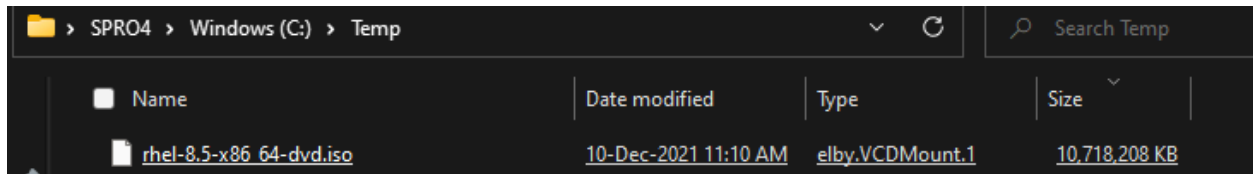


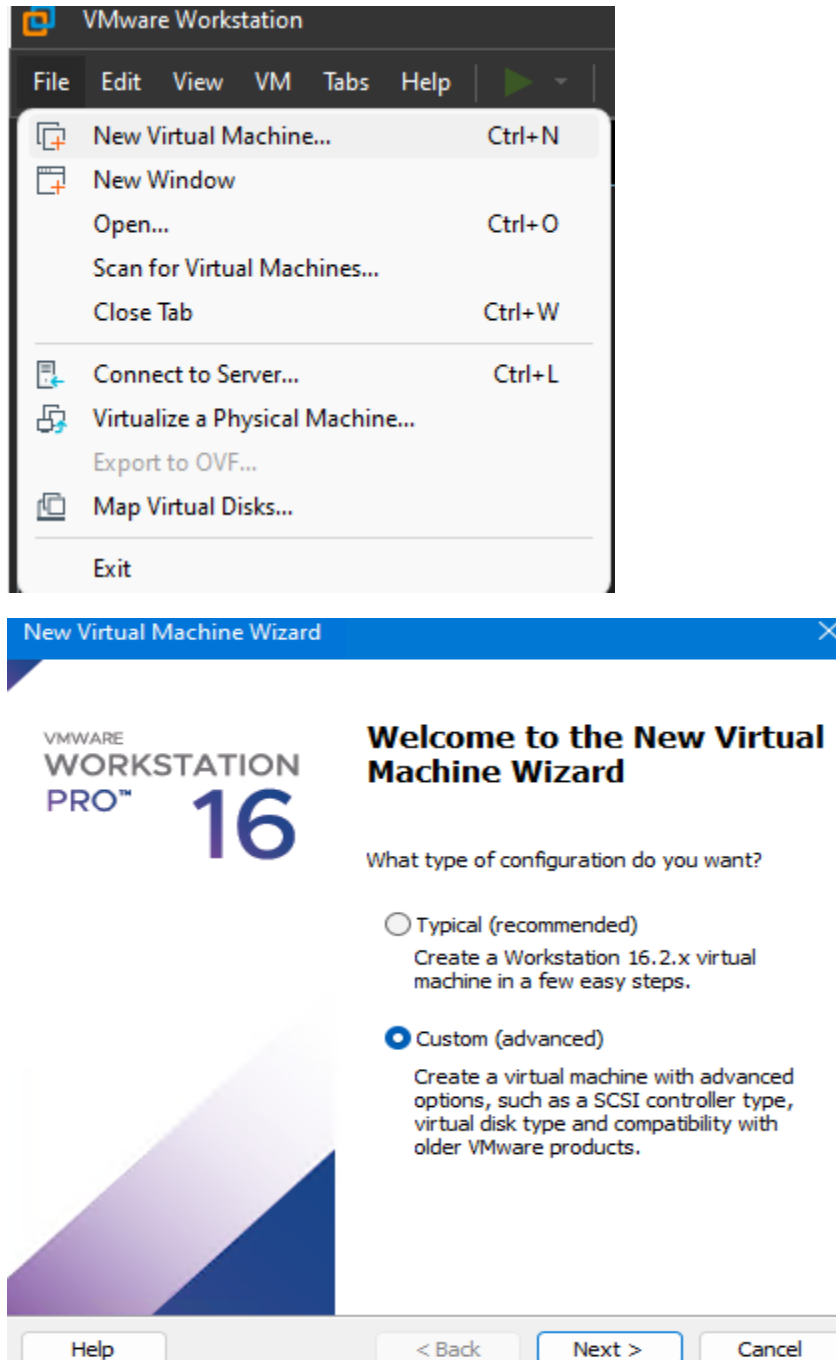
# Installing Red Hat Enterprise Server 8.5 on VMWare Workstation 16

In this post, I am going to install Red Hat 8.5 on VMWare Workstation for testing and learning hands on with Linux.

I have completed registration at Red Hat site and downloaded the ISO for this install.



Will create a virtual machine now...



New Virtual Machine Wizard

Choose the Virtual Machine Hardware Compatibility

Which hardware features are needed for this virtual machine?

Virtual machine hardware compatibility

Hardware compatibility: Workstation 16.2.x

Compatible with: ☒ ESX Server

Compatible products:

Fusion 12.2.x  
Workstation 16.2.x

Limitations:

128 GB memory  
32 processors  
10 network adapters  
8 TB disk size  
8 GB shared graphics memory

Help

< Back

Next >

Cancel

New Virtual Machine Wizard

Guest Operating System Installation

A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

☐ Installer disc:

BD-ROM Drive (D:)

☐ Installer disc image file (iso):

C:\Users\ram\Downloads\VMware-VMvisor-Installer-6. 

