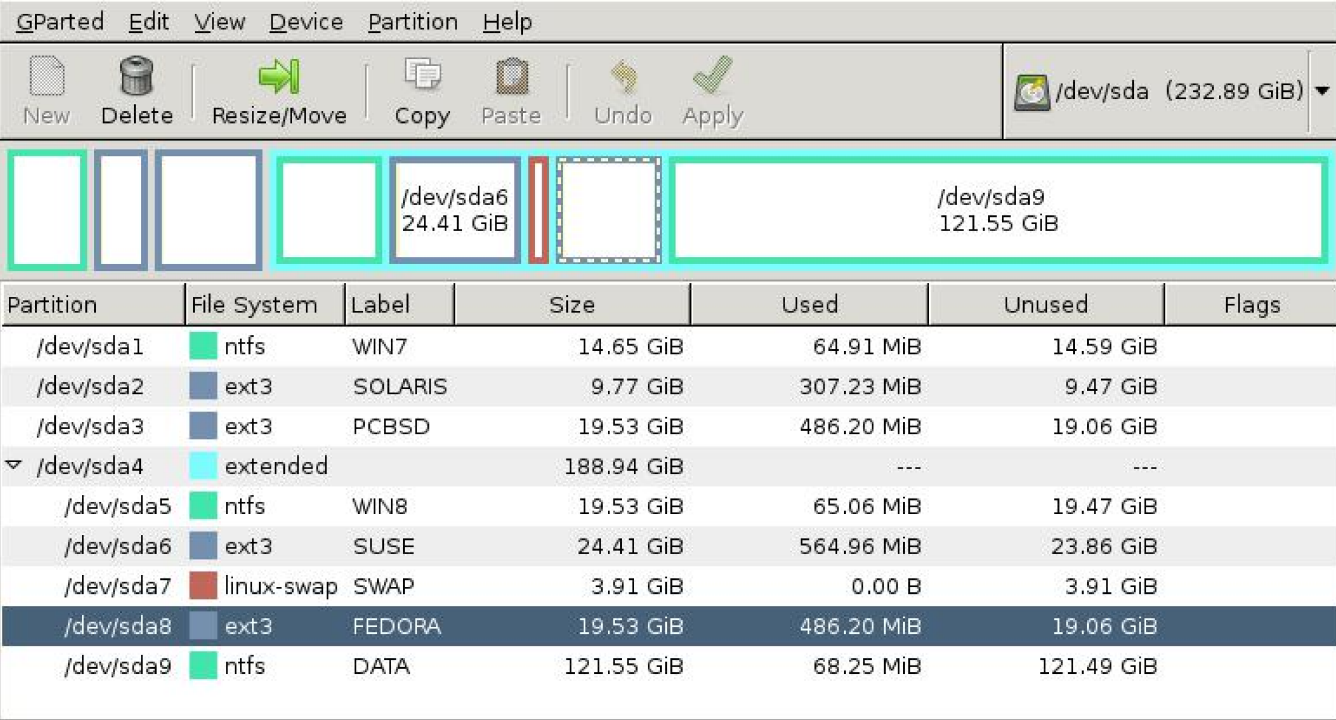# OS Installation Notes

CREATE PARTITIONS (MBR)

- Start the machine and Insert GParted Live CD in DVD-drive.
- Menu will appear on screen with "Gnome Partition Editor" at bottom of screen. From this menu select 1st option as "GParted Live (Default settings)". [You can scroll menu items using arrow keys and select using enter key. This is usual way of selecting menu item hereafter].
- Next screen will show "Configuring console-data". Select "Policy for handling keymaps:" as "Don't touch keymap" (which is default selection).
- Next it will ask "Which language do you prefer?". Press enter to select the default i.e. 33: US English.
- Then it asks about "Which mode do you prefer?" (related to GUI of GParted). Press enter to select the default values.
- Next Screen will show a window application "GParted". This screen will show our hard disk in combo box on toolbar. Select the appropriate hard disk (no need to select if there is a single hard disk). Assuming that all partitions are already deleted, the screen below will show single partition of type unallocated and of size equal to size of hard disk.
- Right click "unallocated" to create "New" partition. This shows a dialog box titled as "Create new Partition". Select the valid options (i.e. "New Size (MiB)", "Create as", "Filesystem" and "Label") and then click "Add" button. This will create first partition. Please ensure that you have selected "Align to" dropdown box as "MiB". Do not change the values appearing in "Free Space Preceding (MiB)" and "Free Space Following (MiB)".
- This partition can be viewed at first line and remaining space will be shown on next line as "unallocated". Similarly right click "unallocated" to create "New" partition. The options to be selected for each partition are given below in the table. Note that this partition scheme is decided considering our hard disk size of 250 GB and by reserving recommended sizes for respective operating systems. This may change as per your hard disk size and your needs.

