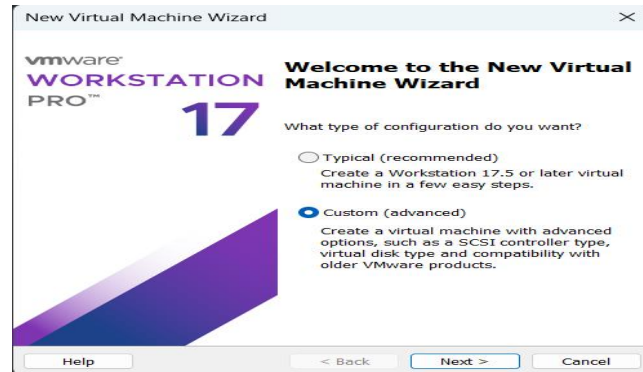


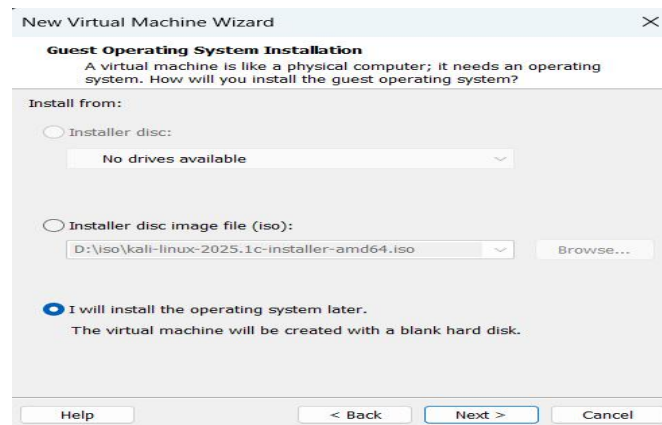
# Install Rocky Linux Minimal

## 1. Create a new virtual machine

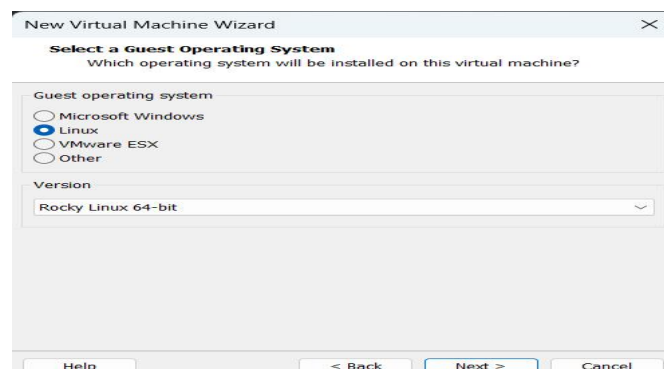
Open VMWare. Click File . Click New Virtual Machine option. Following screen appears.



Select the custom option. Click Next. Click Next to keep the default option. Following screen is displayed.

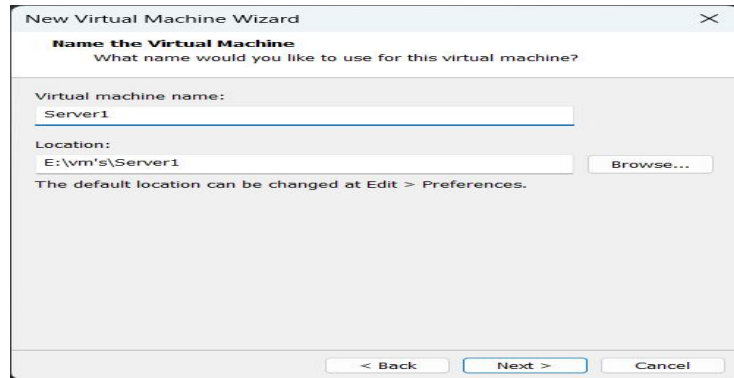


Select the option " I Will install the operating system later". Click Next. The following screen is displayed.

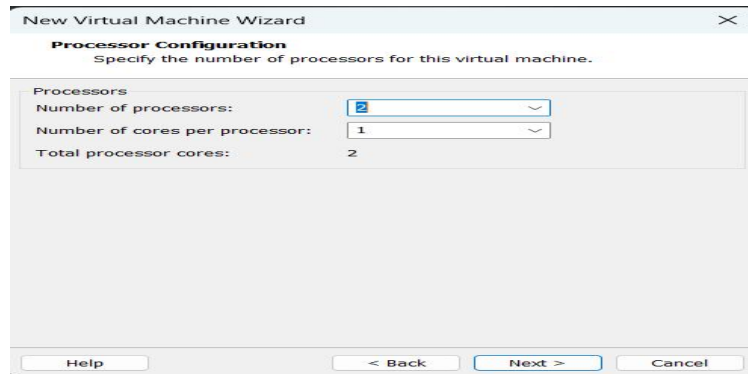


Select Linux in the Guest operating system section. In the version drop down list select Rocky Linux option.

