



Mike Basinger is an administrator on Ubuntu Forums, where he helps users with questions about Ubuntu every day. He serves the community on the Ubuntu Community and Forum councils. He currently works at the University of Utah Marriott Library in Salt Lake City, Utah, USA, as an IT manager. If you have any Ubuntu problems you would like answered, send your questions to [QandA@ubuntu-user.com](mailto:QandA@ubuntu-user.com). You can also follow Mike on [Identi.ca](http://identi.ca) and [Twitter](http://twitter.com/technoviking) at [@technoviking](http://twitter.com/technoviking).

## Don't Push My Buttons



I'm a new user of Ubuntu coming over from Windows, and I have been trying out the new Ubuntu Lucid beta. I really like the new look, but the position of the window buttons is confusing for me because I'm so used to them being on the upper right-hand side of a window. Is there a way to move the buttons back?



The position of the buttons has been a passionate debate among Ubuntu developers and the

## Q&A with Ubuntu Forums admin Mike Basinger

# ANSWERBUNTU

Ubuntu community during the beta test of Ubuntu Lucid. It has been decided to keep the buttons on the left for Ubuntu 10.04 and use the space on the right for other things in Ubuntu 10.10 and going forward.

I would suggest trying for a few days to get used to the button position. If you get used to the buttons being on the left, you will see it makes sense to have all your controls and menus located near each other. If you can't get used to it, just switch your theme from the Ubuntu default Radiance (light) or Ambiance (dark) themes to any other theme, and the buttons should move back to the right.

## CD Updates



I have recently built a computer and installed Ubuntu 9.10, 64-bit version, from the DVD in your Issue 3. Although this computer has hardware capable of being connected to the Internet, it is not so connected, nor is it likely to be in the immediately foreseeable future.

The computer hardware is capable of 64 bit, and the CPU is an Intel Pentium 4 HT. I noted that in various places, the 64-bit version of Ubuntu is called "AMD64." Although the operating system I installed seems to be working (for the most part), given that my CPU is from Intel, should I have installed the 32-bit version?

Also, could you explain how to select and manually download packages (I would do it at an Internet cafe), to be burned onto optical media for subsequent installation onto the Ubuntu computer? Lawrence



AMD64 is the proper version of to use with all 64-bit processors, either AMD or Intel. The Ubuntu Community documentation website [1] has more information about 32-bit vs. 64-bit processors.

Although it is possible to download updated Ubuntu packages and install

them via CD, it will be very hard to know exactly which updated deb files you need to download. For example, if program X has five associated packages and you only download and install four of them, you could end up with a broken program that refuses to run. Because your computer will not be connected to the Internet, you do not have to worry as much about security updates as long as access to the physical computer is limited to people you trust. New features are not added to Ubuntu via updates after a version of Ubuntu is released, only security patches and bug fixes.

It is possible to upgrade to the next version of Ubuntu, say from Ubuntu 9.10 to Ubuntu 10.04 using a CD. To do this, you will need to download a copy of the alternative installation CD. Burn the ISO to a CD and insert it into the CD-ROM drive of the computer to be upgraded (Figure 1). If the ISO file is on the computer to be upgraded, you can mount the ISO as a drive.

```
sudo mount -o loop ~/Desktop/
ubuntu-9.10-alternate-i386.iso
/media/cdrom0
```

Click *Run Upgrade* from the dialog box and follow the instructions provided by the installer. If the upgrade dialog is not displayed for some reason, you can also run the following command using **Alt + F2**:

```
(Ubuntu)
gksu "sh /cdrom/cdromupgrade"
```

```
(Kubuntu)
kdesudo "sh /cdrom/cdromupgrade"
```

## Fixing GRUB: The Revenge of GRUB 2



I have installed the latest Ubuntu for notebook on my Acer Aspire 4715Z Pentium Dual-Core. For the past several months,

