

Linux 7.3 Installation Illustration

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Before Installation

Before u start the installation, make sure u have the following information regarding ur PC

1. Type of video card, amount of video memory
2. Type of monitor + vender name
3. Type of mouse interface : serial or PS2
4. Know hard disk partition where u want to install Linux
5. If u have a Ethernet card then
 - a. Must know whether ur PC IP is assigned by DHCP or manual
 - b. If manual IP is assigned (which is most of the case), then must know ur PC IP address

This is the information that must be known to u before installation. Now in the following pages, Linux 7.3 installation is explain step by step with screen shots

Step # 1 – After PC Boot from CD-ROM

```

Welcome to Red Hat Linux 7.3!

- To install or upgrade Red Hat Linux in graphical mode,
  press the <ENTER> key.

- To install or upgrade Red Hat Linux in text mode, type: text <ENTER>.

- To enable low resolution mode, type: lowres <ENTER>.
  To disable framebuffer mode, type: nofb <ENTER>.
  Press <F2> for more information.

- To disable hardware probing, type: linux noprobe <ENTER>.

- To test the install media you are using, type: linux mediacheck<ENTER>.

- To enable rescue mode, type: linux rescue <ENTER>.
  Press <F4> for more information about rescue mode.

- If you have a driver disk, type: linux dd <ENTER>.

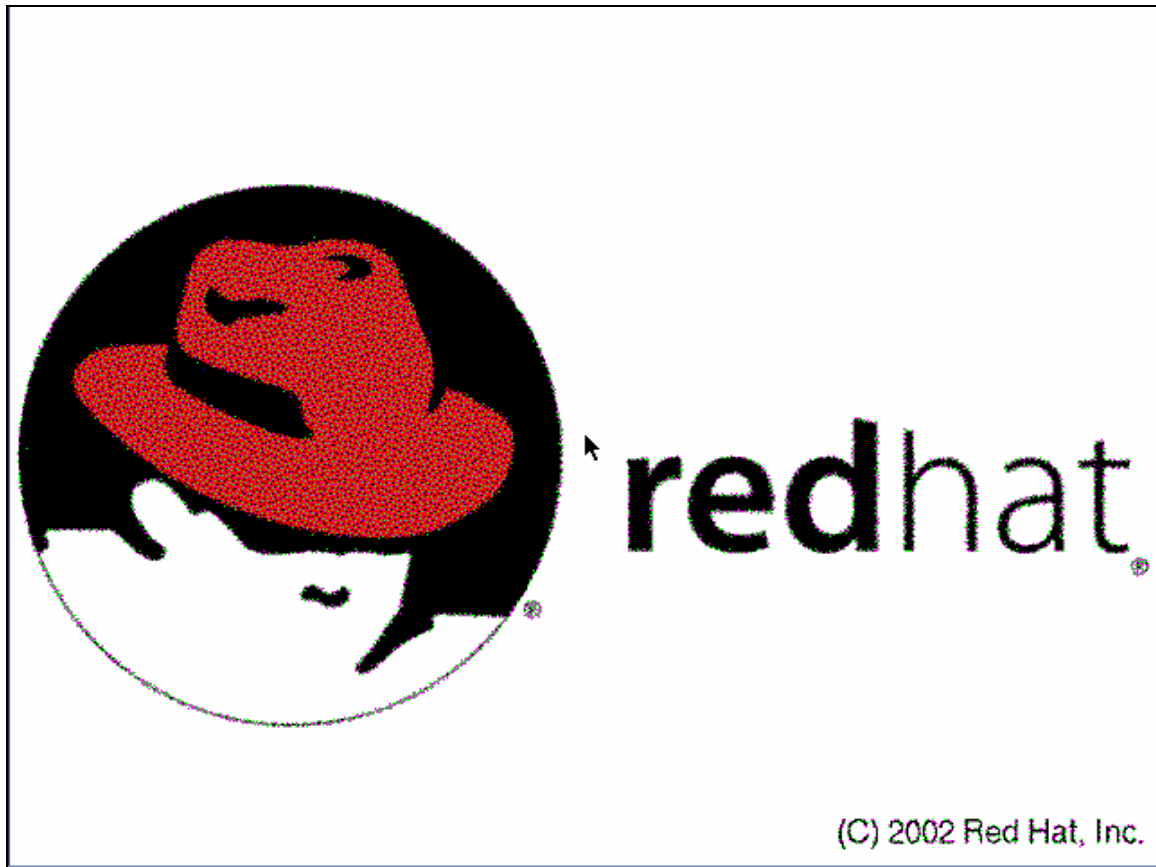
- Use the function keys listed below for more information.

[F1-Main] [F2-General] [F3-Kernel] [F4-Rescue]
boot: _
```

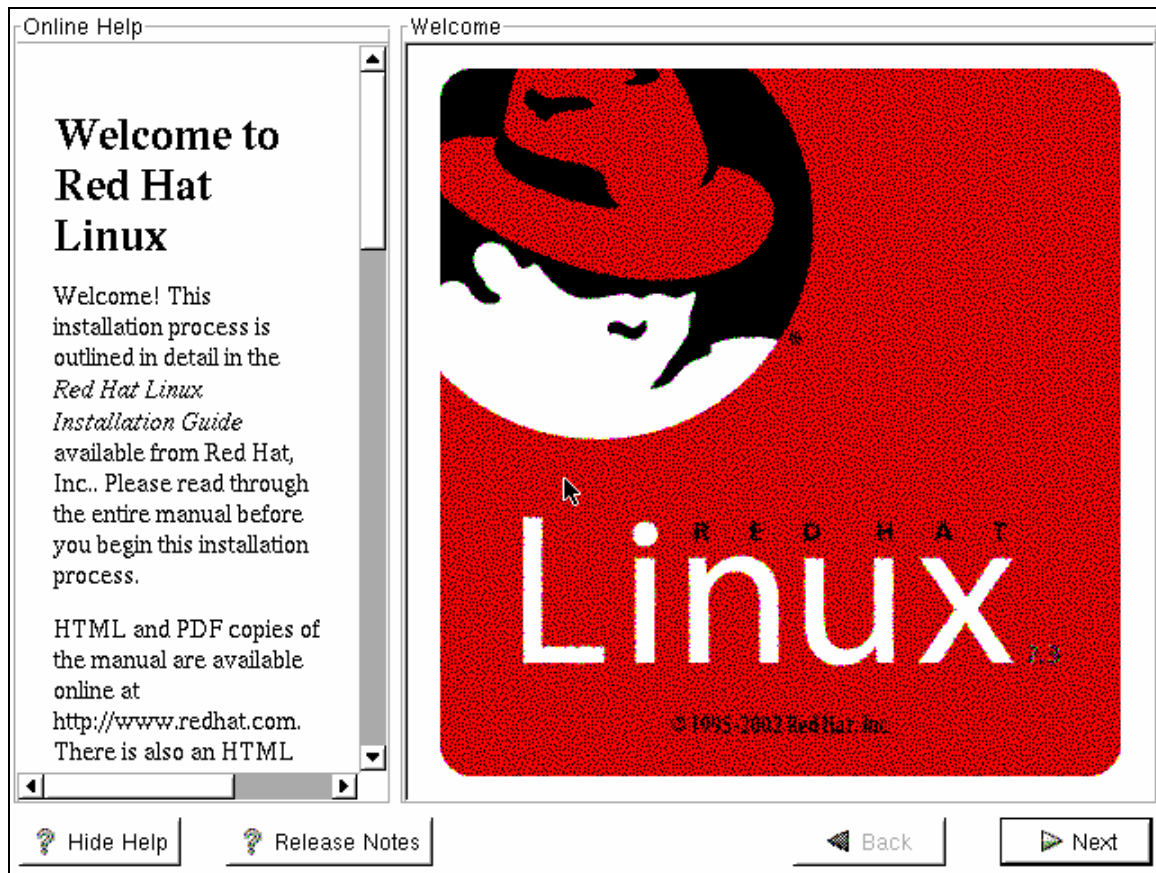
Insert Linux 7.3 CD#1 and boot ur PC from CD-ROM. After boot, the above screen will be shown. Just press ENTER and proceed forward