Browse...

☒ I will install the operating system later.

The virtual machine will be created with a blank hard disk.

Help

< Back

Next >

Cancel

New Virtual Machine Wizard

Select a Guest Operating System

Which operating system will be installed on this virtual machine?

Guest operating system

☐ Microsoft Windows

☒ Linux

☐ VMware ESX

☐ Other

Version

Red Hat Enterprise Linux 8 64-bit

Help

< Back

Next >

Cancel

## New Virtual Machine Wizard

### Name the Virtual Machine

What name would you like to use for this virtual machine?

Virtual machine name:

RHES1

Location:

C:\VM\RHES1

Browse...

The default location can be changed at Edit > Preferences.

< Back

Next >

Cancel

## New Virtual Machine Wizard

### Processor Configuration

Specify the number of processors for this virtual machine.

Processors

Number of processors:

2

Number of cores per processor:

2

Total processor cores:

4

Help

< Back

Next >

Cancel

## New Virtual Machine Wizard

### Memory for the Virtual Machine

How much memory would you like to use for this virtual machine?

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

128 GB -  
64 GB -  
32 GB -  
16 GB -  
8 GB -  
4 GB -  
2 GB -  
1 GB -  
512 MB -  
256 MB -  
128 MB -  
64 MB -  
32 MB -  
16 MB -  
8 MB -  
4 MB -

Memory for this virtual machine:

5196

MB

Maximum recommended memory:  
13.4 GB

Recommended memory:  
2 GB

Guest OS recommended minimum:  
1 GB

Help

< Back

Next >

Cancel

**Network Type**

What type of network do you want to add?

## Network connection

- ☒ Use bridged networking  
Give the guest operating system direct access to an external Ethernet network. The guest must have its own IP address on the external network.
- ☐ Use network address translation (NAT)  
Give the guest operating system access to the host computer's dial-up or external Ethernet network connection using the host's IP address.
- ☐ Use host-only networking  
Connect the guest operating system to a private virtual network on the host computer.
- ☐ Do not use a network connection

Help

&lt; Back

Next &gt;

Cancel

**Select I/O Controller Types**

Which SCSI controller type would you like to use for SCSI virtual disks?

## I/O controller types

## SCSI Controller:

- ☐ BusLogic (Not available for 64-bit guests)
- ☒ LSI Logic (Recommended)
- ☐ LSI Logic SAS
- ☐ Paravirtualized SCSI

Help

&lt; Back

Next &gt;

Cancel

**Select a Disk Type**

What kind of disk do you want to create?

## Virtual disk type

- ☐ IDE
- ☐ SCSI
- ☐ SATA
- ☒ NVMe (Recommended)

Help

&lt; Back

Next &gt;

Cancel

## New Virtual Machine Wizard

### Select a Disk

Which disk do you want to use?

#### Disk

☒ Create a new virtual disk

A virtual disk is composed of one or more files on the host file system, which will appear as a single hard disk to the guest operating system. Virtual disks can easily be copied or moved on the same host or between hosts.

☐ Use an existing virtual disk

Choose this option to reuse a previously configured disk.

☐ Use a physical disk (for advanced users)

Choose this option to give the virtual machine direct access to a local hard disk. Requires administrator privileges.

Help

< Back

Next >

Cancel

## New Virtual Machine Wizard

### Specify Disk Capacity

How large do you want this disk to be?

Maximum disk size (GB):

Recommended size for Red Hat Enterprise Linux 8 64-bit: 20 GB

☐ Allocate all disk space now.

Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.

☒ Store virtual disk as a single file

☐ Split virtual disk into multiple files

Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

Help

< Back

Next >

Cancel

## New Virtual Machine Wizard

### Specify Disk File

Where would you like to store the disk file?

#### Disk file

One 40 GB disk file will be created using this file name.

