

# Fedora Setup Guide

This set-up guide is primarily designed for **Techies**. If you find this guide helpful, and if you're interested in AI related updates, **follow me on LinkedIn ([Tushar Soni](#))**, where I keep posting about AI-related technology.

# Nvidia Driver Installation

1. ``` $ sudo dnf update ```

(Make sure your kernel and applications are updated)

2. Disable all non Linux OS because your system will reboot many times. I recommend you to make sure your safe boot is enabled.

3. `` \$ sudo dnf install fastfetch ``

```
``` $ fastfetch ```
```

(For determining GPU Model. This cmd will show you the result as showing in the image below.)

```
(torch) tsr@Z-Cross:-~$ fastfetch
      .',;:::;,'.
      .',;cccccccccccc;,,
      .;cccccccccccccccccccccc;.
      .:cccccccccccccccccccccccccc:.
      .;cccccccccccccc;.dddl:.;ccccccc;.
      .:cccccccccccccc;OwmK00XmWd;ccccccc:.
      .:cccccccccccccc;KMMc;cc;xMMc;ccccccc;.
,cccccccccccccc;MMM;cc;WW;cccccccc,
:cccccccccccccc;MMM.;cccccccccccccccccc:
:cccccccc;ox000o;MMM000k.;cccccccccccccc:
cccccc;0MMKxdd;:MMMKddc.;cccccccccccccc;
cccccc;XMO';cccc;MMM.;cccccccccccccccccc'
cccccc;MMo;cccccc;MMW.;cccccccccccccccccc;
cccccc;0MNC.ccc.xMmd;cccccccccccccccccc;
cccccc;dNMWXXXWM0;cccccccccccccccccc;.
cccccccc;.odl:.;cccccccccccccccccc;,.
cccccccccccccccccccccccccccccccccc;'.
:cccccccccccccccccccccccccccccc;,,
'cccccccccccccccccccccc;,,.

tsr@Z-Cross
-----
OS: Fedora Linux 42 (Workstation Edition) x86_64
Kernel: Linux 6.16.10-200.fc42.x86_64
Uptime: 1 hour, 59 mins
Packages: 2326 (rpm), 18 (flatpak), 6 (snap)
Shell: bash 5.2.37
Display (G27F): 1920x1080 @ 60 Hz in 27" [External]
DE: GNOME 48.5
WM: Mutter (Wayland)
WM Theme: Adwaita
Theme: Adwaita [GTK2/3/4]
Icons: Adwaita [GTK2/3/4]
Font: Adwaita Sans (11pt) [GTK2/3/4]
Cursor: Adwaita (24px)
Terminal: Ptyxis 48.5
Terminal Font: Adwaita Mono (11pt)
CPU: 13th Gen Intel(R) Core(TM) i5-13600KF (20) @ 5.10 GHz
GPU: NVIDIA GeForce RTX 3060 Ti Lite Hash Rate [Discrete]
Memory: 5.76 GiB / 31.14 GiB (18%)
Swap: 0 B / 8.00 GiB (0%)
Disk (/): 43.02 GiB / 220.51 GiB (20%) - btrfs
Disk (/mnt/Linux): 33.93 GiB / 915.99 GiB (4%) - ext4
Disk (/run/media/tsr/Dark17): 71.13 GiB / 931.48 GiB (8%) - fuseblk
Local IP (enp5s0): 192.168.1.37/24
Locale: en_IN.UTF-8
```



