Installing CentOS in VMWare Workstation/Player

Creating Virtual Machine (VM) in VMware Workstation.

Step 1: Choose File -> New Virtual Machine

File	Edit View VM	Tabs	Help	
*	New Virtual Machin	ne		Ctrl+N
1	New Window			
	Open			Ctrl+O
	Close Tab			Ctrl+W
5	Connect to Server			Ctrl+L
5	Virtualize a Physica	l Machine	·	
	Export to OVF			
£	Map Virtual Disks			
	Exit			

Step 2: Choose mode to installation, normally you can choose Typical.

New Virtual Machine Wizard		
	Welcome to the New Virtual Machine Wizard	
	What type of configuration do you want?	
	 Typical (recommended) Create a Workstation 10.0 virtual machine in a few easy steps. Custom (advanced) Create a virtual machine with advanced 	
vm ware	options, such as a SCSI controller type, virtual disk type and compatibility with older VMware products.	
Workstation		
Help	< Back Next > Cancel	

Step 3: Choose Installation Media. In follow example 3rd option is chooses. Which mean installation media will be chosen later on for installation. Thus, not automatic installation of OS will occur.

nstall from:			
O Installer disc:			
📀 CD Drive (D:))	\sim	
O Installer disc imag	e file (iso): .0-1406-x86_64-DVD.iso	~	Browse

Step 4: Select the type of OS you want to install. Since we are trying to install Redhat Enterprise Linux 6, we choose Linux and then choose Red Hat Enterprise Linux 6 as version.

Which operating s	system will be installed on this virtual machine?
Guest operating system	
O Microsoft Windows	
Linux	
Novell NetWare	
Solaris	
VMware ESX	
Other	
Version	
Red Hat Enterprise Linux	x6 v

Step 5: Choose Virtual Machine (VM) Name and folder where created VM will be saved.

Name the Virtual Machine	
What name would you like to use for this virtual machine?	
/irtual machine name:	
csit_rhel6.5	
oration:	
	-
E: WITUAIPC (CENTUS6.4	Browse
	Browse
E: WITUAIPC (Centuso. 4 The default location can be changed at Edit > Preferences.	Browse
E: (VITUAIPC (CentUS6.4)	Browse
E: WITWAIPC (CentUS6.4	Browse
E: WITWAIPC (CentUS6.4	Browse
E: (VITUAIPC (CentUS6.4	Browse
E: (VITUAIPC (CentUS6.4	Browse
E: (VIITUAIPC (CentUS6.4	Browse

Step 6: Select Disk size which will be total disk size available for Linux. In following example 20GB is chosen which enough for our purpose and Split virtual disk into multiple files are chosen. If you choose store virtual disk in single file, performance of the VM will be better, however it will be difficult to move/copy files with FAT32 formatted disk or DVD discs.

	New Virtual Machine Wizard		
Specify Disl How larg	c Capacity e do you want this disk to be?		
The virtual ma computer's ph add applicatio	chine's hard disk is stored as one or more files on the host ysical disk. These file(s) start small and become larger as you ns, files, and data to your virtual machine.		
Maximum disk	size (GB): 20.0 🛋		
Recommended	size for Red Hat Enterprise Linux 6: 20 GB		
 Store virtu Split virtua 	al disk as a single file disk into multiple files		
Splitting th computer b	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		
ncip	Concer		

Step 7: If require you can change setting in following window. Otherwise click to Finish button.

Name:	csit_rhel6.5	,
Location:	E:\VirtualPC\CentOS6.4	
Version:	Workstation 10.0	
Operating System:	Red Hat Enterprise Linux 6	
Hard Disk:	20 GB, Split	
Memory:	2048 MB	
Network Adapter:	NAT	
Other Devices:	CD/DVD, USB Controller, Printer, Sound Card	•

Starting Virtual Machine (VM)

Step 1: Choose Installation Media. Double click to CD/DVD(SATA) and choose installation media. In our case we are choosing ISO image file, and choose browser to locate ISO image of CentoOS 6.4. and click to OK.