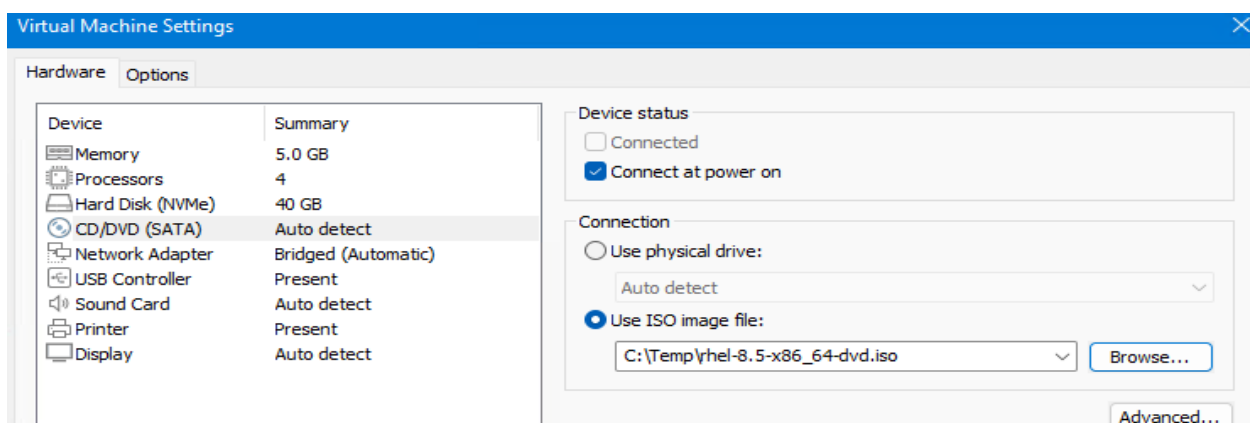
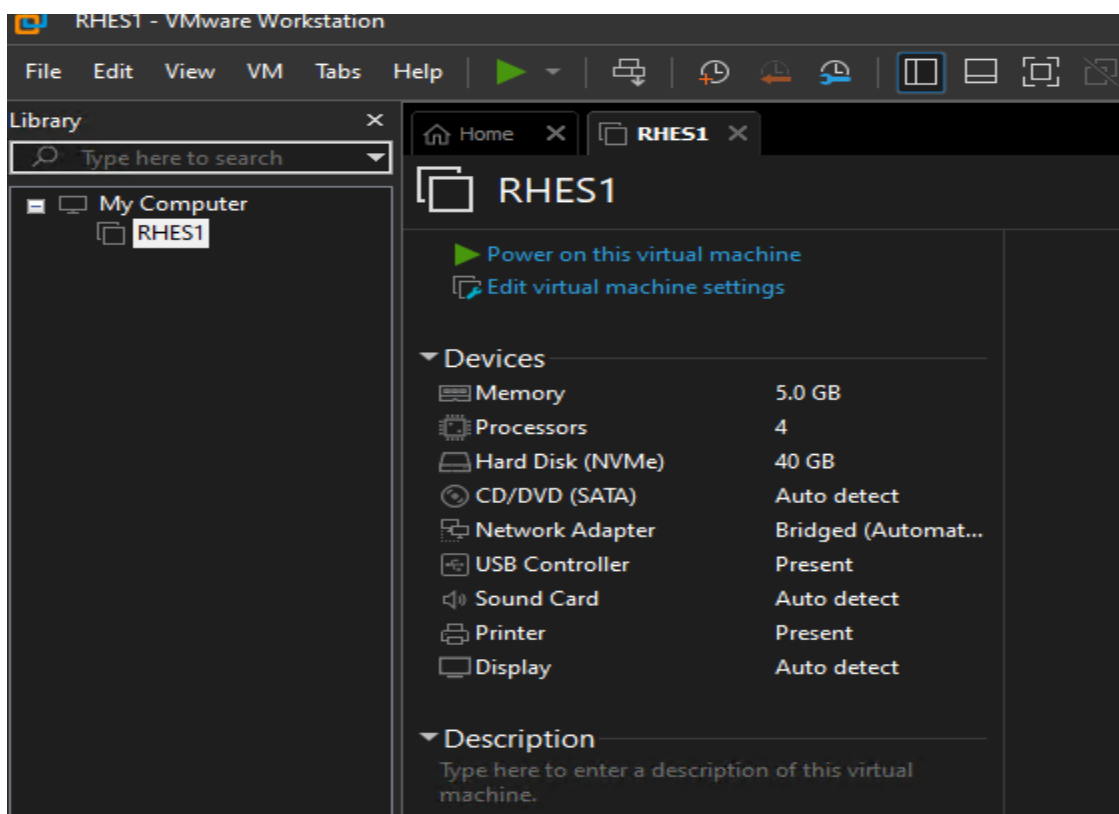
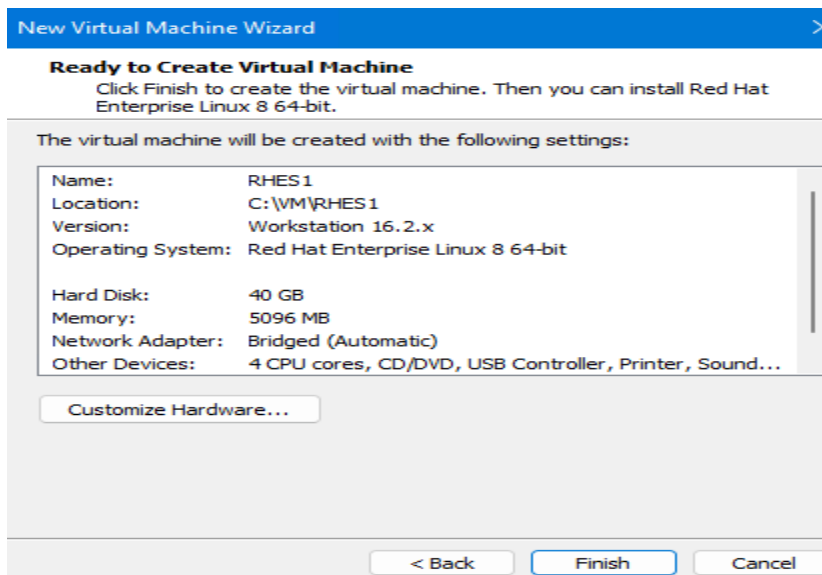
Browse...

