

# Dual Boot Ubuntu with Windows Vista/XP



## Introduction

So, you've heard a bit about this Linux thing and you're interested enough to give it a try. The problem is, installing a Linux distribution can be difficult and you're not ready to give up Windows just yet.

Dual booting is the process of installing two operating systems alongside each other. When your computer starts up, you can choose which operating system you want to start for that session. To switch, you just reboot the machine and select the other option.

In this extended guide, I am going to walk you through the process of installing Ubuntu Hardy Heron (8.04) alongside Windows Vista or Windows XP.

## Assumptions

For the purposes of this guide, I'm going to assume the following about your system:

- You have a PC currently running either Windows Vista or Windows XP.
- Windows is installed in a single-partition layout on a single disk (just one hard drive in Computer, labelled C).
- You have downloaded Ubuntu 8.04's Desktop CD, and have burned it to a blank CD.
- Your PC is configured to boot from a CD.
- You have at least 8 GB or so of free space on your C drive.

## Preparation

While it might be possible to get started straight away, it's usually sensible to spent a little time setting things up first.

### Backup

The process of dual booting with Ubuntu is pretty safe. I have personally done this many times with no ill effects.

However, any major operation you do on your computer is subject to the risk of things going wrong. Before you install Ubuntu, you should make a full backup of anything you don't want to lose and have a strategy for putting things right if things do go awry.

Storage is cheap.

Once you have a copy of all the data you care about (and I mean all of it), we can move on. Also, make sure you fully know and understand how you would go about doing a restore should the worst happen.

### **Preparation within Windows**

Boot your computer into Windows and go into Computer (My Computer under XP). Rightclick on your C drive and choose Properties. Click on the Tools tab.

😻 Local Disk (C:) Properties 🛛 🔍
General Tools Hardware Security Previous Versions
Error-checking
This option will check the volume for errors.
Check Now
Defragmentation
This option will defragment files on the volume.
🕐 Defragment Now
Backup
This option will back up files on the volume.
Backup Now
OK Cancel Apply

There are two things we are interested in here - the Error-checking and Defragmentation sections.

### **Error-checking**

First of all, let's do the error-checking. Performing this step will make sure that your Windows disk is free from problems that might cause the Ubuntu installer issues.

Under the Error-checking header, click Check Now. Vista users will be asked to click Continue.

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Check Disk Local Disk (C:)
Check disk options
Automatically fix file system errors Scan for and attempt recovery of bad sectors
Start Cancel

Now, make sure 'Automatically fix file system errors' is selected, and click Start. You'll get a message saying that the disk check cannot be run while Windows is using it.

Microsoft Windows	×
Windows can't check the disk while it's in use	
Do you want to check for hard disk errors the next time you start your computer?	
Schedule disk check Cancel	

Choose the option to Schedule the check, and reboot the machine. As the machine comes back up, the disk will be checked and any errors fixed.

### Defragmentation

Quick advance warning - this step is likely to take a lot of time. I won't go into technical details on what this entails and why it takes so long, you can read that at Wikipedia (search for 'Defragmentation').

Head back to Computer, right-click again on the C drive and choose Properties. Now click the Tools tab; you should be back on the screen we were at earlier.

👟 Local Disk (C:) Properties 💽
General Tools Hardware Security Previous Versions
Error-checking
This option will check the volume for errors.
Check Now
Defragmentation
This option will defragment files on the volume.
Pefragment Now
Backup
This option will back up files on the volume.
Backup Now
OK Cancel Apply

This time, choose Defragment Now.

A new window will open. In here, click Defragment Now (or just Defragment under Windows XP). As I've said, this step could take a long time - probably hours, especially if you've never defragged before.

📓 Disk Defragmenter 🛛 🗖 🗖 💌	😵 Disk Defragmenter	
Disk Defragmenter consolidates fragmented files on your computer's hard disk to improve system	Ele Action Yew Help 	
☑ Run on a schedule (recommended)	Volume         Session Status         File System         Capacity         Free Space         % Free           C:)         Stopped         NTFS         34.18 GB         943 MB	Space 🔺
Run at 01:00 every Wednesday, starting 01/01/2005 Last run: Never Next scheduled run: 30/07/2008 01:00	Estimated disk usage before defragmentation:	
Scheduled defragmentation is enabled Your disks will be defragmented at the scheduled time.	Estimated disk usage after defragmentation:	
OK Close		

If you have enough free space on your hard drive, this step isn't strictly necessary, especially if you've recently done it or have literally just installed Windows afresh. Nevertheless, I'd recommend you go through with it.

## **Booting into Ubuntu**

That's it for Windows now. We are now ready to get into Ubuntu and install.

Put the Ubuntu CD in your computer and restart it. When your computer comes back up, you should see a menu with a lot of languages - you'll want to pick the one you prefer for the install. Use the arrow keys and press Enter.

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Then you will see this menu.



Use the arrow keys to scroll to Install Ubuntu and press Enter. Now you'll have to wait a while, as Ubuntu needs to load from the disc and show you the installer program.

## Installation



Welcome to the Ubuntu installer program. First of, you'll need to pick your language again to the left and click Forward.

