Ex.No:15 DUAL OS INSTALLATION Date:

<u>Aim</u>:

To install and configure Ubuntu OS alongside Windows as installing dual OS.

PROCEDURE:

1. Backup your Windows partition

To open the Dell Backup and Recovery software move your mouse to the top right corner within Windows 8 and this will bring up the search icon.

Click on the search icon and start typing "backup". The "Dell Backup and Recovery" software will be the only option listed.

Clicking on the "Recovery Media" option displays the screen above. You have two options:

- Factory Backup
- Apps & Drivers

All you need to do to backup to DVD is insert the first disc and then press "Start".

Once you have finished backing up to DVD repeat the process but backup to USB.

Recovery Media		
Factory Backup	Factory Backup	
Apps & Drivers	Select Drive Below	Start Cancet Amount of data: 11.57 GB Insert a blank disc and click "Start" to continue. vidia types are not supported.

2. Shrink the Windows partition

To be able to shrink the Windows partition you will need to run the "Disk Management" tool. To do this move your mouse to the top right corner and click on the search icon. Now click the settings icon and start typing "disk".

Click on the option "Create and format hard disk partitions".

Right clicking on the relevant drive brings up a context menu and on that context menu is the option to "Shrink Volume".

Click on "Shrink" to start the process.

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File	Act	ion View	Help							
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Volun	ne		Layout	Туре	File S	ystem	Status	Capacity	Free Spa	% F
			Simple	Basic			Healthy (E	500 MB	500 MB	100
			Simple	Basic			Healthy (40 MB	40 MB	100
		Simple	Basic			Healthy (R	490 MB	490 MB	100	
			Simple	Basic			Healthy (R	11.89 GB	11.89 GB	100
👄 DB	R_BO	OT (E:)	Simple	Basic	FAT3	2	Healthy (A	506 MB	481 MB	95
👄 DB	R_MA	ASTER (F:)	Simple	Basic	NTFS		Healthy (P	465.26 GB	425.89 GB	92
C OS	(C:)		Simple	Basic	NTFS		Healthy (B	918.49 GB	876.81 GB	95
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٦		Mark Partiti	ion as Active							
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		Properties								
	_	Help								

3. Create a bootable USB drive with Ubuntu on it

You can download Ubuntu from http://www.ubuntu.com/download/desktop. Unetbootin is the tool that I used to create a bootable USB drive with Ubuntu on it. To download Unetbootin visit http://unetbootin.sourceforge.net/.

4. Run the Ubuntu Installer

Reboot your computer Clicking on the "Install Ubuntu 13.04" (or 12.04 if you are going LTS) brings up the Ubuntu installer.

The first step lets you choose the language for the installer.

😣 🖨 Install	
Welcome	
Català Čeština Cymraeg Dansk Deutsch Eesti English Español Esperanto Euskara Français Gaeilge Galego	
	Quit Back Continue
	• • • •
Preparing to install Ubuntu For best results, please ensure that this compu	ter:
has at least 5.4 GB available drive space	
✓ is plugged in to a power source	
is connected to the Internet	
 Download updates while installing Ubuntu uses third-party software to play Flash, MP wi-fi hardware. Some of this software is proprietarits documentation. 	23 and other media, and to work with some graphics and y. The software is subject to license terms included with
Install this third-party software	
Fluendo MP3 plugin includes MPEG Layer-3 audio decodir	ng technology licensed from Fraunhofer IIS and Technicolor SA.
	Quit Back Continue

5. Partition the empty space

To install Ubuntu alongside Windows 8 and therefore to do this choose "Something Else".

Se Install	
Installation type	
This computer currently has no detected operating systems. What would you like to do?	
O Erase disk and install Ubuntu	
Warning: This will delete any files on the disk.	
 Encrypt the new Ubuntu installation for security You will choose a security key in the next step. 	
 Use LVM with the new Ubuntu installation This will set up Logical Volume Management. It allows taking snapshots and easier partition resizing. 	
 Something else You can create or resize partitions yourself, or choose multiple partitions for Ubuntu. 	
Quit Back	Continue

This is the simplest choice. We will have to create the Extended partition and then create three logical partitions inside it, one for the root filesystem, one for home and one for swap. The 6.3GB free space is enough for a Ubuntu installation.

					And a second	
2		6			Install	
Prepare	partiti	ons				
				sda1 (ntfs) 100.0 MB	sda2 (ntfs) Free space 13.6 GB 6.3 GB	
Device	Type M	lount point I	ormat?	Size	Used	14
/dev/sda						
/dev/sda1	ntfs			104 MB	35 MB	
/dev/sda2	ntfs		0	14574 MB	6440 MB	
free space				6787 MB		
New partitio	on table	New parti	ion] [Et	lit partition	Defete partition	
Undo chang	es to pa	rtitions				
					Ouit Gack	Forward

For Linux installation, we will require a swap partition of at least 256MB and a root partition of at least 2GB. This means that the arbitrary partitioning we did earlier does not suit us.