Help

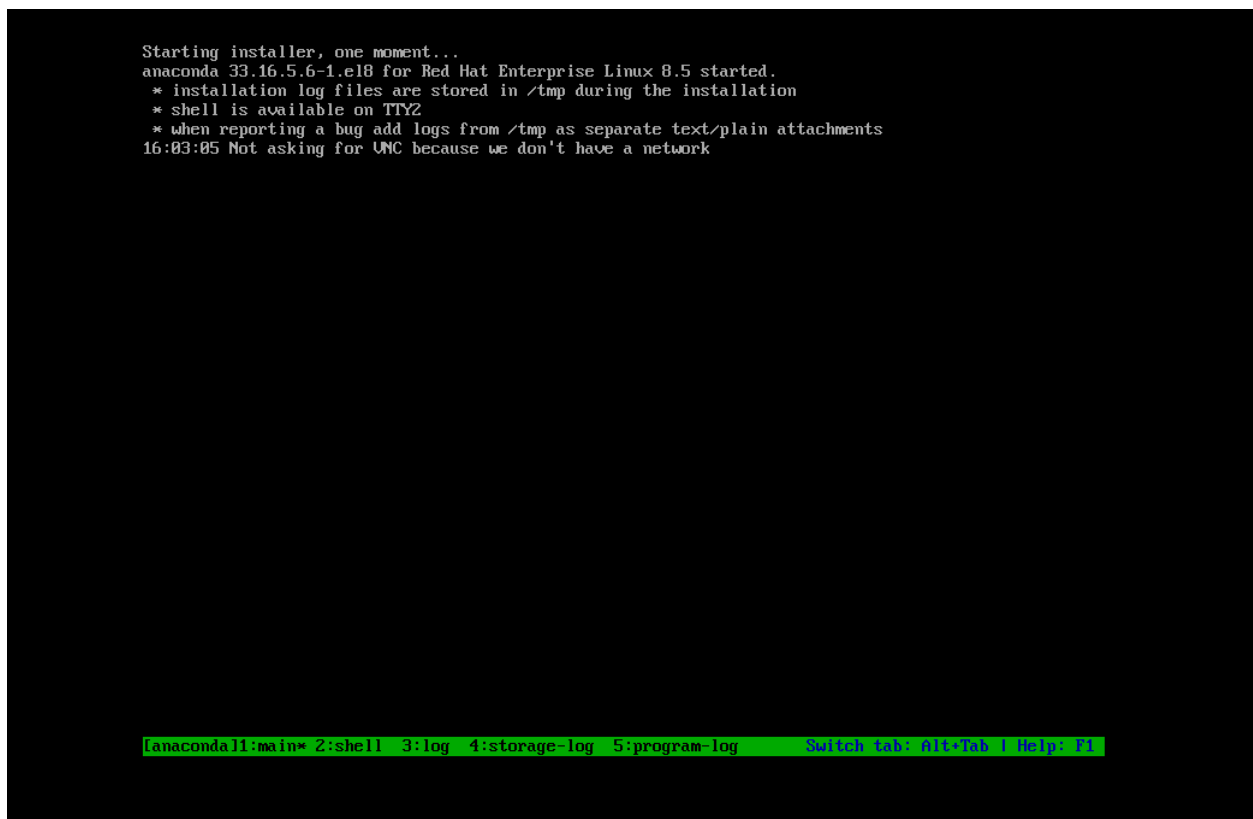
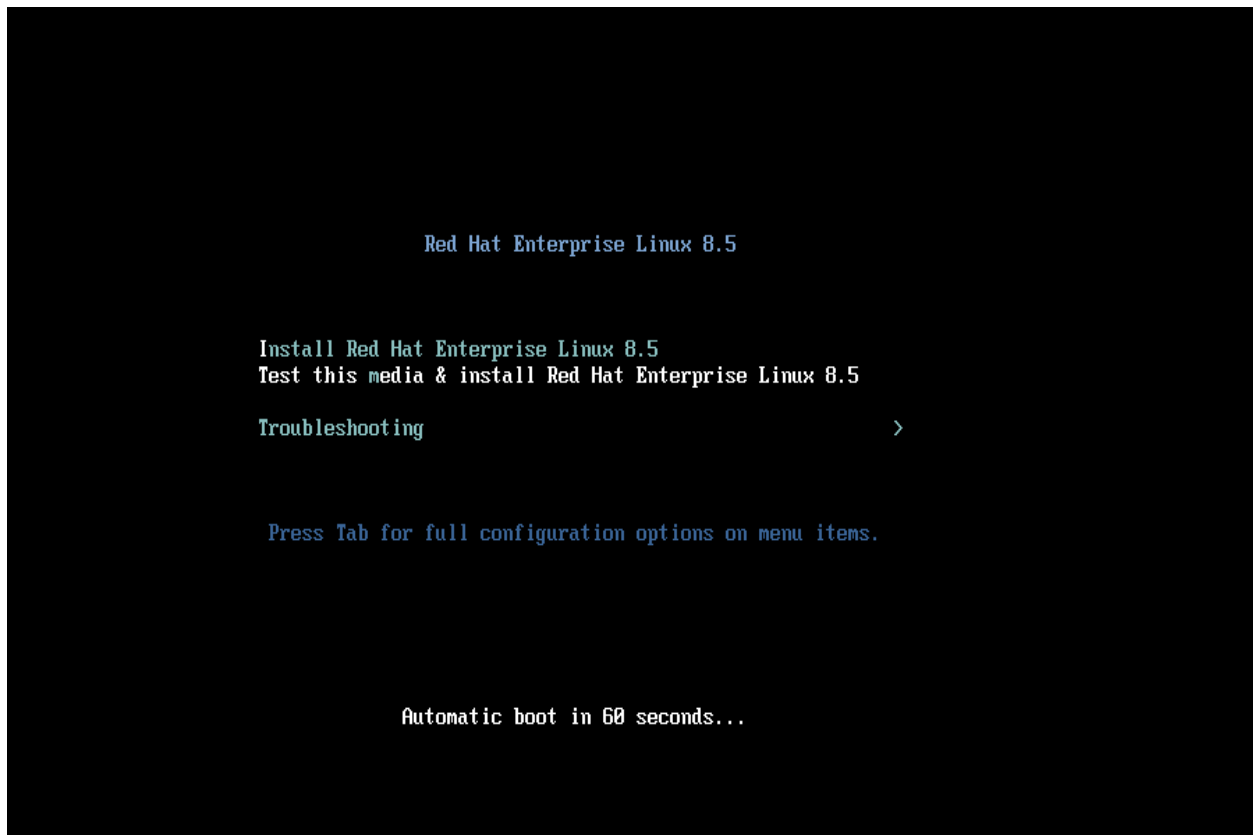
< Back

Next >

Cancel



Now we are ready to power on the VM.





