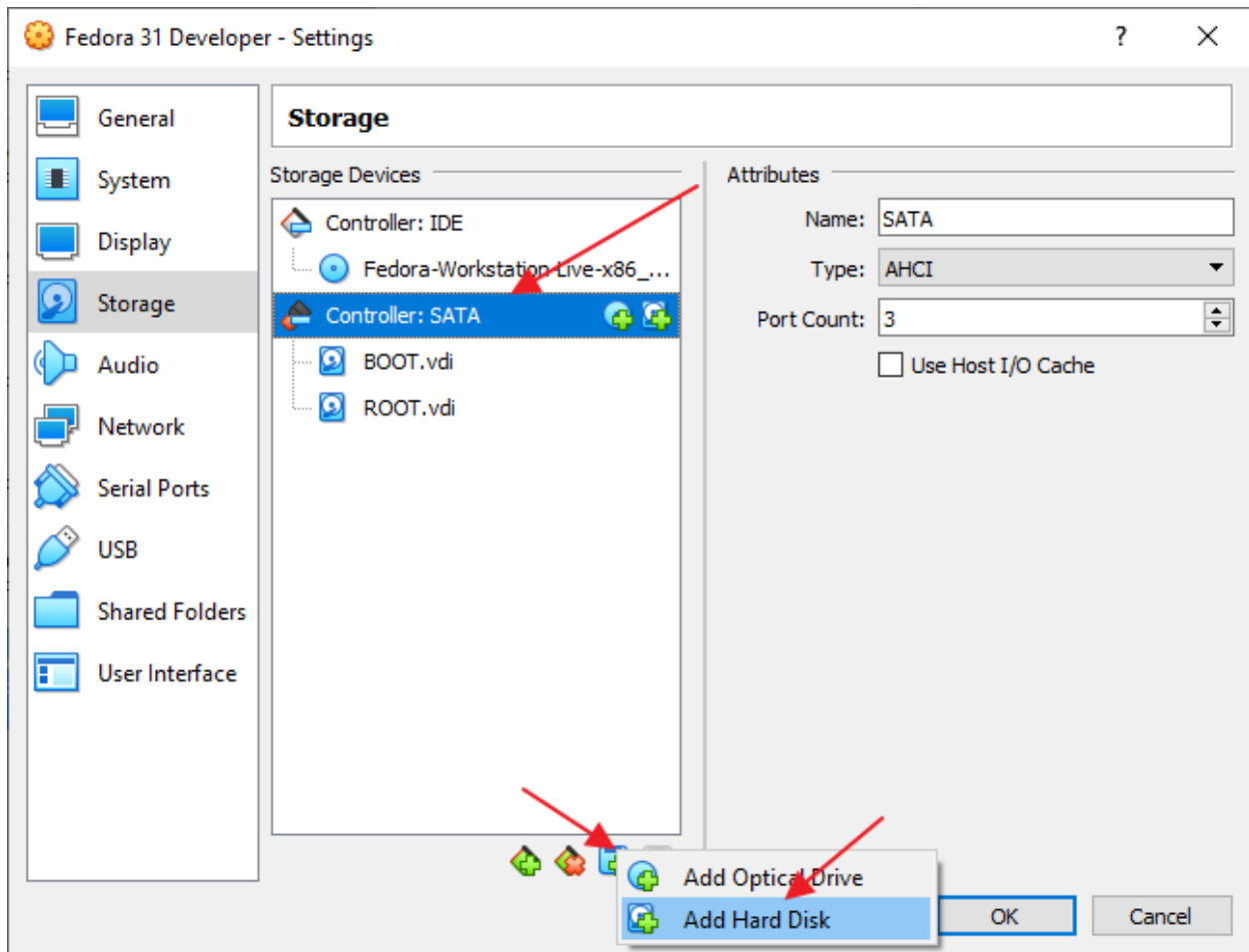


File location: .../ROOT.vdi

File Size: 80 GB

Click: Create

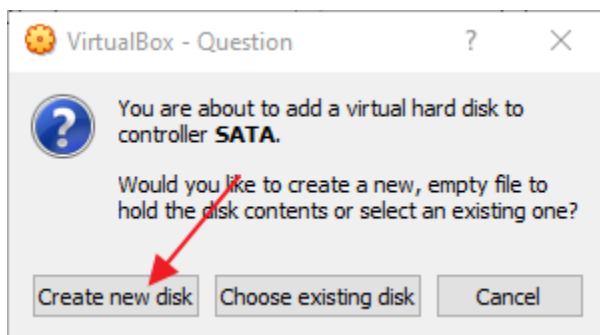
### Step 035 – Create Fedora 31 Workstation VM



Click: Controller: SATA

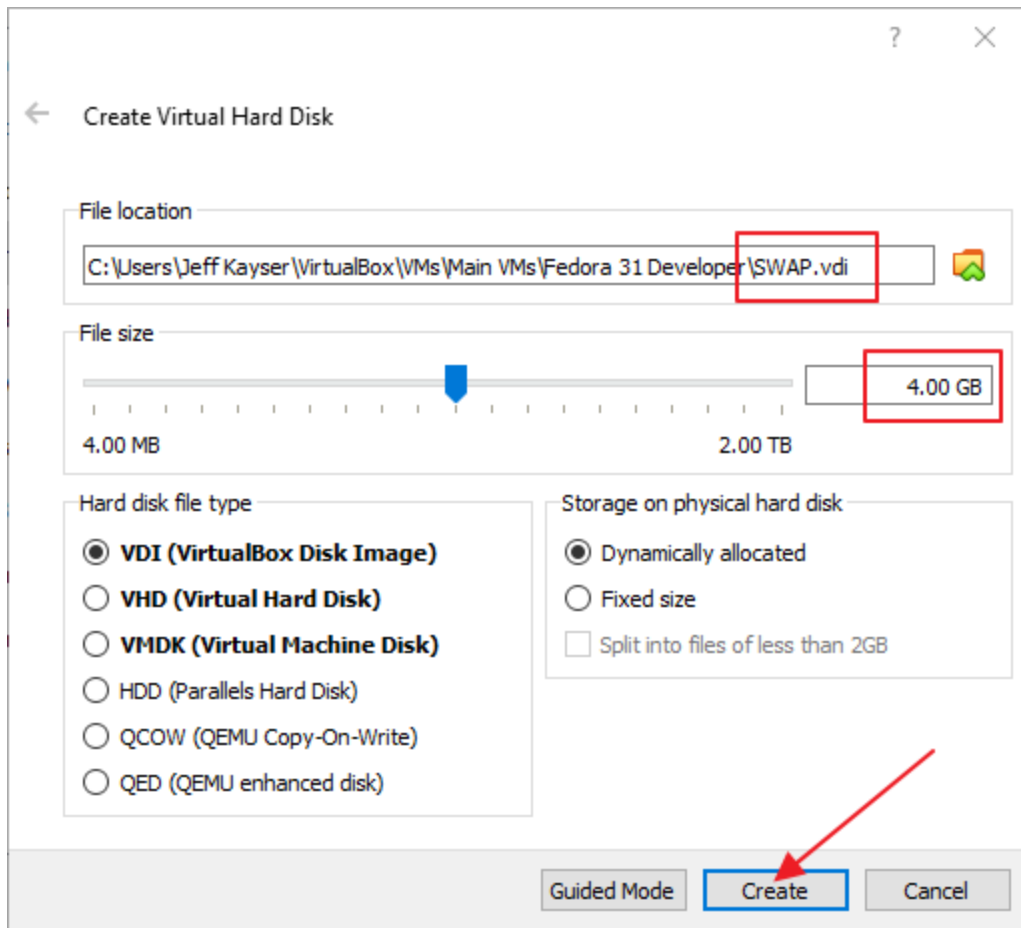
Click: icon to add storage attachment

Click: Add Hard Disk



Click: Create new disk

### Step 035 – Create Fedora 31 Workstation VM

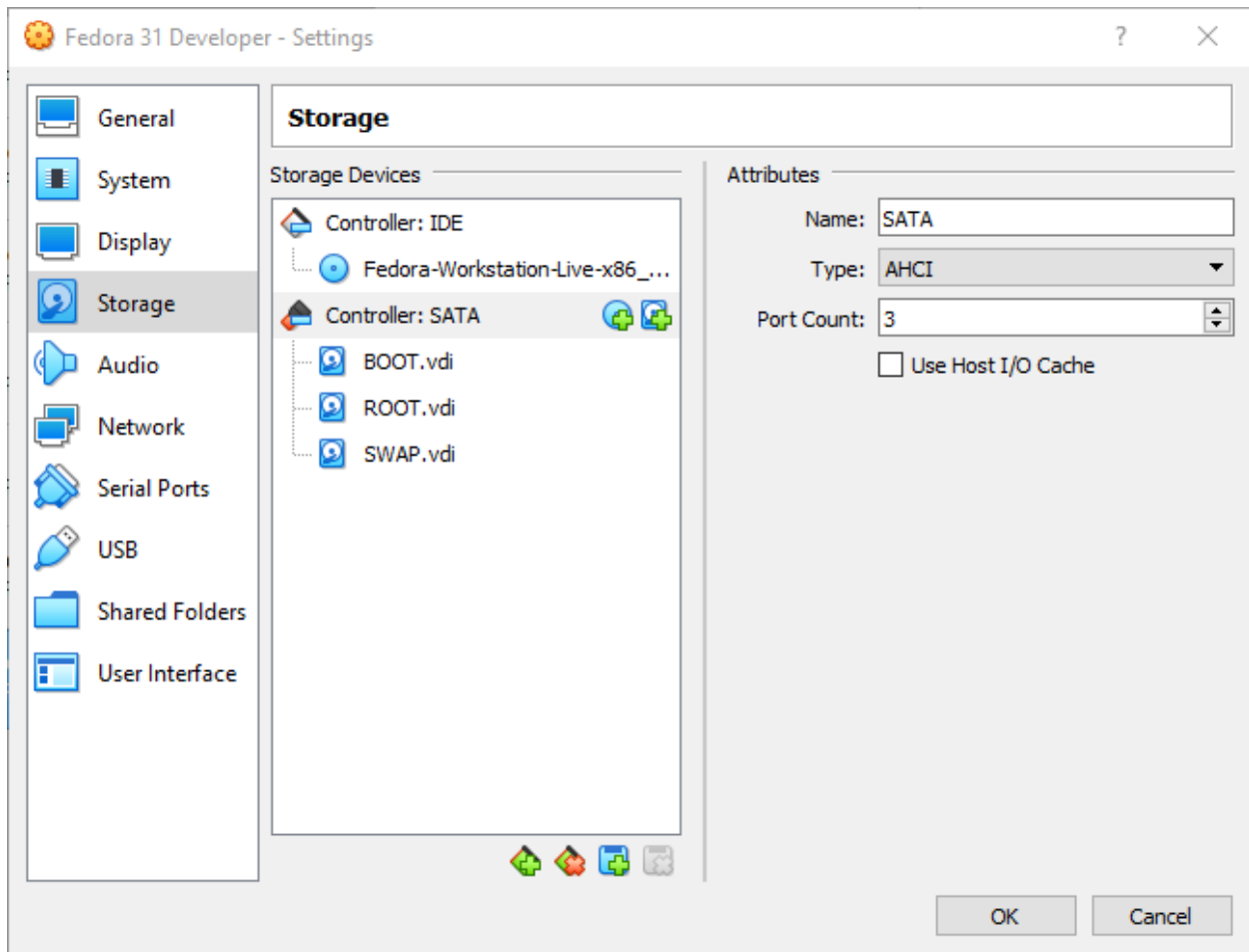


File location: .../SWAP.vdi

File Size: 4 GB

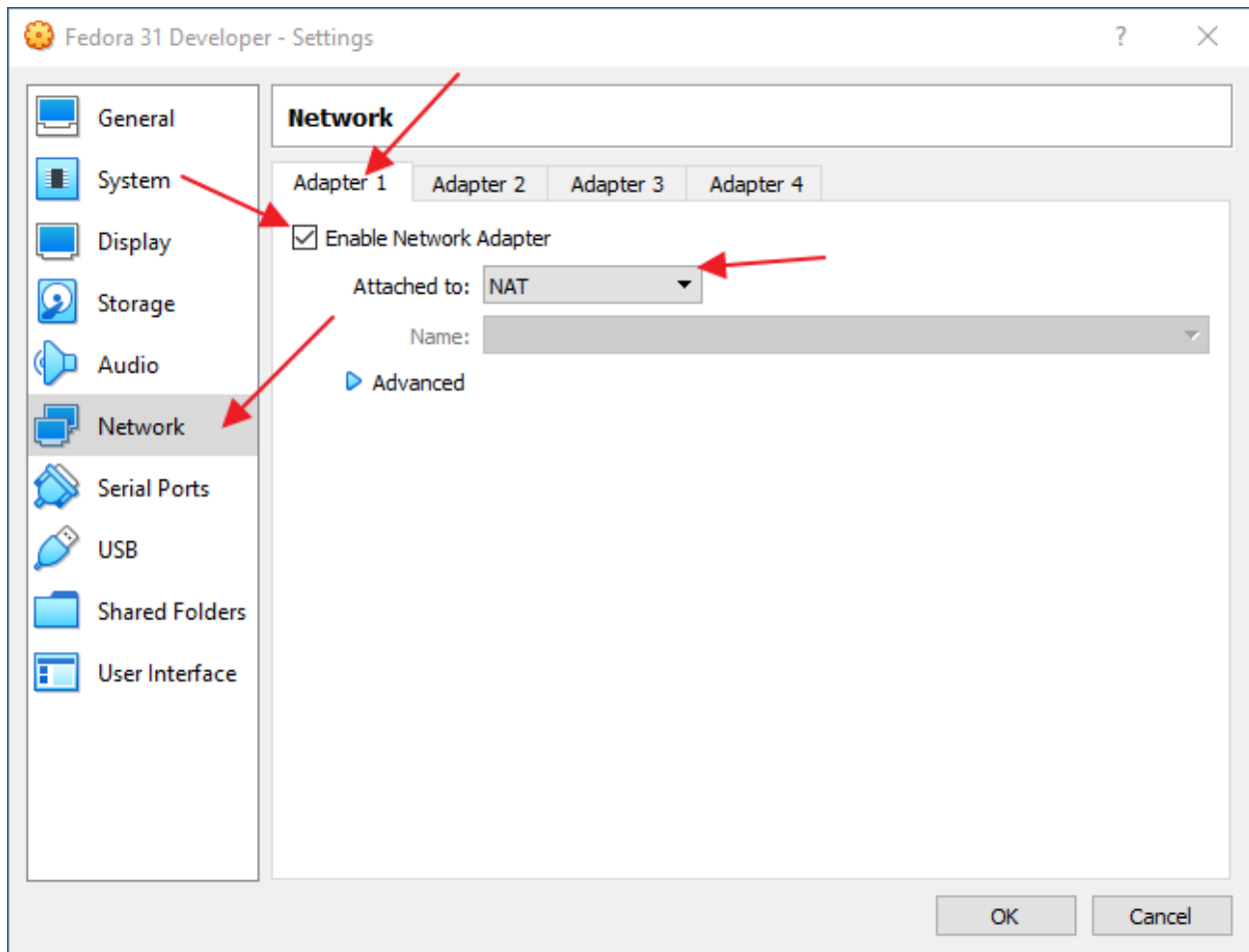
Click: Create

## Step 035 – Create Fedora 31 Workstation VM



Continuing on. . .

## Step 035 – Create Fedora 31 Workstation VM



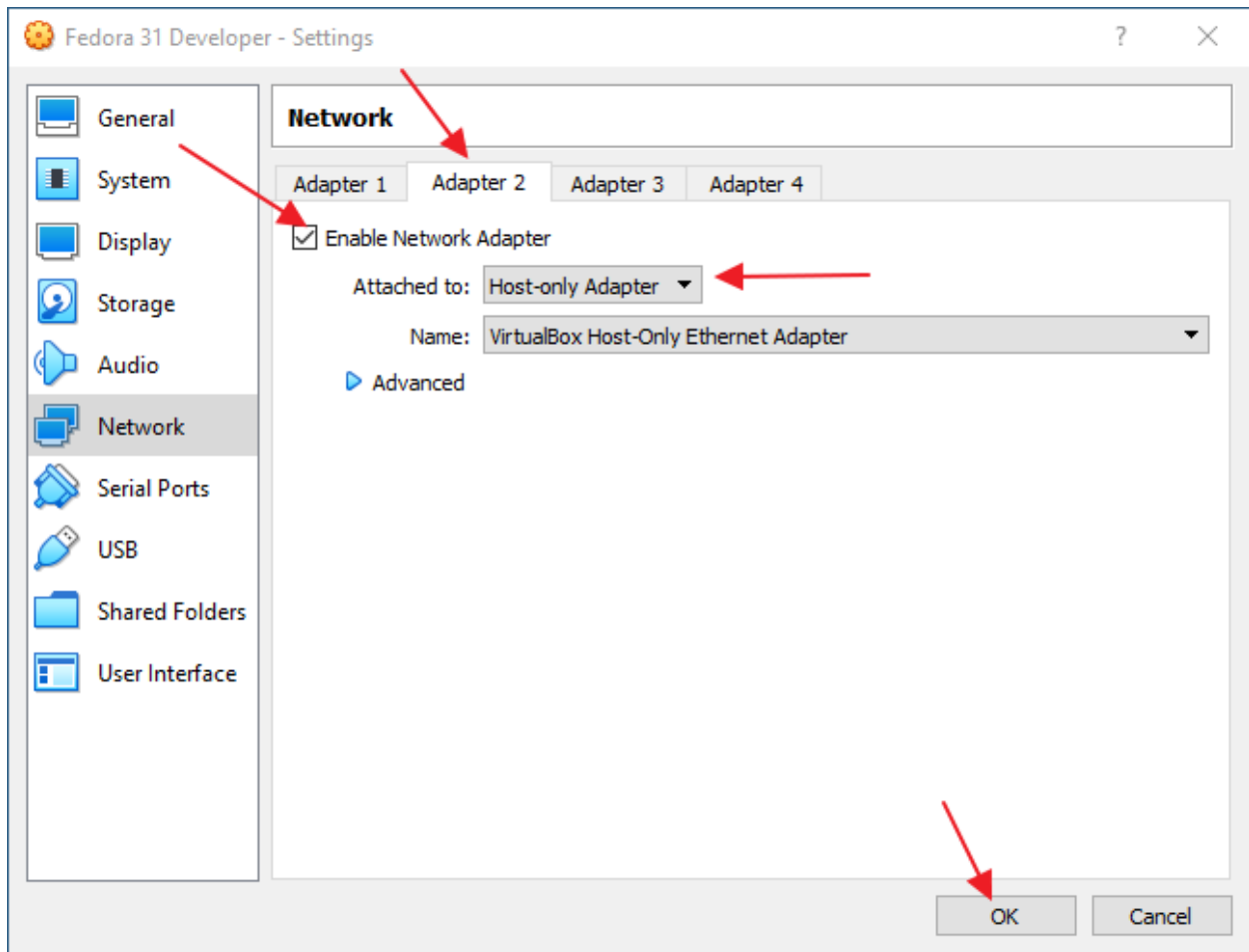
Section: Network

Tab: Adapter 1

Check: Enable Network Adapter

Attached to: NAT

## Step 035 – Create Fedora 31 Workstation VM



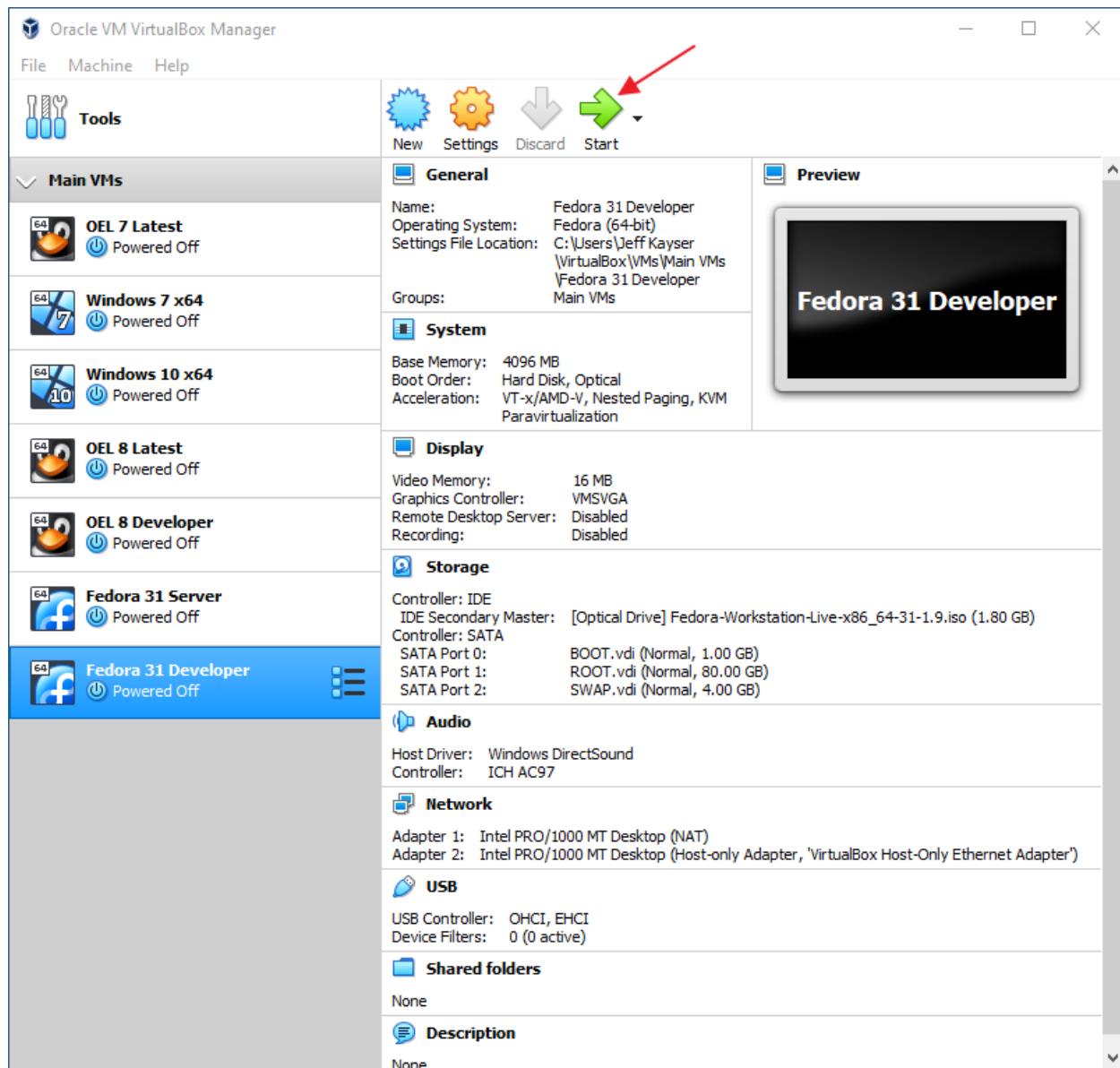
Tab: Adapter 2

Check: Enable Network Adapter

Attached to: Host-only Adapter

Click: OK

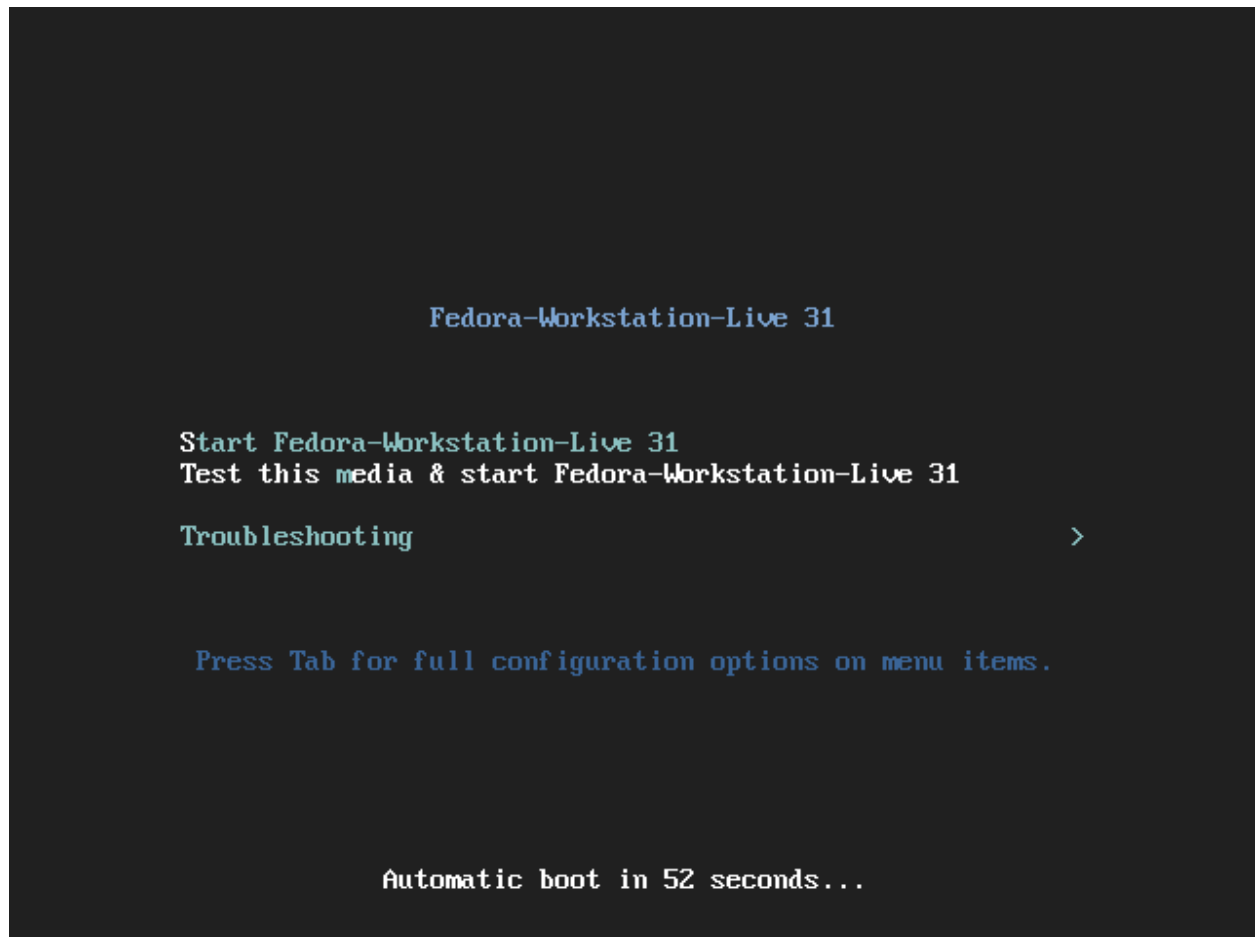
## Step 035 – Create Fedora 31 Workstation VM