Sr. No.	Partition Type *Create as:*	File System *Filesystem:*	Label *Label:*	Size (MB) *New Size (MiB):*	OS
1	Primary Partition	Ntfs	WIN7	15000	Windows 7
2	Primary Partition	ext3	SOLARIS	10000	Open Solaris 2009
3	Primary Partition	ext3	PCBSD	20000	PC BSD 10.1
4	Extended Partition	--	--	--	--
5	Logical Partition	Ntfs	WIN8	20000	Windows 8.1
6	Logical Partition	ext3	SUSE	25000	Open SuSE 13.1
7	Logical Partition	linux-swap	SWAP	4000	--
8	Logical Partition	ext3	FEDORA	20000	Fedora Core 20
9	Logical Partition	Ntfs	DATA	Remaining size	--

- Click on "Apply" button on toolbar. It will ask "Are you sure you want to apply pending operations?" Click "Apply". Next message shows "All operation successfully completed".
- Finally screen of GParted will look like as given in next image:

OS Installation Notes

Partition	File System	Label	Size	Used	Unused	Flags
/dev/sda1	ntfs	WIN7	14.65 GiB	64.91 MiB	14.59 GiB	
/dev/sda2	ext3	SOLARIS	9.77 GiB	307.23 MiB	9.47 GiB	
/dev/sda3	ext3	PCBSD	19.53 GiB	486.20 MiB	19.06 GiB	
▽ /dev/sda4	extended		188.94 GiB	---	---	
/dev/sda5	ntfs	WIN8	19.53 GiB	65.06 MiB	19.47 GiB	
/dev/sda6	ext3	SUSE	24.41 GiB	564.96 MiB	23.86 GiB	
/dev/sda7	linux-swap	SWAP	3.91 GiB	0.00 B	3.91 GiB	
/dev/sda8	ext3	FEDORA	19.53 GiB	486.20 MiB	19.06 GiB	
/dev/sda9	ntfs	DATA	121.55 GiB	68.25 MiB	121.49 GiB	

0 operations pending

- Click on "Close" button and close the "GParted" window.
- Double click on "Exit" icon on screen, which will lead to the dialog "Exit". Select "Shutdown" from it and click "OK".
- After some time it will ask you to "remove the disc and close the tray". So remove GParted CD from DVD drive and press enter.

WINDOWS 7

- Start machine and put Windows 7 DVD into DVD drive.
- Please wait while "Windows is loading files".
- Screen titled as "Install Windows" ask for some settings. Here Select "Language to install" as "English". Also select "Time and currency format" as "English (United States)". Select "Keyboard or Input Method" as "US". Then click "Next".
- On the next screen, click on "Install Now".
- On the next screen, select "Windows 7 Ultimate" "Architecture x86" (32-bit) for installation and click "Next".
- Next screen displays license terms. Check mark "I accept the license terms" and click "Next".
- Next screen ask for "Which type of installation do you want?" Click on "Custom (Advanced)".
- Next screen ask "Where do you want to install windows?". Select the partition with label "WIN7" and click on "Drive options (advanced)". Now click "Format" and after formatting is done, click "Next".
- Now Installation will continue for a long time.
- After reboot, windows need to be "Set Up".
- Finally new screen will ask "Choose the user name for your account and name your computer". Type a username and type a computer name as "mypc" and click "Next".
- On next screen type the password and confirm the same. Also give the "password hint". Click "Next".
- On next screen "Type your Windows product key" for activation or can keep blank to go for evaluation version. The checkbox below labeled as "Automatically activate windows when I'm online" should be marked or unmarked as necessary. Click "Next".
- Next screen shows "Help protect windows automatically". And then select "Ask me later".