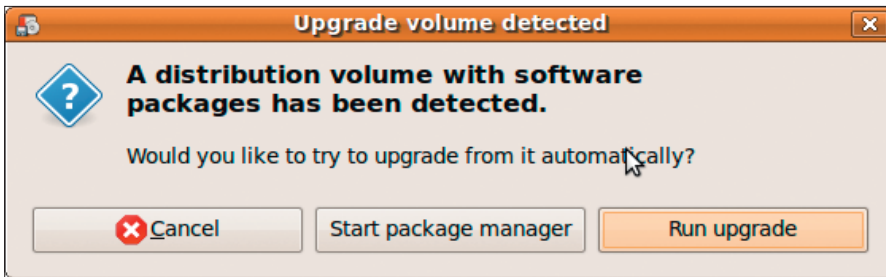


Figure 1: Running an upgrade.

it's been working very smoothly, and I am enjoying the "new world." I thought I would never need to go back to Windows (rarely). But yesterday, I updated the Update Manager and restarted it as requested – after the setup then choosing the Ubuntu operating system (I have kept dual booting with Windows) – and suddenly the GNU GRUB version 1.97beta 4 appeared with the following prompt:

```
sh: grub>
```

Thank you very much. I miss using Linux (Ubuntu). Francis



In *Ubuntu User Issue 1*, I gave an example of how to repair GRUB, but since then, the Ubuntu Developers have upgraded to GRUB 2. GRUB 2 has more features and supports a wide variety of hardware, but it is a little different to fix. To repair GRUB 2, you will need to boot from the Ubuntu Live CD [2], and choose *Try Ubuntu without Installing* at the boot menu. After Ubuntu loads from the Live CD, open a terminal window (*Applications | Accessories | Terminal*) and type the following into the terminal:

```
sudo fdisk -l
```

### Listing 1: fdisk of Root Partition

```
01 Disk /dev/sda: 250.1 GB, 250059350016 bytes
02 255 heads, 63 sectors/track, 30401 cylinders
03 Units = cylinders of 16065 * 512 = 8225280 bytes
04 Sector size (logical/physical): 512 bytes / 512 bytes
05 I/O size (minimum/optimal): 512 bytes / 512 bytes
06 Disk identifier: 0x26951e29
07
08 Device Boot      Start         End      Blocks   Id  System
09 /dev/sda1  *           1           13        102400   7   HPFS/NTFS
10 /dev/sda2                13        10199     81817600   7   HPFS/NTFS
11 /dev/sda3           10200       29654    156272287+  83   Linux
12 /dev/sda4           29655       30401     6000277+  82   Linux swap / Solaris
```

This will show the partitions on your hard drives. You want the partition containing your root (/) partition (Listing 1). In my case, the root partition is */dev/sda3*. Now you will need to mount the root partition and the *proc* and *dev* system area:

```
sudo mount /dev/sda3 /mnt
sudo mount --bind /dev /mnt/dev
sudo mount --bind /proc /mnt/proc
```

Next, you'll need to run *chroot*, which is an operation that changes the apparent disk root directory on a Unix- or Linux-based operating system:

```
sudo chroot /mnt
```

To make sure there is no problem with the */etc/default/grub* file, you might want to edit it to fit your system:

```
nano -w /etc/default/grub
```

Then run *grub-install* to repair your GRUB 2 boot loader:

```
grub-install /dev/sda
grub-install --recheck /dev/sda
```

Now you can exit the chroot, unmount root, and reboot your system:

```
exit
sudo umount /mnt/dev
sudo umount /mnt/proc
sudo umount /mnt
sudo reboot
```

## Wireless Roundup

I received many questions about getting wireless cards working in Ubuntu. These questions involve common problems that you might see using wireless under Linux. I have provided some solutions and feedback here, but be sure to check out WiFi Docs pages on the Ubuntu Community documentation website [3] for additional information.

## Which Wireless Is Best



My problem is with a USR5614 PCI wireless card (PCI not the PCMCIA). I just can't seem to get it to work. I can get a PCMCIA version of the card to work on my laptop, but the PCI doesn't seem to want to run. I added the proper drivers with NDIS-wrapper, but according to the second major step, *lspci*, it doesn't even get listed.