Click: Start



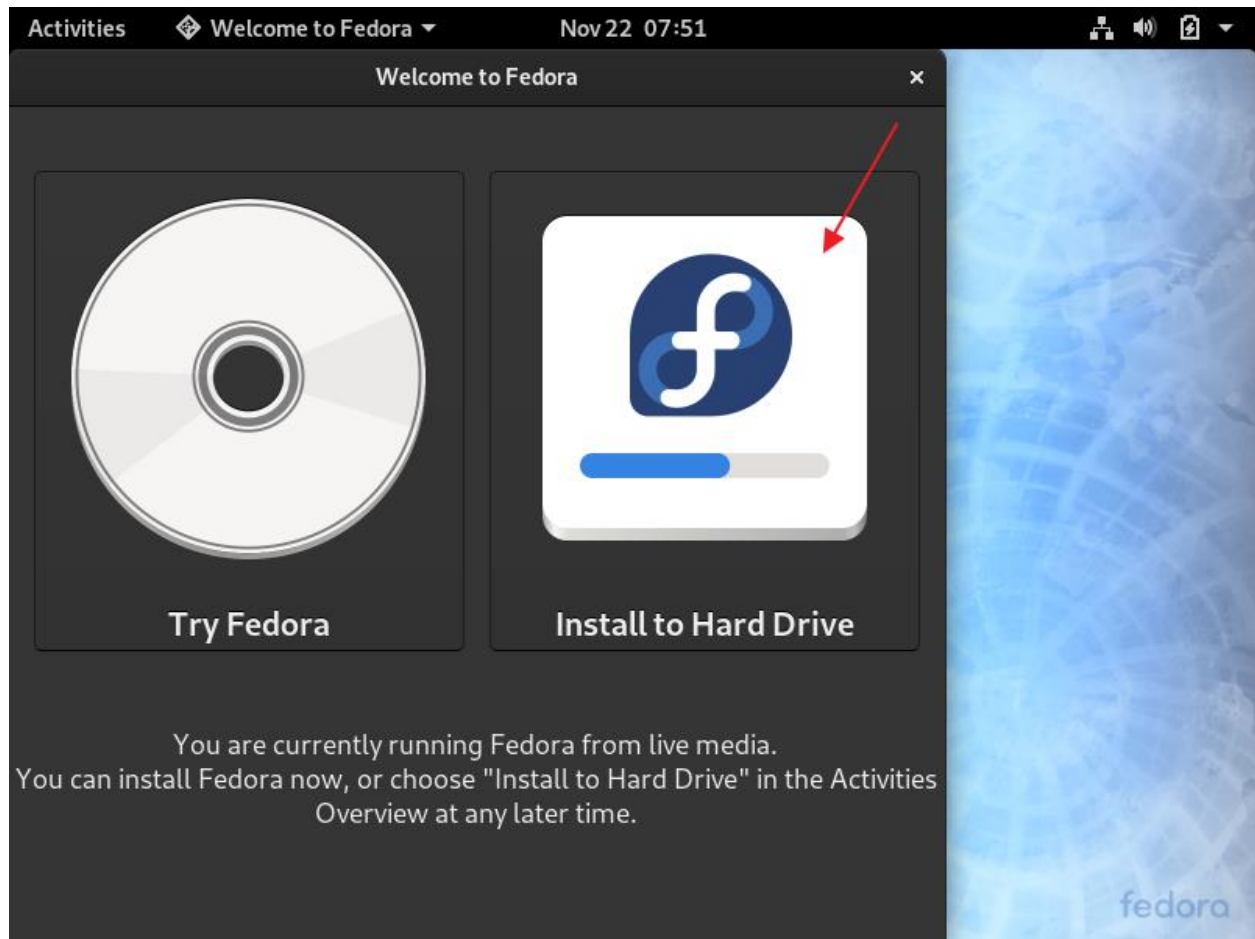
## Step 035 – Create Fedora 31 Workstation VM



Highlight: Test this media & start Fedora-Workstation-Live 31

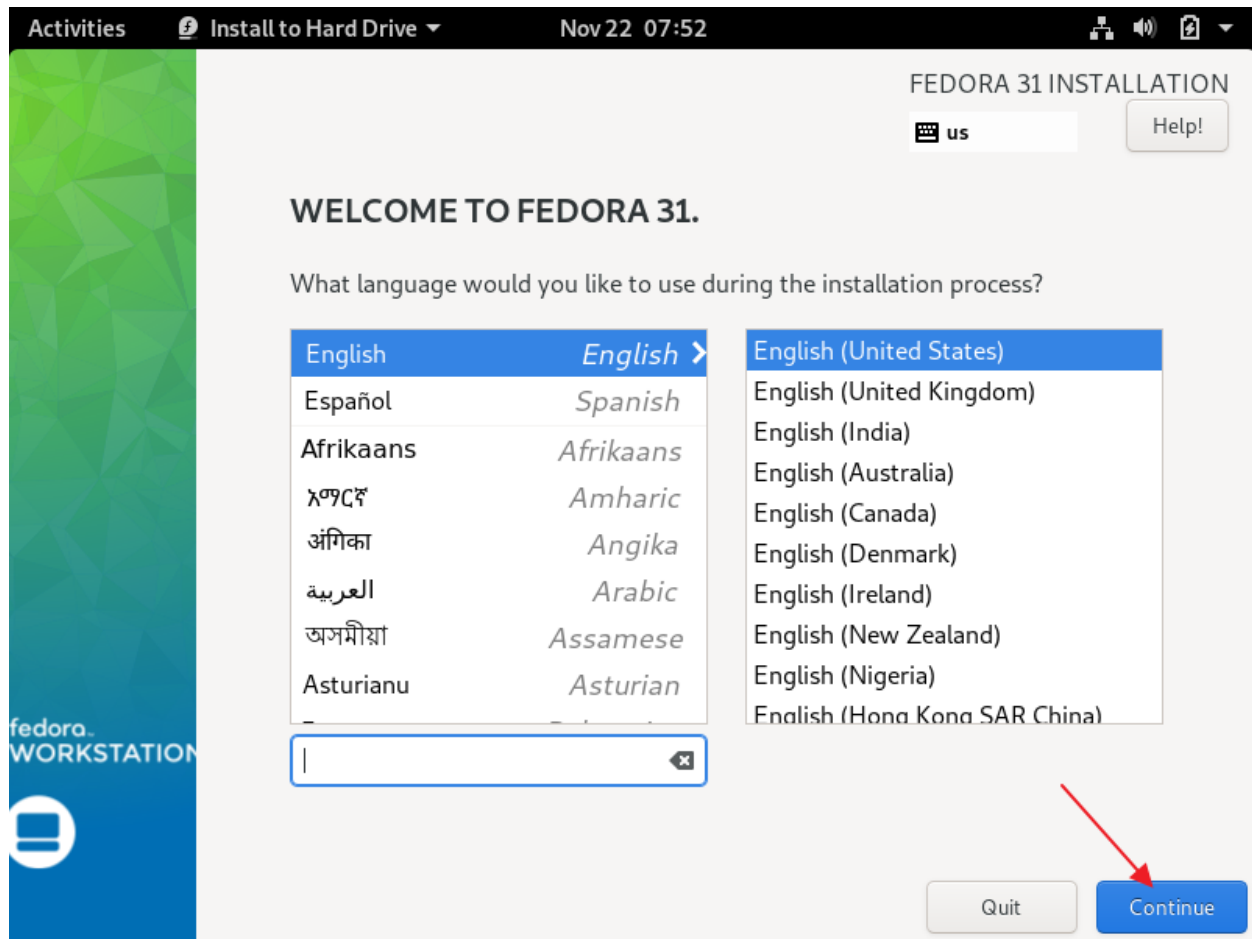
Click: Enter

### Step 035 – Create Fedora 31 Workstation VM



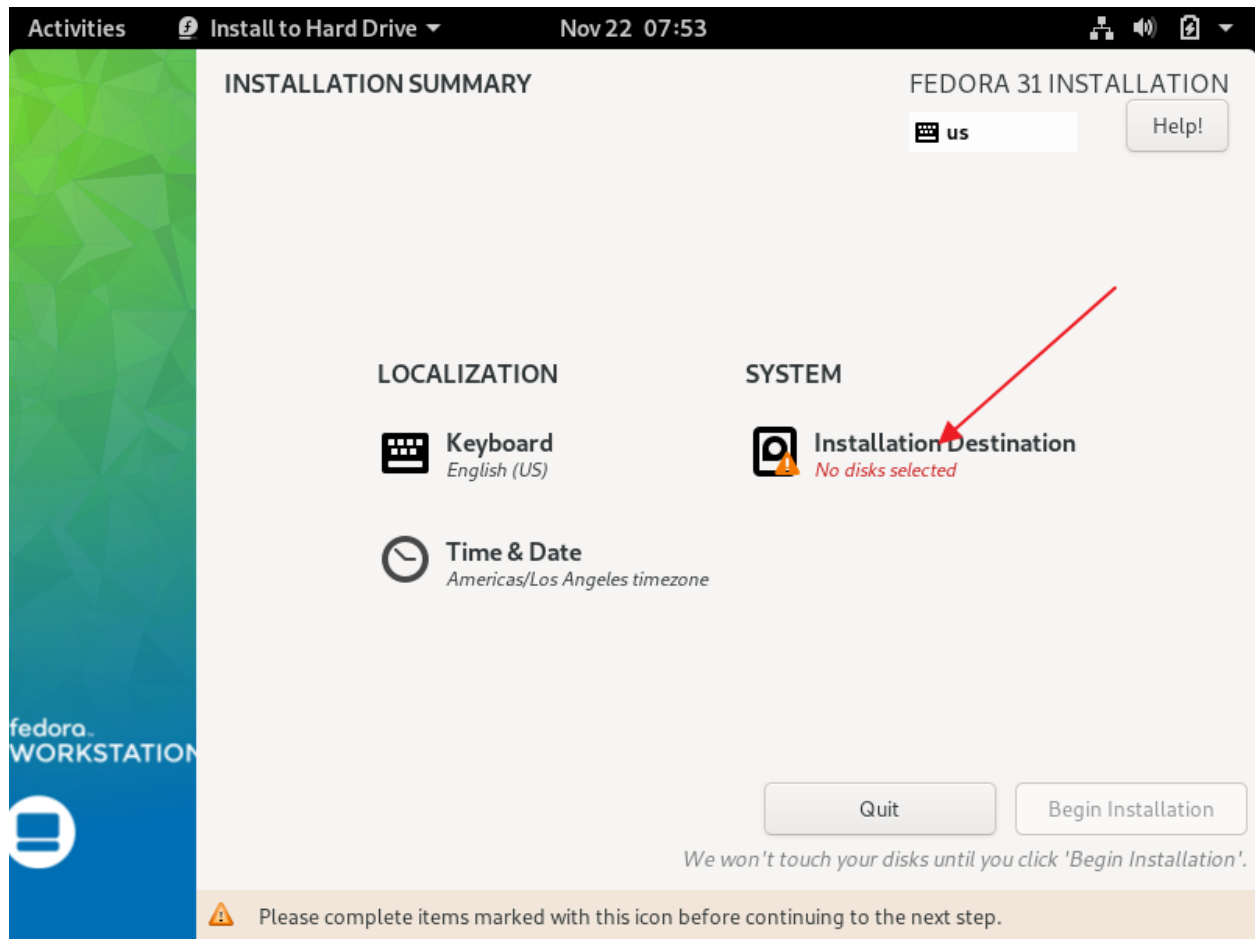
Click: Install to Hard Drive

## Step 035 – Create Fedora 31 Workstation VM



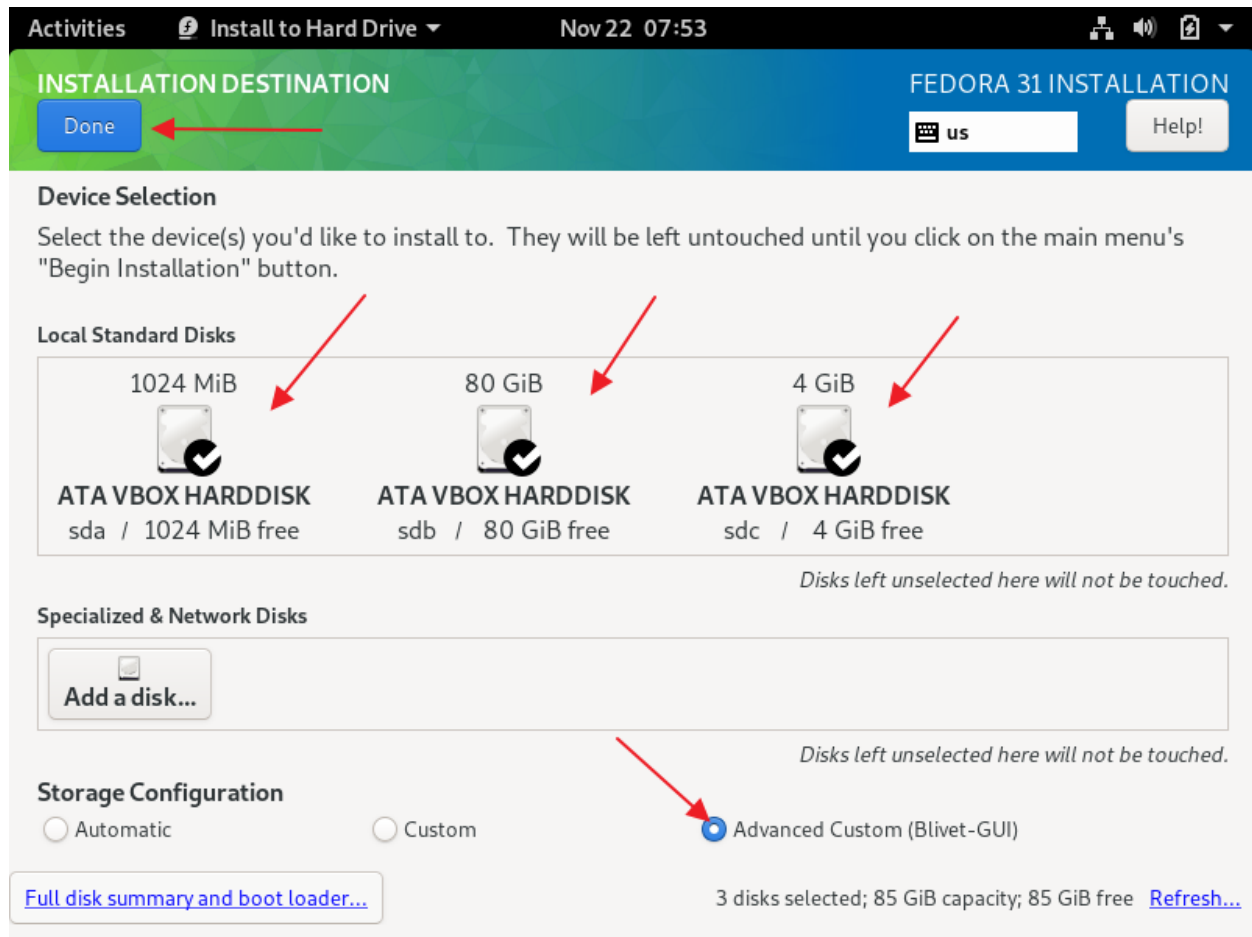
Click: Continue

## Step 035 – Create Fedora 31 Workstation VM



Click: Installation Destination

## Step 035 – Create Fedora 31 Workstation VM

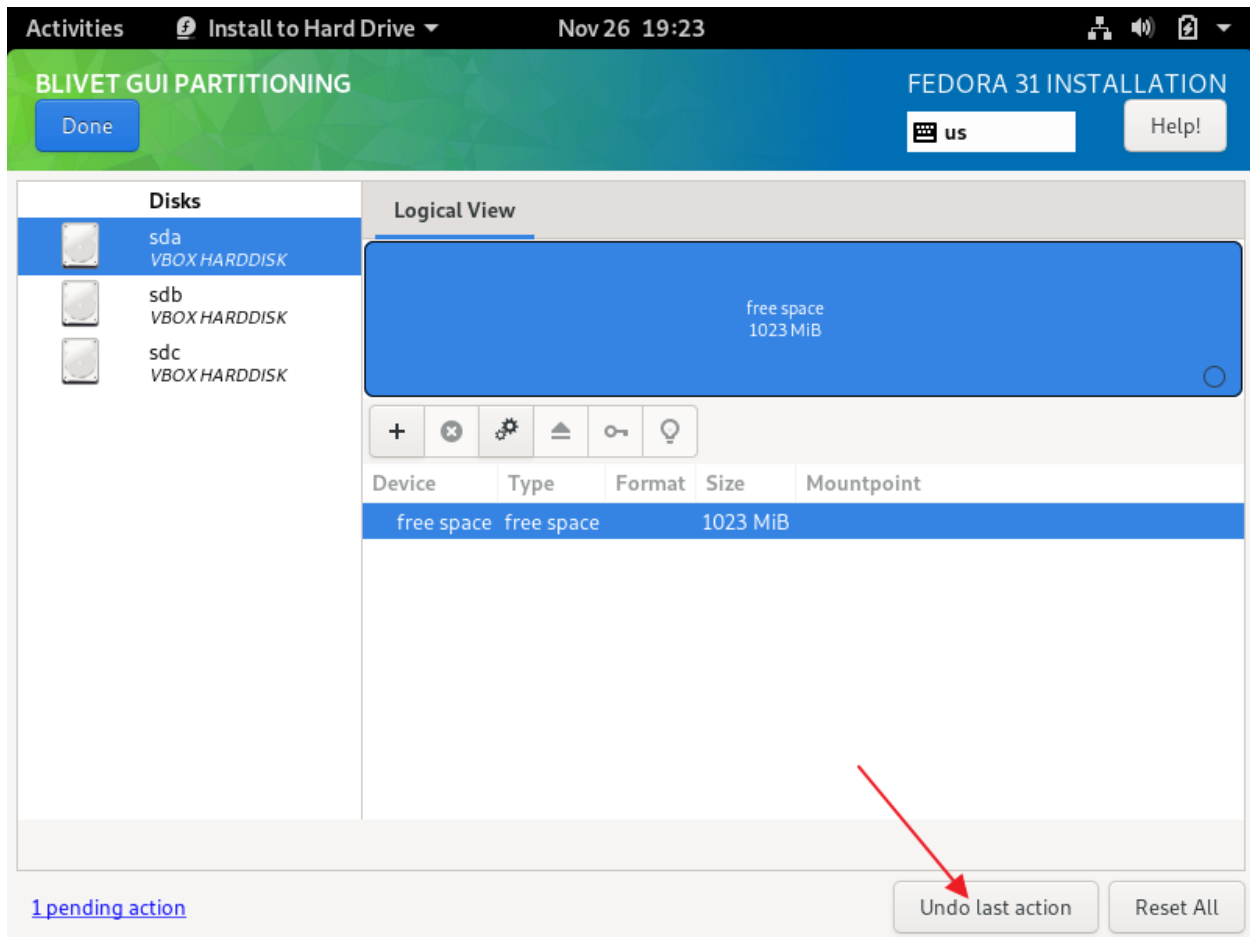


Select: All disks

Select: Advanced Custom (Blivet-GUI)

Click: Done

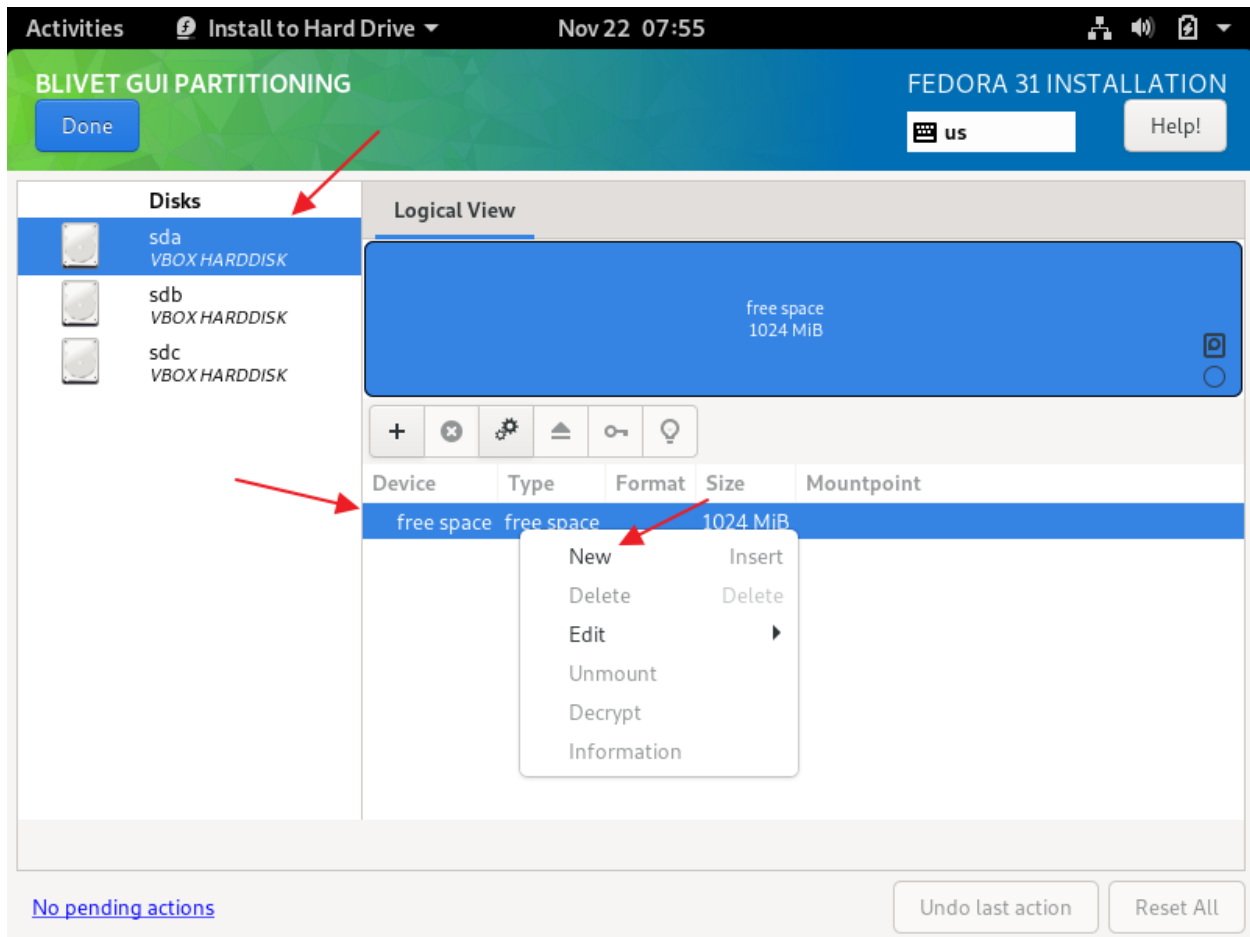
## Step 035 – Create Fedora 31 Workstation VM



Click: Undo last action (otherwise, you won't be prompted for the type of partition table).

The default is to create msdos partitions, and you have to explicitly choose gpt if you want that type of partition table.

## Step 035 – Create Fedora 31 Workstation VM

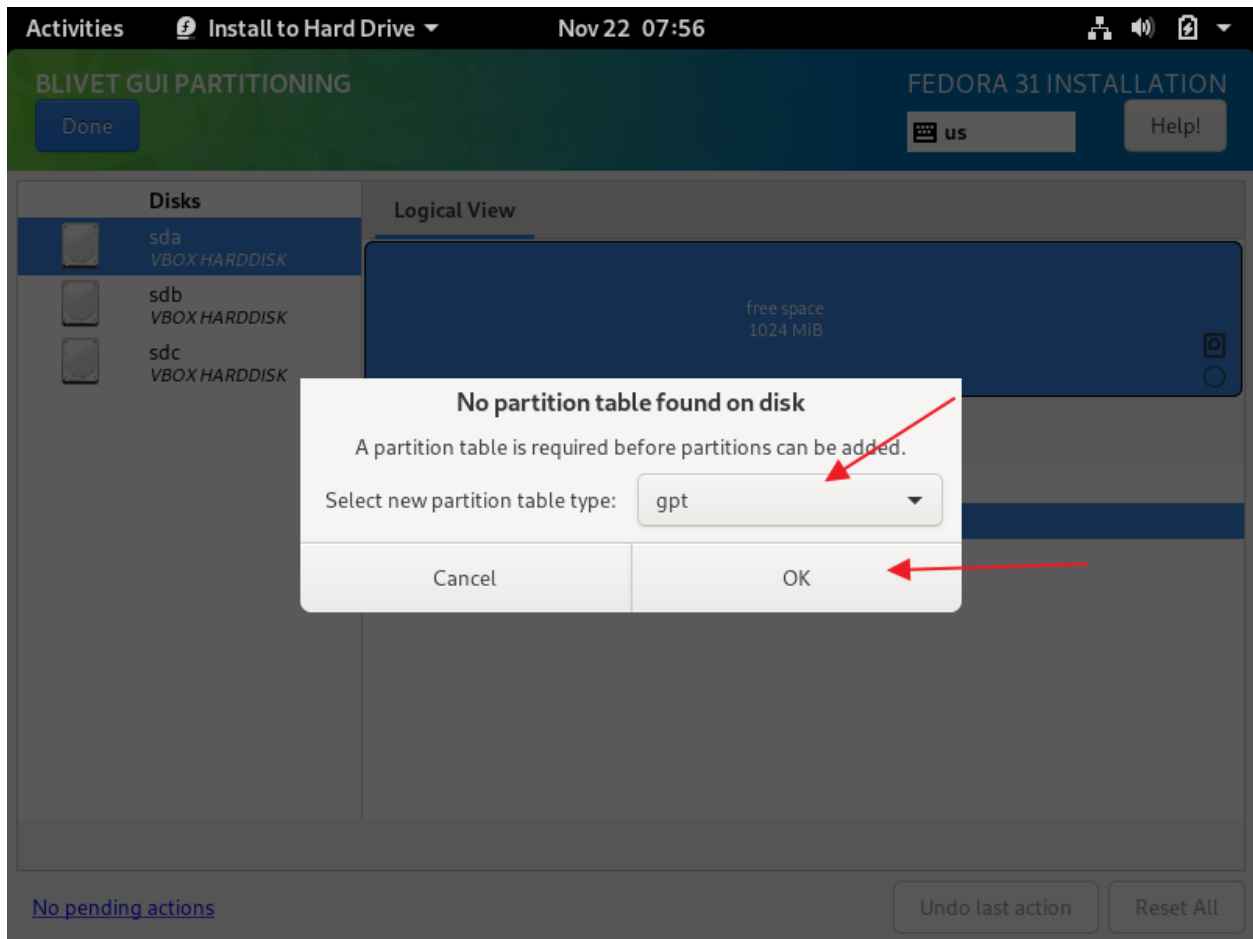


Select: sda (1GB)