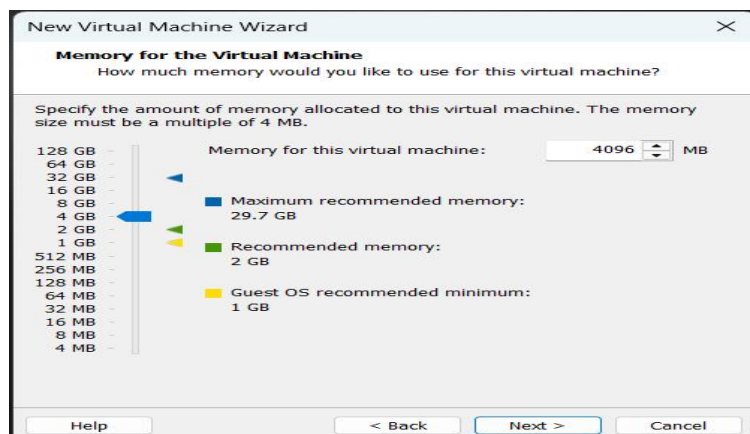
The following screen is displayed.



Provide a name for this virtual machine. This is not the hostname for the operating system. Also provide the location to store virtual machine related files. The location will contain the hard disk file of this virtual machine. Thus make sure you select a drive where you have sufficient free space. Make sure for each virtual machine a different folder name is specified. Click Next.



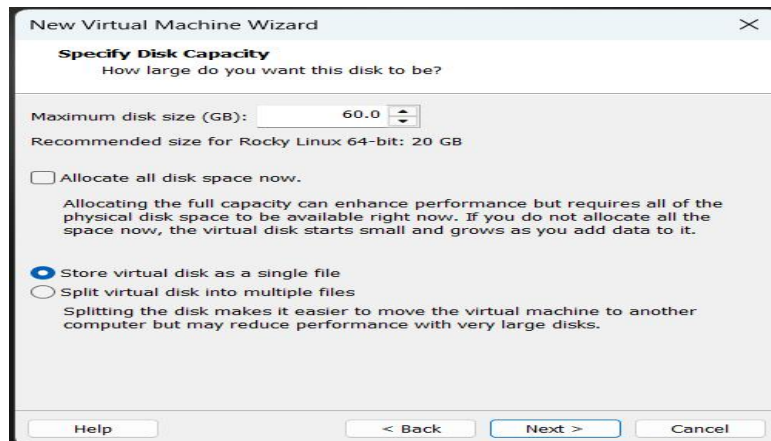
On the above screen select the number of processors and number of cores per processor. Here we select 2 processors and 1 core only. Click Next.



On the above screen select RAM as 4 GB. As this virtual machine will be server and host a lot of services, it requires a good amount of memory. Click Next.

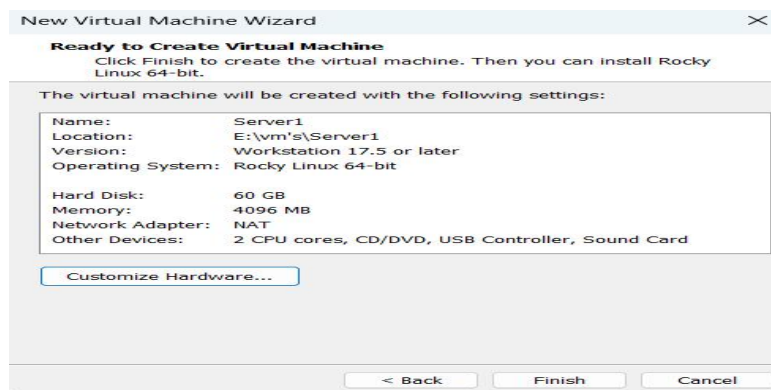
On the next screen click Next to keep the default NAT networking mode.

Click Next on all the screen till the following screen is displayed.