After that screen, some messages will appear on the screen showing the loading of some modules and identification of ur PC resources. Wait for the screen to go to the graphical mode

Step # 2 – Starting of Linux 7.3 Installation



After this REDHAT logo screen, the new screen is shown as in the next page



Press the NEXT button to proceed forward.


Step # 3 – Selection of Language

Online Help

Language Selection

Choose the language you would like to use during this Red Hat Linux installation.

Language Selection

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

Chinese(Simplified)

Chinese(Traditional)

Czech

Danish

English

French

German

Icelandic

Italian

Japanese

Korean

Norwegian

Portuguese

Romanian


Russian


Slovenian


Spanish


Swedish

Ukrainian

 Hide Help

 Release Notes

 Back

 Next

Just select English and press NEXT to proceed.

Step # 4 – Keyboard Configuration

Online Help


Keyboard Configuration

Choose your exact keyboard model if it is listed. If you cannot find an exact match, choose the closest **Generic** match (for example, Generic 101-key PC).

Hint: A 101-key keyboard is a generic keyboard. A 104-key or 105-key keyboard is a keyboard designed to work with MS Windows 95 and features Windows-specific keys.

Choose the layout type for your keyboard (for

Keyboard Configuration

 Which model keyboard is attached to the computer?

Model

Generic 102-key (Intl) PC

Generic 104-key PC

Generic 105-key (Intl) PC

Genius Comfy KB-16M

HP Internet

Layout

Turkish

Turkish (F)

U.S. English

U.S. English w/ ISO9995-3

U.S. English w/ deadkeys

Dead Keys

Disable dead keys

Enable dead keys

Test your selection here:

? Hide Help

? Release Notes

◀ Back

▶ Next

On most Intel based PCs, above shown default setting will be appear, just press NEXT to proceed.

Step # 5 – Mouse configuration

Online Help

Mouse Configuration

Choose the correct mouse type for your system.


Do you have a PS/2, Bus or serial mouse? (Hint: If the connector your mouse plugs into is round, it is a PS/2 or a Bus mouse; if rectangular, it is a serial mouse.)

Try to find an exact match. If an exact match cannot be found, choose one which is compatible with yours. Otherwise, choose the appropriate **Generic** mouse type.

?

Hide Help

Mouse Configuration

 Which model mouse is attached to the computer?

ALPS GlidePoint (PS/2)

▷ ASCII

ATI Bus Mouse

▽ Generic

2 Button Mouse (PS/2)

2 Button Mouse (USB)

2 Button Mouse (serial)

3 Button Mouse (PS/2)

3 Button Mouse (USB)

3 Button Mouse (serial)

▷ Genius

▷ Kensington

▷ Logitech

▷ MM

Port	Device
ttyS0	/dev/ttyS0 (COM1 under DOS)
ttyS1	/dev/ttyS1 (COM2 under DOS)
ttyS2	/dev/ttyS2 (COM3 under DOS)
ttyS3	/dev/ttyS3 (COM4 under DOS)