Right-click: free space

Click: New

## Step 035 – Create Fedora 31 Workstation VM



Partition table type: gpt

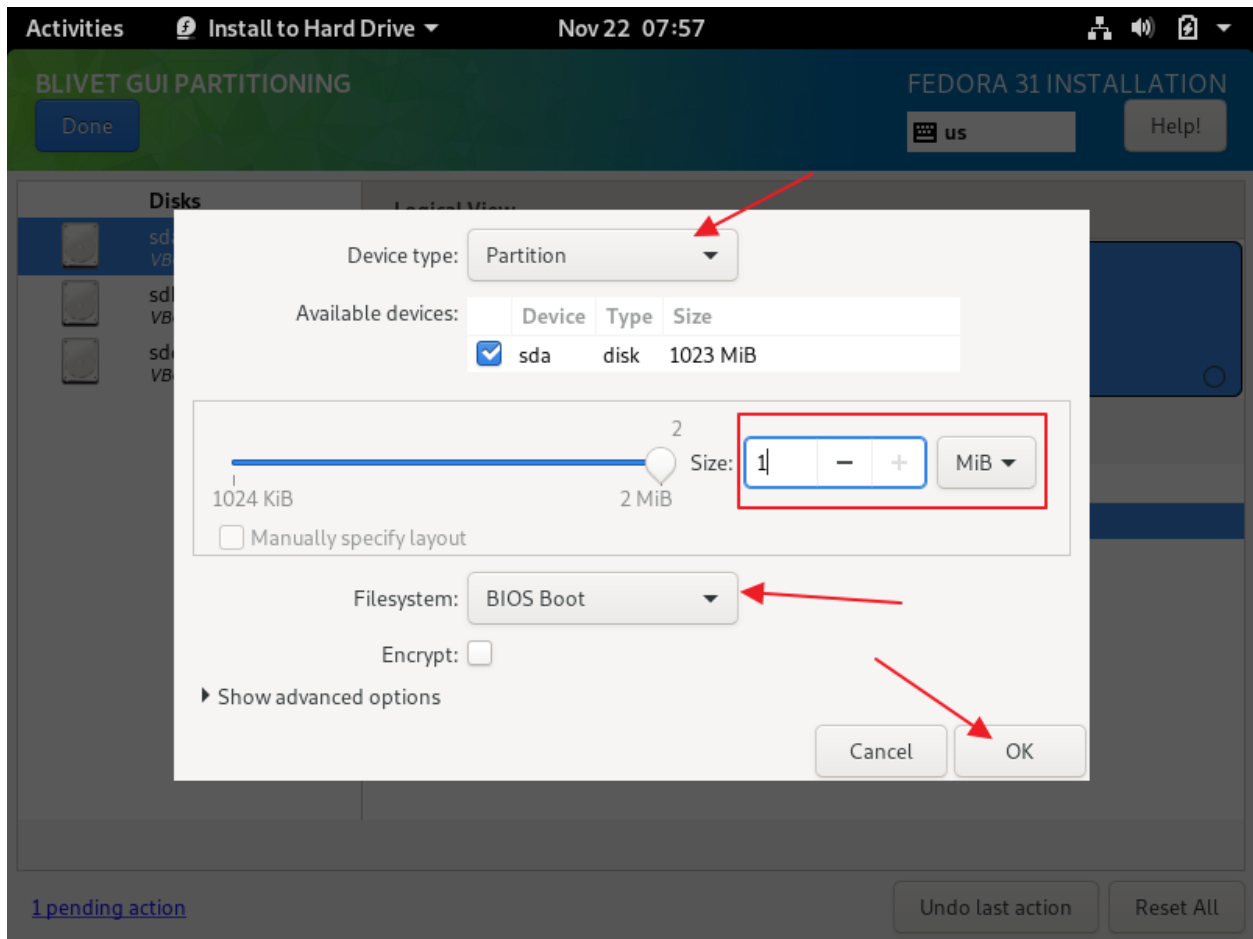
Click: OK

Right-click: free space

Click: New



### Step 035 – Create Fedora 31 Workstation VM



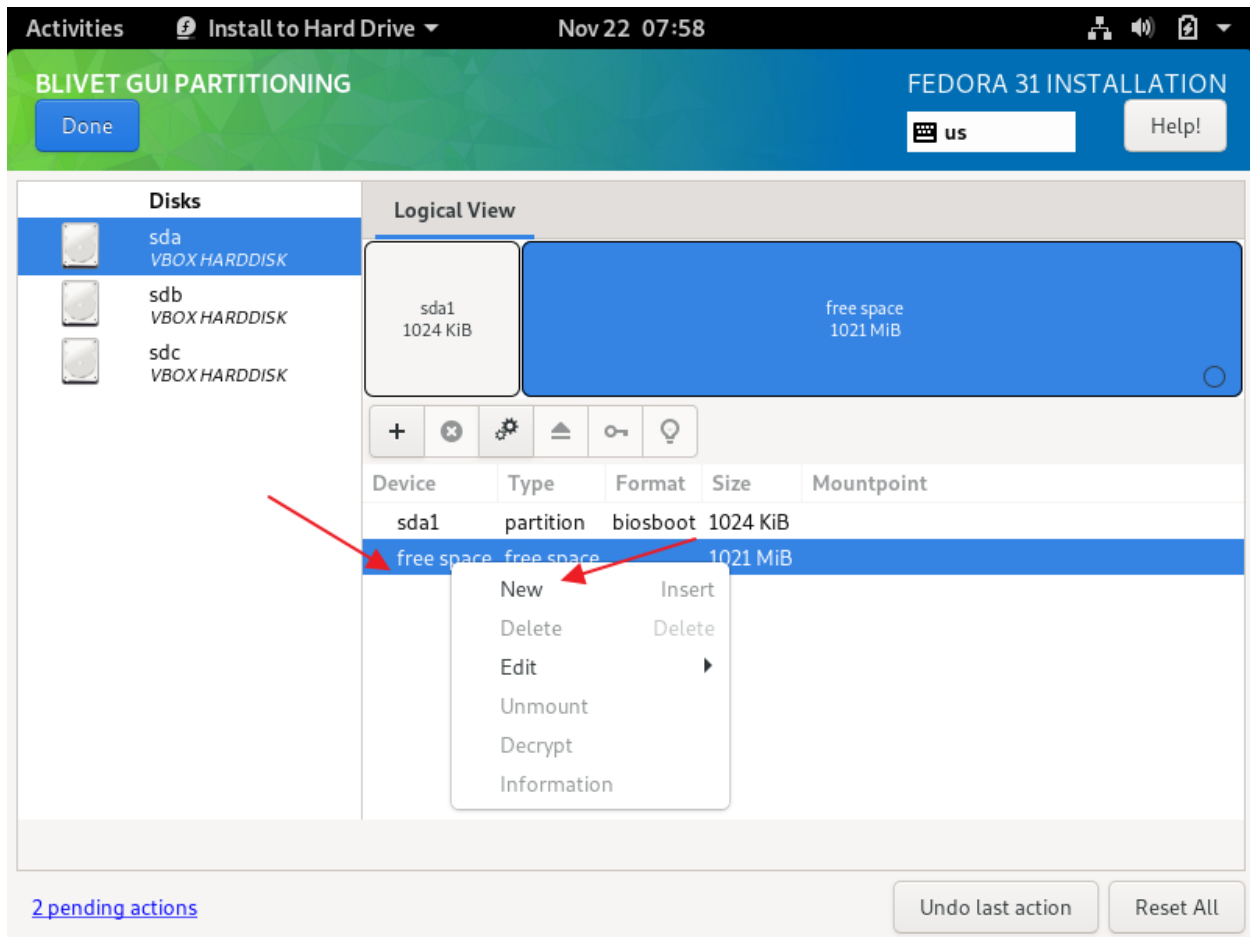
Device type: Partition

Size: 1 MiB

Filesystem: BIOS Boot

Click: OK

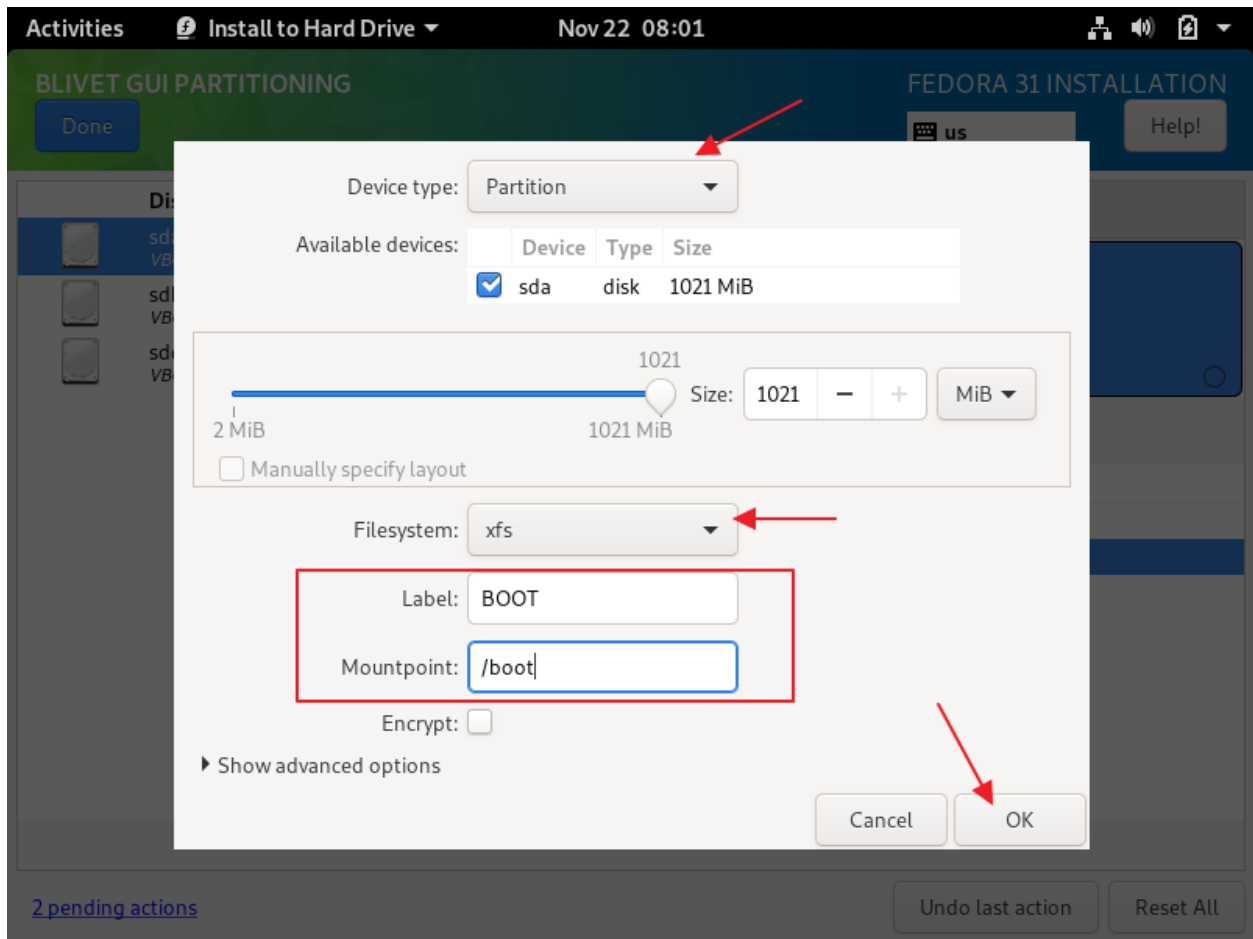
## Step 035 – Create Fedora 31 Workstation VM



Right-click: free space

Click: New

### Step 035 – Create Fedora 31 Workstation VM



Device type: Partition

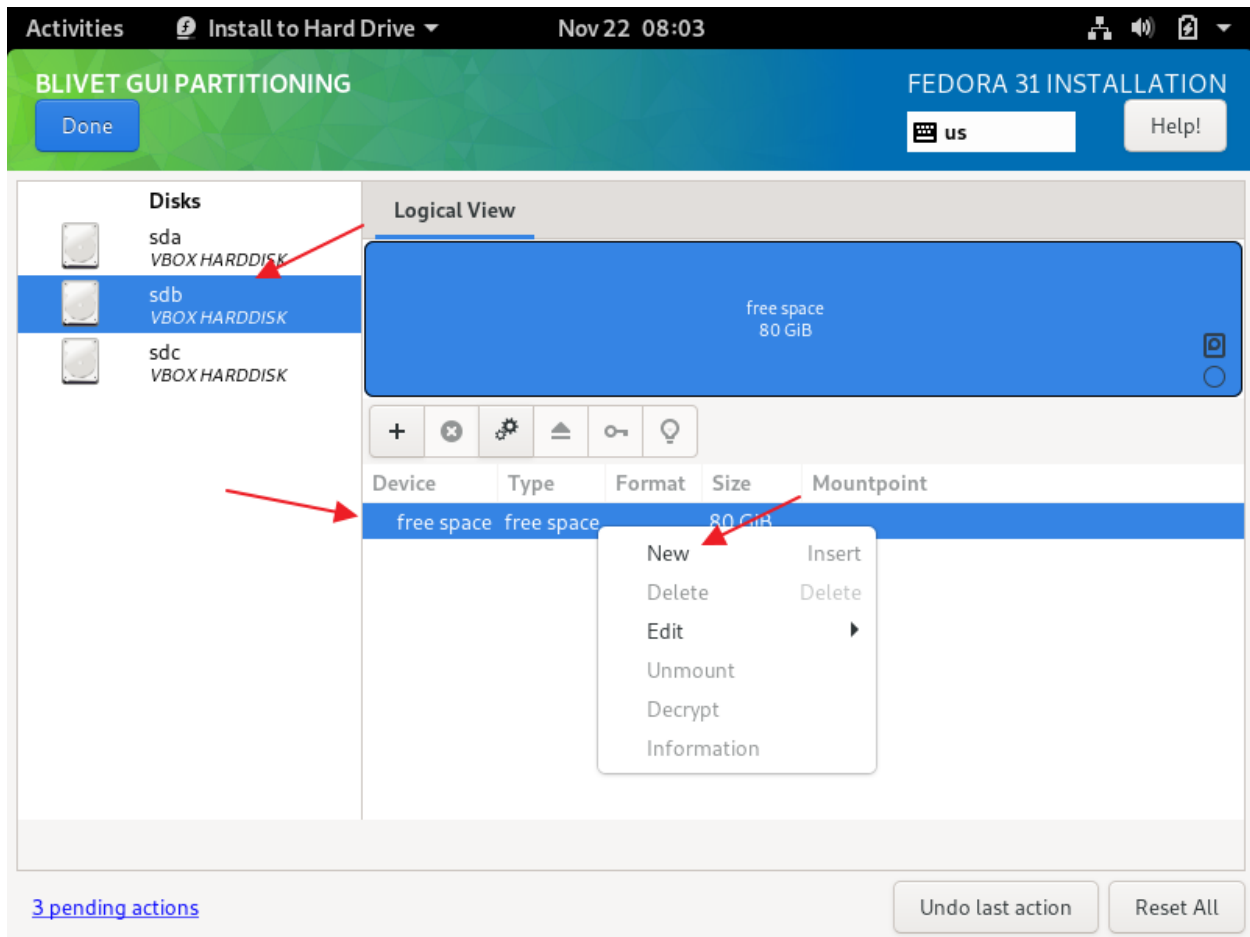
Fiesystem: xfs

Label: BOOT

Mountpoint: /boot

Click: OK

## Step 035 – Create Fedora 31 Workstation VM

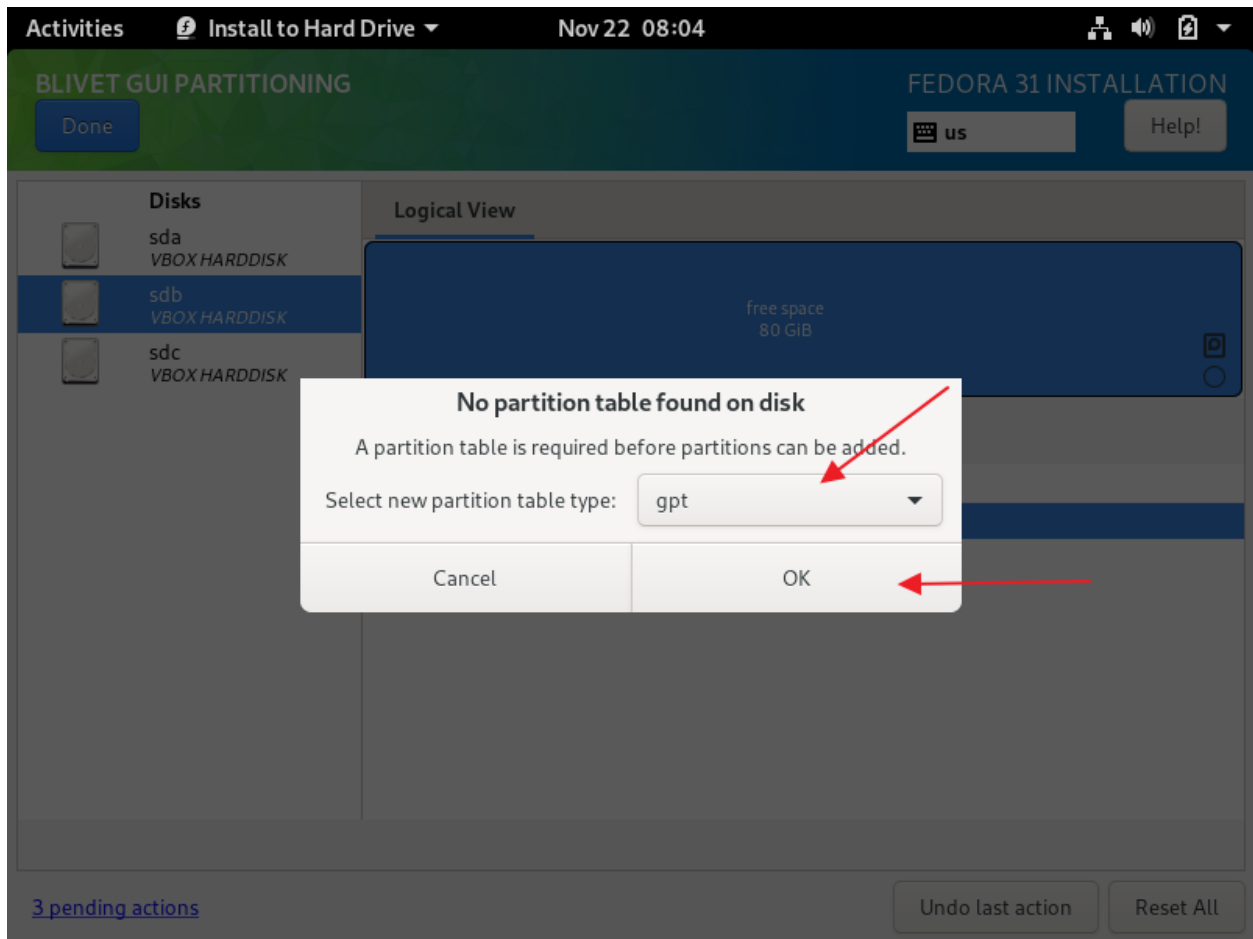


Select: sdb (80 GB)

Right-click: free space

Click: New

## Step 035 – Create Fedora 31 Workstation VM



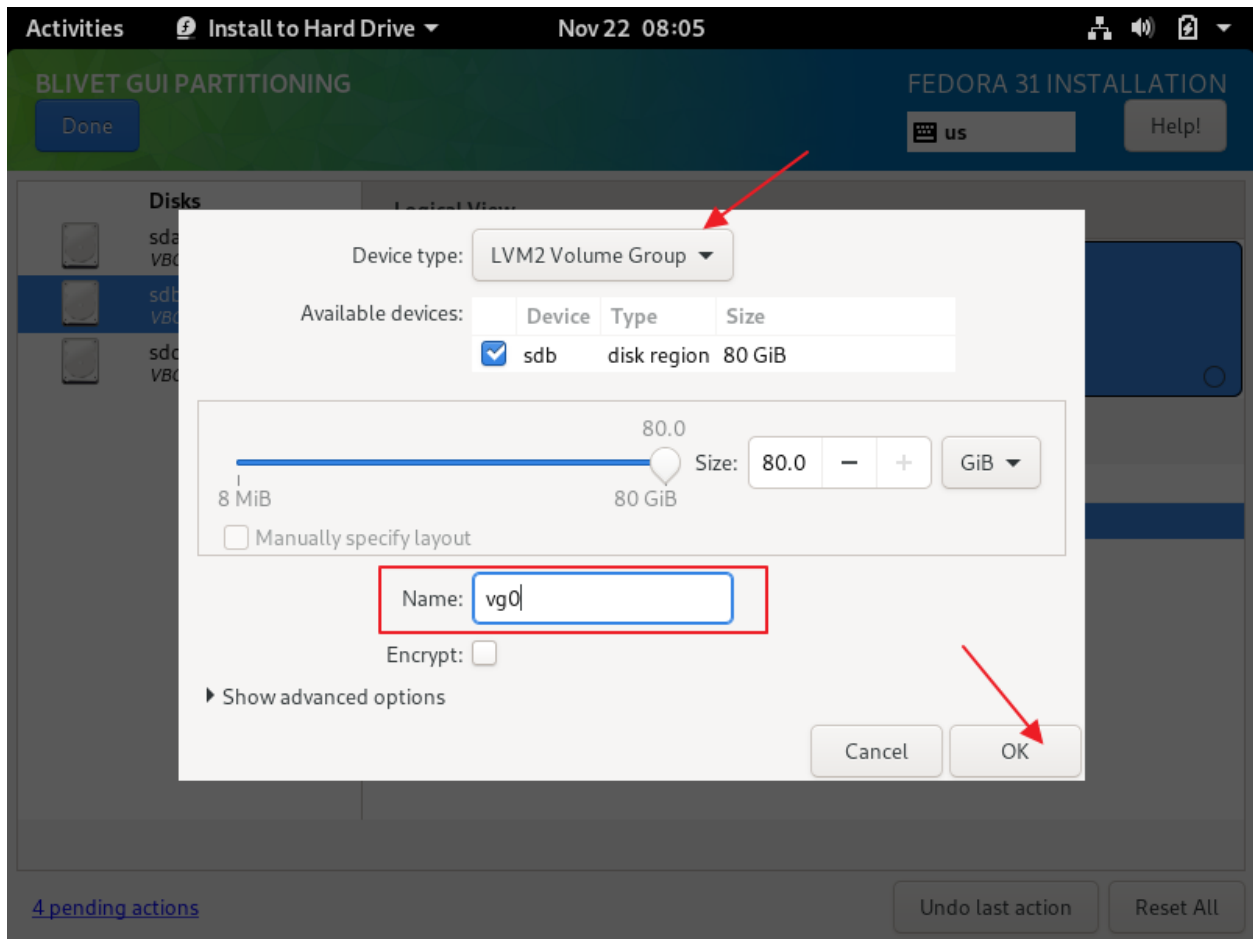
Partition table type: gpt

Click: OK

Right-click: free space

Click: New

### Step 035 – Create Fedora 31 Workstation VM

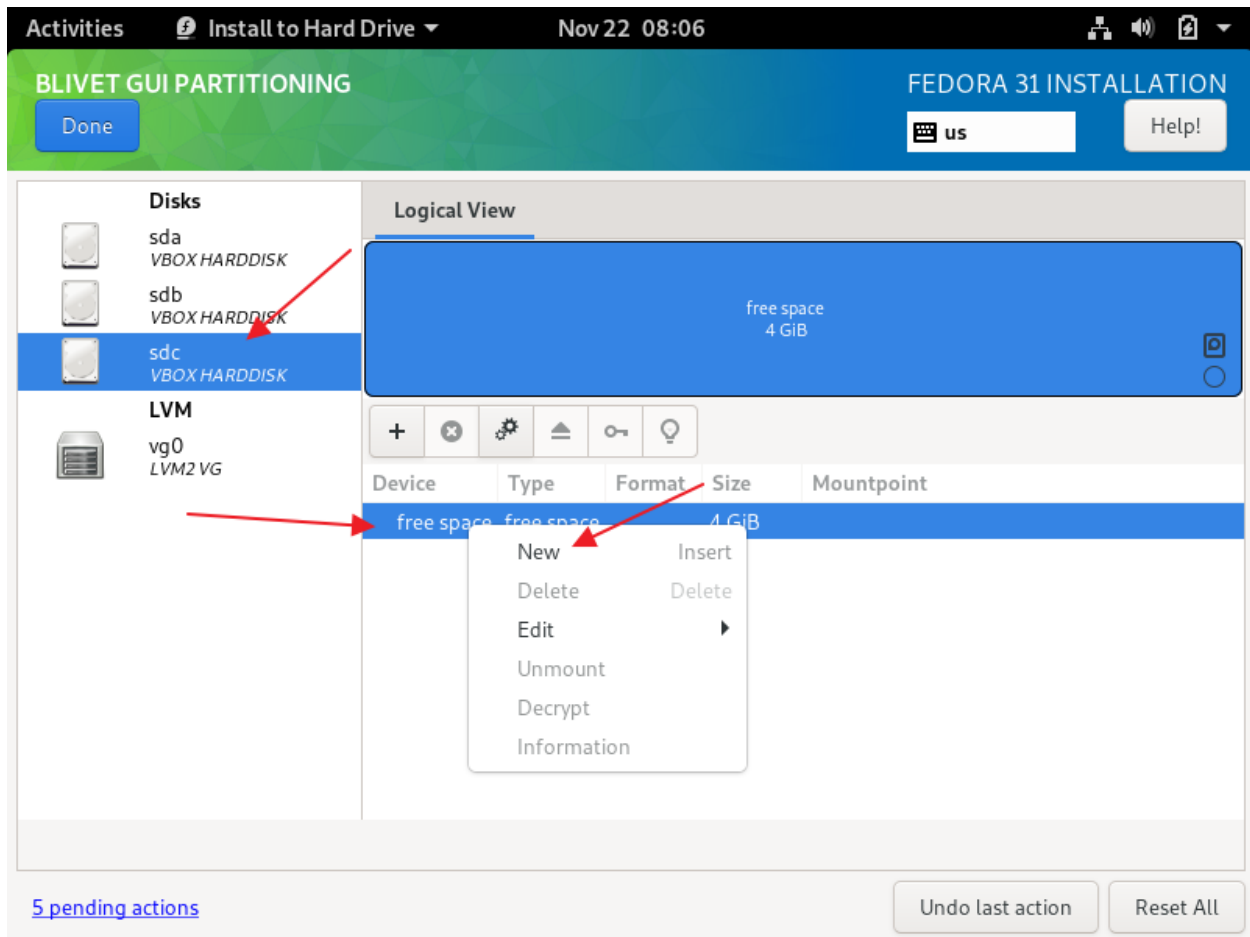


Device type: LVM2 Volume Group

Name : vg0

Click : OK

## Step 035 – Create Fedora 31 Workstation VM

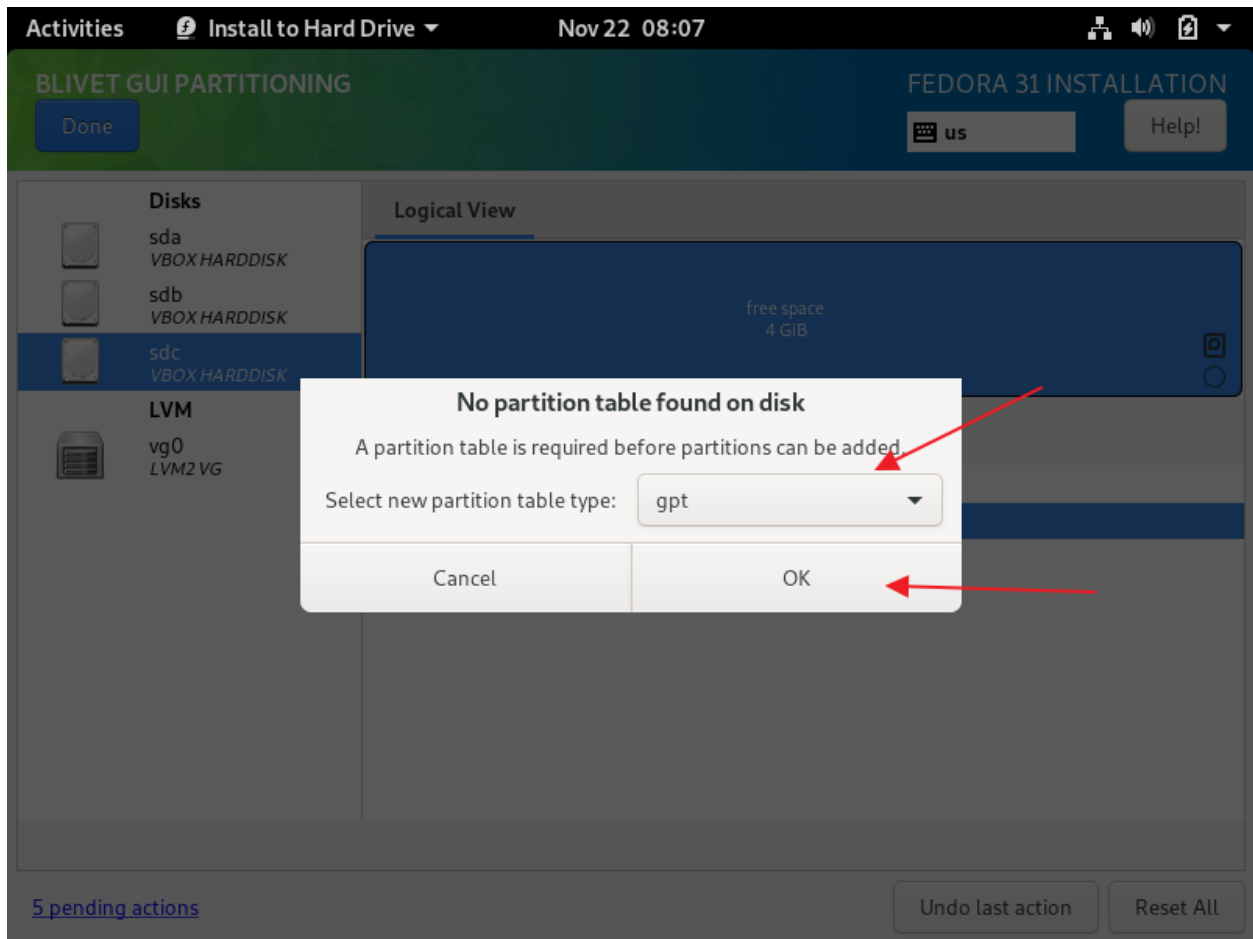


Select : sdc (4 GB)