🛓 Install 🗙		
Where are you	J?	
Select a city in your country and time zone. If the indicated current time is incorrect even after selecting the correct time zone, you can adjust it after rebooting into the installed system.		
Selected city:	London	Selected region: United Kingdom
Time zone:	BST (GMT+1:00)	Current time: 03:00:15 PM
Step 2 of 7		Cancel

Next, either use the map to click on a point close to you (this is to select the right time zone), or use the list box to select the closest city to you. Again, click Forward.

4. 	Install
Keyboard layout	
Which layout is most similar to your keyboard?	
Syria Tajikistan Thailand Turkey USA Ukraine United Kingdom Uzbekistan Vietnam	United Kingdom United Kingdom - Dvorak United Kingdom - International (with dead keys) United Kingdom - Macintosh
You can type into this box to test your new keybo	oard layout.

Now, the equally thrilling step of choosing a keyboard layout. You can use the text box to try typing any unique characters your keyboard may have (such as  $\mathbf{\hat{t}}$  here on a UK keyboard) to make sure the correct keyboard layout is selected.

After a brief pause to start up the Partitioner, we return.

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🛓 Install 🗙		
Prepare disk space		
How do you want to partition the disk?		
Guided - resize SCS	SI1 (0,0,0), partition #1 (sda) and use f	reed space
New partition size:	Windows Vista/Longhorn (loader) 52% (15.3 GB)	Ubuntu 8.04 48% (14.1 GB)
🔘 Guided - use entire	disk	
) SCSI1 (0,0,0) (sda	a) - 31,5 GB ATA Virtual HDD [0]	
🔾 Manual		
Step 4 of 7	3	I <u>C</u> ancel 👍 <u>B</u> ack Forward

This stage of the installation is a little more critical. Make sure you choose the right option here, or it's possible that you could accidentally wipe out Windows.

Provided that your Windows installation has been detected successfully, the first option should start with something like 'Guided - resize'.

Choose this option. You can now drag the slider between the two sections below to choose how much space Windows will get, and how much Ubuntu will get.

Let me explain further. Windows and Ubuntu can't coexist in the same space on the same drive, due to the fact that they work completely differently. What we are doing here is resizing your Windows C drive, to make a separate space, or partition, for Ubuntu to exist on.

After you've selected how much to resize, you won't easily be able to change this or reclaim space back. Leave enough space so that you can do whatever you need to do with Windows, but also make sure there's enough space on the other side for Ubuntu. What you choose here, though, is up to you, and depends on how much you want to use Ubuntu vs Windows.

Once you've made your selection in terms of resizing, click Forward.



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You will be given a warning about writing your changes to disk. Once you click Continue on that screen, your Windows C drive will be permanently resized and Ubuntu's partition will be set up.

📥 📃 Please wait 📃 🗙		
Please wa	it	
	0%	
Resizing partit	ion	

Relax now - the hard part is already done!

🛓 Install 🗙		
Who are you?		
What is your name?		
Peter Upfold		
What name do you want to use to log in?		
peter		
If more than one person will use this computer, you can set up multiple accounts after installation.		
Choose a password to keep your account safe.		
Enter the same password twice, so that it can be checked for typing errors.		
What is the name of this computer?		
fosswire-demol		
This name will be used if you make the computer visible to others on a network.		
Step 5 of 7		

Now, you need to enter the details for your Ubuntu user. This page should be pretty selfexplanatory, with fields for your real name, username to log in with, password and the name of the computer you're installing on. As always, click Forward.

The next stage allows you to import some of your information from Windows, if it can be extracted. Use the tickboxes to choose which user you want to import data from and the data to import.

Or, if you prefer, don't tick anything to start afresh, and keep your Windows stuff only in one place - Windows.



#### http://fosswire.com/

🚔 İnstall	×
Ready to install	
Manual an anation contains will not be installed with the fallowing actions.	
four new operating system will now be installed with the following settings:	
Language: English Keyboard layout: United Kingdom Name: Peter Upfold Login name: peter Location: Europe/London Migration Assistant:	
If you continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually. WARNING: This will destroy all data on any partitions you have removed as well as on the partitions that are going to be formatted	•
	Advanced
Step 7 of 7	ack 📄 📫 Install

This is it - you'll get a final review of your settings before the Install gets underway. Click Install and now let Ubuntu do its work!

📥 Installing system 💶 🗙		
Installing sys	tem	
	25%	
Copying files		

Once the install finishes, click Restart Now to restart your PC.



### The Boot Menu

Your dual boot system is now installed and working. Windows and Ubuntu co-exist peacefully on the same machine and you can switch between them at start up.

Let's take a quick look at how that switching happens.

As your computer restarts, watch and wait until you see a menu like this:



Each entry here represents a choice you can make to boot your computer with. By default, the top Ubuntu entry is the one you want to use (ignore the other recovery mode options).

If you don't use the arrow keys and press enter to make a choice within a few seconds, Ubuntu gets launched automatically. Whenever you want to start Windows, press the down key until Windows is highlighted, then press Enter.

Quick note - the first time you relaunch Windows after resizing it, it will want to do another disk check. Don't worry, this is normal - so just let it complete the check!

And that's it. Your Ubuntu/Windows dual boot setup is complete!