🔁 csit_rhel6.5			
Power on this virtual machine Edit virtual machine settings			
 Devices 			
🎟 Memory	2 GB		
Processors	1		
Hard Disk (SCSI)	20 GB		
CD/DVD (SATA)	Auto detect		
envetwork Adapter	NAT		
🚭 USB Controller	Subscripter Present		

Step 2: Click to "Power on the Virtual Machine" to start virtual machine.



Installing CentOS 6.4

Step 1: As soon as you start VM, following screen will be displayed. Just click to Install (1st option)

	Welcome to CentOS 6.4!	
Th Th Re Bo Me	nstall or upgrade an existing system nstall system with basic video driver escue installed system pot from local drive emory test	
	Press [Tab] to edit options	
	Automatic boot in 48 seconds	
	NTerprise Operating System	

Step 2: Choose Skip. (We are using ISO so no need to check if our CD/DVD ROM is damaged or not.)

Welcome to CentOS for	i386
	Disc Found To begin testing the media before installation press OK.
	and start the installation.
<tab>∕<alt-tab> bet</alt-tab></tab>	ween elements i <space> selects i <f12> next screen</f12></space>

Step 3: Choose Next



Step 4:

Select English and Choose Next (If you want to change Language setting, you can do it here.)

What language would you like to use during the installation process?	
Bulgarian (Български)	
Catalan (Català)	
Chinese(Simplified) (中文(简体))	
Chinese(Traditional) (中文(正體))	
Croatian (Hrvatski)	
Czech (Čeština)	
Danish (Dansk)	
Dutch (Nederlands)	
English (English)	
Estonian (eesti keel)	
Finnish (suomi)	
French (Français)	
German (Deutsch)	
Greek (Ελληνικά)	
Gujarati (ગુજરાતી)	
Hebrew (עברית)	
Hindi (हिन्दी)	
	▲ <u>B</u> ack

Step 5:

Choose Keyboard Layout, In our case we use U. S. English based keyboard so just click to Next.

Select the appropriate keyboard for the system.		
Portuguese		
Romanian		
Russian		
Serbian		
Serbian (latin)		
Slovak (qwerty)		
Slovenian		
Spanish		
Swedish		
Swiss French		
Swiss French (latin1)		
Swiss German		
Swiss German (latin1)		
Turkish		
U.S. English		
U.S. International		
Ukrainian		
United Kingdom		
	Back	Ne:
		-

Step 6: Since we are not dealing to SAN Storage system just choose 'Basic Storage Devices' and click to next.

What type of devices will your installation involve?	
 Basic Storage Devices Installs or upgrades to typical types of storage devices. If you're not sure which option is right for you, this is probably it. 	
Specialized Storage Devices Installs or upgrades to enterprise devices such as Storage Area Networks (SANs). This option will allow you to add FCoE / iSCSI / zFCP disks and to filter out devices the installer should ignore.	
B ack	<u>N</u> ex

Step 7: It will display a Warning messaing stating that all your data will be lost. We have just created the virtual disk in our VM so we don't have data. Just choose 'Yes, discard any data'

Shiba R. Tamrakar (<u>shibaratna@gmail.com),</u>	www.shiba.com.np
RHCE, CEHv7, DB2 As	sociate, <mark>f <u>Facebook</u></mark>	

Λ	The storage device below may contain data.
	WMware, VMware Virtual S 20480.0 MB pci-0000:00:10.0-scsi-0:0:00
	We could not detect partitions or filesystems on this device.
	or virtual. If not, there may be data on the device that can not be recovered if you use it in this installation. We can remove the device from this installation to protect the data. Are you sure this device does not contain valuable data? ☑ Apply my choice to all devices with undetected partitions or filesystems
	Yes, discard any data No, keep any data

Step 8: Set Hostname, it may be any. In our case I choose lab.shiba.com.np.internal, where lab is host name and shiba.com.np.internal is domain.

Please name this computer. The hostname identifies the computer on a network. Hostname: Iab.shiba.com.np.internal
Hostname: Iab.shiba.com.np.internal
•
•
*
*
•
Configure Network
▲Back ▲Next

Step 9: Select time zone by clicking on the map. Hover the mouse until you fine your country/city and click to select.



Step 10: Next, you need to assign root password. root is a super user (administrator) in Linux. If you give weak password it will prompt you a warning message, just choose "Use Anyway" button.