Right-click : free space

Click : New

## Step 035 – Create Fedora 31 Workstation VM



Partition table type : gpt

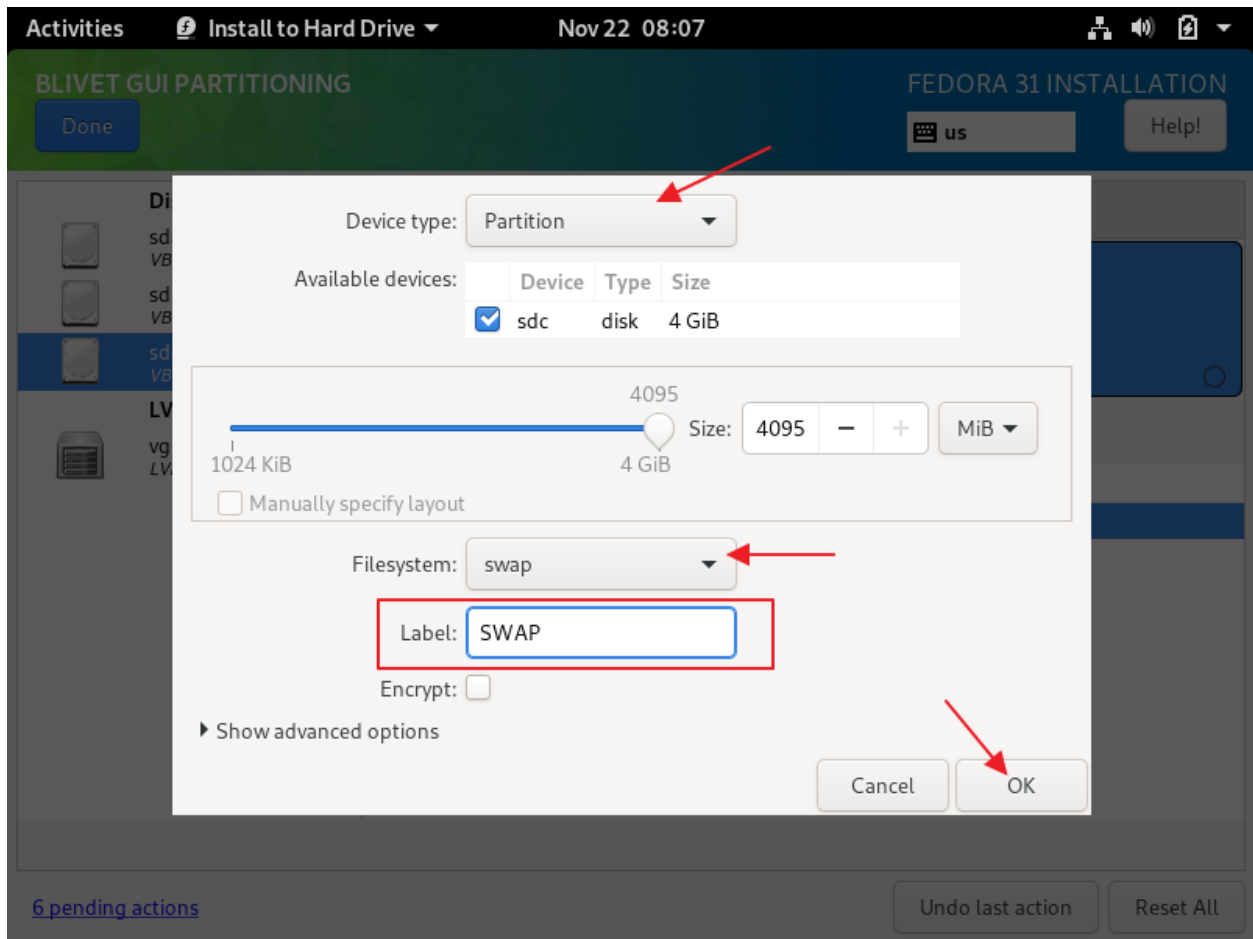
Click : OK

Right-click : free space

Click : New



### Step 035 – Create Fedora 31 Workstation VM



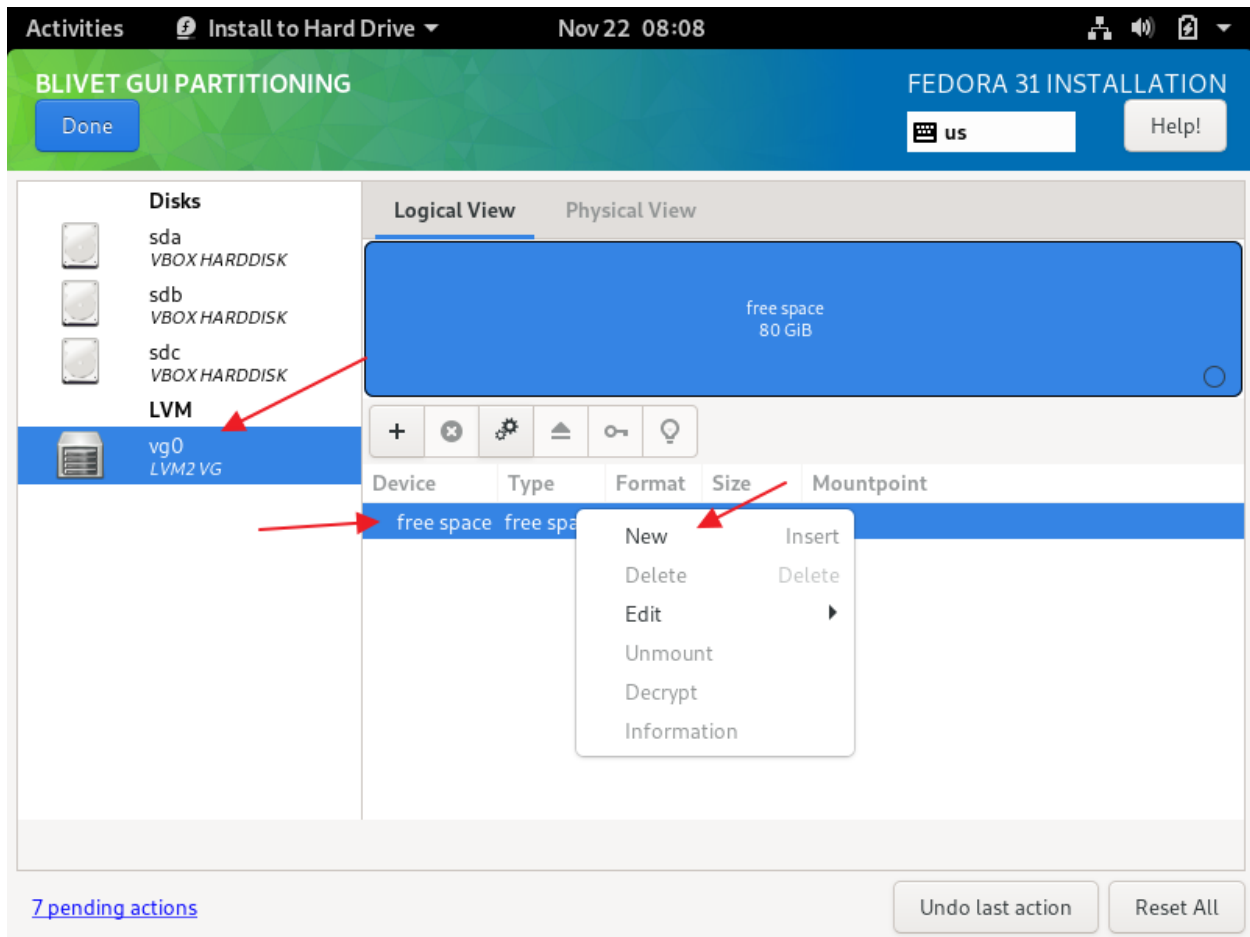
Device type: Partition

Filesystem: swap

Label: SWAP

Click: OK

## Step 035 – Create Fedora 31 Workstation VM

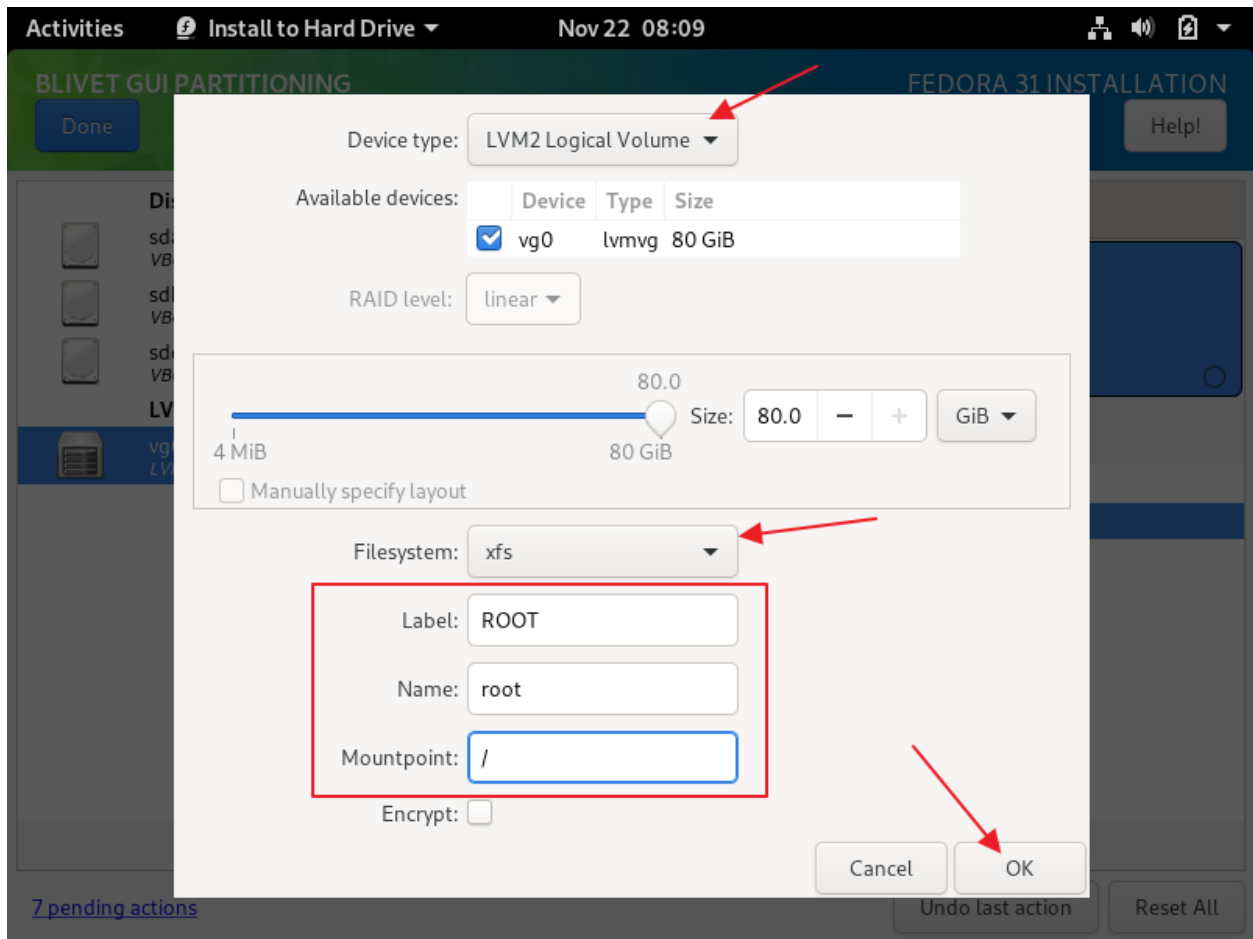


Select: vg LVM2 Volume Group

Right-click: free space

Click: New

### Step 035 – Create Fedora 31 Workstation VM



Device type: LVM2 Logical Volume

Filesystem: xfs

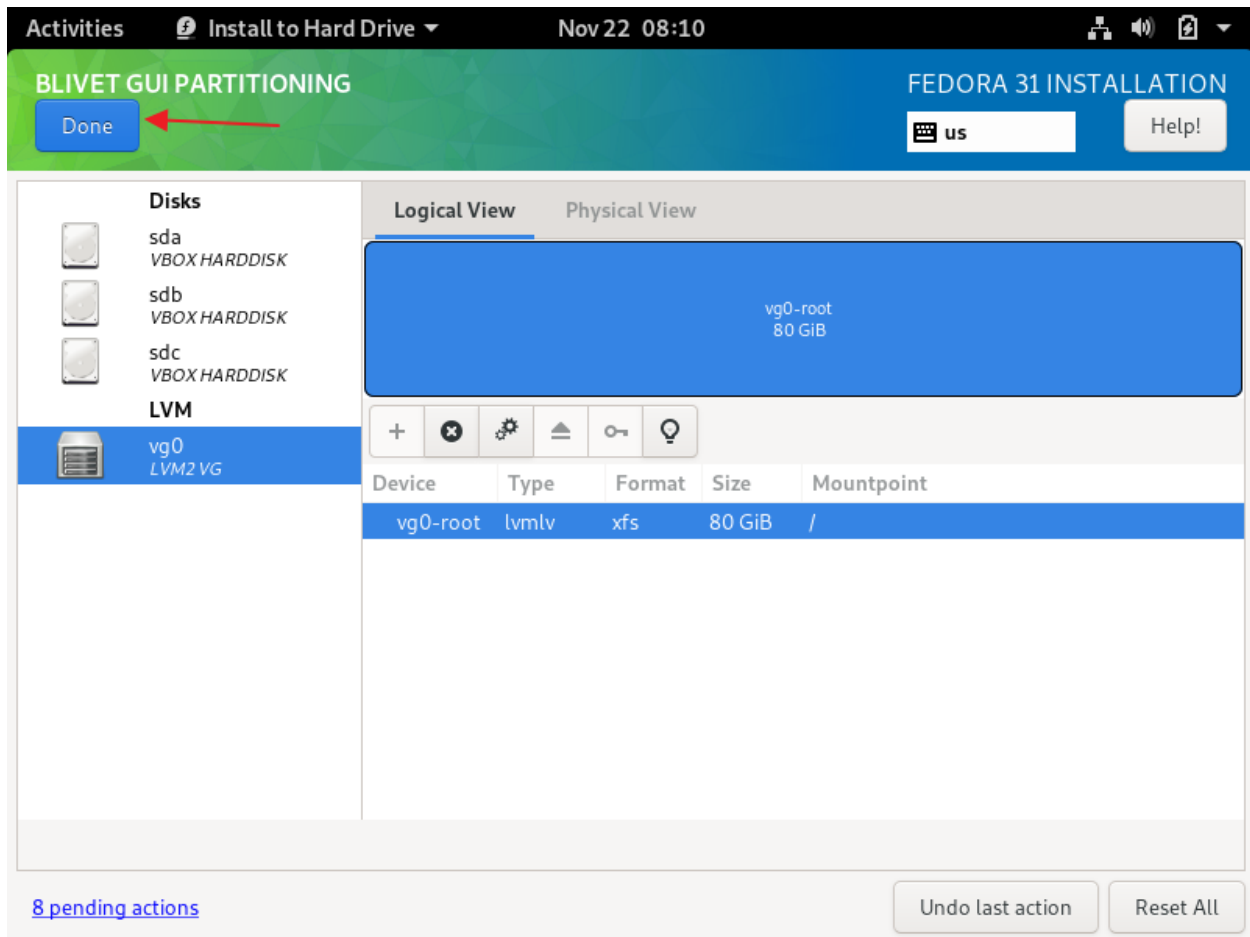
Label: ROOT

Name: root

Mountpoint: /

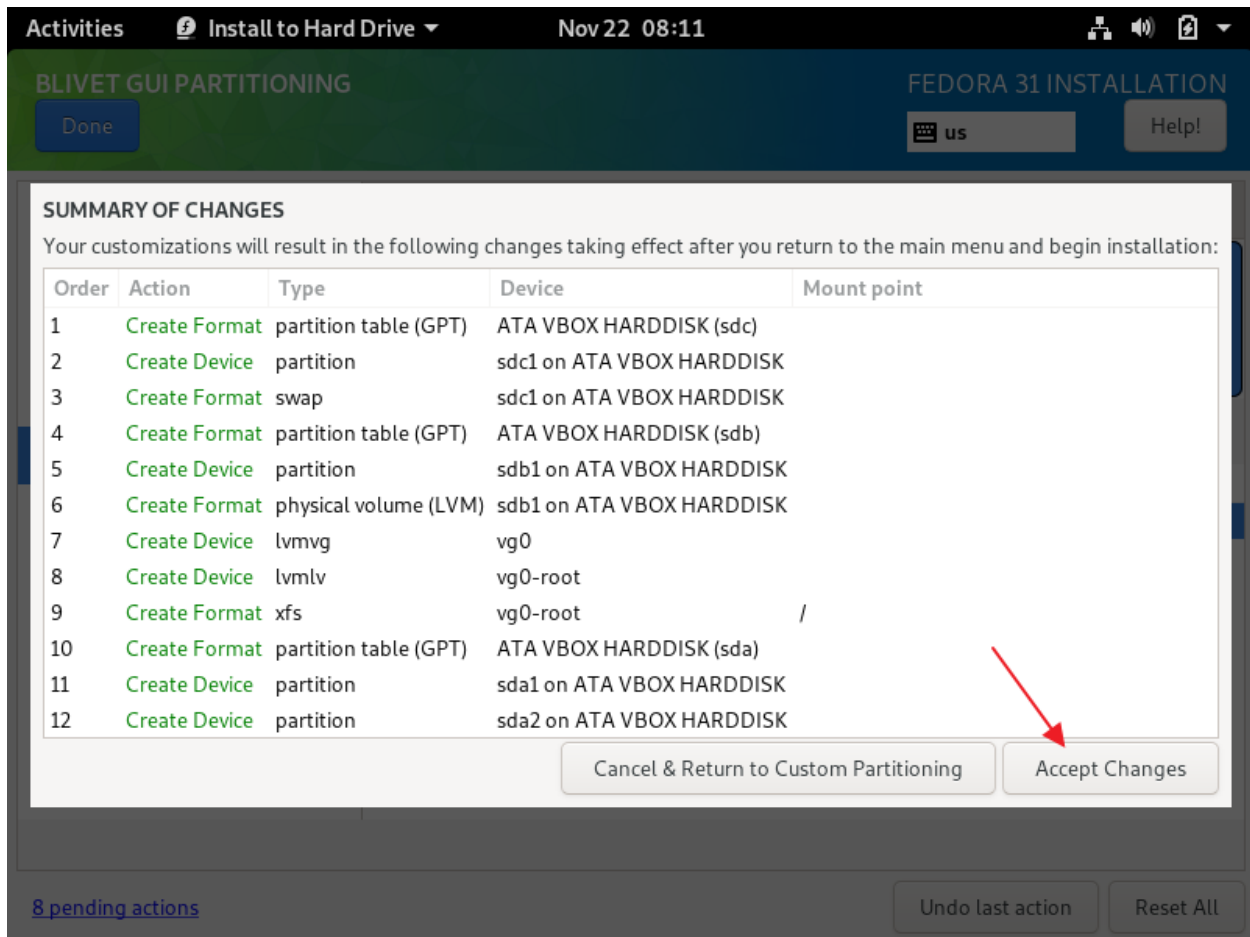
Click: OK

## Step 035 – Create Fedora 31 Workstation VM



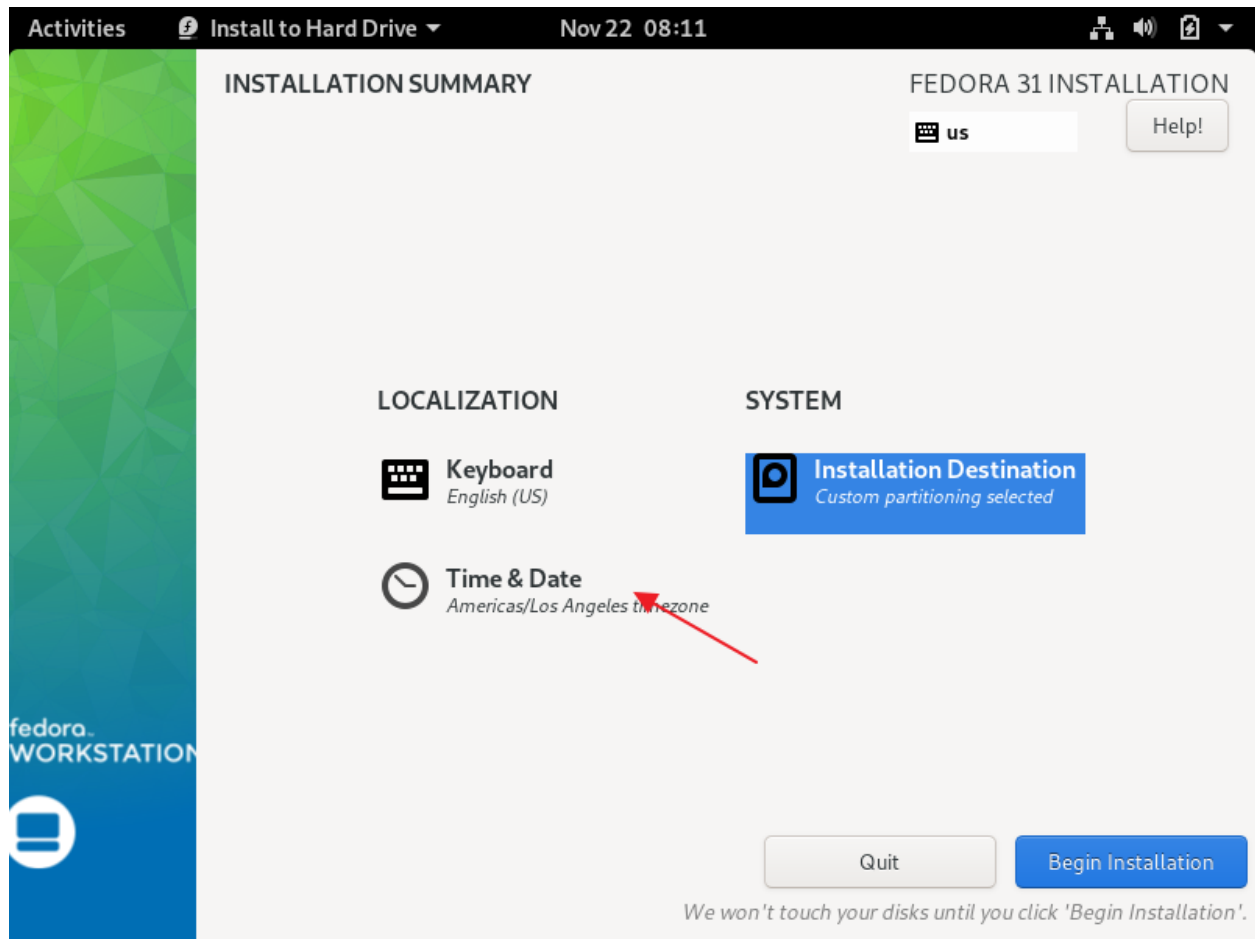
Click: Done

## Step 035 – Create Fedora 31 Workstation VM



Click: Accept Changes

## Step 035 – Create Fedora 31 Workstation VM



Click: Time & Date

## Step 035 – Create Fedora 31 Workstation VM



Click: somewhere near your time zone (in our case, Los Angeles)