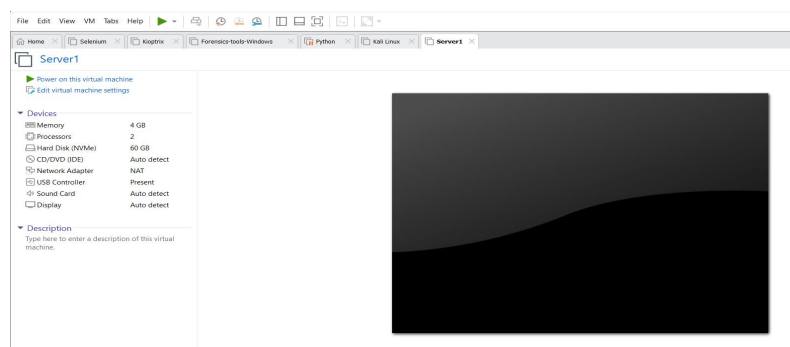


Here specify the hard disk capacity as 60 GB. Also select the option, Store virtual disk as a single file. Click Next.

Click Next to keep the default file name of the hard disk file. Following screen is displayed.



Click Finish to create the virtual machine.



A virtual machine will be created by the name specified in the above steps. Thus you have created a new virtual machine successfully. However this is just a computer without any operating system. Thus we need to install an operating system on it.

## 2. Download Rocky Linux ISO

To install operating system on the above virtual machine, you need an ISO file. Following is the link to download Rock Linux ISO image. Download the **minimal version ISO**. The current version was 10 when this document was created.

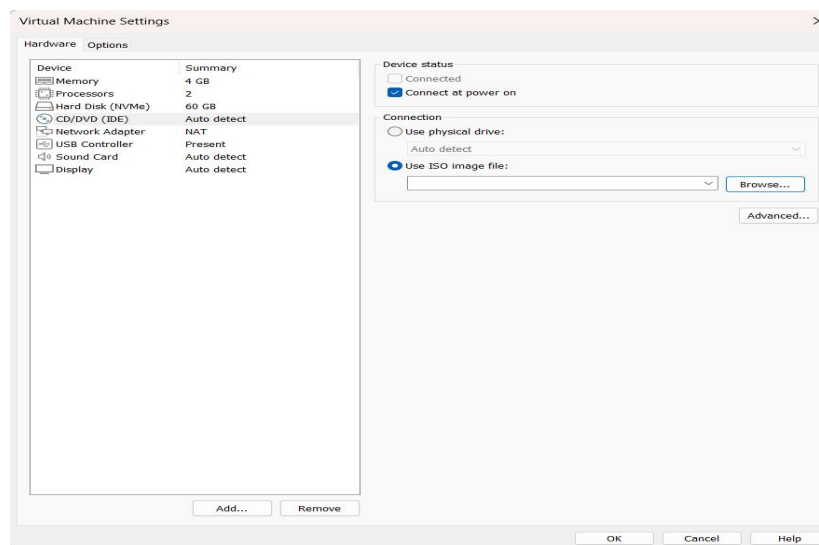
<https://rockylinux.org/download>

### 3. Install Rocky Linux minimal version

Once your download completes, then you can start installing the operating system on the virtual machine created.



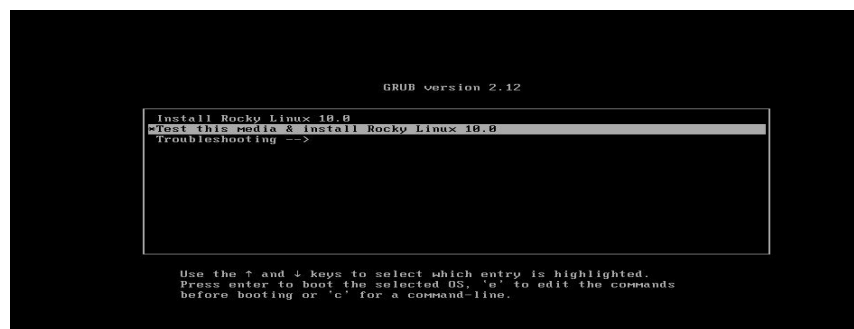
In the VMWare window, make sure your new virtual machine is selected. Click Edit virtual machine settings option as marked by a red color line. The following screen will open.



On this screen Select CD/DVD option on the left side. On the right side select Use ISO image file option. Click Browse and select the ISO file which you downloaded above from the Rocky Linux website. Click OK.

Now click **Power on this virtual machine** option to start the virtual machine.

Once the virtual machine starts, it will boot from the DVD ISO. The following screen is displayed.