I checked *dmesg* output but could not see anything that mentioned the tiac model chipset for the card. I checked the back of the card, which has a power light on, so I know it is still working (I also stuck it in a Windows PC). I really want to get this going, as my wife seems open to the idea of having a PC upstairs with which we can watch movies on the TV. If I can't get the USR card to work, are there other recommended "Linux-Friendly" wireless PCI cards?



USRobotics tells users to use Linuxant [4] drivers for many of their cards. I have had hit-and-miss results with Linuxant drivers in the past. As for "Linux-Friendly" wireless cards, I like many of Intel wireless cards. Most of their drivers are open source and are supported out of the box with a default Ubuntu install.

## Wanting to Switch, but ...



I really, really want to switch to Ubuntu and get rid of Windows. I tried the previous version and I could never get the OS to recognize my wireless connection. I have an HP 9500 series laptop with wireless, and I believe

it is Broadcom. I am running Vista on it, because it came with that. I would seriously like to convert to Ubuntu full time and not have to depend on Microsoft. Although I am computer savvy, I am no expert at Linux. I would like to use it right out of the box and not have to spend countless hours trying to fix it so it will work. Anyway, I also have four other computers at home, one with the HP Media Server connected to it, but I'd like to begin with the laptop. Has the wireless problem been fixed?



The Broadcom card that comes in the HP dv9500 laptop should work with Ubuntu; you will need to activate the driver after you complete the install. The laptop will need to be connected to the Internet via the Ethernet port temporarily until the wireless driver is installed.

When the laptop is on the Internet, go to *System | Administration | Hardware Driver*. There should be an option to install a Broadcom driver (BCM43xx) for Ubuntu. For more information about using Broadcom, go to the Ubuntu Documentation website [5].

## Using a Windows Driver under Ubuntu



I am in possession of a Linksys external USB wireless network unit that I would like to set up and use for my spare desktop computer running Ubuntu 9.10. I have the Win-

dows software installation CD, but is there a way I can use it in Ubuntu? We have a recreation room in our basement with no wired connection available, and I would like to operate my computer there as well. Thank you for any assistance you may be able to render.



To use the Windows drivers for your Linksys USB adapter under Ubuntu, try NDISwrapper [6].

NDISwrapper is a free software driver wrapper that enables the use of Windows drivers for network devices (cards, USB modems, and routers) on Unix- and Linux-based operating systems. You will need to install NDISwrapper from the Ubuntu software repositories.

```
sudo apt-get install ndisgtk
```

Then download and extract the Windows drivers for wireless adapter in a folder on your Ubuntu machine and use the `ndiswrapper` command to load the driver.

```
sudo ndiswrapper -i ~/WhereDriverWasExtracted/
drivername.inf
```

To see if the driver is loaded, use the `ndiswrapper -l` command. If the driver is loaded and detects the adapter, you

should be able to configure the wireless setting normally using the Network Manager applet.

## Changing Language



Hi: As a speaker, reader, and writer of Russian, I'd like to be able to use my Ubuntu machine to write to people in Russia in the Russian language.

Unfortunately, I've yet to find any Ubuntu keyboard drivers that are comparable to the Apple/Macintosh. The goal is to write Cyrillic text both for email and Google, without having to use the character map available in the *Accessories* section.

In the Synaptic package manager, I found *console-cyrillic console-terminus*, as well as *keyboards-rg*, but I haven't been able to get any response from any of them.



On the *Layout* tab, go to *Systems | Preferences | Keyboard*, click *Add*, then choose a country and variant. When I chose Russian Federation and the Phonetic keyboard, I got Cyrillic characters when I typed.