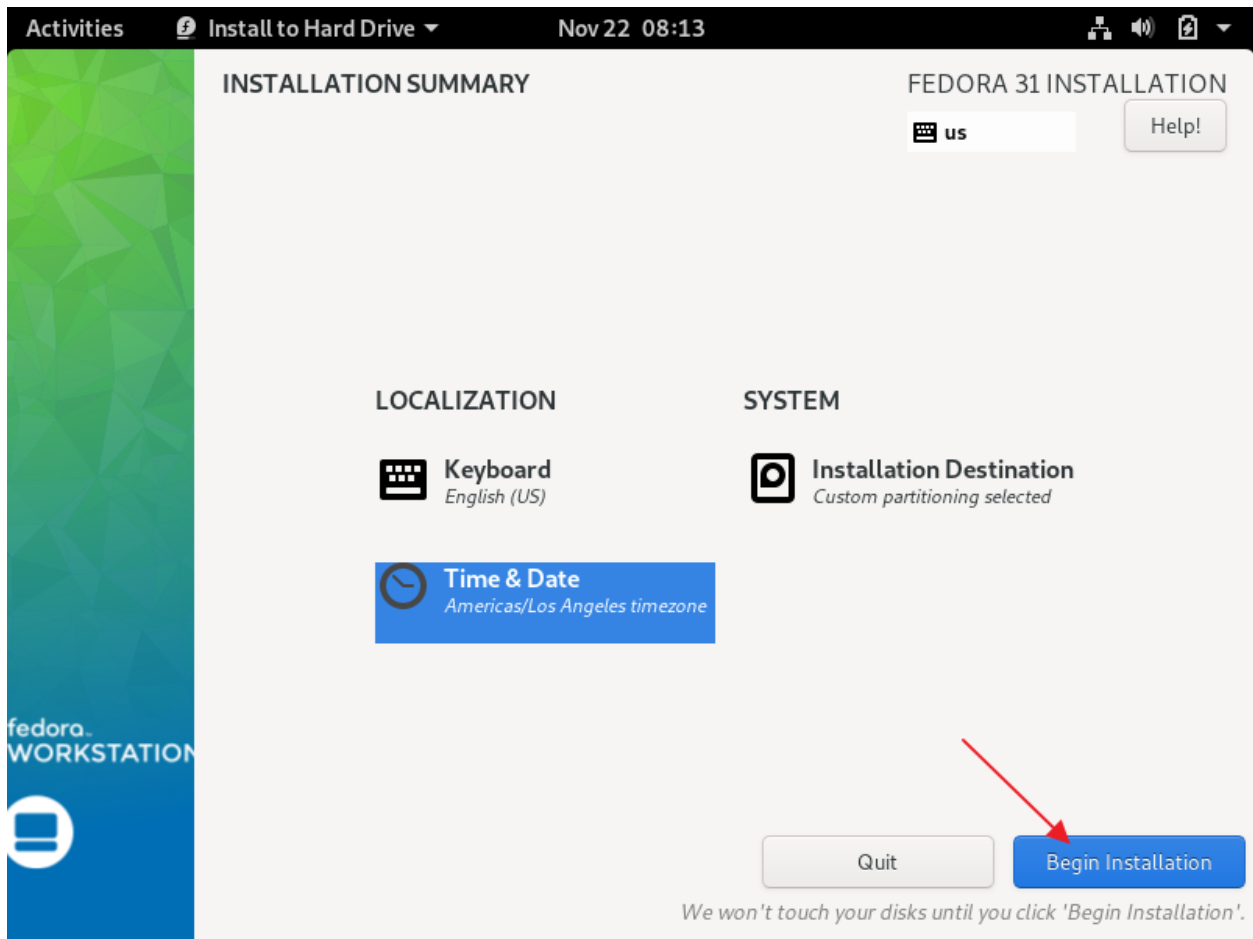
Region: Americas

City: Los Angeles

Network Time: enabled

Click: Done

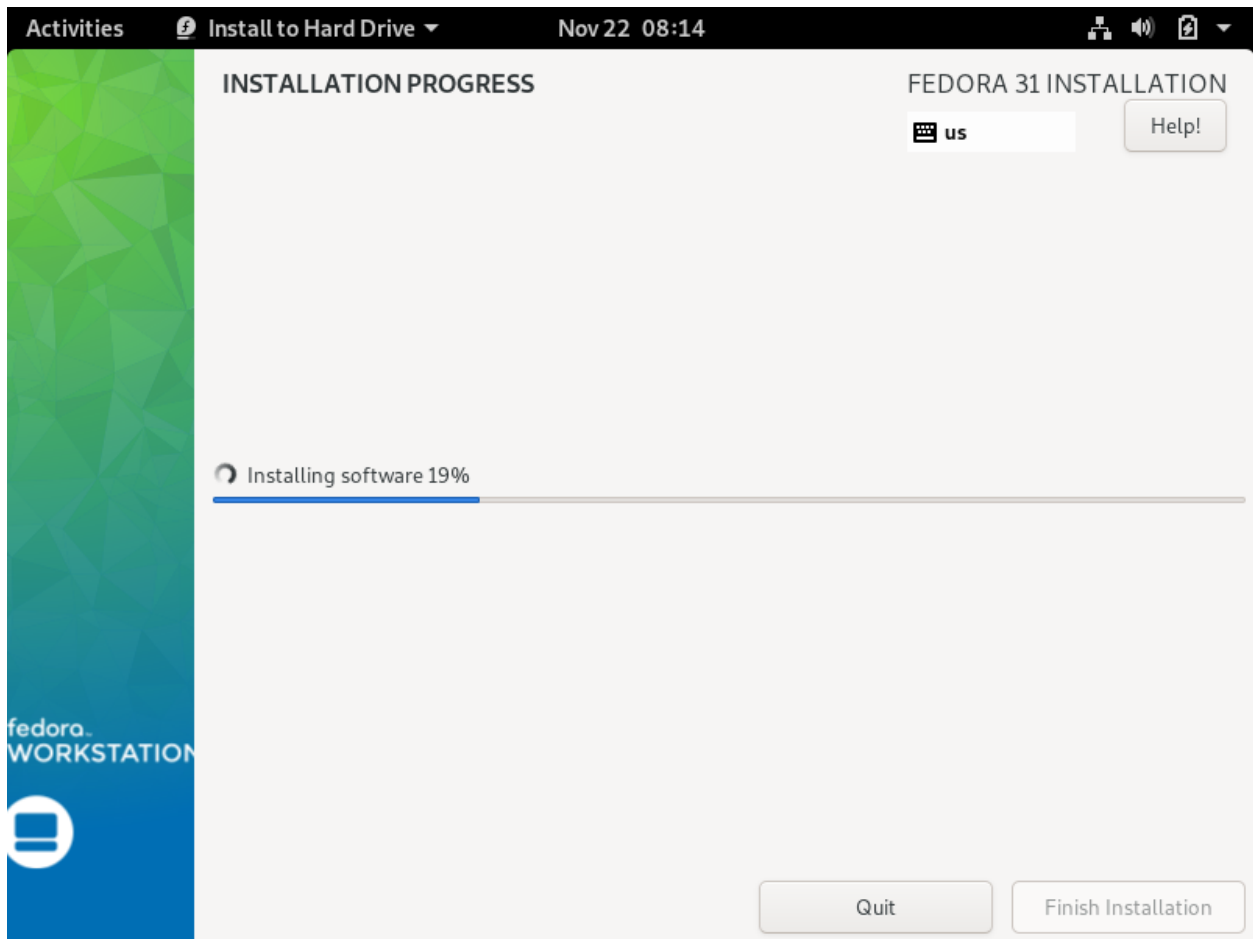
## Step 035 – Create Fedora 31 Workstation VM



Click: Begin Installation

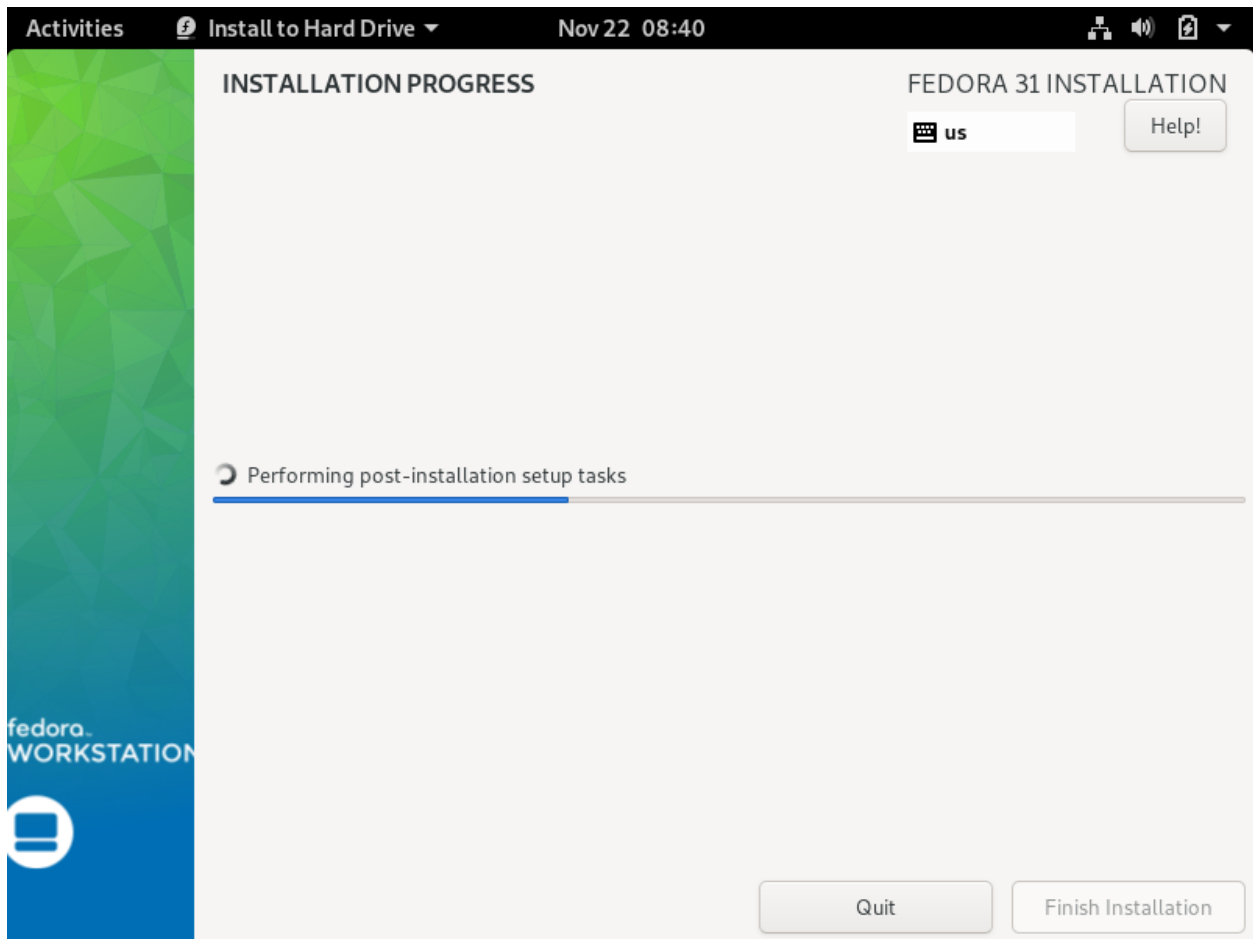


## Step 035 – Create Fedora 31 Workstation VM



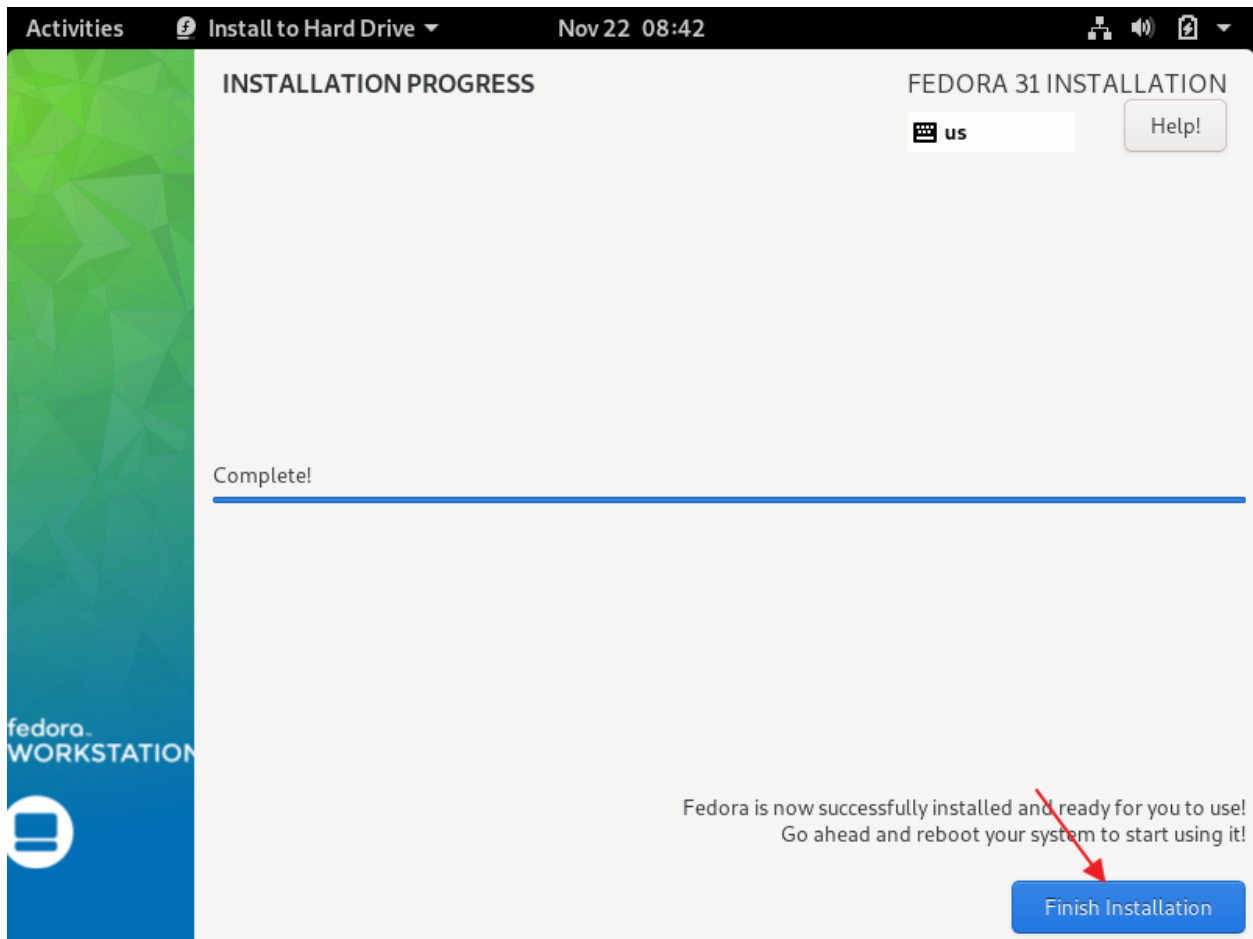
Progress. . .

## Step 035 – Create Fedora 31 Workstation VM



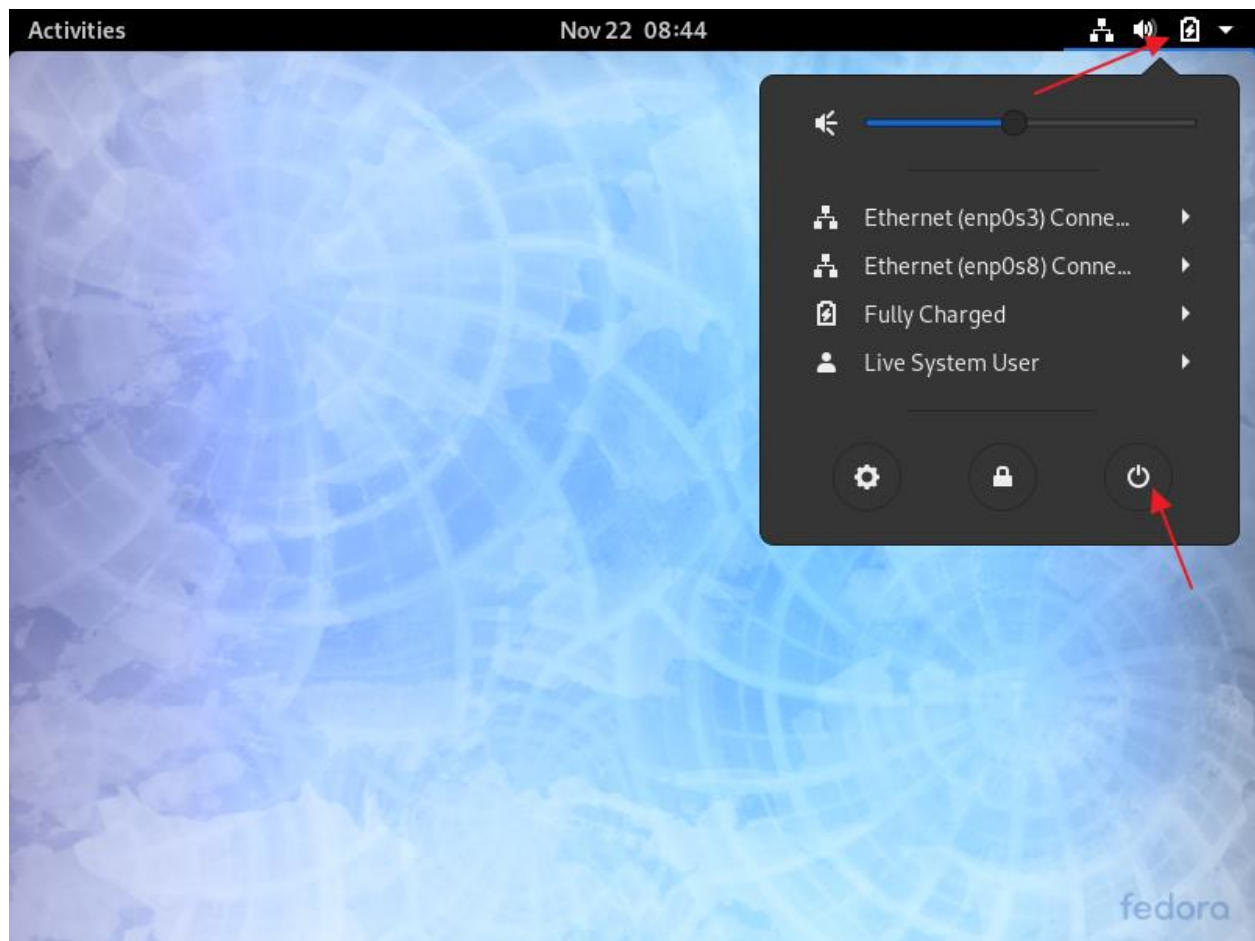
Progress. . .