We still need three partitions for Linux (root, swap, home). There are already two partitions in use by Windows. There can only be a total of four primary partitions on any hard disk. This means we must create the Extended partition in the free space, including the extra space gained by Windows 7 partition shrinking, otherwise we must forgo either the use of separate swap or home in Ubuntu. If push comes to shove, Ubuntu can manage with just one partition, but this is not recommended.

So, the tasks at hand are:

- Resize Windows partition (sda2).
- Create Extended partition will be called sda3.
- Create logical partitions (root, swap, home) inside the Extended will be called sda5, sda6 and sda7.

Once you are satisfied with the partitioning, click Continue > to proceed. Our partitions need to be mounted. Again, we will follow the same principles as before.

The information about these mount points will be given over to the boot loader, which will use it to prompt the user about the choices during boot up.

Partition Partition Partition 1 Disc IDE/ATA 1 (P Mb Partition 1 Disc IDE/ATA 2 (P p Partition 3 Disc IDE/ATA 2 (P	w must choose at least on Reform rimary) [hda1] • rimary) [hdb1] • rimary) [hdb2] • rimary) [hdb3] •	ne partition nat?		
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	and the second s			
< <u>G</u> o B	ack	Cancel		
	So B:	< <u>Go</u> Back <u>Continue</u> >	< So Back Continue > Cancel	< Go Back Continue > Cancel

🗴 🖨 🛛 Install								
Installa	tion	type						
free space 1.0 MB	e 🗖	sda1 (fat32) 524.3 MB	sda2 (fa 41.9 MB	at32) 🔳 sd	la3 (unkno 4.2 MB	wn)	sda4 (ntfs) 513.8 MB	sda5 (ntfs) 494.6 GB
Device	Туре	Mount point	Format?	Size	Used	Syster	n	
/dev/sda								
free space				1 MB				
/dev/sda1	efi			524 MB	52 MB			
/dev/sda2	fat32			41 MB	41 MB			
/dev/sda3				134 MB	unknown			
/dev/sda4	ntfs			513 MB	287 MB			
/dev/sda5	ntfs			494605 MB	45204 MB			
+ - Char Device for bo	nge pot loa	der installatio	n:				New Partition	Table Rever
/dev/sda	ATA W	DC WD10JPVX	-75J (1.0 TI	В)				-
					(Quit	Back	Install Now
			•	• • •	•••	_		

Press Install to continue.

7. Complete the installation

The installation will now continue and you will see files copied across and the installation taking place.

At this point you will be able to choose keyboard layouts, timezone and you will be asked to add a new user.

At the end of the install process you will asked if you want to restart the system or continue using the live version.



Give the location as India in the window that appears.

Install	
Keyboard layout	
Choose your keyboard layout: English (Cameroon) English (Ghana) English (Nigeria) English (South Africa) English (UK) English (US) Esperanto Estonian Faroese Type here to test your keyboard	English (UK) English (UK) - English (UK, Colemak) English (UK) - English (UK, Dvorak with UK punctuatic English (UK) - English (UK, Dvorak) English (UK) - English (UK, Macintosh international) English (UK) - English (UK, Macintosh) English (UK) - English (UK, extended WinKeys) English (UK) - English (UK, international with dead ke
Detect Keyboard Layout	
	Back Continue
▶ Copying files	

The keyboad Layout is chosen as English in the window that appears.

Machine View Devices Help Insta Wh	u o are you?		(*) t ₁ (*)
*	Your name: L Your computer's name: L Th Pick a username: L Choose a password: Confirm your password:	ee Kaelin eeky-VirtualBox te name it uses when it talks to other computers. eeky Short password Short password Log in automatically Require my password to log in Encrypt my home folder	•
Alm	ost finished copying files	Back	Continue

Username and password for your system to login via your Ubuntu Operating system is given.

Hence the installion is completed!!



Once this screen appears and if the options for username and password is asked then the installation of dual os (installation of Ubuntu alongside Windows) is done successfully. Now start working with Ubuntu.

🔣 Ubuntu / XP Pro dual boot demo [Running] - Oracle VM VirtualBox	x
Machine View Devices Help	
GNU GRUB version 1.99–12ubuntu5	
Ubuntu, with Linux 3.0.0–12–generic Ubuntu, with Linux 3.0.0–12–generic (recovery mode) Memory test (memtest86+) Memory test (memtest86+, serial console 115200) Microsoft Windows XP Professional (on /dev/sda1)	
Use the ↑ and ↓ keys to select which entry is highlighted. Press enter to boot the selected OS, 'e' to edit the commands before booting or 'c' for a command-line.	
😂 🕑 🌽 🚍 🛄 🦉 🛃 Right C	trl di