- On next screen select "Time Zone" as "(UTC +05:30) Chennai, Kolkata, Mumbai, New Delhi". Select time and date as required. Click "Next".
- Then a command prompt opens and display the product key installed. Then machine reboots and Windows 7 starts.
- Now test the installation and shut down the machine.

OPEN SOLARIS

- Insert the Open Solaris installation DVD into DVD DRIVE and boot from it.
- The first screen will show grub with title "GNU GRUB version 0.97".
- Select "Open Solaris 2009.06" using arrow keys and press ENTER.
- Since Open Solaris DVD is live DVD it will boot from DVD and will show Solaris GUI.
- During booting one console screen will ask for keyboard layout, this is default "US English" i.e. number 43. Press enter to continue with the same.
- Then it asks for desktop language "English" i.e. Number 6. Press enter to continue with the same.
- Please wait till Open Solaris is ready and show you GUI desktop.
- Now some icons will be shown on screen. Double Click "Install Open Solaris" option.
- This will open "Open Solaris Installer" "Welcome" screen. Click on "Next".
- Next screen shows screen with title "Disk", asking you "where should Open Solaris be installed?". Select the proper disk and then from that disk select 2nd option on the screen "Partition the disk" and below that it shows 4 combo boxes.
- The first combo box shows "IFS : NTFS". Second combo box shows "Linux Native" Click on it and select "Solaris" partition type. Then click "Next".
- Next screen shows "Time zone, date, time". Select "Region" as "Asia", "Location" as "India" and "Time zone" as "India" and also date time as needed. Then click "Next".
- Next screen ask for "Locale" (i.e. language) Select "English" and click "Next".
- Next screen asks for "users" give "root password" and "confirm password". Also create a user name and password and confirm the same.
- On the same screen give computer name as "mypc".
- Next screen shows full information about "Installation", confirm it and click on "Install".
- Now installer will start "Installing" Open Solaris.
- After a lot of time, it shows "Finished" screen indicating Open Solaris 2008.05 installation is complete. Click on "Reboot".
- Remove the DVD from DVD drive.
- Check if Open Solaris installation is done successfully. Reboot the machine.

PC-BSD

- Insert the PC BSD installation DVD into DVD DRIVE and boot from it.
- Machine will automatically boot from DVD and show the screen "PC-BSD / True OS Installation".
- To select first option "Graphical Install", press ENTER.
- After some time it will show a "PC-BSD" GUI screen. Select Language as "English" and click "Next".
- Next screen shows "System Selection". Select "Desktop (PC-BSD)"and Click "Next".
- Next screen ask for "Disk Selection". Click "Customize".
- On next screen select "Advanced (Experienced with file systems)" and click "Next".
- Choose "Selected disk" as "ada0" (i.e. first hard disk) and "Selected Partition" as "ada0s3". Also select "Bootloader" dropdown box to "None". Click "Next".
- On next "Mount points" screen, click "Swap Size" button and give size of "4000" MB there. Then click "Next".
- Read the given summary on next screen and "Finish" disk selection. Here installer will warn you as no boot loader is selected.

- A warning may appear saying that "The selected disk / partition is less than recommended 50 GB. The installation may fail …". Ignore if this warning appears, by clicking "OK".
- Clicking "Next" on "Disk Selection" screen will ask for "Start Installation Now?". Click "Yes" to begin installation.
- As installation completes, system will reboot and by default machine will boot with OPEN SOLARIS Grub as we have not installed boot loader of PC-BSD. To boot with PC-BSD we will need to do "Grub Tweaking" as follows.