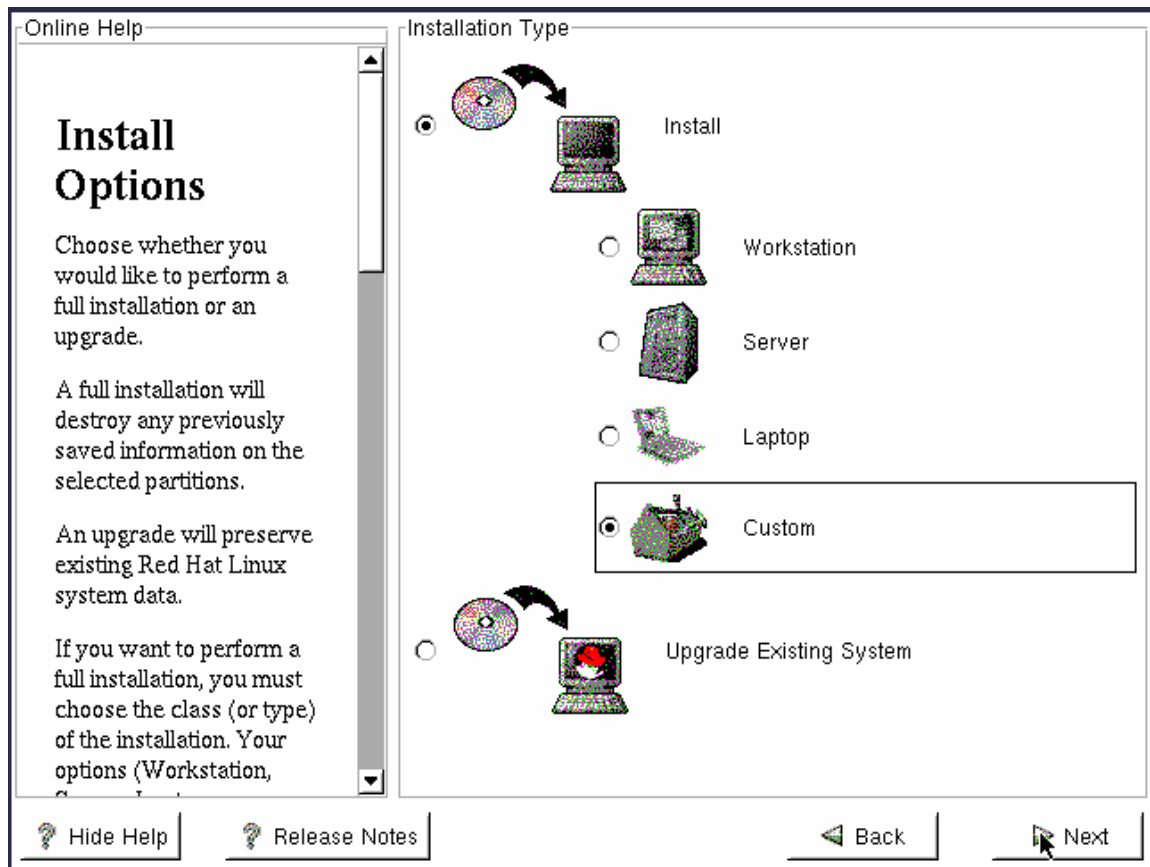
☐ Emulate 3 Buttons

◀ Back

▶ Next

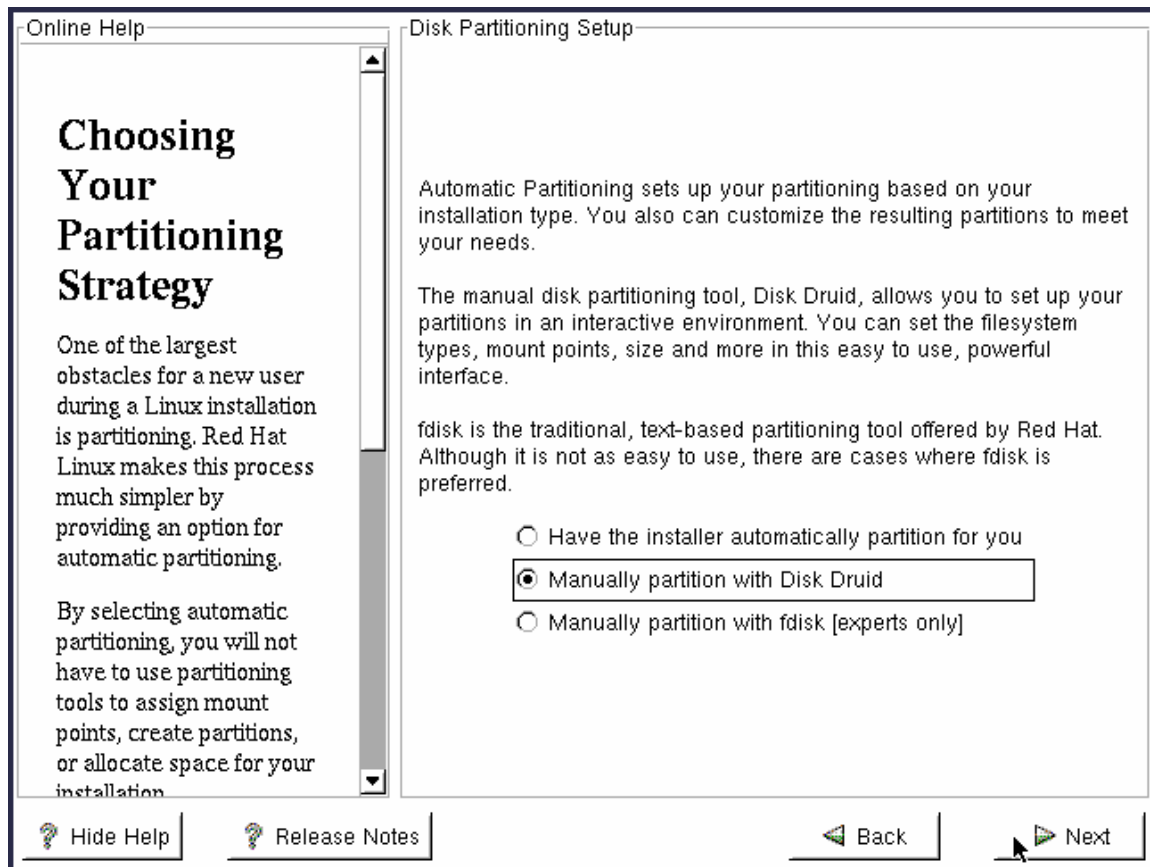
Set the mouse configuration and press NEXT to proceed.

Step # 6 – Installation Type



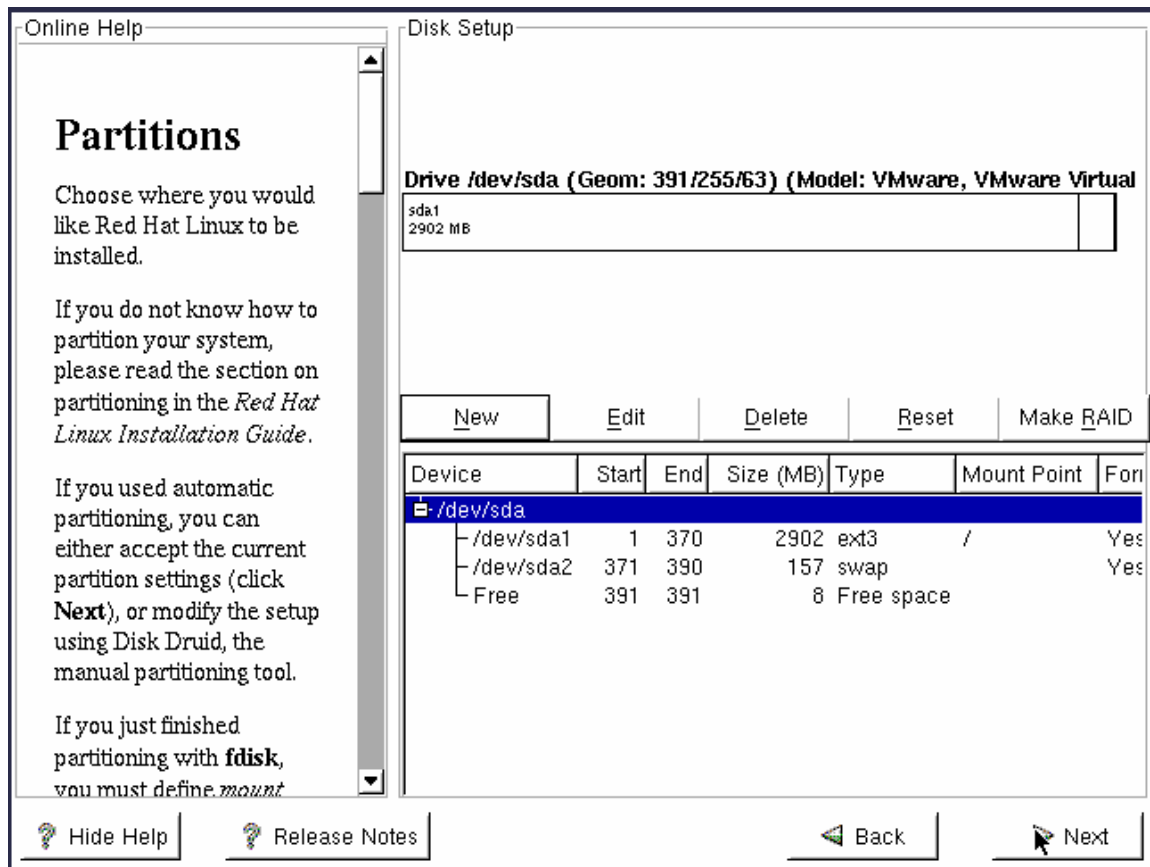
Select **Custom** type and press NEXT to proceed.