**Do not press Enter.** The default option is to test this media and Install Rocky Linux. Testing media will take a lot of time.

Click inside the virtual machine screen. The mouse is captured inside the virtual machine. Thus now mouse and keyboard work for the virtual machine. To release the mouse from virtual machine use Ctrl + Alt on the keyboard.

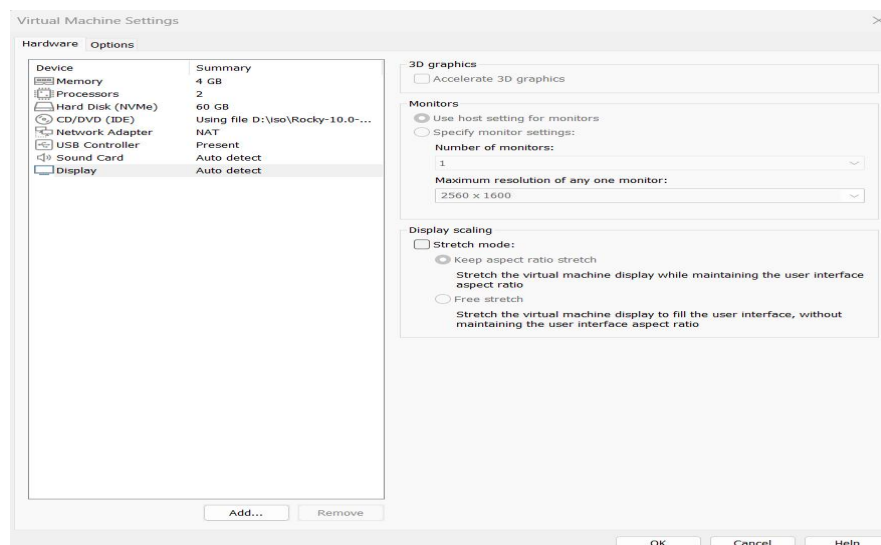
Click inside the Virtual Machine and use up arrow key to select Install Rocky Linux 10.0 option.



Now press Enter. Wait till it displays the next screen.

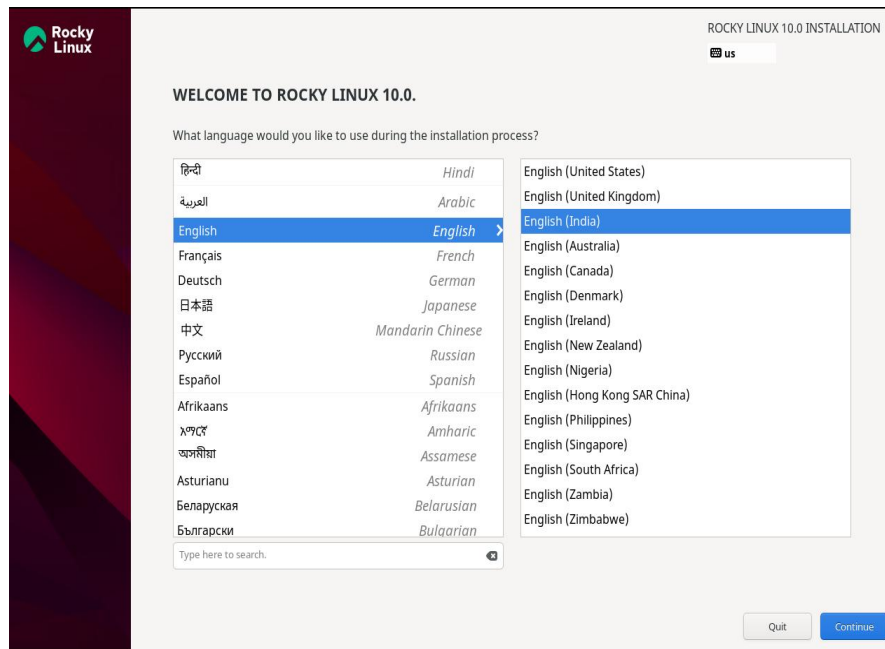
### Troubleshooting Tips

In case if the next screen is not fully displayed or takes a longer time then perform the following step.