## INSTALLATION SUMMARY

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

us

Help!

### LOCALIZATION



**Keyboard**  
English (US)



**Language Support**  
English (Canada)



**Time & Date**  
Americas/Toronto timezone

### USER SETTINGS



**Root Password**  
Root password is set



**User Creation**

### SOFTWARE



**Connect to Red Hat**  
Registered.



**Installation Source**  
Red Hat CDN



**Software Selection**  
Server with GUI

### SYSTEM



**Installation Destination**  
Automatic partitioning selected



**KDUMP**  
Kdump is enabled



**Network & Host Name**  
Wired (ens160) connected



**Security Policy**  
No profile selected

Quit

Begin Installation

We won't touch your disks until you click 'Begin Installation'.



RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

us

Help!

## WELCOME TO RED HAT ENTERPRISE LINUX 8.5.

What language would you like to use during the installation process?

English

English >

Afrikaans

Afrikaans

አማርኛ

Amharic

العربية

Arabic

অসমীয়া

Assamese

Asturianu

Asturian

Беларуская

Belarusian

Български

Bulgarian

বাংলা

Bangla

Type here to search.

English (United States)

English (United Kingdom)

English (India)

English (Australia)

English (Canada)

English (Denmark)

English (Ireland)

English (New Zealand)

English (Nigeria)

English (Hong Kong SAR China)

Quit

Continue



Done

us

Help!

Select additional language support to be installed:

<input checked="" type="checkbox"/> English	English >	<input checked="" type="checkbox"/> English (Canada)
<input type="checkbox"/> Español	Spanish	<input type="checkbox"/> English (Denmark)
<input type="checkbox"/> Eesti	Estonian	<input type="checkbox"/> English (Ireland)
<input type="checkbox"/> Euskara	Basque	<input type="checkbox"/> English (New Zealand)
<input type="checkbox"/> فارسی	Persian	<input type="checkbox"/> English (Nigeria)
<input type="checkbox"/> Suomi	Finnish	<input type="checkbox"/> English (Hong Kong SAR China)
<input type="checkbox"/> Filipino	Filipino	<input type="checkbox"/> English (Philippines)
<input type="checkbox"/> Français	French	<input type="checkbox"/> English (Singapore)
<input type="checkbox"/> Furlan	Friulian	<input type="checkbox"/> English (South Africa)
<input type="checkbox"/> Gaeilge	Irish	<input type="checkbox"/> English (Zambia)
<input type="checkbox"/> Galego	Galician	<input type="checkbox"/> English (Zimbabwe)
<input type="checkbox"/> ગુજરાતી	Gujarati	<input type="checkbox"/> English (Botswana)
<input type="checkbox"/> עברית	Hebrew	<input type="checkbox"/> English (Antigua & Barbuda)
<input type="checkbox"/>		<input type="checkbox"/> English (Israel)

Done

us

Help!

Region: Americas

City: Toronto

Network Time

OFF



11:04

☒ 24-hour  
☐ AM/PM

2021

12

16



You need to set up networking first if you want to use NTP

Done

 us

Help!

Authentication ☒ Account ☐ Activation Key

User name ramlan@infotechram.com

Password ••••••••

Purpose ☒ Set System Purpose

Role Red Hat Enterprise Linux Server ▼

SLA Standard ▼

Usage Development/Test ▼

Insights ☒ Connect to Red Hat Insights

▼ Options

☐ Use HTTP proxy☐ Custom server URL☐ Custom base URL

Not registered.

Register

Done

 us

Help!

Authentication ☒ Account ☐ Activation Key

User name ramlan@infotechram.com

Password ••••••••

Purpose ☒ Set System Purpose

Role Red Hat Enterprise Linux Server ▼

SLA Self-Support ▼

Usage Development/Test ▼

Insights ☒ Connect to Red Hat Insights

▼ Options

☐ Use HTTP proxy☐ Custom server URL☐ Custom base URL

Attaching subscription...

Register

The system has been properly subscribed

[Unregister](#)

**Method** Registered with account ramlan@infotechram.com

**System Purpose** Role: Red Hat Enterprise Linux Server

SLA: Self-Support

Usage: Development/Test

## Insights Connected to Red Hat Insights

1 subscription attached to the system

## Red Hat Developer Subscription for Individuals

Service level Self-Support

**Start date** Dec 12, 2021

SKU RH00798

End date Dec 12, 2022

## Contract

Entitlements 1 consumed

## INSTALLATION SOURCE

# RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

Done



Help!

Which installation source would you like to use?

☐ Auto-detected installation media:

Device: sr0  
Label:

Verify

Red Hat CDN

- On the network:

http://

URL type:

repository URL ▼

Proxy se

### Additional repositories

Enabled	Name

+

-

↺

Name:

http:// ▼

URL type:

Proxy URL:

User name:

Password:

Here, I selected few additional software since this is a test machine.

**SOFTWARE SELECTION**

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

Done

us

Help!

**Base Environment**

☒ **Server with GUI**  
An integrated, easy-to-manage server with a graphical interface.