BOOT FLAG TWEAKING USING GParted Live DVD
- Put Gparted Live DVD in the drive and reboot the machine.
- Menu will appear on screen with "Gnome Partition Editor" at bottom of screen. From this menu select 1st option as "GParted Live (Default settings)". [You can scroll menu items using arrow keys and select using enter key. This is usual way of selecting menu item hereafter].
- Next screen will show "Configuring console-data". Select "Policy for handling keymaps:" as "Don't touch keymap" (which is default selection).
- Next it will ask "Which language do you prefer?". Press enter to select the default i.e. 33: US English.
- Then it asks about "Which mode do you prefer?" (related to GUI of GParted). Press enter to select the default values.
- Next Screen will show a window application "GParted". This screen will show our hard disk in combo box on toolbar. Select the appropriate hard disk (no need to select if there is a single hard disk).
- Now it will display all partitions along with second partition set as "boot" partition (see last column). Right click on 2nd partition and click "Manage Flags" menu item. From the appeared dialog box, uncheck "boot" flag and click close.
- Now it will display all partitions along with none of the partition marked as "boot" partition (see last column). Then right click on 3rd partition and click "Manage Flags" menu item. From the appeared dialog box, check "boot" flag and click close. Now machine is ready to boot from "PC-BSD" partition.
- Click on "Close" button and close the "GParted" window.
- Double click on "Exit" icon on screen, which will lead to the dialog "Exit". Select "Reboot" from it and click "OK".
- After some time it will ask you to "remove the disc and close the tray". So remove GParted CD from DVD drive and press enter.
- BOOT FLAG TWEAKING IS FINISHED HERE. NOW CONTINUE INSTALLATION OF PC-BSD. PC-BSD WILL BOOT NOW. FOLLOW THE STEPS GIVEN BELOW.
- By default now system will boot into PC-BSD.
- When PC BSD boot first time, it allows to adjust screen resolution.
- On "Confirm Resolution" screen confirm the default settings and click "Yes".
- On next "PC-BSD" welcome screen select language and click "Next".
- On next screen, select time-zone as "Asia/Kolkata" and give hostname as "mypc". Click "Next".
- On next screen give "Root password" and confirm (repeat) the same. Click "Next".
- Give user name, login name, password and confirm password on next click and click "Next".
- Then "Finish" the setup.
- On login screen, select username from dropdown box. Give password and click login button (arrow button).
- Now test the operating system and shut down the operating system.

- Here we can boot any of the installed OS by making the corresponding partition bootable. For that use the BOOT FLAG TWEAKING mechanism as discussed during PC-BSD installation.

- Before installing next Windows operating system, ensure that the partition with windows installation is active i.e. 1st partition. This can be done using GParted Live DVD as follows:
- Boot from GParted Live DVD and reach to the partitioning tool.
- Now right click on PCBSD partition and click menu "Manage Flags". Now uncheck "boot" flag.
- Right click on 1st partition i.e. WIN7 and click menu "Manage Flags". Now check "boot" flag.
- Close GParted utility and reboot to install Windows 8.1.

Windows 8.1

- Start the machine and insert Windows 8.1 DVD into DVD-ROM.
- Hit a key when message appears "Press any key to boot from CD or DVD".
- After some time "Windows Setup" window will be opened. Keep language and other options default selected and click "Next".
- On next screen click "Install Now".
- Enter appropriate product key on next screen and click "Next".
- Accept license terms and click "Next".
- Next screen asks "Which type of installation do you want?". Select "Custom: Install Windows only (advanced)".
- Select the partition reserved for Windows 8 Installation on the next screen (i.e. 1st logical partition in our case). You can reformat that partition by clicking "Format" button. Then click "Next".
- Next "Installation Windows" screen will show installation progress. This will take few minutes to complete. During installation process machine will reboot twice.
- On "Personalize" screen give "PC name" as "mypc" and click "Next".
- On "Settings" screen click "Use express settings".
- On "Your account" screen, give username, password, confirm password and password hint. Click "Finish".
- If system detects any new device, it will prompt for installing that device. Click on "Install" there.
- On reboot, select Windows 8.1 (default) on boot loader screen. Enter password on login screen and press enter. For first login, system personalization setup will take few minutes.
- On login, test the system. Remove Windows 8.1 DVD and reboot system.