Step # 7 – Disk Partitioning setup



Select the **Disk Druid (second option)** and press NEXT to proceed.

Step # 8 – Disk Druid setup



Now, make or change ur hard disk partitions.

Press NEW to create new partition

In the new partition dialog box, type '/' as the mount point and select **ext3** as ur file system

Press EDIT to change any existing partition

In Linux two partitions are required, one for the Linux itself (native partition) and one for the Linux Swap partition as shown in the figure above. Swap partition has no mount point.

Swap partition should be double or greater of the amount of ur RAM, e.g. if u have 64 MB RAM then swap partition should be of atleast 128 MB size.

For native partition, allocate up to or above 2.5 GB if u want to install full Linux 7.3

After creating partitions, press NEXT. Linux installation will confirm u about this act, just press OK and NEXT.

Step # 9 – Boot loader configuration

Online Help

Boot Loader Installation

Choose which boot loader you want to install. If you would rather use the legacy boot loader, LILO, make sure it is selected instead of GRUB. If you choose not to install a boot loader, make sure you create a boot disk or have another way to boot your Red Hat Linux system.

To install a boot loader, select where you want to install it. If your system will use only Red Hat Linux you should choose the Master Boot Record

Boot Loader Configuration

Please select the boot loader that the computer will use. GRUB is the default boot loader. However, if you do not wish to overwrite your current boot loader, select "Do not install a boot loader."

☒ Use GRUB as the boot loader

☐ Use LILO as the boot loader

☐ Do not install a boot loader

Install Boot Loader record on:

☒ /dev/sda Master Boot Record (MBR)

☐ /dev/sda1 First sector of boot partition

Kernel Parameters:

☐ Force use of LBA32 (not normally required)

Partition: /dev/sda1 Type: ext3

☒ Default boot image

Boot label:

Default	Device	Partition type	Boot label
<input checked="" type="checkbox"/>	/dev/sda1	ext3	Red Hat Linux

There r 2 boot loader, Grub or LILO, select any one of them

Now if u want ur PC to boot from Linux boot loader select MBR, the first option (already selected in the figure), otherwise select the second one. I RECOMMEND to set the first one – MBR.

Press NEXT to proceed.

Step # 10 – Grub configuration (if selected in prev screen)

Online Help

GRUB Password

Now that you have chosen to install GRUB as your boot loader, you should create a password to protect your system. Users can pass options to the kernel which can compromise your system security.

To enhance your system security, you should select **Use a Grub Password**.

Once selected, enter in a password and then confirm it.

Boot Loader Password Configuration

A boot loader password prevents users from passing arbitrary options to the kernel. For highest security, we recommend setting a password, but this is not necessary for more casual users.

☐ Use a GRUB Password?

Password:

Confirm:

Please enter password

[? Hide Help](#)

[? Release Notes](#)

[◀ Back](#)

[▶ Next](#)

If u wants to set boot loader password, type it. I RECOMMEND not to set password here.

Press NEXT to proceed.

Step # 11 – Network configuration (if Ethernet card is installed)

The screenshot shows a window titled "Network Configuration" with a sidebar on the left and a main configuration area on the right. The sidebar contains a "Network Configuration" section with instructions: "Choose your network card and whether you would like to configure using DHCP. If you have multiple Ethernet devices, each device will have its own configuration screen. You can switch between device screens, (for example eth0 and eth1); the information you give will be specific to each screen. If you select **Activate on boot**, your network card will be started when you boot. If you do not have DHCP client access or are". The main area shows the "eth0" interface selected. It has two checkboxes: "Configure using DHCP" (unchecked) and "Activate on boot" (checked). Below these are input fields for "IP Address" (192.168.0.1), "Netmask" (255.255.255.0), "Network", and "Broadcast". Further down are fields for "Hostname", "Gateway", "Primary DNS", "Secondary DNS", and "Tertiary DNS". At the bottom, there are buttons for "Hide Help", "Release Notes", "Back", and "Next".

Online Help

Network Configuration

Choose your network card and whether you would like to configure using DHCP. If you have multiple Ethernet devices, each device will have its own configuration screen. You can switch between device screens, (for example eth0 and eth1); the information you give will be specific to each screen. If you select **Activate on boot**, your network card will be started when you boot. If you do not have DHCP client access or are

eth0

☐ Configure using DHCP

☒ Activate on boot

IP Address: 192.168.0.1

Netmask: 255.255.255.0

Network:

Broadcast:

Hostname:

Gateway:

Primary DNS:

Secondary DNS:

Tertiary DNS:

? Hide Help ? Release Notes < Back > Next

If u have Ethernet card installed, then in this screen specify, whether on the network u r assigned IP by the network DHCP server. If NO, uncheck the DHCP option, the lower part becomes enabled. Type ur PC static IP.

Press NEXT to proceed.