☐ **Server**  
An integrated, easy-to-manage server.

☐ **Minimal Install**  
Basic functionality.

☐ **Workstation**  
Workstation is a user-friendly desktop system for laptops and PCs.

☐ **Custom Operating System**  
Basic building block for a custom RHEL system.

☐ **Virtualization Host**  
Minimal virtualization host.

**Additional software for Selected Environment**

☒ **Windows File Server**  
This package group allows you to share files between Linux and MS Windows(tm) systems.

☒ **Debugging Tools**  
Tools for debugging misbehaving applications and diagnosing performance problems.

☐ **File and Storage Server**  
CIFS, SMB, NFS, iSCSI, iSER, and iSNS network storage server.

☐ **FTP Server**  
These tools allow you to run an FTP server on the system.

☒ **Guest Agents**  
Agents used when running under a hypervisor.

☐ **Infiniband Support**  
Software designed for supporting clustering, grid connectivity, and low-latency, high bandwidth storage using RDMA-based InfiniBand, iWARP, RoCE, and OPA fabrics.

☐ **Mail Server**  
These packages allow you to configure an IMAP or SMTP mail server.

☐ **Network File System Client**

**INSTALLATION DESTINATION**

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

Done

us

Help!

**Device Selection**

Select the device(s) you'd like to install to. They will be left untouched until you click on the main menu's "Begin Installation" button.

**Local Standard Disks**

40 GiB

VMware Virtual NVMe Disk i.c87d027fad0881d8000c2961521a7c7b

nvme0n1 / 40 GiB free

Disks left unselected here will not be touched.

**Specialized & Network Disks**

Add a disk...

Disks left unselected here will not be touched.

**Storage Configuration**

☒ Automatic ☐ Custom

☐ I would like to make additional space available.

[Full disk summary and boot loader...](#)

1 disk selected; 40 GiB capacity; 40 GiB free [Refresh...](#)

# NETWORK & HOST NAME

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

Done

us

Help!

Ethernet (ens160)  
VMware VMXNET3 Ethernet Controller



Ethernet (ens160)

ON

Connected

Hardware Address 00:0C:29:E3:BF:FD

Speed 10000 Mb/s

IP Address 192.168.0.106/24

Default Route 192.168.0.1

DNS 192.168.0.2

+

-

Configure...

Host Name: RHES1.RAMLAN.CA

Apply

Current host name: WIN11.RAMLAN.CA

# ROOT PASSWORD

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

Done

us

Help!

The root account is used for administering the system. Enter a password for the root user.

Root Password: .....

Strong

Confirm: .....

CREATE USER

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

Done

us

Help!

Full name

Ram

User name

ram

☒ Make this user administrator

☒ Require a password to use this account

Password

••••••••


Strong

Confirm password

••••••••

Advanced...

Click Begin Installation....

 Red Hat

INSTALLATION SUMMARY

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION


us

Help!

LOCALIZATION

SOFTWARE

SYSTEM

 **Keyboard**  
English (US)


 **Connect to Red Hat**  
Registered.

 **Installation Destination**  
Automatic partitioning selected

 **Language Support**  
English (Canada)

 **Installation Source**  
Red Hat CDN

 **KDUMP**  
Kdump is enabled


 **Time & Date**  
Americas/Toronto timezone


 **Software Selection**  
Server with GUI

 **Network & Hostname**  
Wired (ens160) connected

 **Security Policy**  
No profile selected

USER SETTINGS

 **Root Password**  
Root password is set

 **User Creation**

Quit

Begin Installation

We won't touch your disks until you click 'Begin Installation'.



## INSTALLATION PROGRESS

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

 us

 Creating xfs on /dev/mapper/rhel\_rhes1-root

Quit

Reboot System



## INSTALLATION PROGRESS

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

 us

 Installing checkpolicy.x86\_64 (385/1630)

Quit

Reboot System



## INSTALLATION PROGRESS

RED HAT ENTERPRISE LINUX 8.5 INSTALLATION

us

Complete!

Red Hat Enterprise Linux is now successfully installed and ready for you to use!  
Go ahead and reboot your system to start using it!

Reboot System

⚠ Use of this product is subject to the license agreement found at `/usr/share/redhat-release/EULA`

## INITIAL SETUP

RED HAT ENTERPRISE LINUX 8.5 (OOTPA)

us

Help!

### LICENSING



License Information  
License not accepted

### SYSTEM



Subscription Manager  
All installed products are covered  
by valid entitlements at this time.

QUIT

FINISH CONFIGURATION

⚠ Please complete items marked with this icon before continuing to the next step.



License Information

RED HAT ENTERPRISE LINUX 8.5 (OOTPA)

Done

us

Help

License Agreement:

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☒ I accept the license agreement.

INITIAL SETUP


RED HAT ENTERPRISE LINUX 8.5 (OOTPA)


us

Help

LICENSING

SYSTEM

 **License Information**  
License accepted

 **Subscription Manager**  
All installed products are covered  
by valid entitlements at this time.

QUIT

FINISH CONFIGURATION



Ram

Not listed?



Red Hat



Ram

Password:

••••••••••|

Cancel



Sign In



Red Hat



## Welcome!

Arabic	Egypt
Chinese	China
English ✓	Canada
English	United States
French	France
German	Germany
Japanese	Japan
Russian	Russian Federation
Spanish	Spain
⋮	



## Typing

Select your keyboard layout or an input method.