OPEN SUSE

- Start the machine and put OPENSUSE 13.1 DVD into DVD drive.
- From the menu, select option "Installation" and press ENTER.
- On next screen select "Language" of installation as "English". Also select "Keyboard Layout" as "English (US)" and click "Next".
- On the next screen "Select mode" as "New Installation". Also uncheck "Use automatic configuration" and click "Next".
- Next screen ask for "Clock and Time zone". Select "Region" as "Asia", "Time Zone" as "Kolkata" and "Change" time and date appropriate. Then click "Next".
- Next screen ask for "Desktop Selection". Select "GNOME" or "KDE". Here we select "KDE". Then click "Next".
- On "Suggested Partitioning" screen, click "Create Partition Setup".
- Next screen shows "Preparing Hard Disk". Select "Custom Partitioning (for experts)". Click "Next"
- Next screen shows "Expert partitioner". Right click valid partition labeled as "SUSE" and click "Edit" menu.
- In dialog box appeared Select "Format partition" and "File system" as "ext3". Also select "Mount partition" and give "mount point" as "/". Then click "Finish".
- In "Expert Partitioner" also right click partition of type "Linux Swap" and click "Edit" menu.
- In dialog box appeared, select "Format partition". File system as "swap" and mount point "swap". Then click "Finish".
- Click "Accept" button on "Expert Partitioner" screen. Then click "Next" to proceed further installation.

- On next screen "Create New User" by giving username, password and confirm password. Also uncheck "Use this password for system administrator" as well as "Automatic login".
- Next screen will ask for "Password for system Administration (root)" give "password for root user" and "confirm password".
- On "Installation settings" screen click on "Booting".
- Next screen show "Boot loader Installation". Now check mark "Boot from Master Boot Record". Uncheck other checkboxes, if any. Then click "OK".
- On "Installation settings" click on "Software". Here you can select the softwares that you want to install. To install virtual box virtualization tool, click on "Details". On new screen, click on view and select "Package Groups". From this group select "System". On right hand side number of packages will appear. Select all packages whose name starts from "virtualbox". Then click "Accept". A dialog box will show the "Automatic Changes". Click "Continue".
- On "Installation settings" screen click on "Install" button.
- Finally dialog box appears with title "Confirm Installation". Click on "Install" button.
- Now installation will start. After some time machine will reboot. Then "Boot from Hard Disk".
- Next screen will ask for "Hostname and domain name". Give hostname as "mypc". Then click "Next".
- Next screen will ask for "Network Configuration". Select "Skip Configuration". Then click "Next".
- On "Test Internet Connection" screen, select "No, Skip This Test" and click "Next".
- On "Release Notes" screen, click "Next".
- Next screen ask for "Hardware Configuration". Select "Use following configuration". Then click "Next".
- Finally screen shows "Installation Completed". Then click "Finish".
- Next screen ask for user name and password. Give username as root and password chosen previously and press enter to login.
- Now remove DVD from DVD drive and test installation.
- Then shutdown the machine.

GRUB TWEAKING FOR TAKING ALL OPERATING SYSTEMS INTO OPENSUSE GRUB:
- Start the machine. OPEN SUSE grub will appear on the screen. From the grub select "Open Suse 13.1" using UP / DOWN keys and press ENTER.
- Boot in OPENSUSE and login "root" user.
- Click on "My Computer". Then click "etc" folder. Then click "grub.d". Right click "40_custom" and open with "kwrite" (text editor). [Thus we have open /etc/grub.d/40_custom for editing]
- Add entries of OpenSolaris and PCBSD at the end of this file as follows:
  menuentry 'Open Solaris 2009.06' --class solaris {
        set root='hd0,msdos2'
        chainloader +1
  }

  menuentry 'PC-BSD 10' --class pcbsd {
        set root='hd0,msdos3'
        chainloader +1
  }

- Note that hard disk counting starts from 0, so in entry given above hd0 indicates first hard disk. However partition counting starts from 1, so in entry given above 'msdos2' indicate second partition and 'msdos3' indicate third partition.
- Save the changes from the menu File->save and close editor.
- Updating actual grub file (/boot/grub2/grub.cfg) can be updated by running following command:
  update-bootloader --reinit
- Even though grub of SuSE is installed on MBR, sometimes SuSE installer may activate extended partition. To boot all OS properly, 1st partition must be activated using GParted CD as discussed above (after PC-BSD installation) or using Linux fdisk command from SuSE Linux itself using following steps.
- Open terminal (konsole) on SuSE Linux and give command
  fdisk /dev/sda
- Give fdisk command 'p' to see current active partition (star mark).
- Give fdisk command 'a' to toggle active flag and give that partition number (4 in our case).
- Again give fdisk command 'a' to toggle active flag and give partition number 1. This will set active flag to 1st partition.
- Give fdisk command 'w' to write modified partition table to disk and quit from fdisk.
- Reboot machine to see the effect. Now you should be able to boot any of the operating system installed till now from the Open SuSE grub.