Step # 12 – Firewall configuration

The screenshot shows the 'Firewall Configuration' window in Red Hat Linux. On the left is an 'Online Help' pane with the title 'Firewall Configuration' and text explaining that Red Hat Linux offers firewall protection for enhanced system security. The main pane is titled 'Firewall Configuration' and asks the user to 'Please choose your security level:'. There are three radio buttons: 'High', 'Medium', and 'No firewall'. The 'No firewall' option is selected. Below this, there are two more radio buttons: 'Use default firewall rules' and 'Customize'. The 'Customize' option is selected. Under 'Customize', there are three sections: 'Trusted devices:' with a checkbox for 'eth0'; 'Allow incoming:' with checkboxes for 'DHCP', 'SSH', 'Telnet', 'WWW (HTTP)', 'Mail (SMTP)', and 'FTP'; and 'Other ports:' with an empty text box. At the bottom of the window are four buttons: 'Hide Help', 'Release Notes', 'Back', and 'Next'. A mouse cursor is pointing at the 'Next' button.

Online Help

Firewall Configuration

Red Hat Linux also offers you firewall protection for enhanced system security. A firewall sits between your computer and the network, and determines which resources on your computer remote users on the network are able to access. A properly configured firewall can greatly increase the out-of-the-box security of your system.

Choose the appropriate security level for your system.

Firewall Configuration

Please choose your security level:

☐ High ☐ Medium ☒ No firewall

☐ Use default firewall rules

☒ Customize

Trusted devices: ☐ eth0

Allow incoming:

- ☐ DHCP
- ☐ SSH
- ☐ Telnet
- ☐ WWW (HTTP)
- ☐ Mail (SMTP)
- ☐ FTP

Other ports:

Hide Help Release Notes Back Next

If u r on the network, configure the Linux internal firewall. Or if u do not know what is a firewall, just select the No firewall option

Press NEXT to proceed.

Step # 13 – Additional Language support

Online Help

Language Support Selection

Select a language to use as the default language. The default language will be the language used on your Red Hat Linux system once installation is complete. If you choose to install other languages, it is possible to change the default language after the installation.

Red Hat Linux can alternately install and support several languages. To use more than one language on

Additional Language Support

Choose the default language for this system:

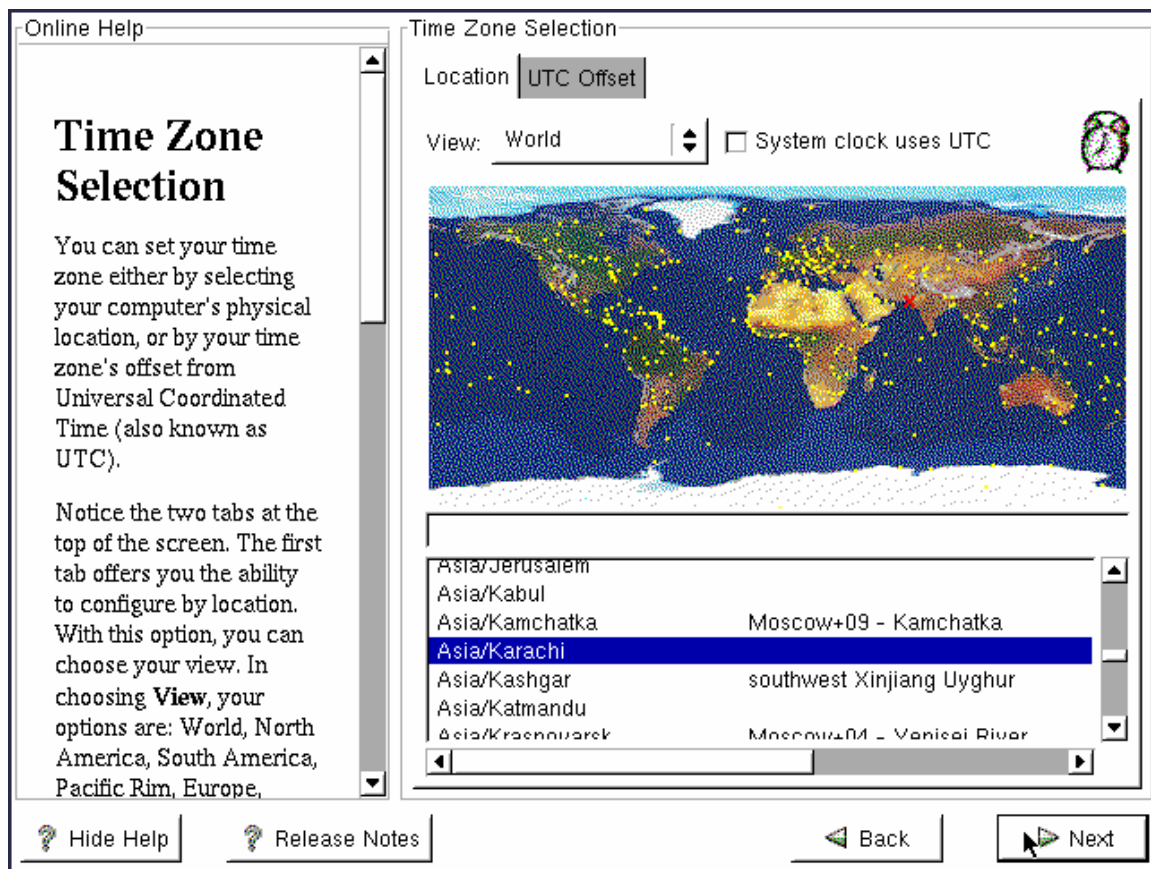
Choose additional languages you would like to use on this system:

	Select all
<input type="checkbox"/> English (Denmark)	
<input type="checkbox"/> English (Great Britain)	
<input type="checkbox"/> English (Hong Kong)	
<input type="checkbox"/> English (Ireland)	
<input type="checkbox"/> English (New Zealand)	
<input type="checkbox"/> English (Philippines)	
<input type="checkbox"/> English (Singapore)	
<input type="checkbox"/> English (South Africa)	
<input checked="" type="checkbox"/> English (USA)	
<input type="checkbox"/> English (Zimbabwe)	
<input type="checkbox"/> Estonian	
<input type="checkbox"/> Faroese (Faroe Islands)	
<input type="checkbox"/> Finnish	
<input type="checkbox"/> French (Belgium)	
<input type="checkbox"/> French (Canada)	
<input type="checkbox"/> French (France)	
<input type="checkbox"/> French (Luxemburg)	
<input type="checkbox"/> French (Switzerland)	
<input type="checkbox"/> Galician (Spain)	
<input type="checkbox"/> German (Austria)	
<input type="checkbox"/> German (Belgium)	

If u want other language support, select from the list

Press NEXT to proceed.