Cameroon Multilingual (Dvorak)	<a href="#">Preview</a>
Cameroon Multilingual (QWERTY)	<a href="#">Preview</a>
English (Australian)	<a href="#">Preview</a>
English (Cameroon)	<a href="#">Preview</a>
English (Canada)	<a href="#">Preview</a>
English (US) ✓	<a href="#">Preview</a>
⋮	

[Previous](#)

Privacy

[Next](#)

## Privacy

### Location Services

☒ ON

Allows applications to determine your geographical location. An indication is shown when location services are in use.

Uses Mozilla Location Service: [Privacy Policy](#)

### Automatic Problem Reporting

☒ ON

Sending reports of technical problems helps us to improve Red Hat Enterprise Linux. Reports are sent anonymously and are scrubbed of personal data.

Privacy controls can be changed at any time from the Settings application.

[Previous](#)

Online Accounts

[Skip](#)

## Connect Your Online Accounts

Connect your accounts to easily access your email, online calendar, contacts, documents and photos.



Google



Nextcloud



Microsoft

Accounts can be added and removed at any time from the Settings application.



You're ready to go!

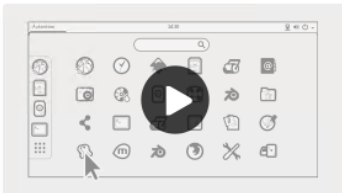
Start Using Red Hat Enterprise Linux



Getting Started  
GNOME Help



## Getting Started



Launch applications



Switch tasks



Use windows and workspaces

## Common Tasks

[Browse the web](#)

[Connect to online accounts](#)

[Get online](#)

[Change the date, time and timezone](#)

[Use the system search](#)

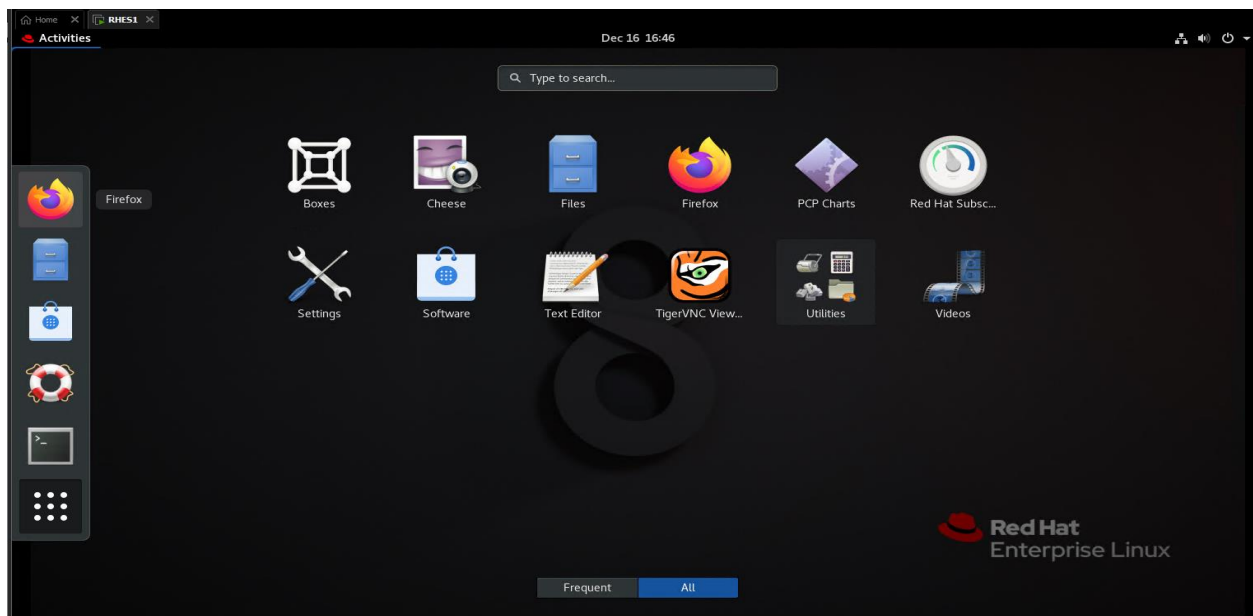
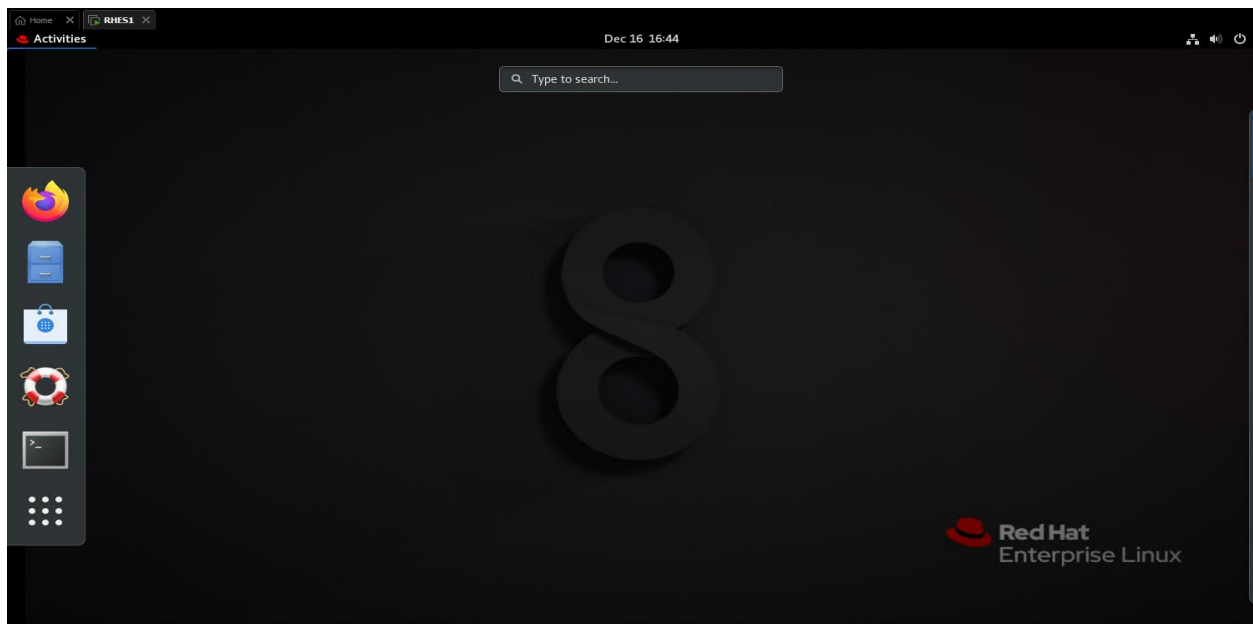
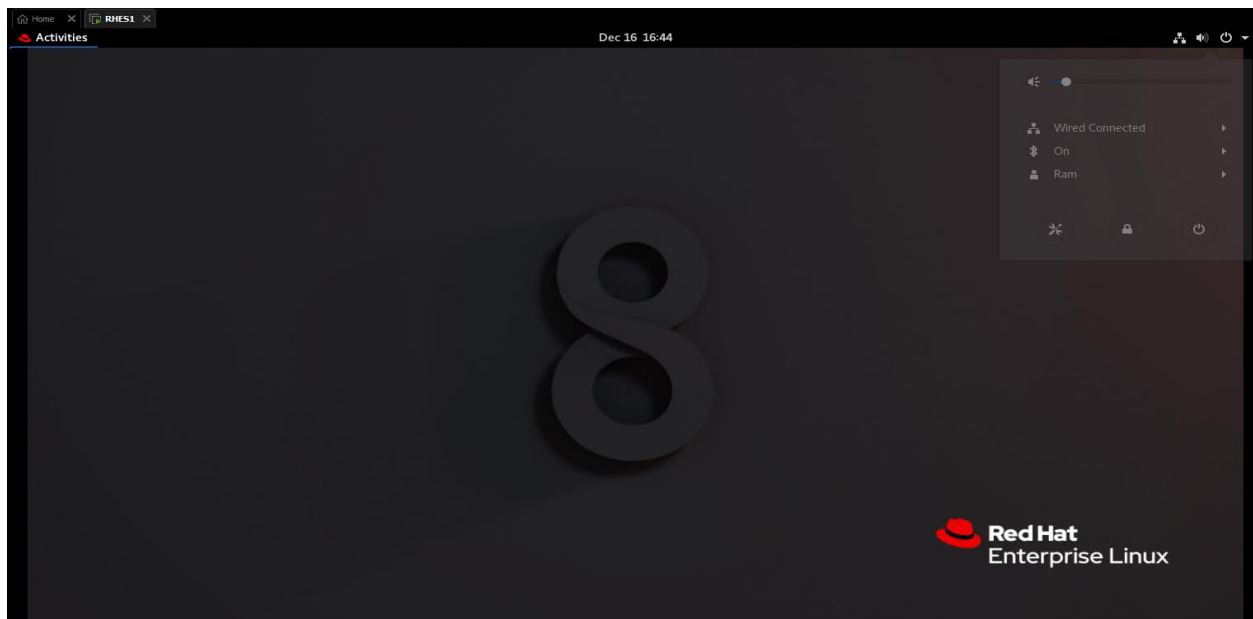
[Launch applications](#)