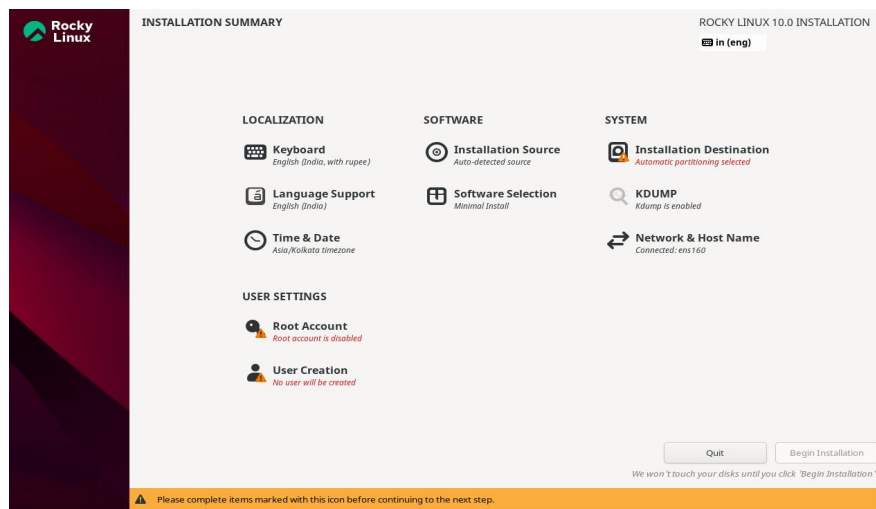


Power off the virtual machine. Edit the virtual machine settings. Click the Display option at the end. Then on the right hand side remove the check from the option "Accelerate 3D graphics" as shown above. Click OK. Start the virtual machine.

The following screen is displayed.

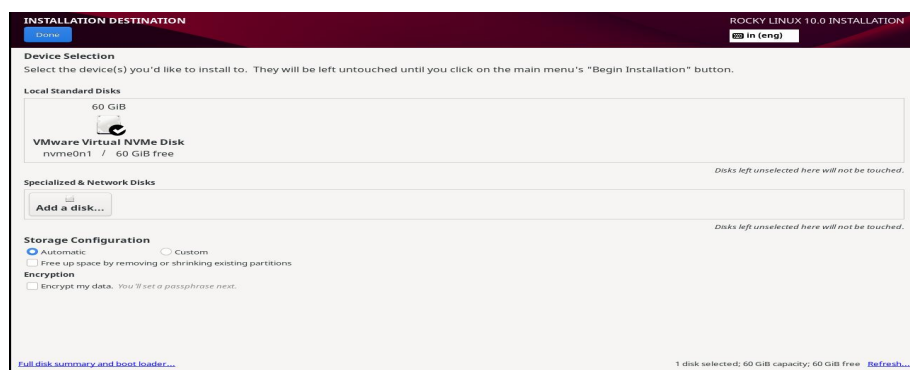


Select the language and click Continue. Following screen is displayed.



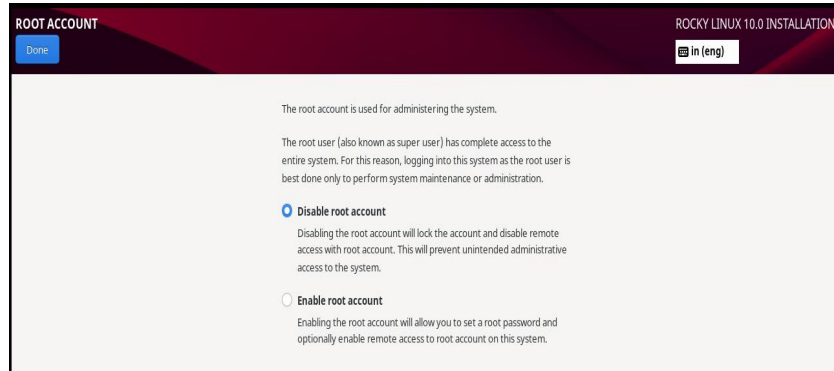
Unless you configure all the option displayed with red warning, you will not be able to continue with the installation.

First Click the option Installation Destination option. The following Screen is displayed.