## Step 035 – Create Fedora 31 Workstation VM

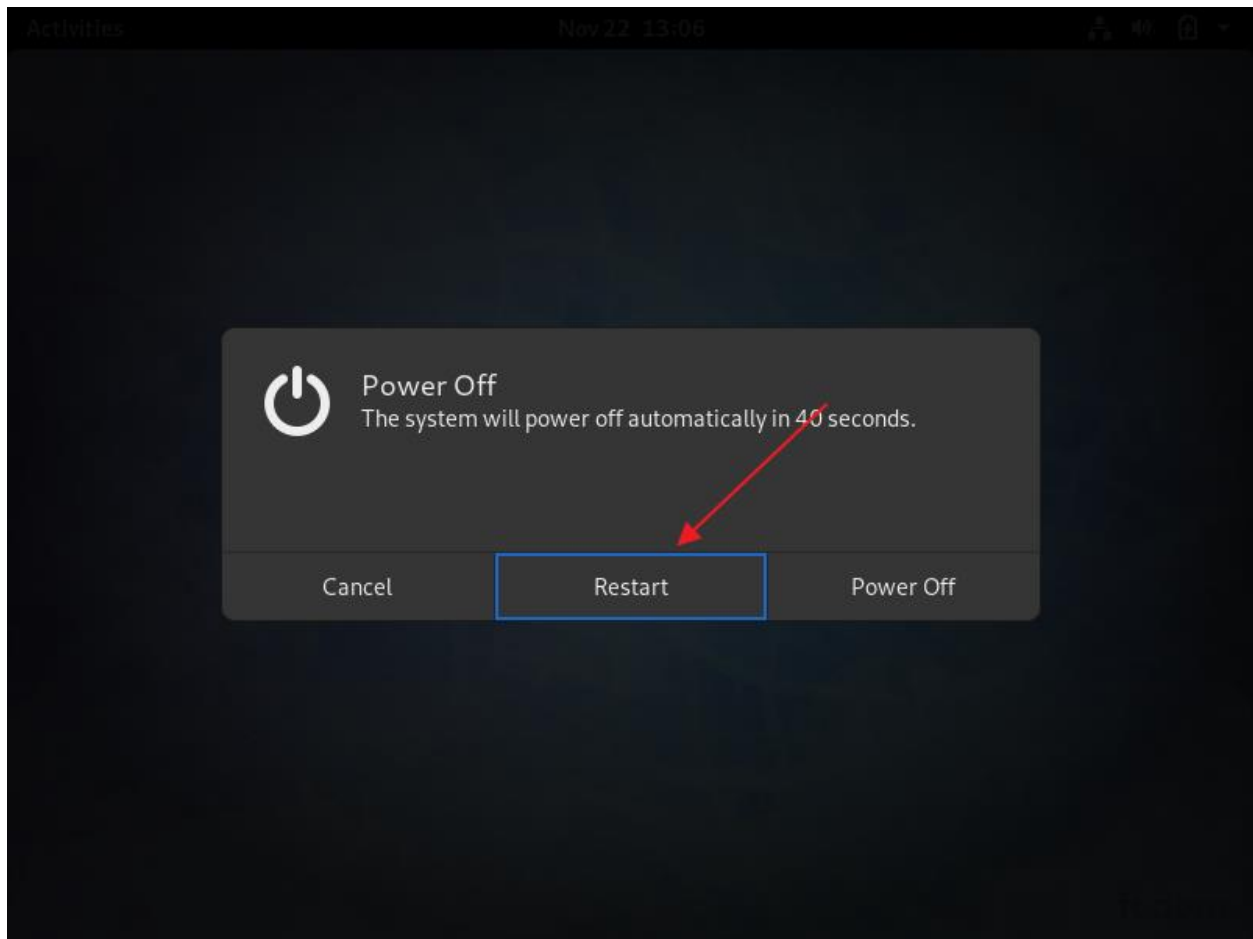


Click: Finish Installation

### Step 035 – Create Fedora 31 Workstation VM

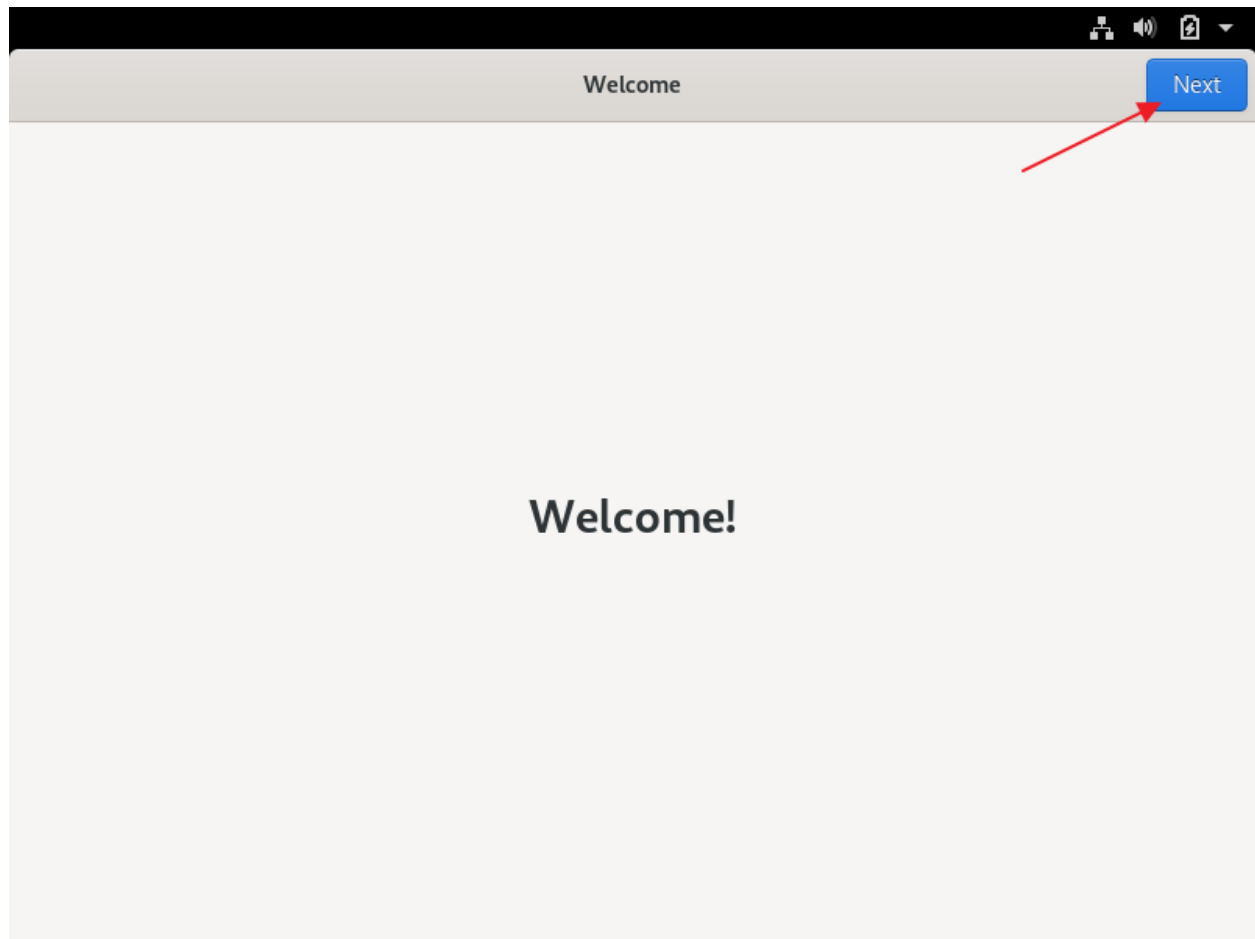


## Step 035 – Create Fedora 31 Workstation VM



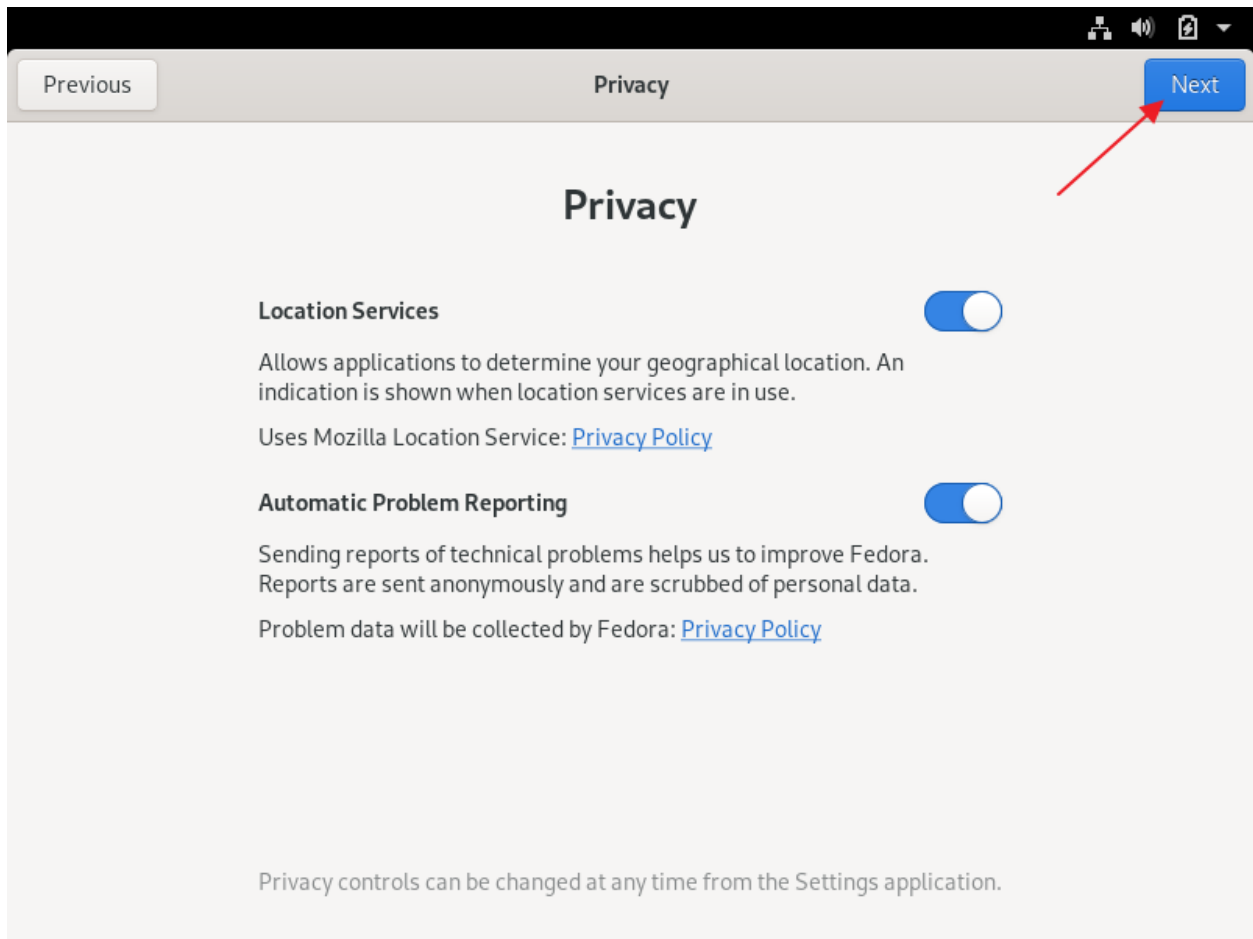
Restart

## Step 035 – Create Fedora 31 Workstation VM



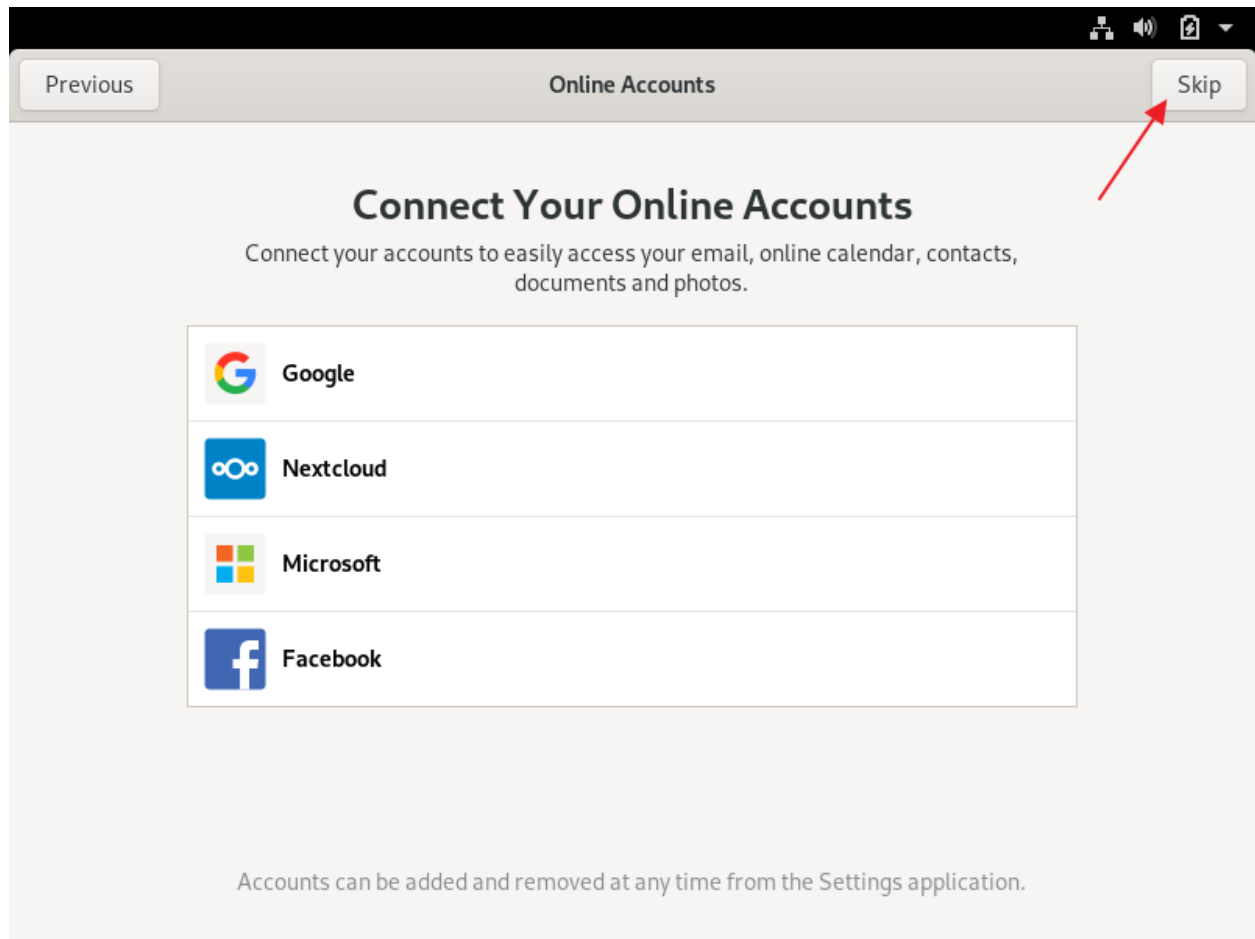
Click: Next

## Step 035 – Create Fedora 31 Workstation VM



Click: Next

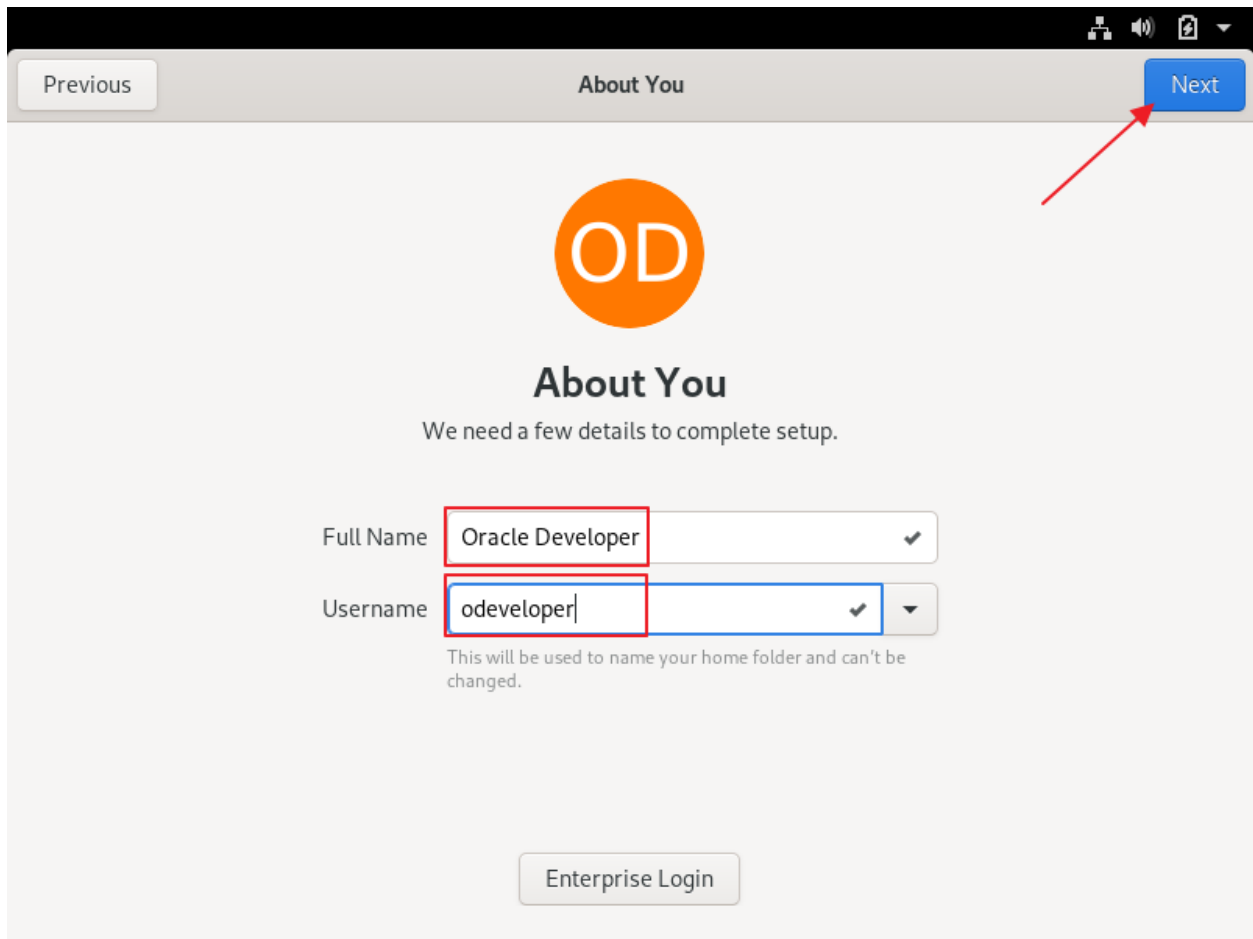
## Step 035 – Create Fedora 31 Workstation VM



Click: Skip



## Step 035 – Create Fedora 31 Workstation VM



Previous About You Next

**OD**

### About You

We need a few details to complete setup.

Full Name Oracle Developer ✓

Username odeveloper ✓

This will be used to name your home folder and can't be changed.

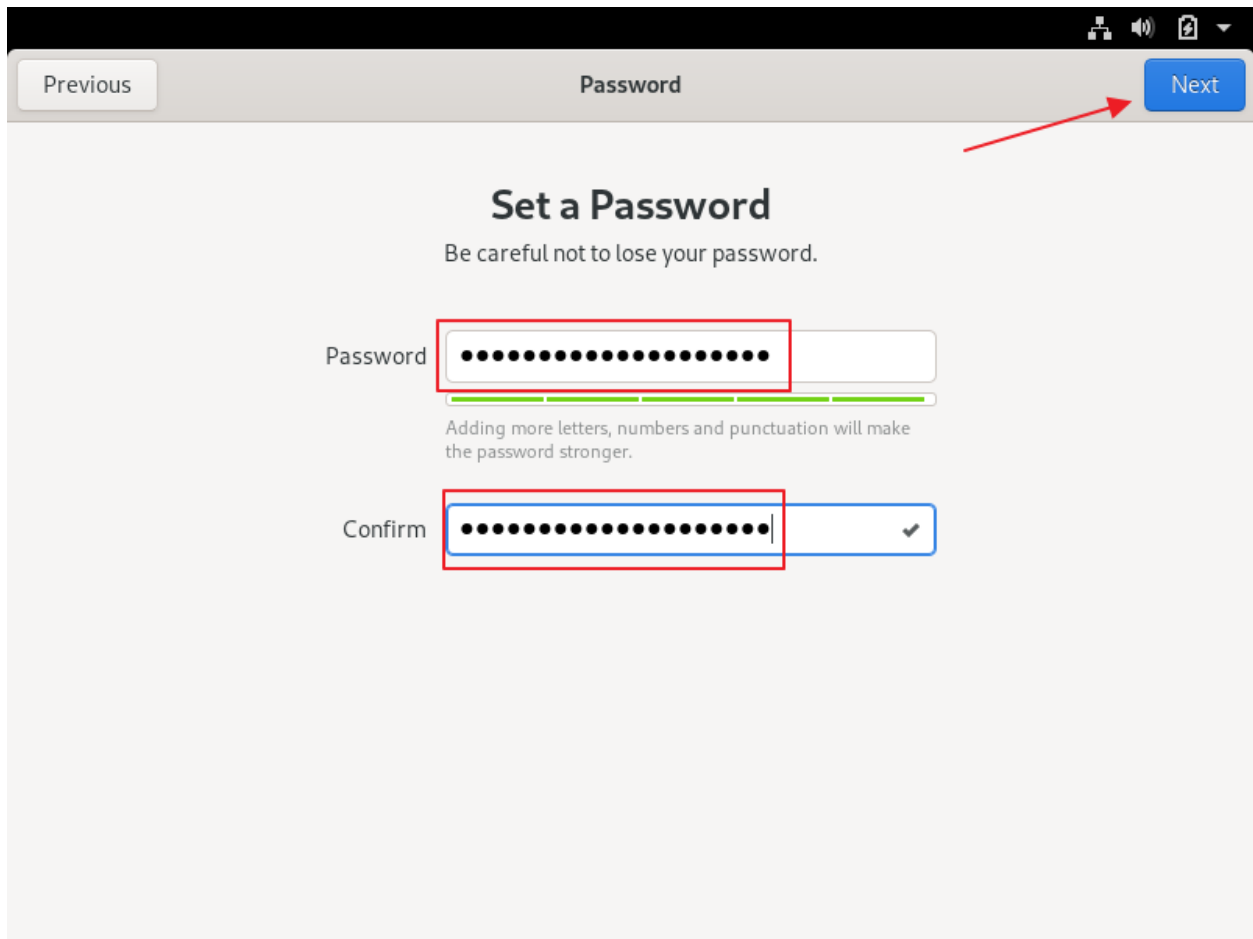
Enterprise Login

Full Name: Oracle Developer

Username: odeveloper

Click: Next

## Step 035 – Create Fedora 31 Workstation VM



Previous Password Next

### Set a Password

Be careful not to lose your password.

Password

Adding more letters, numbers and punctuation will make the password stronger.

Confirm

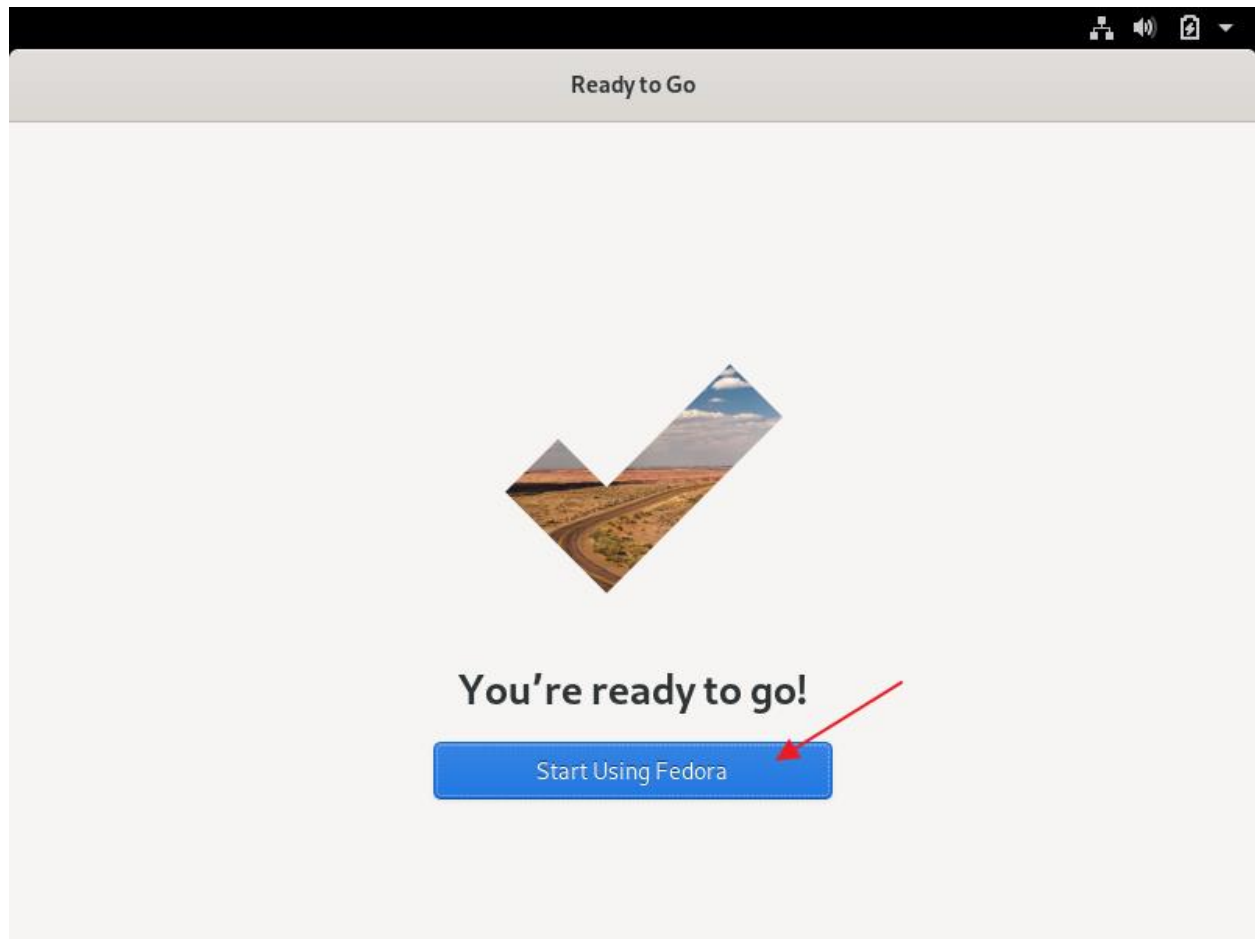
Use KeePass to create a new password for the Oracle Developer account

Password: {odeveloper password}

Confirm: {odeveloper password}

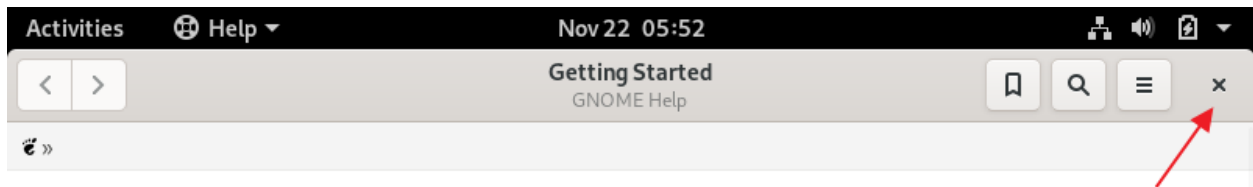
Click: Next

## Step 035 – Create Fedora 31 Workstation VM

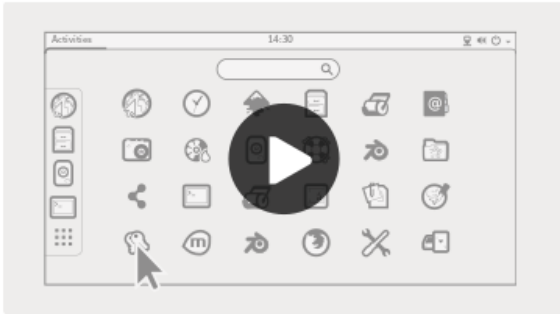


Click: Start Using Fedora

## Step 035 – Create Fedora 31 Workstation VM



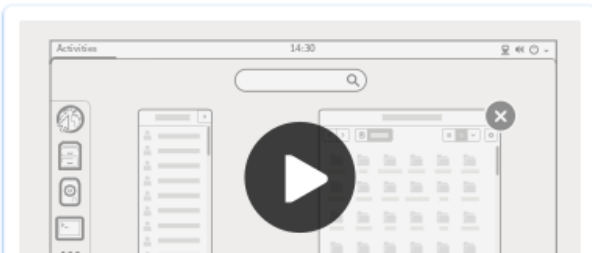
# Getting Started



Launch applications

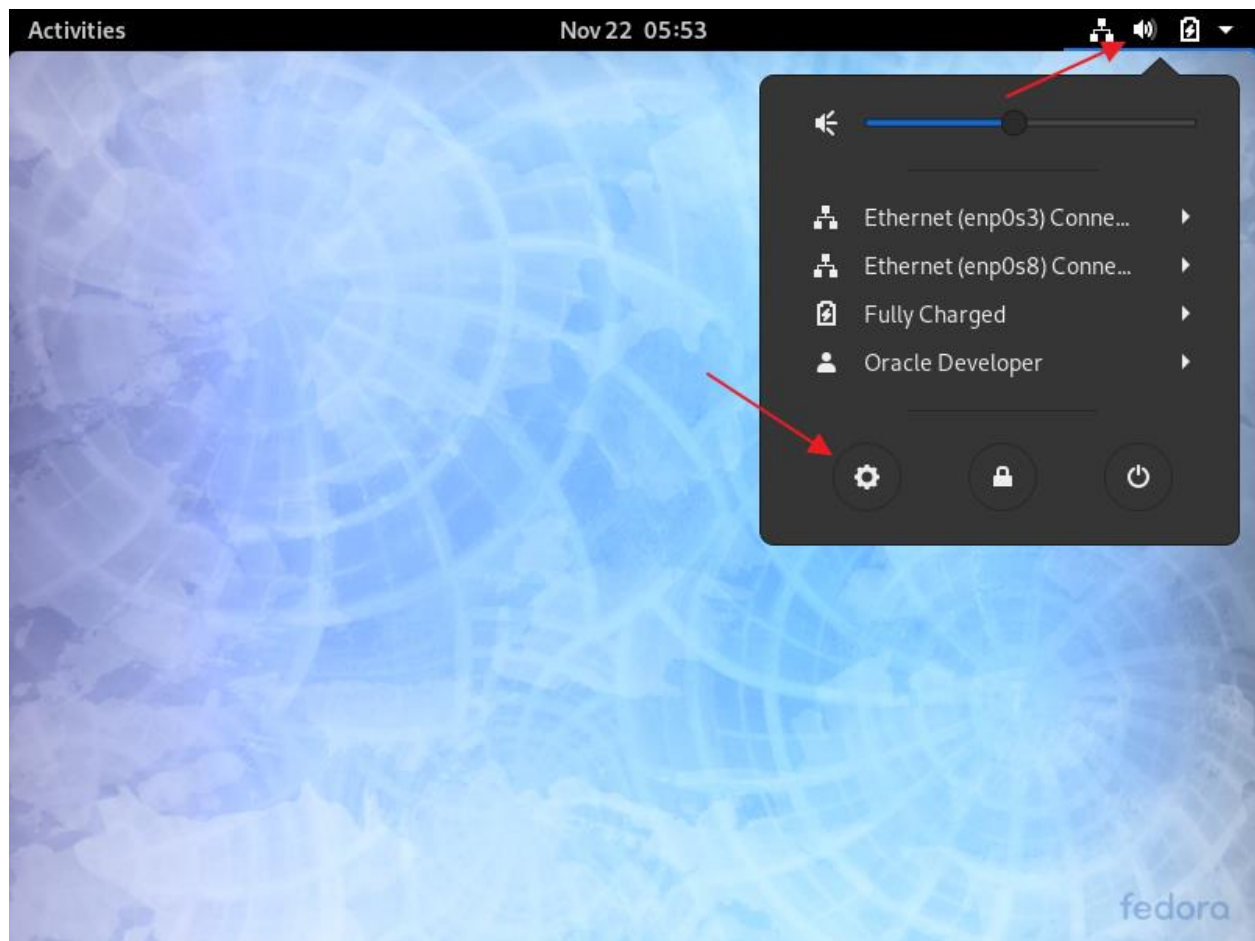


Switch tasks



Exit help

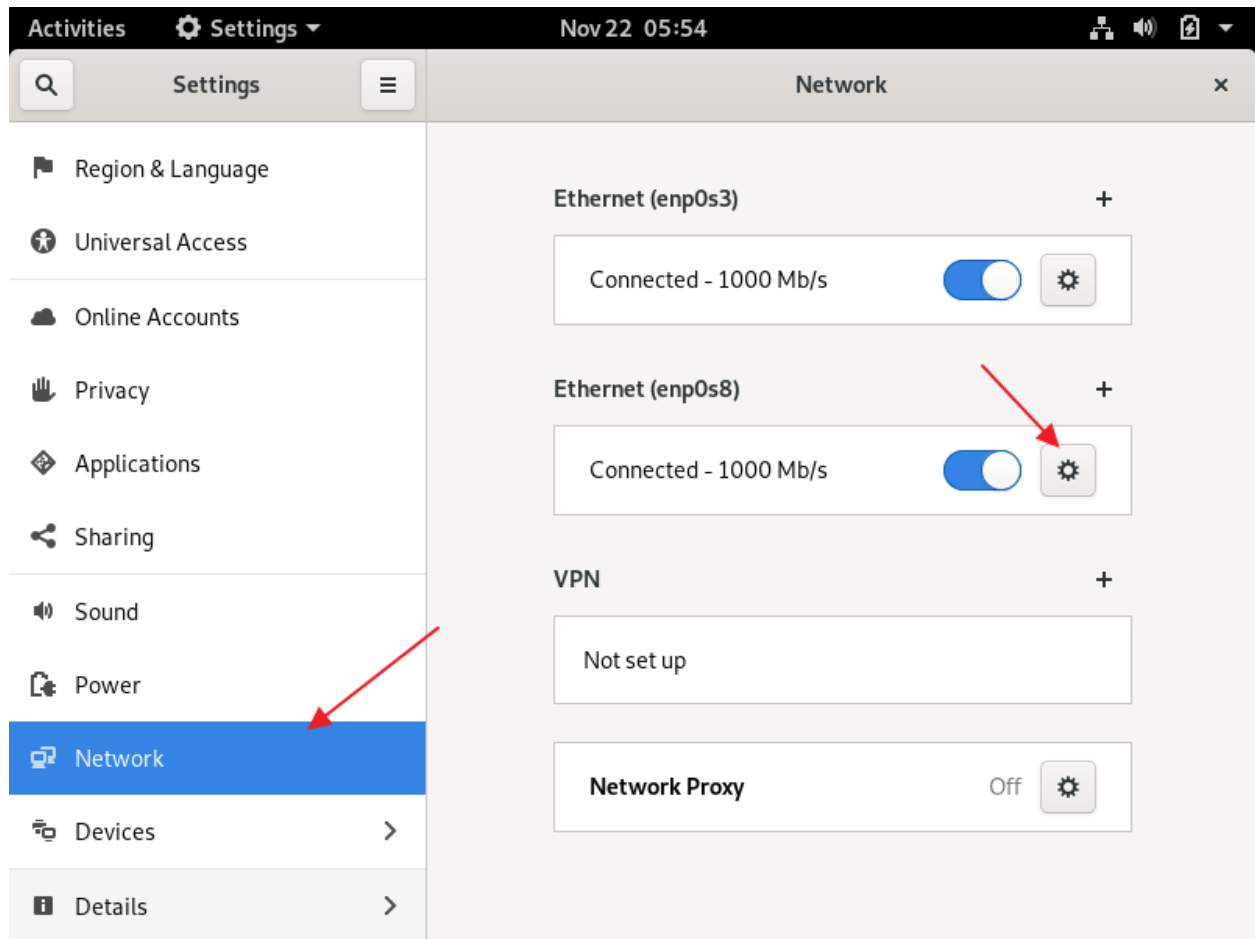
## Step 035 – Create Fedora 31 Workstation VM



Right-click for drop-down menu

Click: gear (settings)