Step # 14 – Zone configuration



Select Asia/Karachi

Press NEXT to proceed.

Step # 15 – Account configuration

Online Help

Account Configuration

Note: Setting up a root account and password is one of the most important steps during your installation. Your root account enables you to install packages, upgrade RPMs and do most system maintenance. Logging in as root gives you complete control over your system and is very powerful.

Use the root account *only* for administration. Create a non-root account for your general use and **su -** to gain root access when

Account Configuration

Enter the password for the root user (administrator) of this system.

Root Password:

Confirm:

Root password accepted.

Additional accounts can be created for other users of this system. Such accounts could be for a personal login account, or for other non-administrative users who need to use this system. Use the <Add> button to enter additional user accounts.

Account Name	Full Name	
kashif	Kashif Ali Siddiqui	<div>Add</div> <div>Edit</div> <div>Delete</div>

Hide Help

Release Notes

Back

Next

Type ur root or administrator password. In Linux admin user id is always **root**

If u want to have extra non-admin, normal user account, press ADD and add new ones as in the above figure

Press NEXT to proceed.

Step # 16 – Authentication configuration

Online Help

Authentication Configuration

You can skip this section if you will not be setting up network passwords. If you are unsure, ask your system administrator for assistance.

Unless you are setting up an NIS password, you will notice that both **MD5** and **shadow** are selected. Using both will make your system as secure as possible.

- **Enable MD5 Passwords** - allows a long password to be

Authentication Configuration

☒ Enable MD5 passwords

☒ Enable shadow passwords

NIS **LDAP** Kerberos 5 SMB

☐ Enable NIS

NIS Domain:

☒ Use broadcast to find NIS server

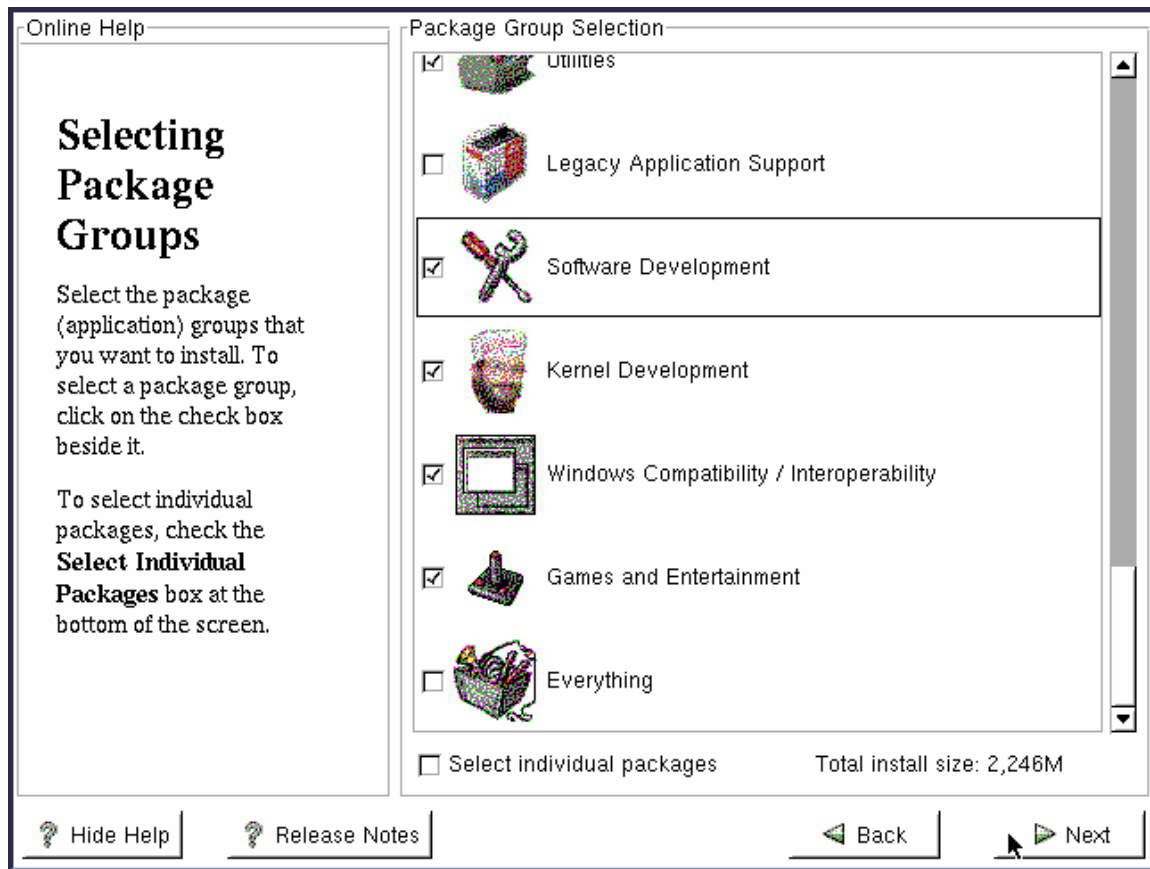
NIS Server:

Hide Help Release Notes Back Next

MD5 and shadow are encryption techniques, select them both

Press NEXT to proceed.