The root account is used fo the system. Enter a passw user.	r administering ord for the root
Root <u>P</u> assword:	
<u>C</u> onfirm:	
	Weak Password
	You have provided a weak password: it is based on a dictionary word
	Cancel Use Anyway
	▲ <u>B</u> ack ▶ <u>N</u> ext

Step 11: We don't have any existing OS so choose default. If you are working in dual boot system with Windows pre-installed choosing "Replace Existing Linux System(s)" is safe choice to select. Click next.

Whi	ch type	e of installation would you like?
0	OS.	Use All Space Removes all partitions on the selected device(s). This includes partitions created by other operating systems.
		Tip: This option will remove data from the selected device(s). Make sure you have backups.
۲	05	Replace Existing Linux System(s) Removes only Linux partitions (created from a previous Linux installation). This does not remove other partitions you may have on your storage device(s) (such as VFAT or FAT32).
		Tip: This option will remove data from the selected device(s). Make sure you have backups.
0	05 •	Shrink Current System Shrinks existing partitions to create free space for the default layout.
0	OS	Use Free Space Retains your current data and partitions and uses only the unpartitioned space on the selected device (s), assuming you have enough free space available.
0	?	Create Custom Layout Manually create your own custom layout on the selected device(s) using our partitioning tool.
	Encrypt	system
V	Re <u>v</u> iew	and modify partitioning layout
		▲ Back

Note: If you are familiar with Linux partitions and want to create your own partitions. Choose "Create Custom Layout" and create partitions of size you desire.

Step 11: If you want to customize you can edit in created partition in following screen. And click to Next.

		Please	e Select A Dev	vice			
Device	Size (MB)	Mount Point/ RAID/Volume	Туре	Format			
✓ LVM Volume Groups							
⊽ vg_lab	19976						
lv_root	15912	/	ext4	\checkmark			
lv_swap	4064		swap	\checkmark			
Hard Drives							
▼ sda (/dev/sda)							
sdal	500	/boot	ext4	\checkmark			
sda2	19979	vg_lab	physical volume (LVM)	\checkmark			
			<u>C</u> reate	•	<u>E</u> dit	Delete	Reset

Click to format in following warning message:

N	Format Warnings
The following formatted,	ng pre-existing devices have been selected to be destroying all data.
/dev/sda	partition table (MSDOS)
	<u>C</u> ancel <u>F</u> ormat

And, Choose "Write changes to disk"

v	/riting storage co	nfiguration to disk
	The partitioning opt will now be written deleted or reformat	ions you have selected to disk. Any data on ted partitions will be lost.
	Go <u>b</u> ack	Write changes to disk

Step 12: In this section you may choose to install or not install boot loader (GRUB) in hard disk. Similarly, you can set password to be used for recovering from GRUB. For now I choose to lease all setting as it is and clicked to Next.

<u>U</u> se a b	boot loade boot loader	r on /dev/sda. password	Change device]			
oot load	ler opera	ting system	list				
	aper De CentOS /de	vice v/mapper/vg	lab-ly root				<u>A</u> dd
							<u>E</u> dit
							<u>2</u> elete
						k	

Step 13: In this section, you need to choose the installation selection. If you are installing for workstation choose Desktop, otherwise you can choose any other option as per your server requirement. I choose Desktop and also customize now to install additional server software for our lab.

Targeted Audience: Students of Network and System Administration CSIT (TU), System Administration (Elective) BE Computer/BIT (Purbanchal University), MCS 22: Operating System Concepts and Network Management IGNOU, MCS 52: Network Administration and Programming, IGNOU

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In customize section, I have selected following software in servers section.

Allows the system to act as a print server. Optional packages selected: 5 of 5	Applications Base System Databases Desktops Development High Availability Languages Load Balancer Resilient Storage Servers	 Backup Server CIFS file server Directory Server E-mail server FTP server FTP server Identity Management Server NFS file server Network Infrastructure Server Network Storage Server Print Server
	Allows the system to act as a print server.	Optional packages selected: 5 of 5

Step 14: Installation in Progress.



Step 15: Installation competed, click to reboot.

Congratulations, your CentOS installation is complete. Please reboot to use the installed system. Note that updates may be available to ensure the proper functioning of your system and installation of these updates is recommended after the reboot.
Back Reboot