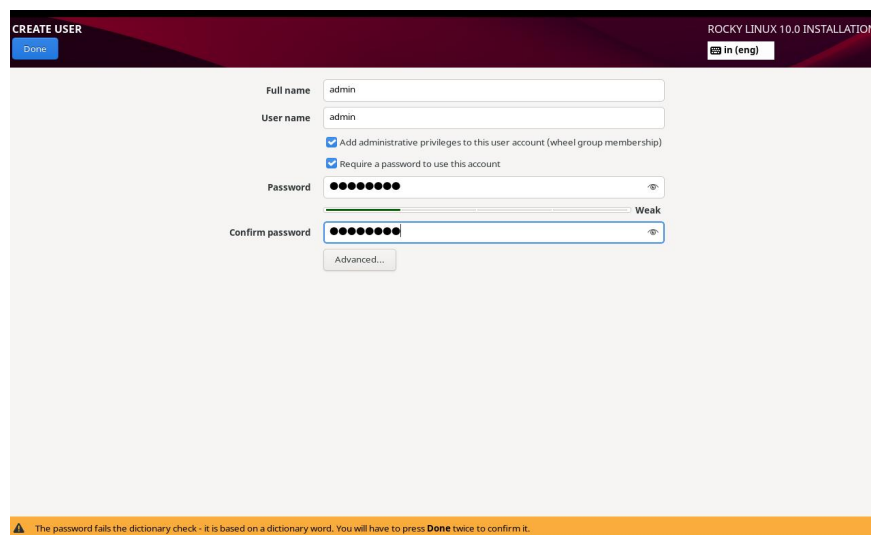
Keep all default values. Here we are not going to create any manual partition. We will keep the automatic partition option. Thus click Done button ( Top left corner in blue colour).

Next click on the Root Account option. Following screen is displayed.



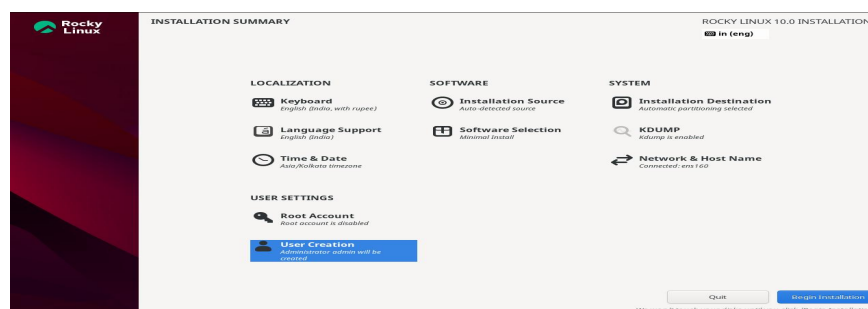
For security reasons it is recommended that the root user account should be disabled. Thus keep the default option and click Done button.

Next click the user creation option. The following screen is displayed.

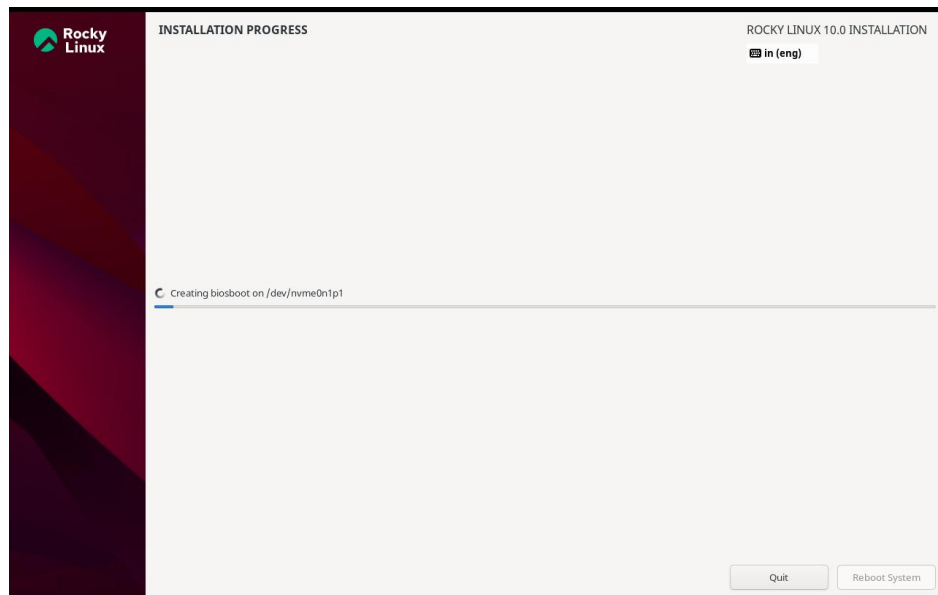


Type a username . Here the username given is admin. Type the password for this user. If the password entered is a simple one then a message is displayed at the bottom highlighted with yellow color.

If you want to continue with this weak password, press done button 2 times as mentioned in the warning message. Following screen is displayed.