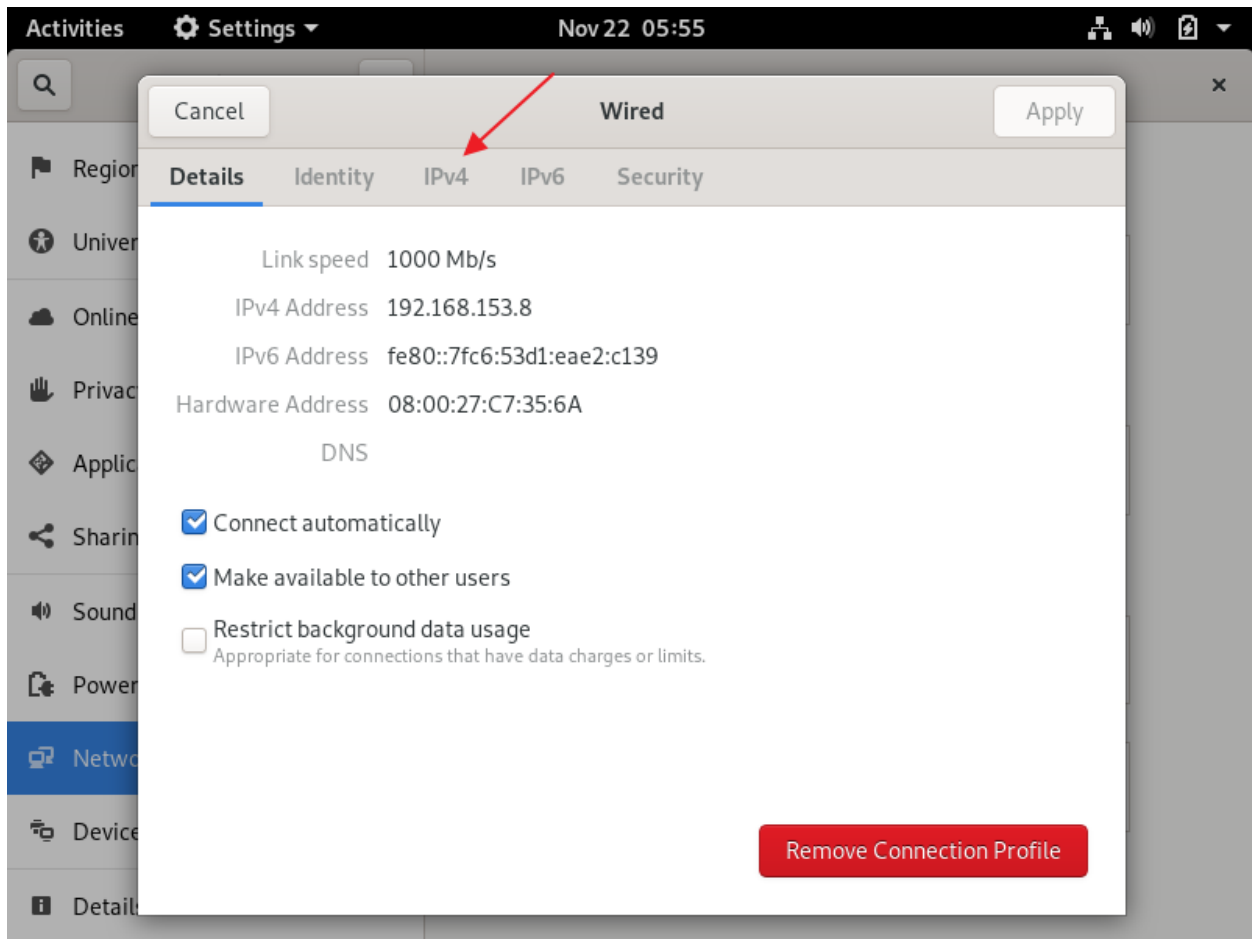
## Step 035 – Create Fedora 31 Workstation VM



Click: Network

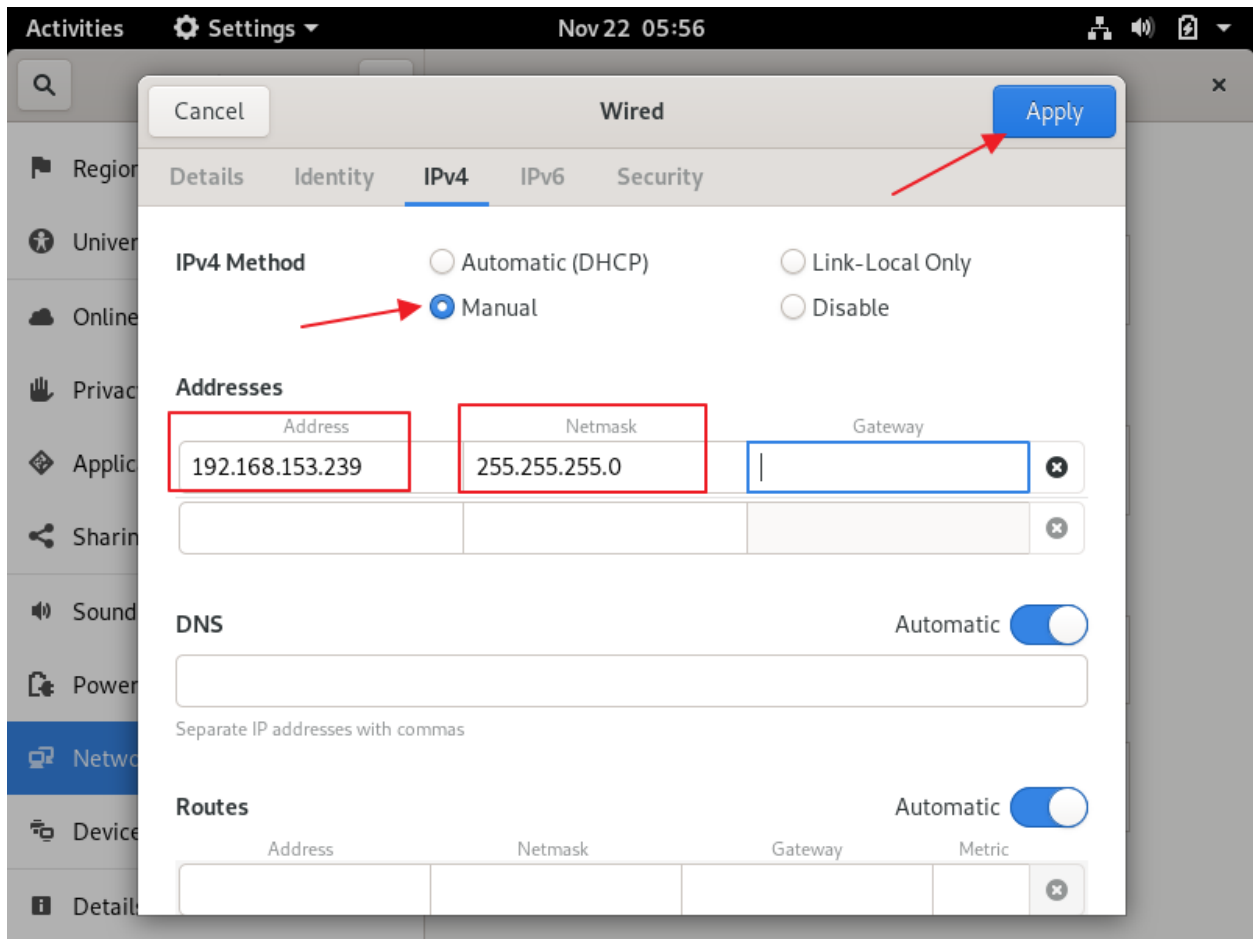
Click: Gear for second network adapter

### Step 035 – Create Fedora 31 Workstation VM



Click: IPv4

### Step 035 – Create Fedora 31 Workstation VM



IPv4 Method: Manual

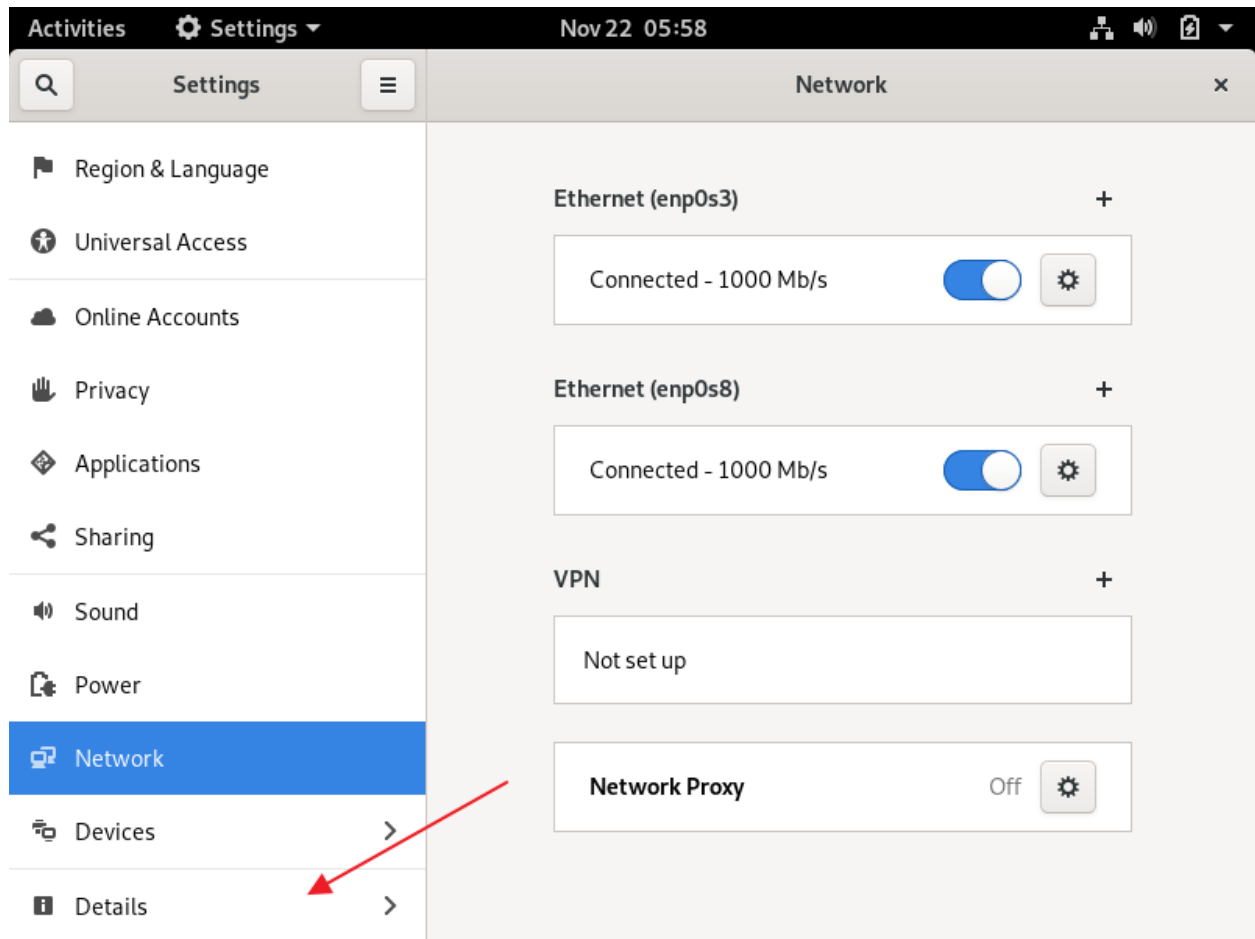
Address: 192.168.153.239

Network: 255.255.255.0

Click: Apply

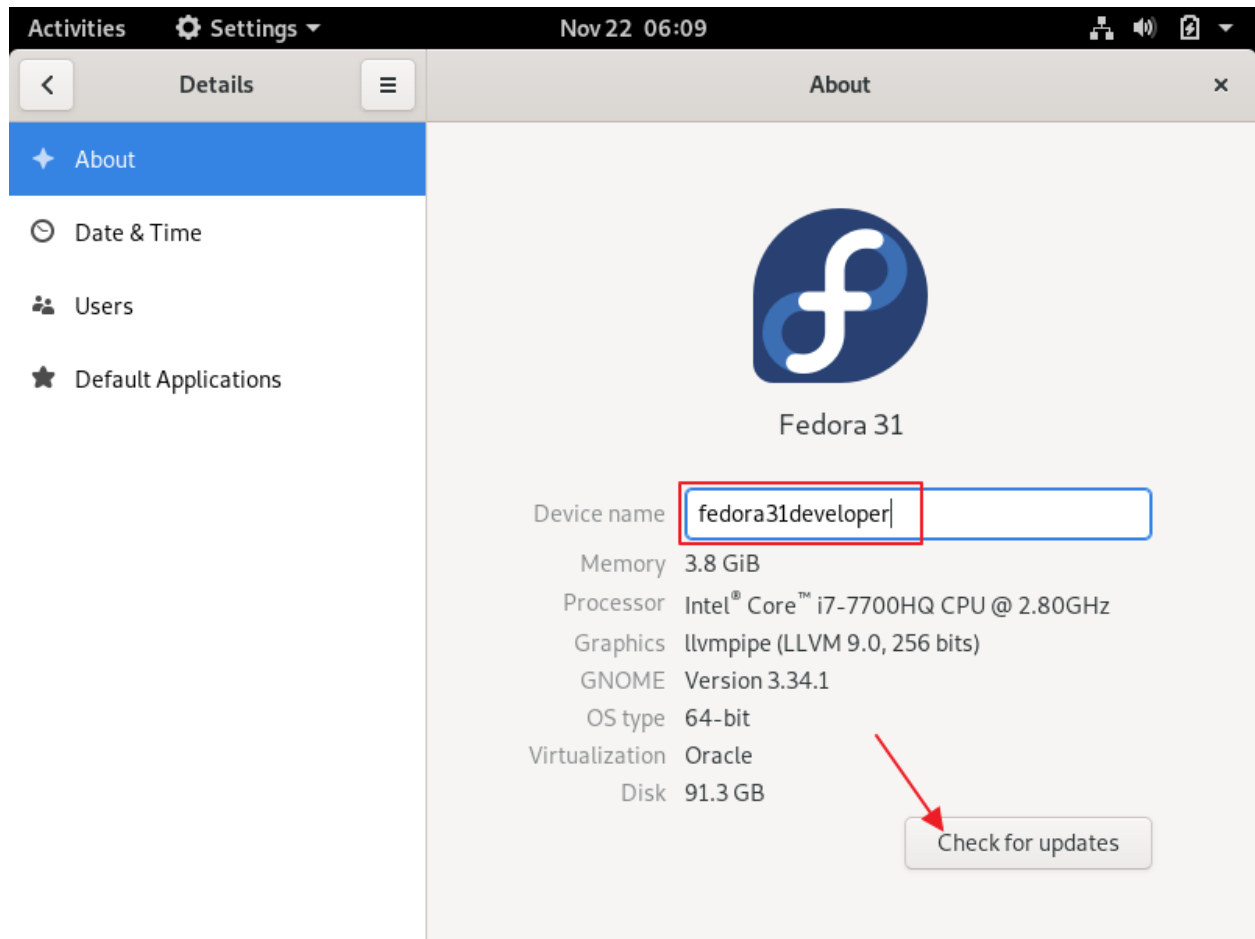


## Step 035 – Create Fedora 31 Workstation VM



Click: Details

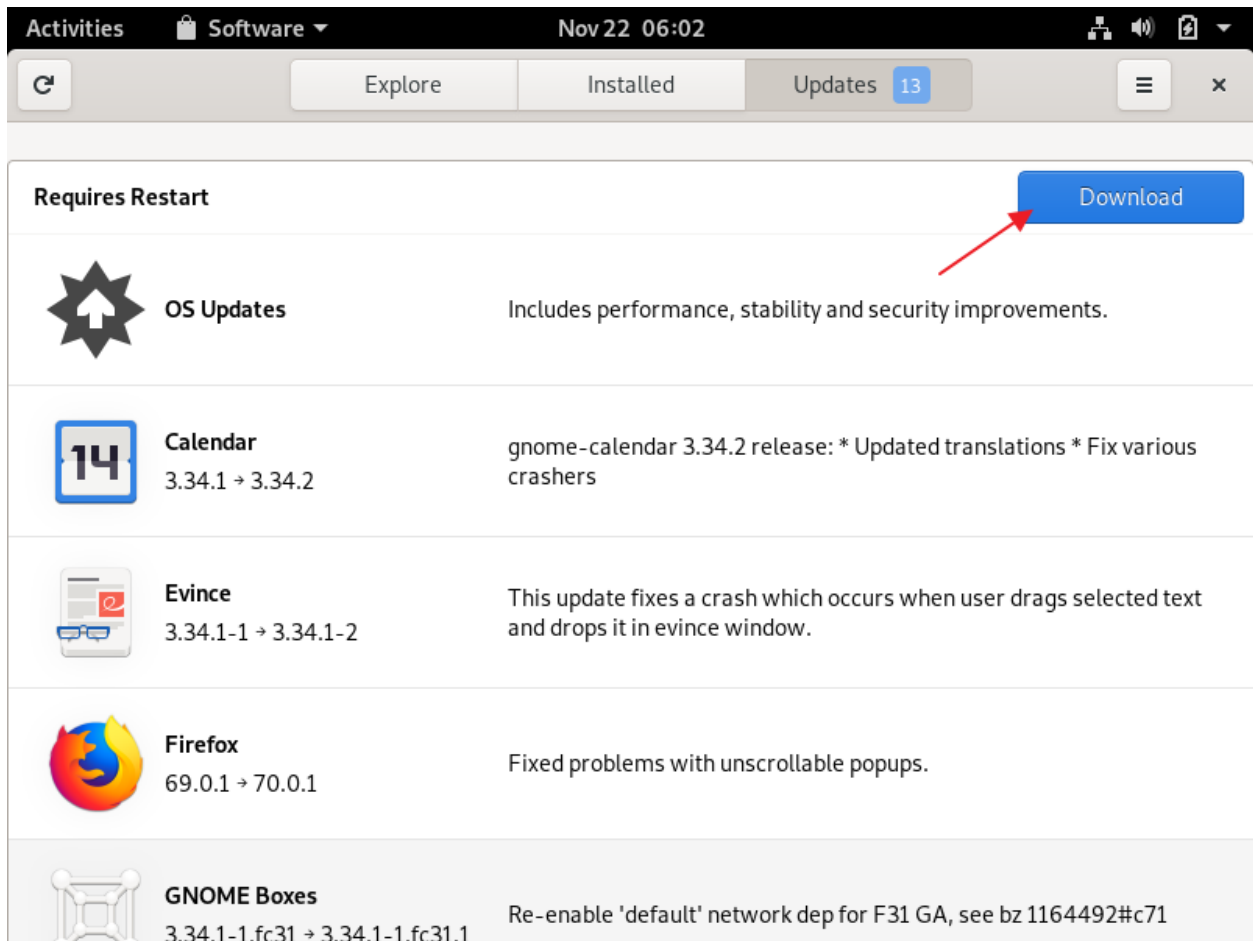
## Step 035 – Create Fedora 31 Workstation VM