Installing Virtual Box on Windows

- Copy virtual box setup to some folder and run it.
- On welcome screen click "Next".
- Select location for installing virtual box and click "Next".
- Allow to create short cut on the desktop and in quick launch bar. Click "Next".
- Next screen shows Warning of Network Interfaces. Click "Yes" to continue the installation.
- Click "Install" to begin installation. If "User Account Control" message box ask for permission for installing program, click "Yes".
- During installation it asks permission to install certain device drivers, click "Install" there.
- Click "Finish" and then start virtual box.
- In virtual box settings, click on "Preferences" menu under "File". Select "Default Machine folder" as "E:\VirtualBox\Machines". (It is recommended to use NTFS partition to save this data.)

Using Virtual box on Windows

- Click "New" on toolbar to create new virtual machine which will open "Create Virtual Machine" wizard. Click "Next".
- Give Operating system name as "ubuntu". Select operating system as "Linux" and version as "Ubuntu (64 bit)" in our case (as we are installing 64 bit KUbuntu). Click "Next".
- On next screen, Accept the default memory i.e. RAM size and click "Next".
- Now select "Create a virtual hard drive now" and click "Create". This will ask for "Hard drive file type". Select "VDI" there and click "Next".
- On next screen select Storage Type as "Fixed size" and click "Next". Give disk size as 8.00 GB and click "Create".

- Select created virtual machine and click "Settings" menu in toolbar. In settings dialog click on "Storage". In the dialog box, select "Controller: SATA". Then click on CD icon with + sign there. On appeared message box, click button "Leave Empty". Now select "Empty" under "Controller: SATA". Now click CD icon under "Attributes" and select CD/DVD device as "Host drive …" (drive representing DVD drive). Also ensure that you have selected appropriate SATA port (beside CD icon there). Then click "OK".

UBUNTU

- Put KUBUNTU DVD into DVD drive. From the toolbar click "Start" to power on virtual machine.
- On first screen select language "English" (default) and click on "Install Kubuntu".
- Next screen shows minimum disk space required. Click "Continue".
- On "Installation Type" screen, select "Guided – use entire disk". Click on "Install Now".
- While configuring further settings, parallel installation (file copy operation) will keep progressing (progress bar shown in bottom of the screen).
- On next screen select "Region" as "India" and "Time Zone" as "India Time".
- On "keyboard Layout" screen, select "English (US)" in both dropdown list and click "Continue".
- Next screen asks "who are you?". On this give some login name and password and confirm the password. Also give computer name as "mypc". Also select "Require my password to log in" and click "Continue".
- At last it shows message "Installation Complete". Click on "Restart Now".
- Remove DVD from DVD drive and reboot the virtual machine to test installation.

Using Virtual box on SuSE

- During installation of Open SuSE 13.1, you can also select packages for installing virtual box. If you have not done, then you can install these packages from YaST any time using installation DVD.
- Now Go to Start menu, then "Applications", select "System" and finally click "Virtual Machine" to open virtual box.
- Click "New" on toolbar to create new virtual machine which will open "Create Virtual Machine" wizard. Click "Next".
- Give Operating system name as "win2k12". Select operating system as "Microsoft Windows" and version as "Windows 2012 (64 bit)". Click "Next".
- Give RAM size appropriate RAM size (minimum 1 GB) click "Next".
- Now select "Create a virtual hard drive now" and click "Create". This will asks for "Hard drive file type". Select "VDI" there and click "Next".
- On next screen select Storage Type as "Dynamically allocated" and click "Next". Give disk size as 15.00 GB and click "Create".
- Select created virtual machine and click "Settings" menu in toolbar. In settings dialog click on "Storage". In the dialog box, select "Controller: SATA". Then click on CD icon with + sign there. On appeared message box, click button "Leave Empty". Now select "Empty" under "Controller: SATA". Now click CD icon under "Attributes" and select CD/DVD device as "Host drive …" (drive representing DVD drive). Also ensure that you have selected appropriate SATA port (beside CD icon there). Then click "OK".