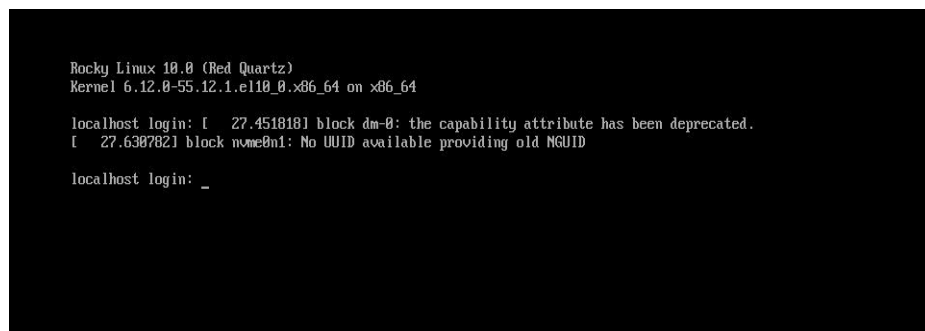
Now all the required configuration is done. The Begin Installation button is enable. Click that button to start the OS installation.



Wait till the installation finishes. Once the installation completes, following screen is displayed.



Click Reboot system. The virtual machine will restart. Once the system restarts, following screen will appear. You may have to click inside and press Enter to get the login prompt. As it is a minimal version, there is no GUI.



This is how you have successfully installed the Rocky Linux minimal version on the virtual machine.



## 4. Initial Configuration

Login to the system using the username and password created during installation. Once you login, following prompt is given.

```
Rocky Linux 10.0 (Red Quartz)
Kernel 6.12.0-55.12.1.el10_0.x86_64 on x86_64

localhost login: [ 27.451818] block dm-0: the capability attribute has been deprecated.
[ 27.638782] block nvmecm1: No UUID available providing old NGUID

localhost login: [ 246.117835] perf: interrupt took too long (3241 > 2500), lowering kernel.perf_event_max_sample_rate to 61000

localhost login: admin
Password:
[admin@localhost ~]$ _
```

As we have disabled the root user, this user is given a sudo permission to execute commands as root user. First time the system may show a warning message for sudo.

The first thing as an administrator you need to do is to update the system. For this you need to use the installer/package manager of the operating system. In RedHat based systems you have 2 Package managers - yum and dnf. The latest is the dnf. Thus you can use any of the following command to update the system.

```
sudo yum update -y
OR
sudo dnf update -y
```

```
localhost login: admin
Password:
[admin@localhost ~]$ sudo dnf update -y

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

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

For security reasons, the password you type will not be visible.

[sudo] password for admin:
Rocky Linux 10 - BaseOS                               61% [=====] 1.6 MB/s | 7.4 MB  00:02 ETA
```

The update process will start. It requires Internet connection as by default it goes to the Rocky Linux repository hosted on Internet.

Once the update finishes, following message is displayed and prompt is given.

```
Upgraded:
NetworkManager-1:1.52.0-4.el10_0.x86_64
elfutils-debuginfo-client-0.192-6.el10_0.x86_64
elfutils-libs-0.192-6.el10_0.x86_64
glibc-2.39-43.el10_0.x86_64
glibc-gconv-extra-2.39-43.el10_0.x86_64
iwlwifi-mvm-firmware-28258604-15.5.el10_0.noarch
kpartx-0.9-6.el10_0.2.x86_64
libb1b-4.21.3-106.el10_0.x86_64
linux-firmware-28258604-15.5.el10_0.noarch
openssh-clients-9.9p1-7.el10_0.rocky.0.1.x86_64
python3-libs-3.12.9-2.el10_0.2.x86_64
zlib-ng-compat-2.2.3-1.el10.rocky.0.1.x86_64

Installed:
kernel-6.12.0-55.24.1.el10_0.x86_64
kernel-modules-core-6.12.0-55.24.1.el10_0.x86_64

Complete!
[admin@localhost ~]$ _
```

Now set the hostname to the server. To set the hostname to the server provide following command.

```
sudo hostnamectl set-hostname demosrv
```

```
[admin@localhost ~]$ sudo hostnamectl set-hostname demosrv
[admin@localhost ~]$
```

## Install EPEL repository

Extra Packages for Enterprise Linux (EPEL) is an initiative within the Fedora Project to provide high quality additional packages for CentOS Stream and Red Hat Enterprise Linux (RHEL).