Step # 17 – Package group selection

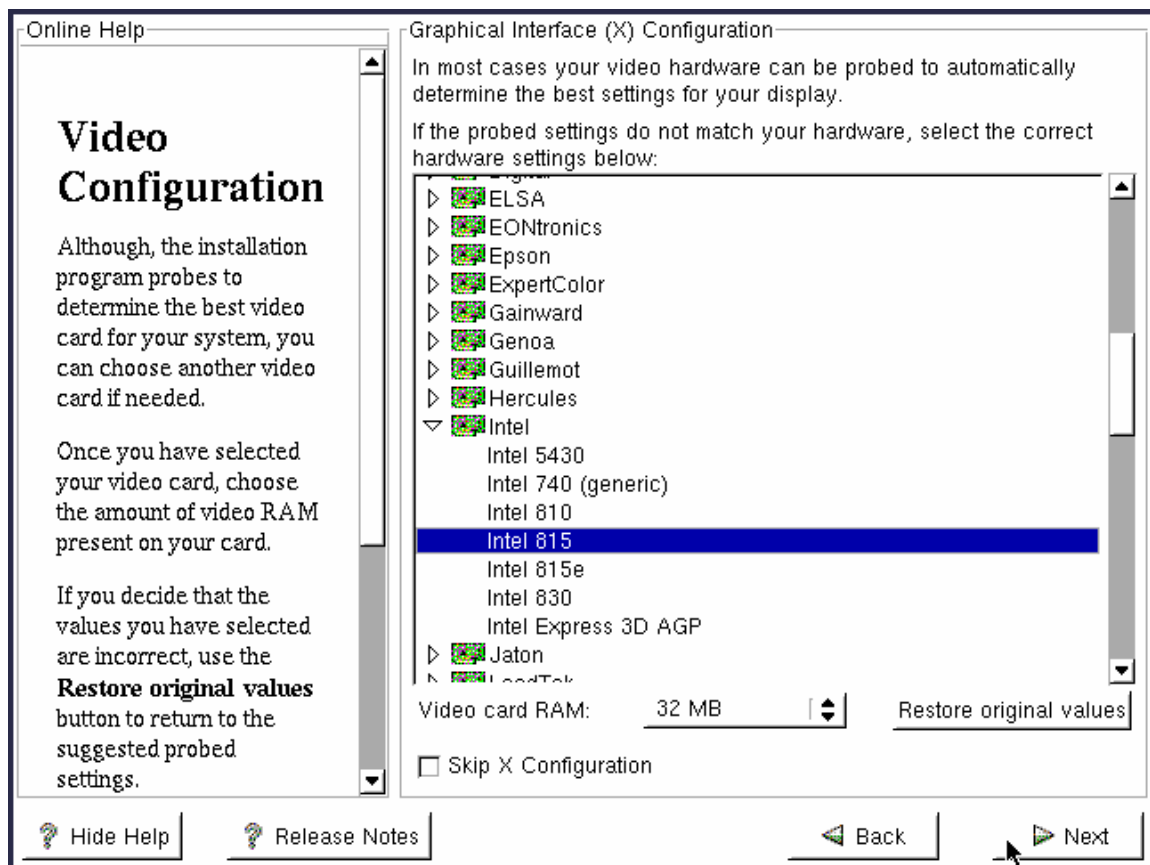


In the list above, select all items except **Laptop support** and **Legacy application support**

Must select **Software development** and **Kernel development**

Press NEXT to proceed.

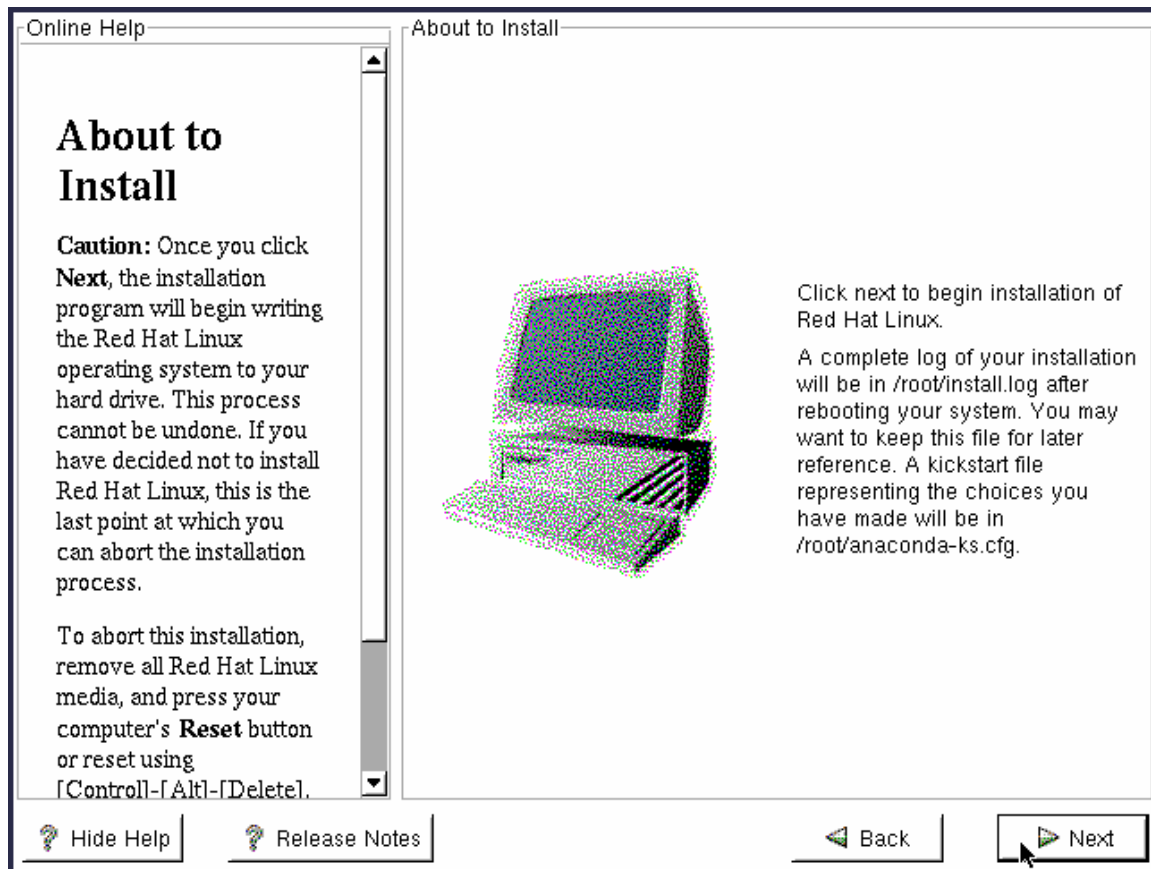
Step # 18 – Graphical Interface or Video Card configuration