[Change the wallpaper](#)

[Use windows and workspaces](#)

[Switch tasks](#)

## GNOME Help



```
ram@RHES1:/home/ram
File Edit View Search Terminal Help
[root@RHES1 ram]# cat /etc/redhat-release
Red Hat Enterprise Linux release 8.5 (Ootpa)
[root@RHES1 ram]#
```

```
ram@RHES1:/home/ram
File Edit View Search Terminal Help
[root@RHES1 ram]# timedatectl
      Local time: Thu 2021-12-16 17:05:40 EST
      Universal time: Thu 2021-12-16 22:05:40 UTC
      RTC time: Thu 2021-12-16 22:05:25
      Time zone: America/Toronto (EST, -0500)
System clock synchronized: no
      NTP service: inactive
      RTC in local TZ: no
[root@RHES1 ram]#
```

```
ram@RHES1:~
File Edit View Search Terminal Help
[ram@RHES1 ~]$ ifconfig -a
bash: ifconfig: command not found...
[ram@RHES1 ~]$ ifconfig -a
ens160: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.0.106  netmask 255.255.255.0  broadcast 192.168.0.255
    inet6 fe80::20c:29ff:fee3:bffd  prefixlen 64  scopeid 0x20<link>
    ether 00:0c:29:e3:bf:fd  txqueuelen 1000  (Ethernet)
    RX packets 126067  bytes 184985117 (176.4 MiB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 30885  bytes 2236587 (2.1 MiB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

```
ram@RHES1:~
File Edit View Search Terminal Help
[ram@RHES1 ~]$ hostname
RHES1.RAMLAN.CA
[ram@RHES1 ~]$
```

This concludes install steps for Red Hat Enterprise Server 8.5.

Thanks

**Ram**

**16<sup>th</sup> Dec 2021**