```
(torch) tsr@Z-Cross:-~$
```



5. ```` $ sudo dnf install kmodtool akmods mokutil openssl ````

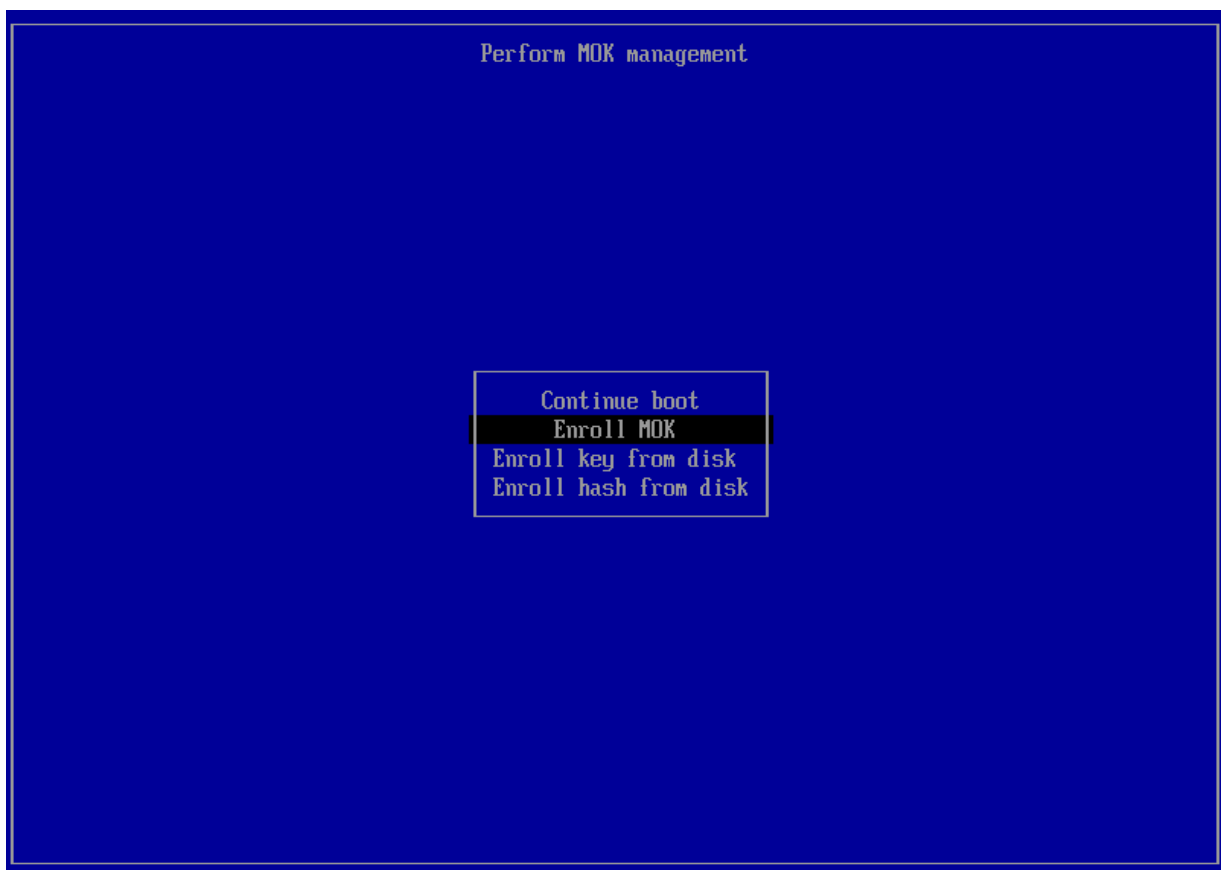
6. ```` $ sudo kmodgenca -a ````

7. ```` $ sudo mokutil --import /etc/pki/akmods/certs/public_key.der ````

(It is will create a key to sign driver. I recommend you to use simple password for creating the key, eg. 1234)

8. ```` $ systemctl reboot ````

9. After rebooting you will be directed to MOK (Machine Owner Key Enrollment). A similar interface will be showing you as shown in the image below:



Press **Enroll MOK** using keyboard and **continue to enroll the key** and put the password which you used while creating the key which was **1234**

10. After reboot, you will be boot to your normal OS interface which means you have successfully enrolled your key.

Now it's time to install Nvidia Driver. For that follow these cmds -

```
``` $ sudo dnf install akmod-nvidia ```
```

```
``` $ sudo dnf install xorg-x11-drv-nvidia-cuda ```
```

```
``` $ systemctl reboot ```
```

11. ``` \$ modinfo -F version nvidia ```

(To check whether driver is installed or not)

Well congrats you have successfully installed your Nvidia Driver!

# Anaconda

1. Download Anaconda for Linux 64-Bit (x86) installer from - <https://www.anaconda.com/download/success>

*(You can download either Anaconda or Miniconda, but Anaconda is recommended)*

2. ```` $ cd Downloads ````

(Make sure you are in Downloads directory in your terminal)

3. ```` $ chmod +x <path downloaded sh> ````

4. ```` $ bash <path downloaded sh> ````

If you want to install it in your mount drive directory, use this cmd

```` $ bash <path downloaded sh> -u ````

where after accepting licence you can provide path where you want to download.

5. ```` $ conda --version ````

(For installation verification)

Congratulation you have successfully installed Anaconda in your Fedora!



# MySQL with Workbench

1. `` \$ sudo dnf update ``

(Make sure your kernel and other applications are up-to date.)

2. `` \$ sudo dnf install community-mysql-server -y ``