Select ur card type and video memory size

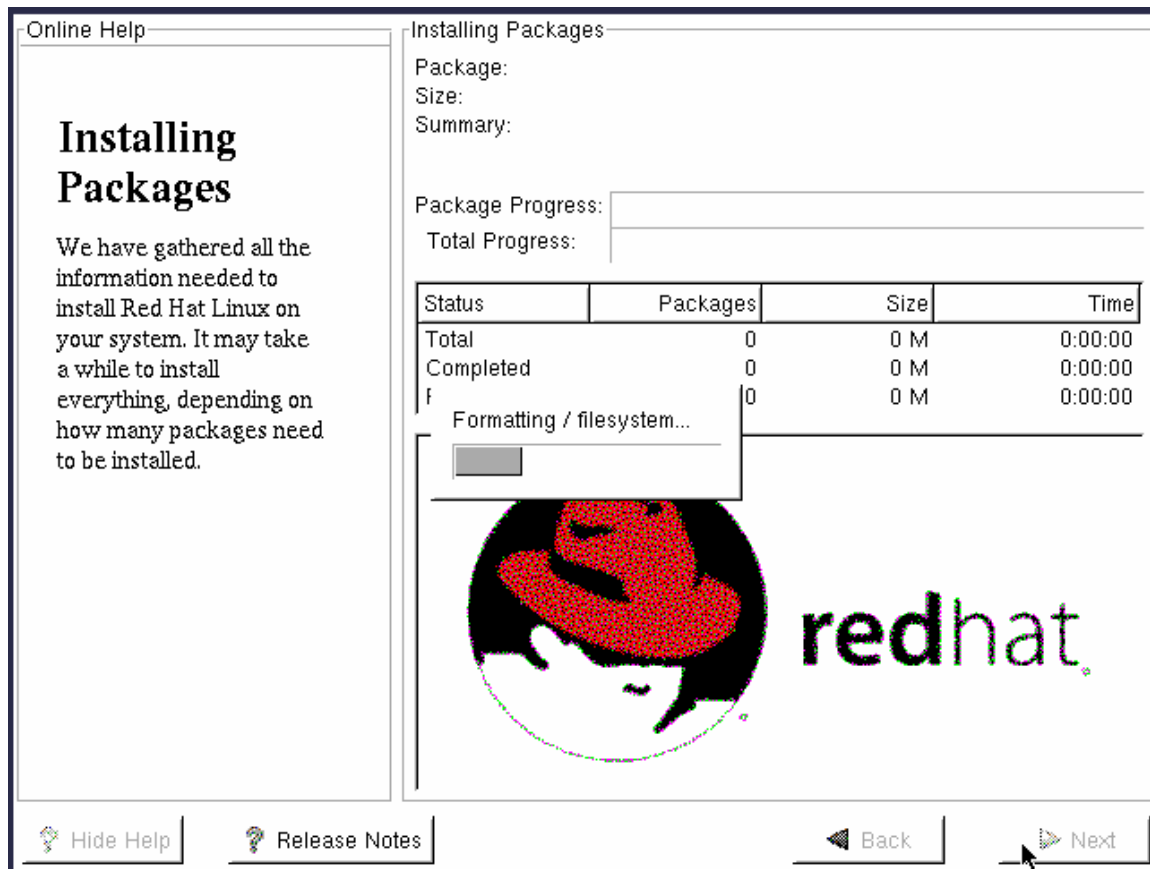
Press NEXT to proceed.

Step # 19 – Starting of Actual Installation



Press NEXT to proceed.

Step # 20 – Pre Installation Steps

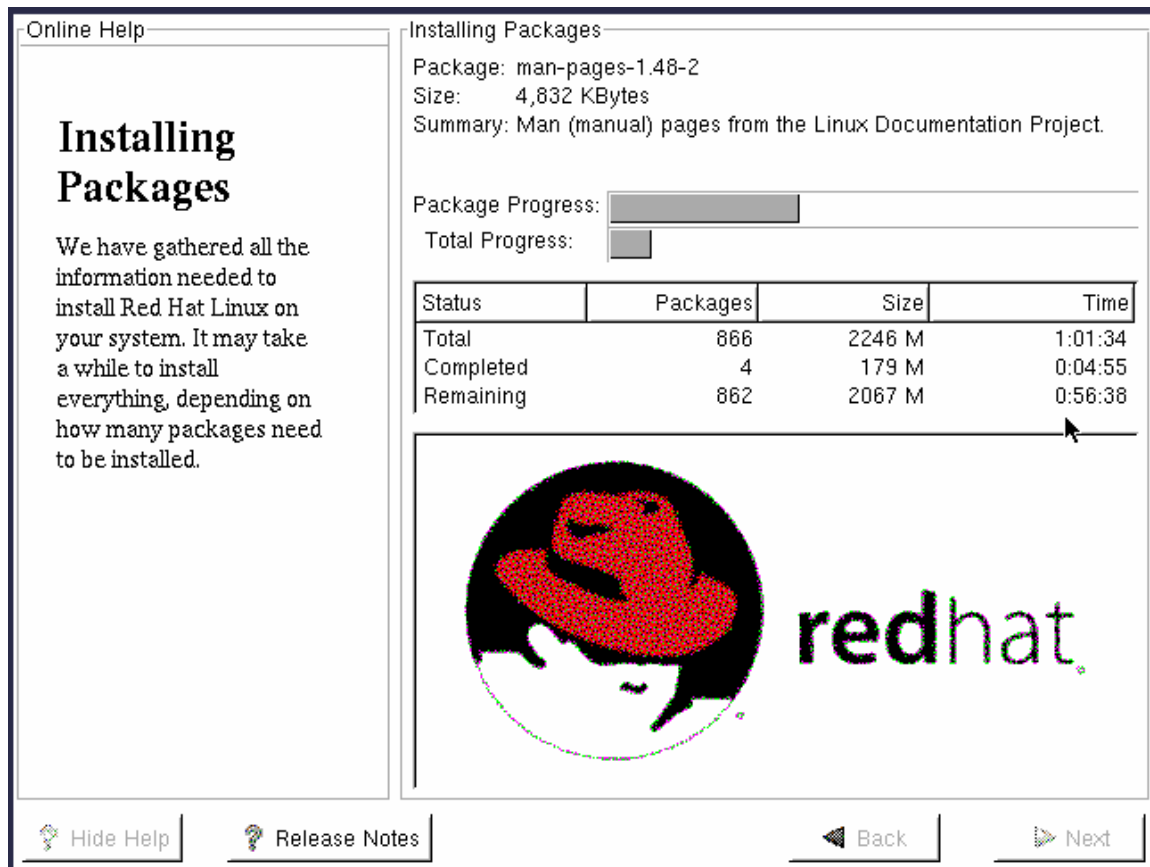


Before the installation and copying of files, file system is formatted and other important operations are followed.

Small dialog boxes will appear on the screen to show u the progress of these operations.

DO NOT DO ANY THING

Step # 21 – Installation of packages



Now after the pre-installation operations, this screen will be shown with statistics and progress bars showing the installation progress.

Now relax for about 1 – 2 hours. In P3 800 MHz PC, it took 56 min. to complete.

During the installation, it will ask u to change CD # 1 to CD # 2 and then to CD # 3. Do as instructed.....

After the installation, 95% installation is complete.

After this, Linux installation ask u for ur monitor type and vendor name. Select one from the given list and press NEXT to proceed.

After the setup of X server, the Linux installation asked u to select, whether u want to start by graphical login or textual login. Select the textual one.

NOW THE INSTALLATION IS COMPLETE PC will automatically reboot, remove the CD and enjoy the freshly installed Linux