Device name: fedora31developer

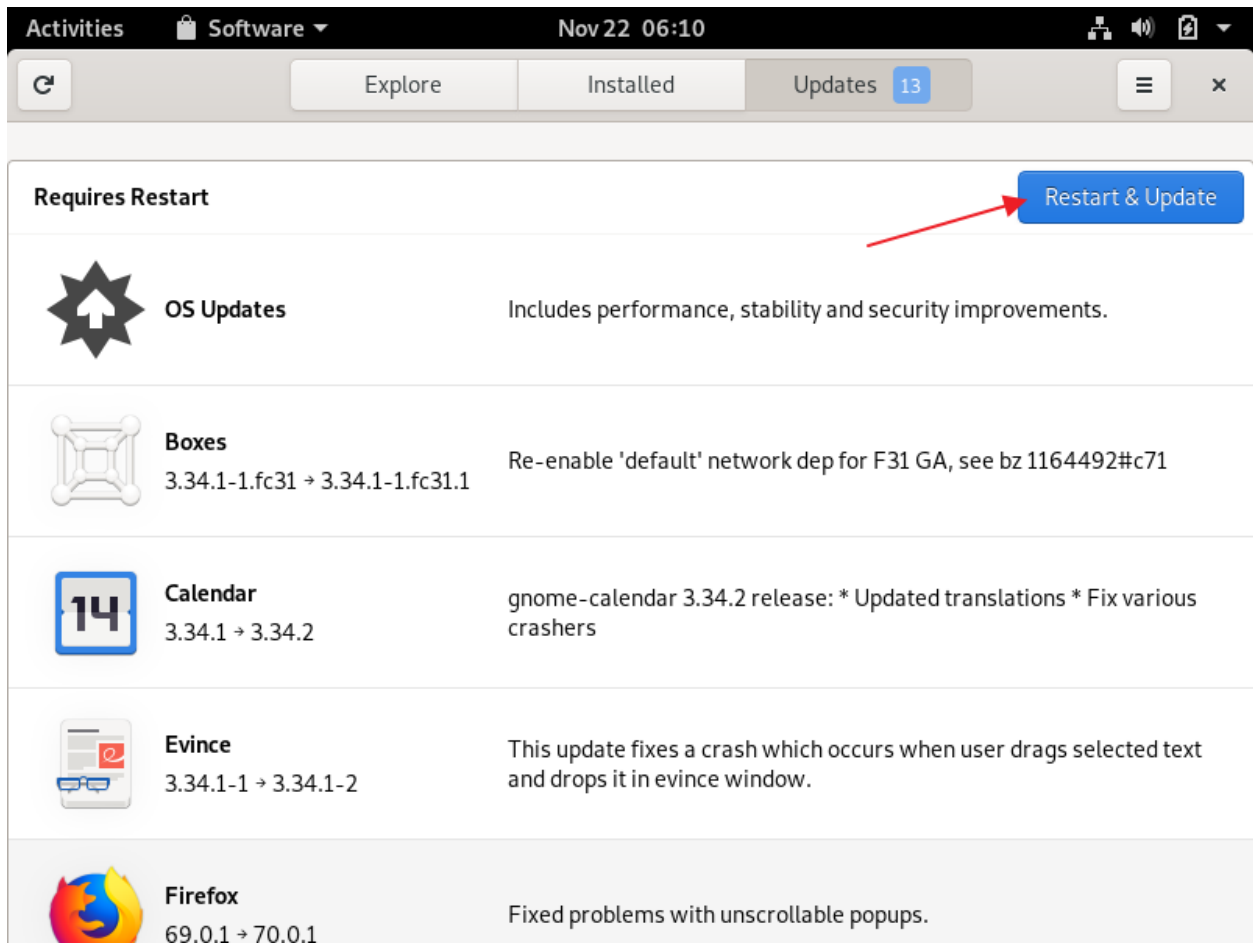
Click: Check for updates

## Step 035 – Create Fedora 31 Workstation VM



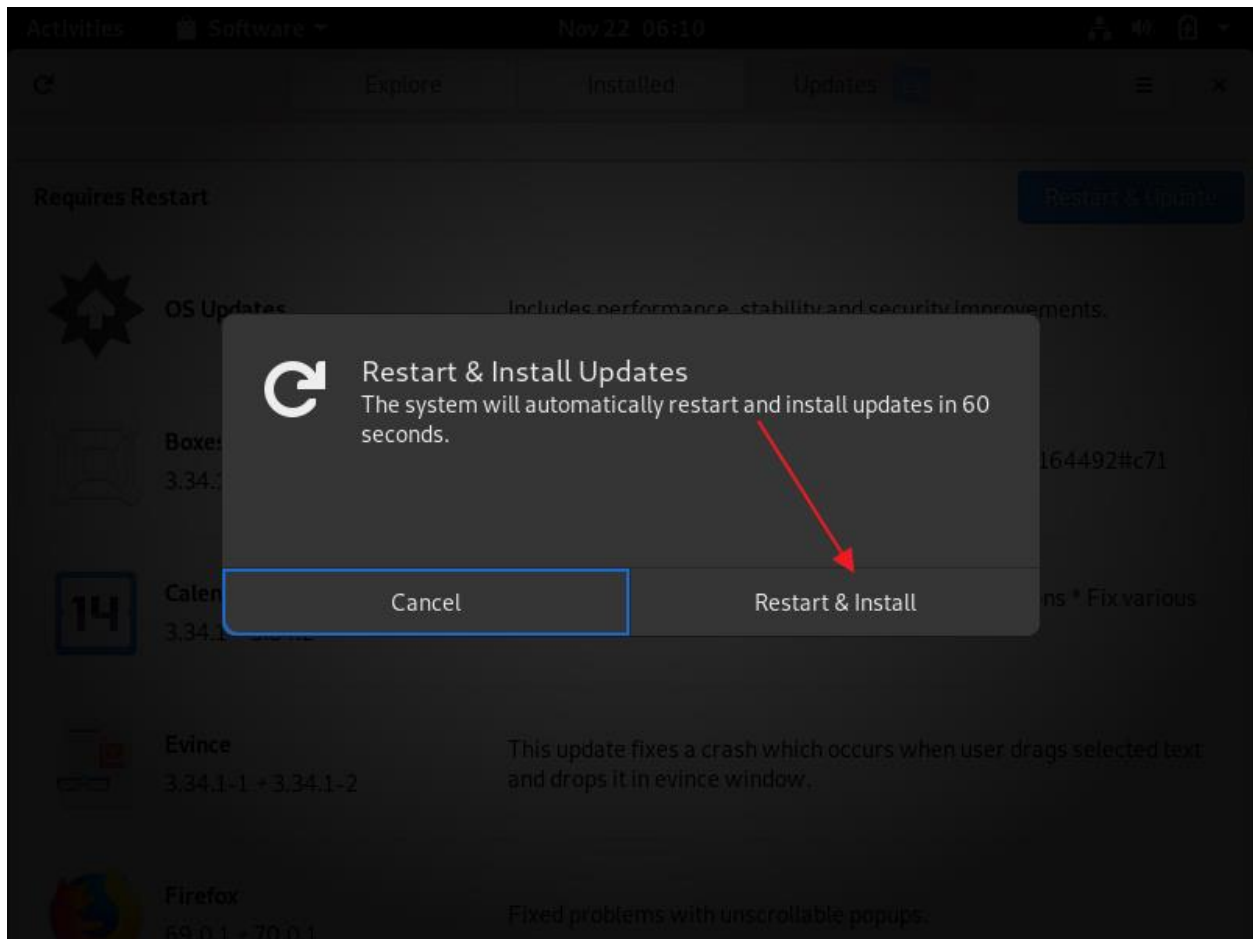
Click: Download

## Step 035 – Create Fedora 31 Workstation VM

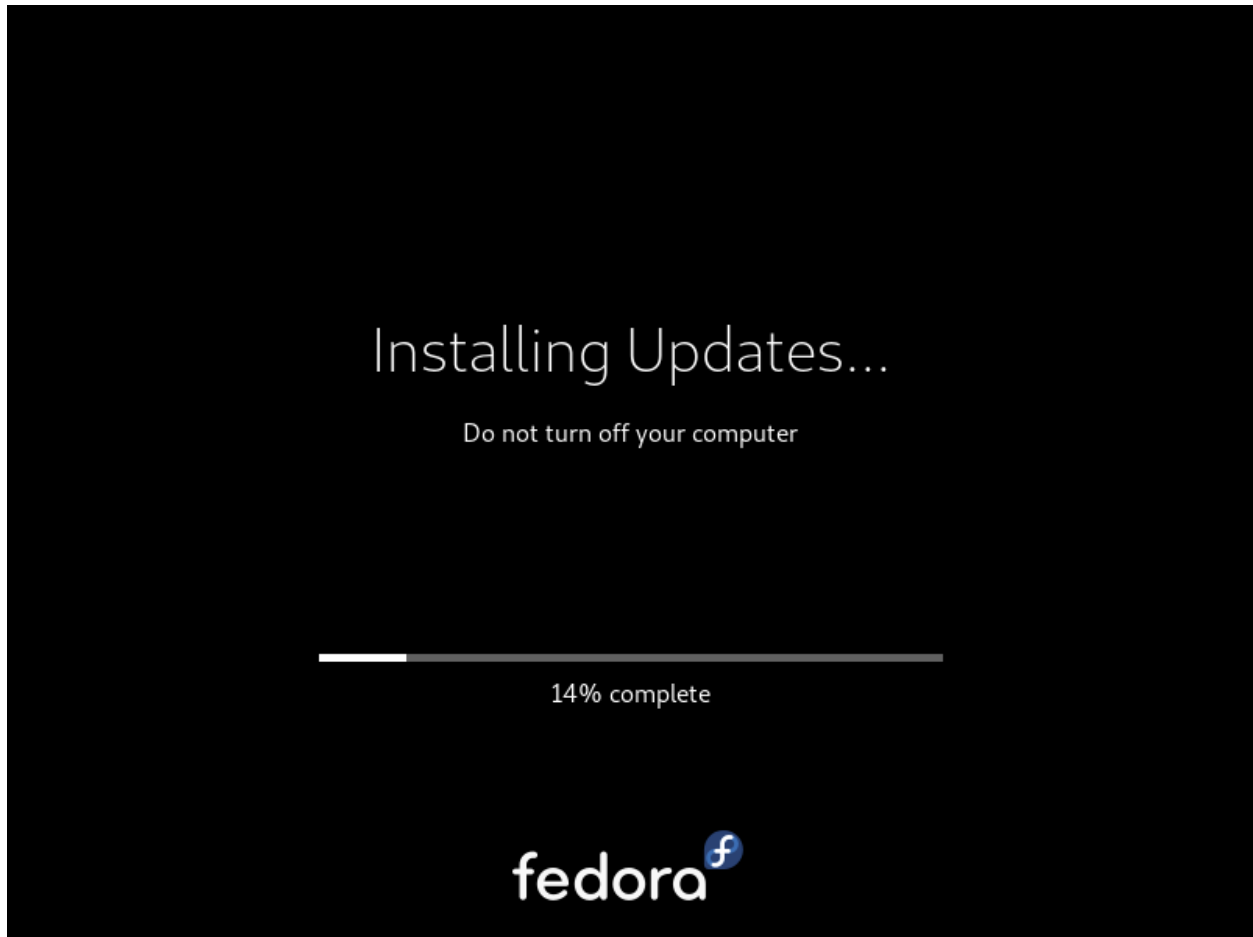


Click: Restart & Update

### Step 035 – Create Fedora 31 Workstation VM



Click: Restart & Install



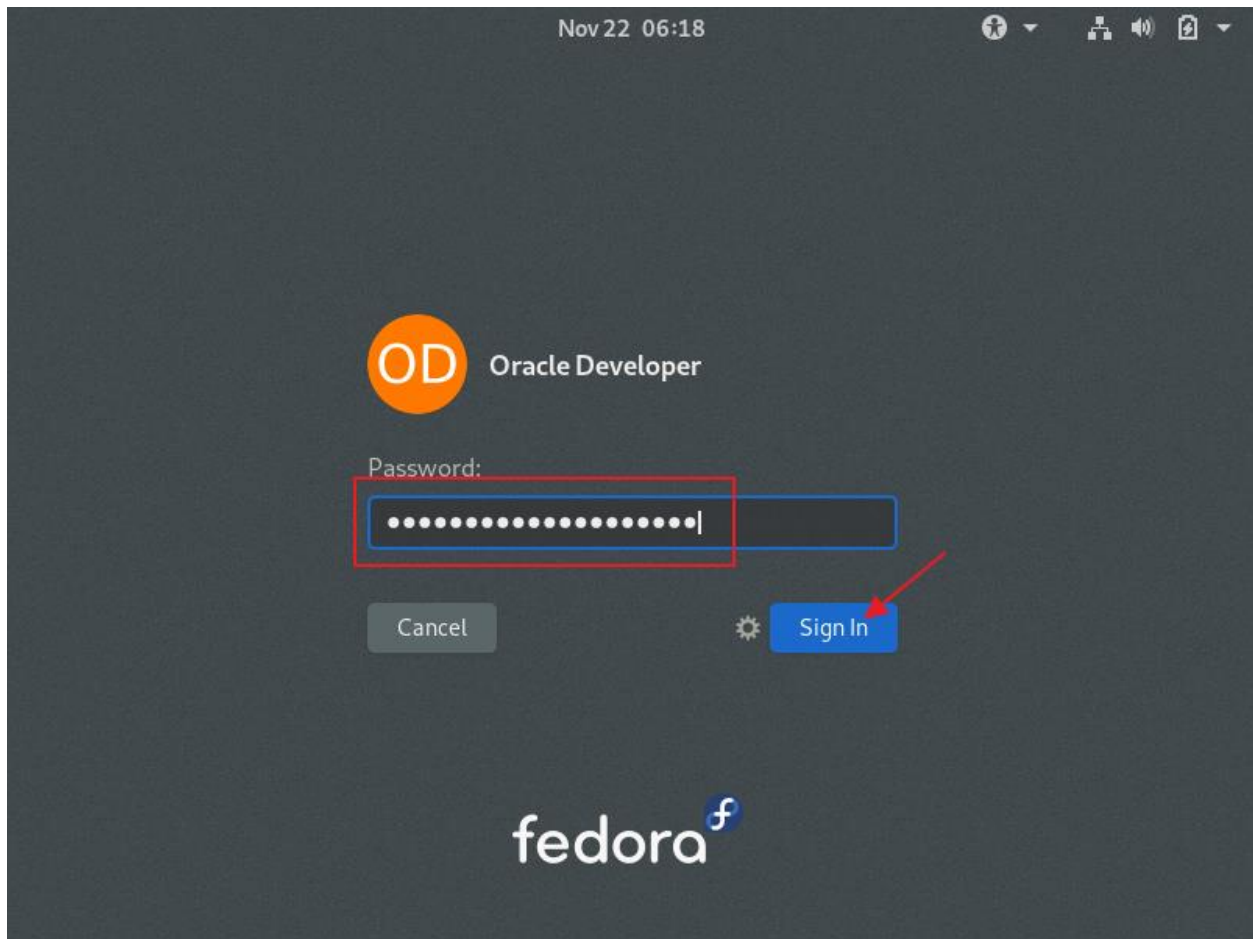
Progress. . .

### Step 035 – Create Fedora 31 Workstation VM



Click: Oracle Developer

## Step 035 – Create Fedora 31 Workstation VM



Password: Oracle Developer password

Click: Sign In

Launch a terminal window

On Fedora, VirtualBox Guest Additions are available as an RPM, so installation is simple:

Add some packages (to be able to install VirtualBox Guest Additions

We also eject the Fedora 31 Workstation CDROM

```
[oracledveloper@fedora31developer ~]$ sudo su -
```

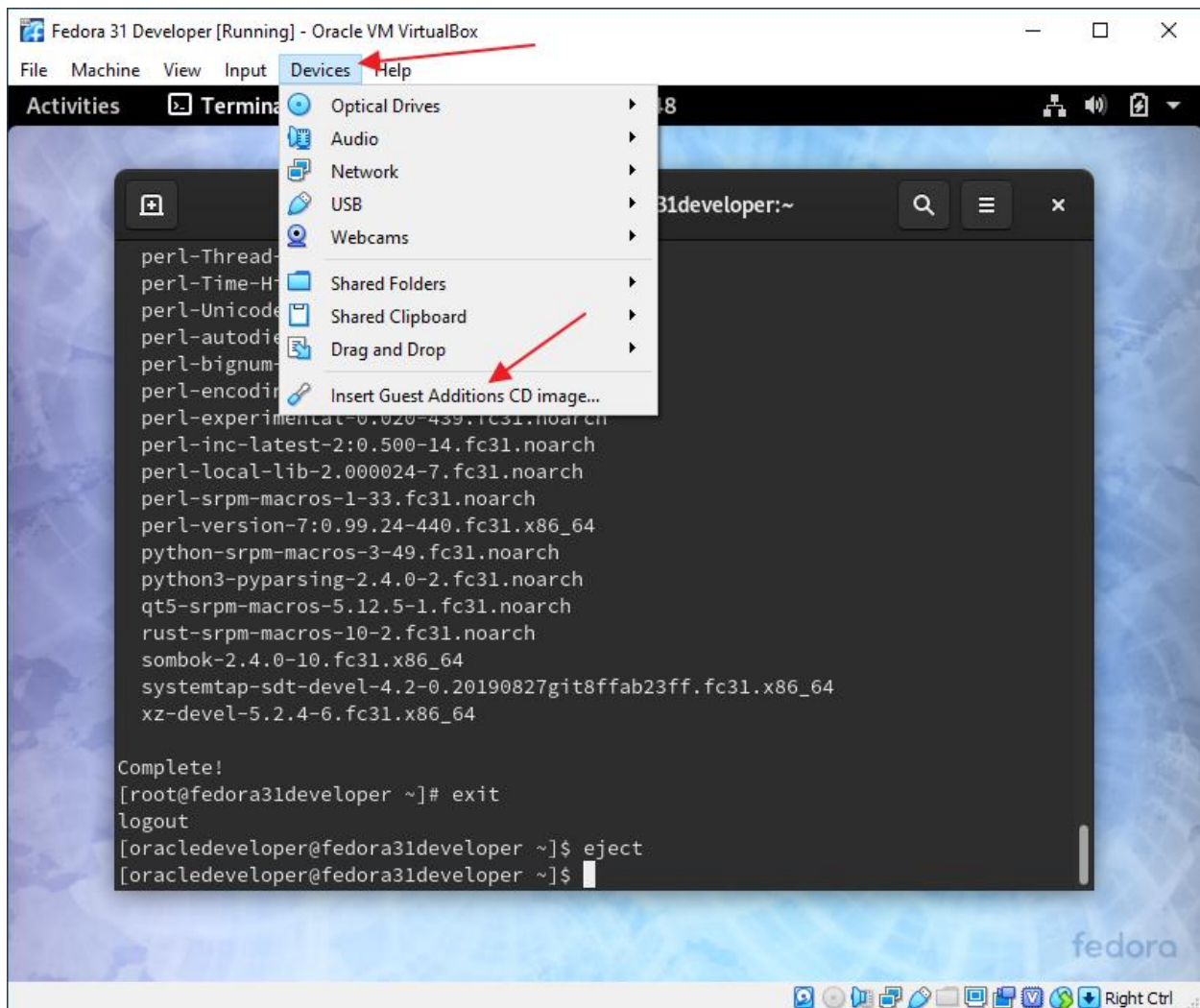
We trust you have received the usual lecture from the local System Administrator. It usually boils down to these three things:



### Step 035 – Create Fedora 31 Workstation VM

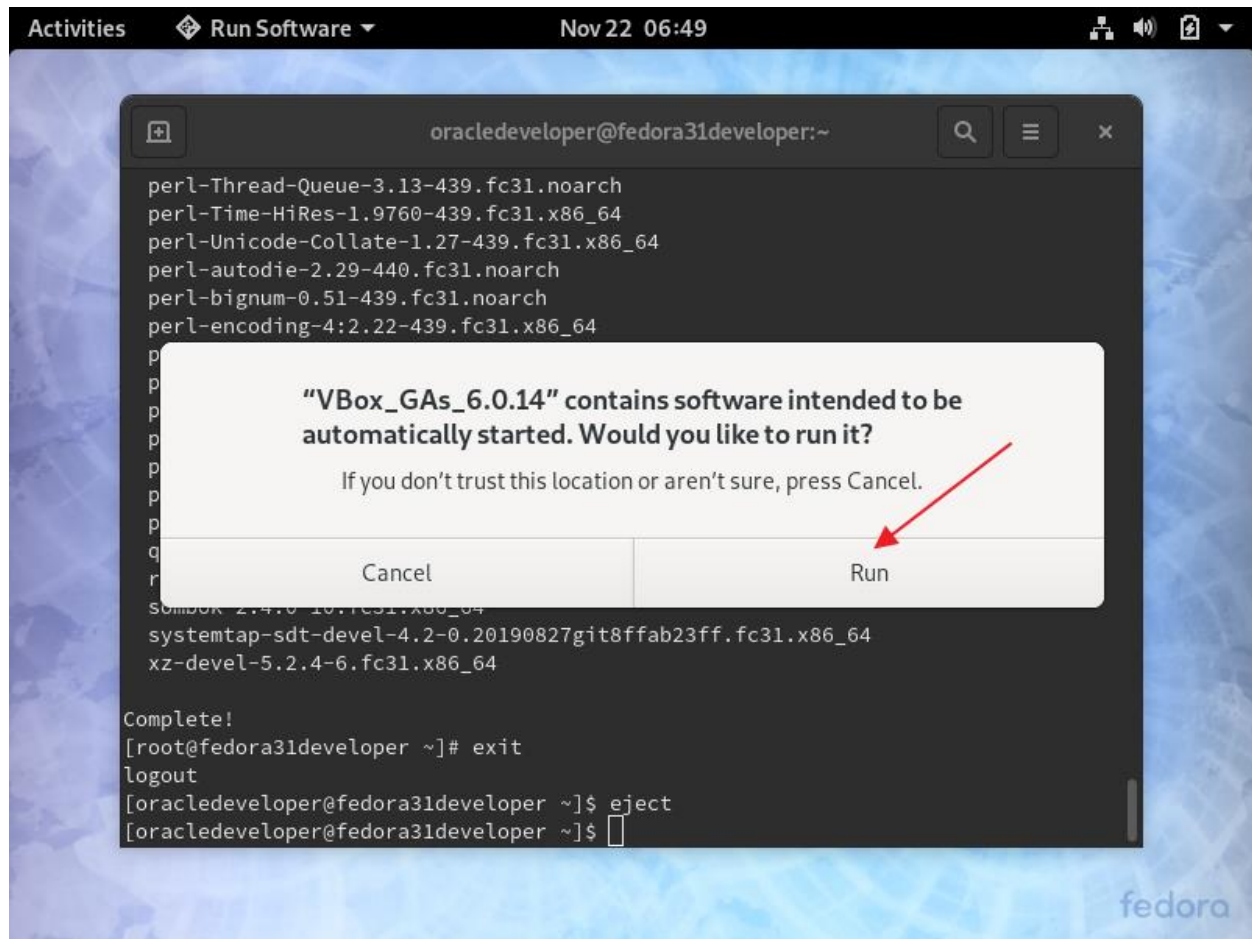
- #1) Respect the privacy of others.
- #2) Think before you type.
- #3) With great power comes great responsibility.

```
[sudo] password for oracledeveloper: {oracle developer password}
[root@fedora31developer ~]# dnf -y install kernel-headers kernel-devel gcc
make perl elfutils elfutils-devel elfutils-libelf-devel
. . .
Complete!
[root@fedora31developer ~]# exit
Logout
[oracledeveloper@fedora31developer ~]$ eject
[oracledeveloper@fedora31developer ~]$
```



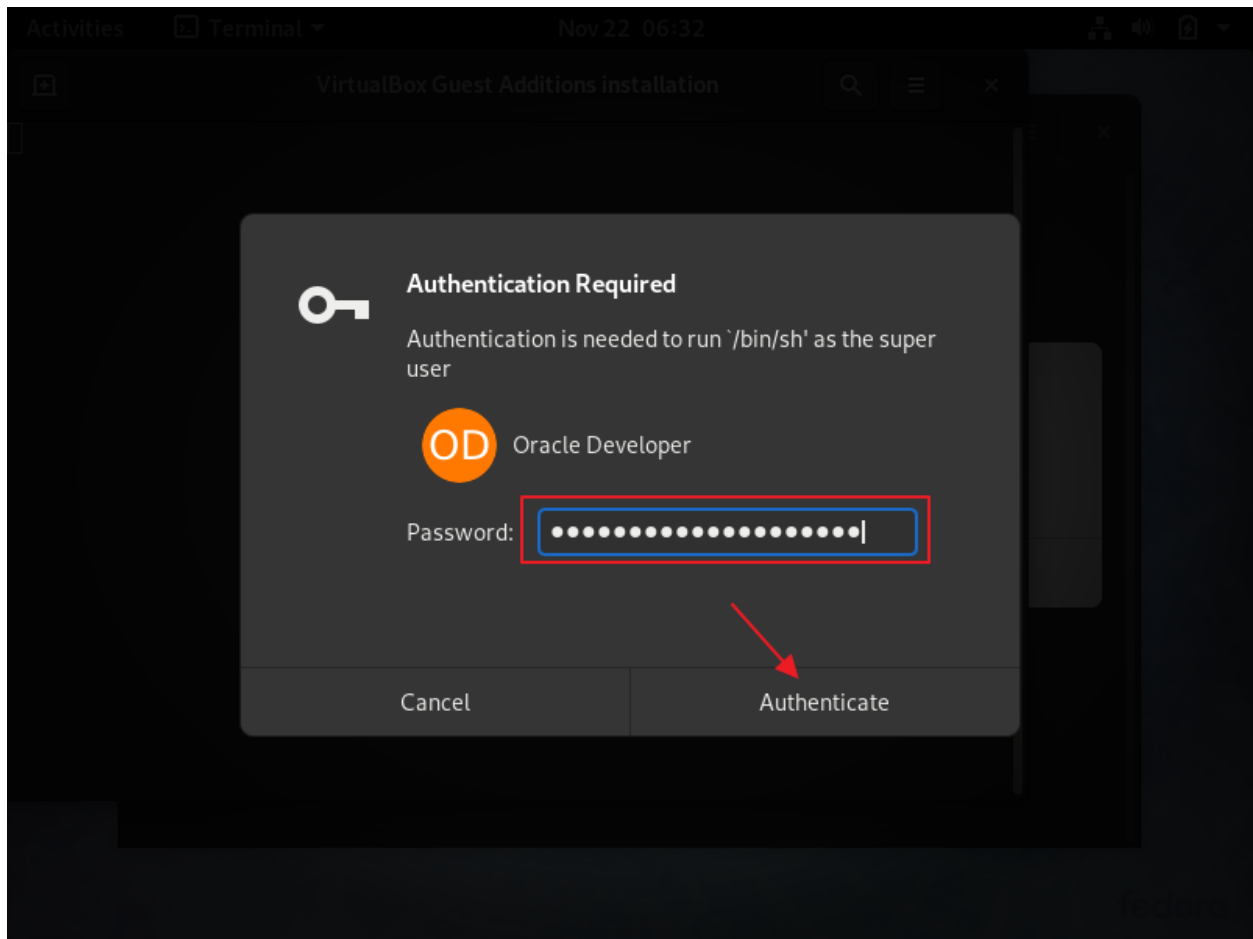
Devices => Insert Guest Additions CD Image...

## Step 035 – Create Fedora 31 Workstation VM



Click: Run

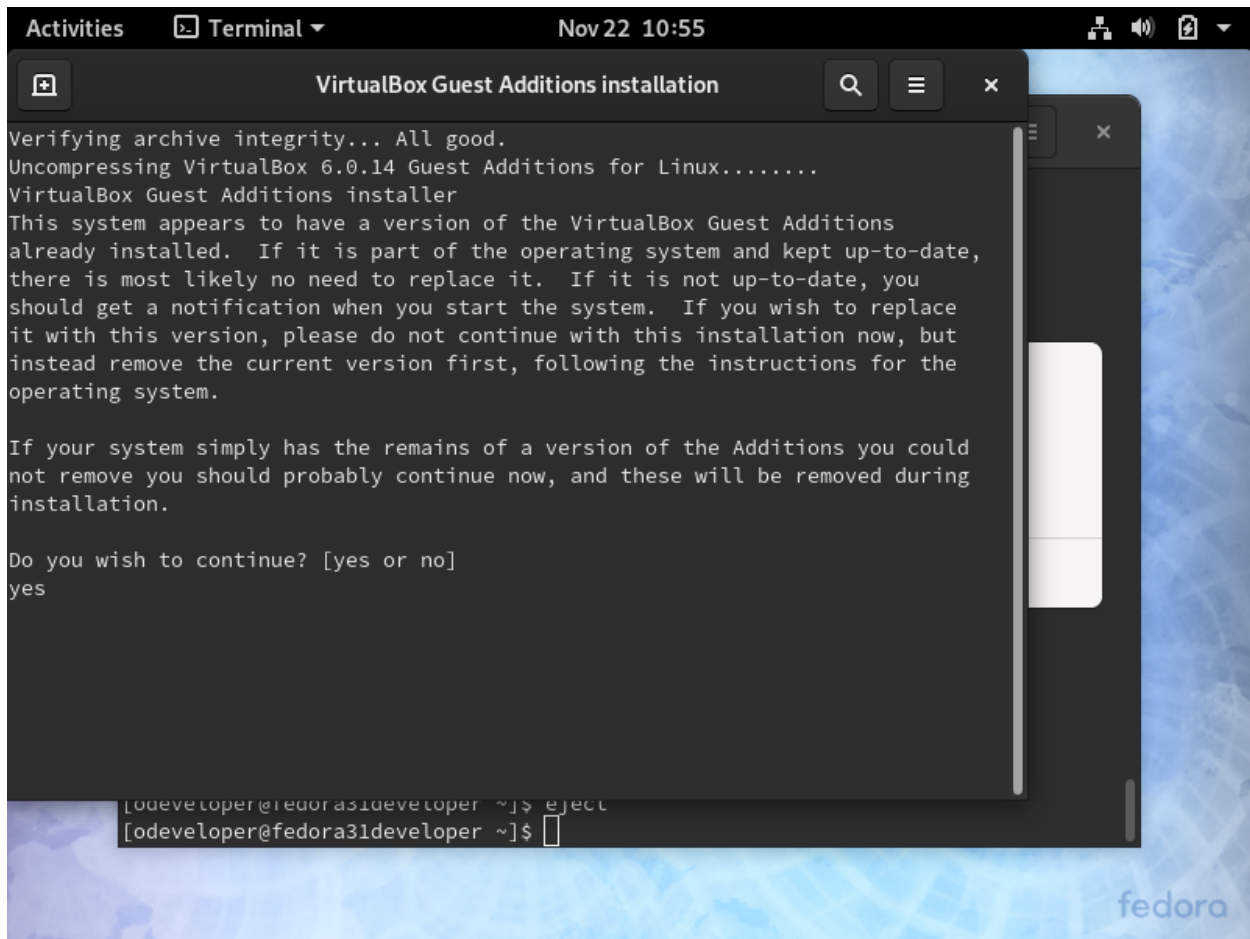
### Step 035 – Create Fedora 31 Workstation VM



Password: Oracle Developer password

Click: Authenticate

## Step 035 – Create Fedora 31 Workstation VM



The screenshot shows a terminal window titled "VirtualBox Guest Additions installation" running on a Fedora 31 Workstation VM. The terminal output is as follows:

```
Verifying archive integrity... All good.
Uncompressing VirtualBox 6.0.14 Guest Additions for Linux.....
VirtualBox Guest Additions installer
This system appears to have a version of the VirtualBox Guest Additions
already installed.  If it is part of the operating system and kept up-to-date,
there is most likely no need to replace it.  If it is not up-to-date, you
should get a notification when you start the system.  If you wish to replace
it with this version, please do not continue with this installation now, but
instead remove the current version first, following the instructions for the
operating system.

If your system simply has the remains of a version of the Additions you could
not remove you should probably continue now, and these will be removed during
installation.

Do you wish to continue? [yes or no]
yes

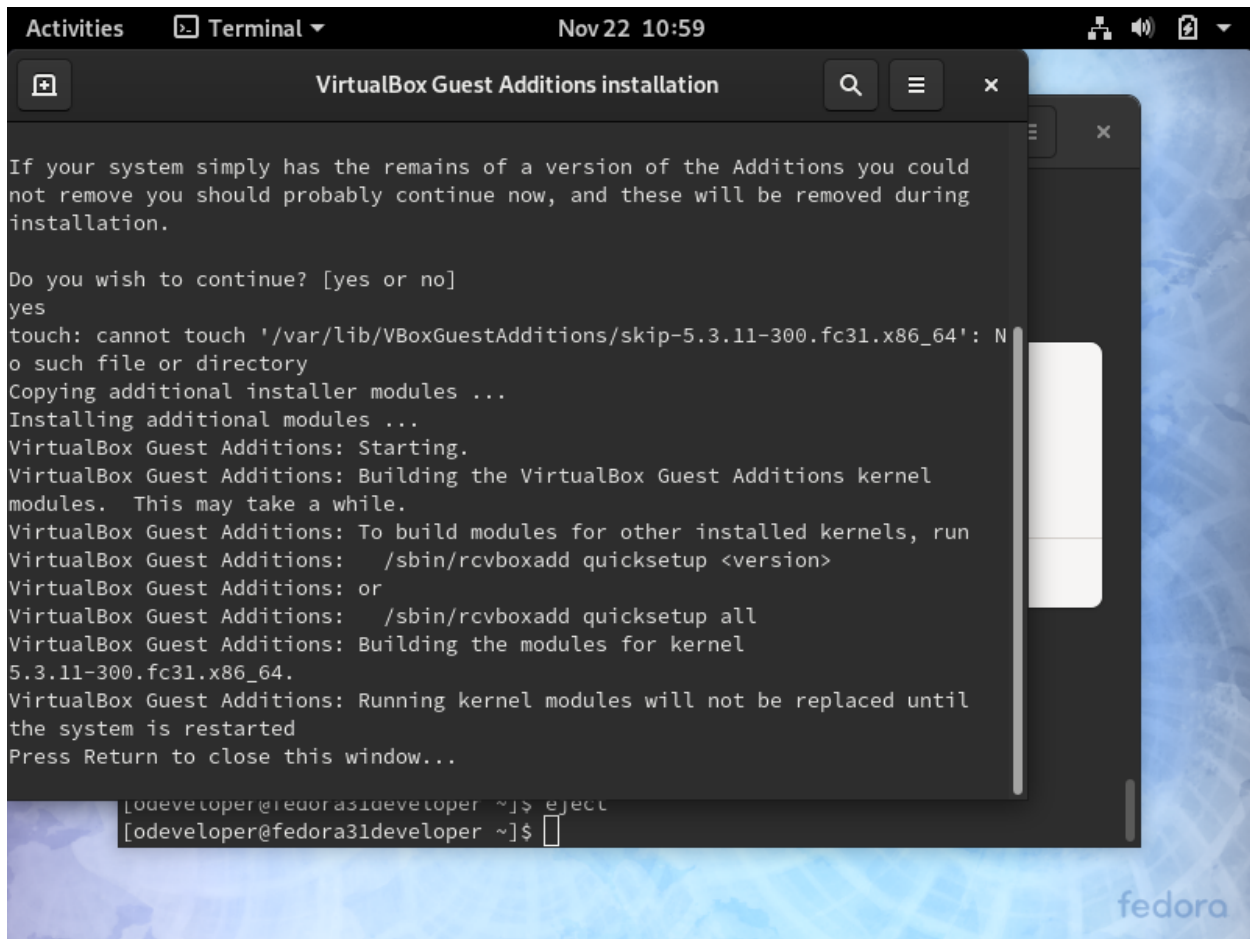
[odeveloper@fedora31developer ~]$ eject
[odeveloper@fedora31developer ~]$
```

The terminal window is overlaid on a desktop background with a blue and white geometric pattern and the "fedora" logo in the bottom right corner. The top of the window shows the system status bar with "Activities", "Terminal", and the date/time "Nov 22 10:55".

Do you wish to continue? [yes or no]

yes

## Step 035 – Create Fedora 31 Workstation VM



```
Activities  Terminal  Nov 22 10:59

VirtualBox Guest Additions installation

If your system simply has the remains of a version of the Additions you could
not remove you should probably continue now, and these will be removed during
installation.

Do you wish to continue? [yes or no]
yes
touch: cannot touch '/var/lib/VBoxGuestAdditions/skip-5.3.11-300.fc31.x86_64': No
such file or directory
Copying additional installer modules ...
Installing additional modules ...
VirtualBox Guest Additions: Starting.
VirtualBox Guest Additions: Building the VirtualBox Guest Additions kernel
modules. This may take a while.
VirtualBox Guest Additions: To build modules for other installed kernels, run
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup <version>
VirtualBox Guest Additions: or
VirtualBox Guest Additions: /sbin/rcvboxadd quicksetup all
VirtualBox Guest Additions: Building the modules for kernel
5.3.11-300.fc31.x86_64.
VirtualBox Guest Additions: Running kernel modules will not be replaced until
the system is restarted
Press Return to close this window...

[odeveloper@fedora31developer ~]$ eject
[odeveloper@fedora31developer ~]$
```

Press Return

Cancel dialog box

Restart VM

Now, screen resizing works. Lots more screen real estate.