EPEL packages are usually based on their Fedora counterparts and should not conflict with or replace packages in the base Enterprise Linux distributions.

```
sudo yum install epel-release -y
```

Once the repository package is installed, give the following command.

```
sudo yum update -y
```

## Change the terminal font

To list all available fonts, give the following command.

```
ls /usr/lib/kbd/consolefonts
```

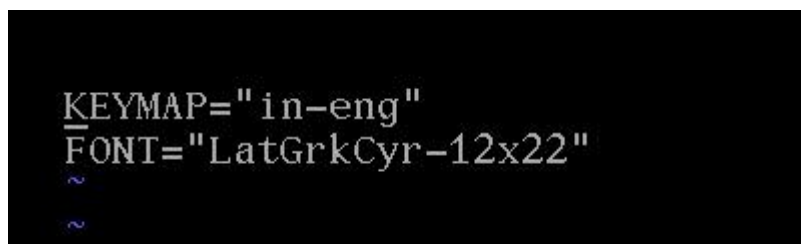
To change the font temporarily, give the following command. You need to specify the file name displayed by the above command. Do not provide the extensions.

```
sudo setfont LatGrkCyr-12x22
```

To set this font permanently, edit the `/etc/vconsole.conf`.

```
sudo vi /etc/vconsole.conf
```

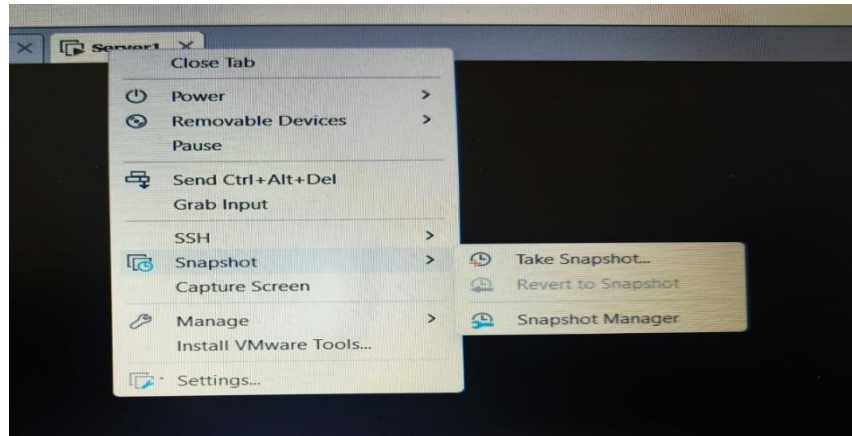
Change the font to as shown below.

A screenshot of a terminal window with a black background. It displays two lines of text in a light blue, monospaced font: 'KEYMAP="in-eng"' and 'FONT="LatGrkCyr-12x22"'. Below each line is a small blue tilde (~) character, indicating a prompt or continuation.

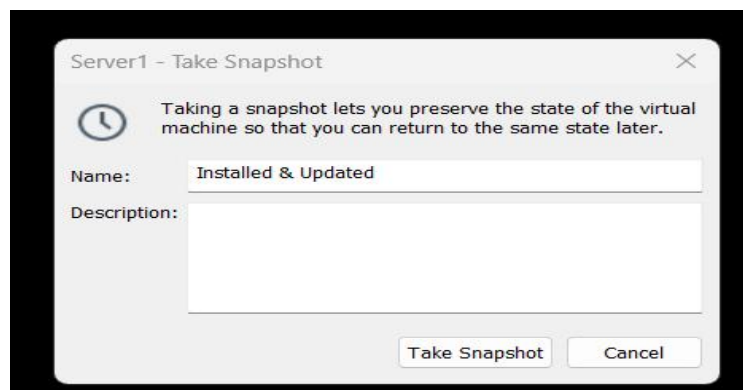
## 5. Take snapshot of the virtual machine.

Snapshot is a special feature provided by the virtualization software like VMWare. The snapshot captures and saves the current state of a virtual machine. Thus in case later if something goes wrong with the OS or applications of the virtual machine, you can simply restore it to earlier snapshot and the virtual machines comes back to that working state. This helps in easy recovery in case of any failure of the virtual machine.

To take snapshot of this virtual machine. Right click on the name of the virtual machine. Select Snapshot option. In the Snapshot sub menu Click Take Snapshot option as shown below.



Once you select take snapshot option, then following screen is displayed.



Provide a name for this snapshot and click Take Snapshot button.

If you go to the snapshot option of the virtual machine, you will see the snapshot by the name given above and option to revert to this snapshot.

This is how you have successfully installed the Rocky Linux minimal version on a virtual machine.