WINDOWS 2012 SERVER (In Virtual Box)

- Insert WIN2012 installation DVD in DVD drive and start the virtual machine.
- After loading files it shows "Windows setup" screen. Click "Next" to continue.
- On next screen click "Install Now".
- Enter appropriate product key on next screen and click "Next".
- Select "Windows Server 2012 R2 Standard (Server with a GUI)" and click "Next".
- Accept license terms and click "Next".
- Next screen asks "Which type of installation do you want?". Select "Custom: Install Windows only (advanced)".
- On next screen select the "Unallocated Space" and create "New" partition. Select disk "Size" in MB there and click "Apply". It shows a dialog box saying "To ensure that all Windows features work correctly, Windows might create additional partitions for system files." Click "OK". Then click "Next" on partition screen.
- Next "Installation Windows" screen will show installation progress. This will take few minutes to complete. During installation process machine will reboot twice.
- On next "Settings" screen give a strong password on next screen and confirm the same. The password must contain at least one alphabet, number and special symbol. Click "Finish".
- Enter password on login screen and press enter. For first login, system personalization setup will take few minutes.
- On login, test the system. Remove Windows 2012 DVD and shutdown virtual machine.

FEDORA CORE

- Start machine and put "Fedora Core" installation DVD in DVD drive.
- Machine will boot from DVD and screen titled as "Fedora Live" will appear. From the options available select "Start Fedora Live".
- On "Welcome to Fedora" screen, click "Install to Hard Drive".
- Select "English" and "English (United States)" as language preference. Click "Continue".
- Click on "Date & Time" on next screen. Now select region as "Asia" and City "Kolkata". Click "Done".
- On next screen click "Installation Destination".
- Ensure that hard disk is selected (It must be check marked). Now click on link "Full disk summary and bootloader". On the next dialog box, select disk name there and click "Do not install bootloader" option. Now click on "Done".
- Into "Installation Options", select "partition scheme" as "Standard Partition" and then click "Custom Partitioning".
- From "Manual Partitioning" scheme, select partition to be used for installation. In our case install partition is "sda8" (found under "Unknown"). Select File system as "ext3" (check mark "Reformat") and Mount point as "/". Click on "Update Settings" and then click on "Done". On next box of "Summary of Changes" click "Accept Changes".
- After returning back to previous screen, click "Begin Installation".
- Click on "Root Password". On next screen give root user password and after confirming it, click "Done". Click "Done" again if you are using weak password.
- Click on "User creation". On next screen give full name, user name, password and confirm password. Then click "Done". Click "Done" again if you are using weak password.
- After completion of installation click "Quit". Then remove installation DVD and reboot system.
- As we have not installed boot-loader of fedora, by default system shows SuSE grub. Now entry of Fedora should be done into SuSE manually as follows.

<u>GRUB TWEAKING FOR TAKING FEDORA CORE INTO OPENSUSE GRUB:</u>

- Boot into SuSE operating system from SuSE grub options.
- After login click open terminal program "Konsole" and mount Fedora core partition in /mnt directory using the command: mount -t ext3 /dev/sda8 /mnt
- Give command to list contents of "boot" directory in fedora partition.
    ls /mnt/boot/
- Note the name of "vmlinuz" and "initrd" file's exact names, which can be used in next step.
- Now from "My computer" open /etc/grub.d/40_custom for editing. (Right click on the file and open with "Kwrite"). Append the following entry there:

        menuentry 'Fedora Core 20' --class fedora {
            set root='hd0,msdos8'
            linux /boot/vmlinuz-3.11.10-301.fc20.x86_64 root=/dev/sda8 splash=silent quiet
            initrd /boot/initramfs3.11.10-301.fc20.x86_64.img
        }

- Save this file and close it.
- Updating actual grub file (/boot/grub2/grub.cfg) can be updated by running following command:
    update-bootloader --reinit
- From the Konsole un-mount partition using command : umount /mnt
- Give command "reboot" to test the system.
- HERE GRUB TWEAKING IS OVER. FROM OPENSUSE GRUB YOU SHOULD BE ABLE TO BOOT FEDORA NOW.

- From Open SuSE grub select "Fedora core" and boot the Fedora Core installation.
- Login with username and password, then hit enter.
- System is ready to use. Test it and shutdown the machine.