```
(base) tsr@Z-Cross:~$ sudo dnf install community-mysql-server -y
Updating and loading repositories:
Repositories loaded.
Package Arch Version Repository Size
Installing:
mysql-server x86_64 8.0.42-2.fc42 updates 108.4 MiB
Installing dependencies:
mecab x86_64 0.996-9.fc42 fedora 1.2 MiB
mysql x86_64 8.0.42-2.fc42 updates 58.3 MiB
mysql-common noarch 8.0.42-2.fc42 updates 444.6 KiB
mysql-errmsg noarch 8.0.42-2.fc42 updates 9.9 MiB
mysql-selinux noarch 1.0.14-1.fc42 updates 49.9 KiB
protobuf-lite x86_64 3.19.6-11.fc42 fedora 861.0 KiB

Transaction Summary:
Installing: 7 packages
```

3. `` \$ systemctl status mysqld ``

```
(base) tsr@Z-Cross:~$ systemctl status mysqld
○ mysqld.service - MySQL 8.0 database server
   Loaded: loaded (/usr/lib/systemd/system/mysqld.service; disabled; preset: >
   Drop-In: /usr/lib/systemd/system/service.d
            └─10-timeout-abort.conf
   Active: inactive (dead)
```

4. `` \$ mysqld --version ``

```
(base) tsr@Z-Cross:~$ mysqld --version
/mnt/Linux/Applications/Anaconda/bin/mysqld Ver 8.4.0 for Linux on x86_64 (Anac
onda)
```



5. `` \$ sudo systemctl enable mysqld ``

Check status again using 4<sup>th</sup> step cmd. If it still shows mysql as dead. Follow this cmd

`` \$ sudo systemctl start mysqld ``

```
(base) tsr@Z-Cross:~$ systemctl start mysqld
(base) tsr@Z-Cross:~$ systemctl status mysqld
● mysqld.service - MySQL 8.0 database server
   Loaded: loaded (/usr/lib/systemd/system/mysqld.service; enabled; preset: d>
   Drop-In: /usr/lib/systemd/system/service.d
            └─10-timeout-abort.conf
   Active: active (running) since Wed 2025-10-08 21:02:27 IST; 1s ago
 Invocation: 96569750b7594f2282e96edc78d4f777
    Process: 5834 ExecStartPre=/usr/libexec/mysql-check-socket (code=exited, st>
    Process: 5871 ExecStartPre=/usr/libexec/mysql-prepare-db-dir mysqld.service>
   Main PID: 5953 (mysqld)
    Status: "Server is operational"
     Tasks: 38 (limit: 37951)
    Memory: 570M (peak: 581.1M)
       CPU: 1.157s
    CGroup: /system.slice/mysqld.service
            └─5953 /usr/libexec/mysqld --basedir=/usr
```

6. `` \$ sudo mysql\_secure\_installation ``

(Follow the further inputs as per your requirement.)

```
(base) tsr@Z-Cross:~$ sudo mysql_secure_installation

Securing the MySQL server deployment.

Connecting to MySQL using a blank password.

VALIDATE PASSWORD COMPONENT can be used to test passwords
and improve security. It checks the strength of password
and allows the users to set only those passwords which are
secure enough. Would you like to setup VALIDATE PASSWORD component?

Press y|Y for Yes, any other key for No: y

There are three levels of password validation policy:

LOW      Length >= 8
MEDIUM  Length >= 8, numeric, mixed case, and special characters
STRONG Length >= 8, numeric, mixed case, special characters and dictionary
        file

Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: 0
Please set the password for root here.
```

7. `` \$ sudo mysql -u root -p ``

```
(base) tsr@Z-Cross:~$ sudo mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.42 Source distribution

Copyright (c) 2000, 2025, Oracle and/or its affiliates.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases
-> ;
+-----+
| Database                |
+-----+
| information_schema      |
| mysql                   |
| performance_schema      |
| sys                     |
+-----+
4 rows in set (0.00 sec)

mysql> exit
Bye
```

Congratulation you have successfully installed mysql community!  
Now we will install **mysql workbench**.

8. `` \$ sudo dnf install snapd ``

9. `` \$ sudo ln -s /var/lib/snapd/snap /snap ``

10. `` \$ sudo snap install mysql-workbench-community ``

Congratulation you've successfully installed MySQL and Workbench!



# OBS

I know OBS is not a developer application, but I still want to include it in this setup guide because many developers will definitely need to install OBS—whether for the virtual camera or for high-resolution screen recording.

1. You can simply install OBS from Software in fedora.

Although installing OBS is usually straightforward, the virtual camera can sometimes cause issues—I've experienced this myself. To fix it, simply run the following command.

2. ```` $ sudo dnf install v4l2loopback ````

3. ```` $ reboot ````

Here we go, now it's working!