Also, you can install full support for the Russian language that will allow you to switch between English and Russian keyboards. Go to *System | Administration | Language Support* and install

### INFO

- [1] Ubuntu Community help site: [https://help.ubuntu.com/community/32bit\\_and\\_64bit](https://help.ubuntu.com/community/32bit_and_64bit)
- [2] Ubuntu Live CD: <http://www.ubuntu.com/getubuntu/download>
- [3] WiFi documentation: <https://help.ubuntu.com/community/WifiDocs/>
- [4] Linuxant: <http://www.linuxant.com/driverloader/>
- [5] Installing BCM43xx drivers: <https://help.ubuntu.com/community/WifiDocs/Driver/bcm43xx#Installing%20BCM43xx%20drivers>
- [6] NDISwrapper: <https://help.ubuntu.com/community/WifiDocs/Driver/Ndiswrapper>
- [7] Ubuntu Manual Project: <https://wiki.ubuntu.com/ubuntu-manual>

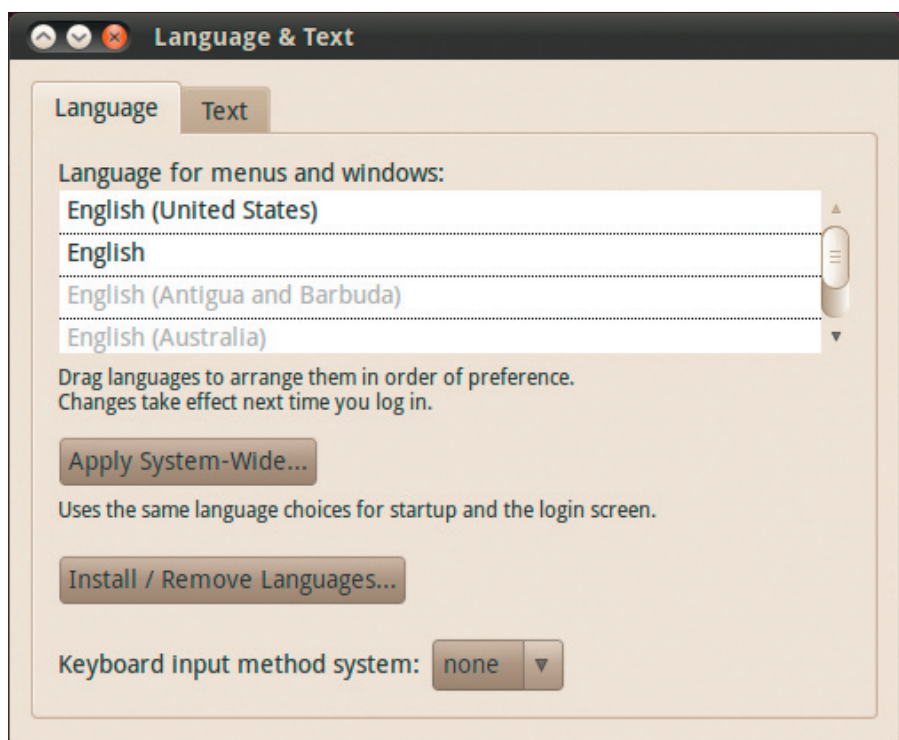


Figure 2: Setting language preferences.

whatever languages you want to add to your computer (Figure 2).

## Mounting Windows



I'm new to Ubuntu; I installed version 9.04 and it was OK. I used to go to *Places | Computer* and mount my Windows drive. After upgrading to 9.10, it does not show up anymore. I've tried a lot of approaches to locate and mount the drive but with no success so far. What should I do to access my data in that NTFS partition?



I'm not sure why your Windows drive is not showing up in Nautilus, the Gnome file manager, but you might consider a fresh install of Ubuntu 9.10 instead of upgrading. If you do not want to re-install, mount the drive by hand from the terminal. To do this, open a terminal and use *fdisk*

```
sudo fdisk -l
```

to view your hard drive partition table. Find the line that lists NTFS as a parti-

tion filesystem and note the partition name. In my case, it is */dev/sda2*. Now create a mount point, if needed, and mount */dev/sda2* to access the drive:

```
sudo mkdir /mnt/windows
sudo mount -t ntfs /mnt/windows
/dev/sda2
```

Your NTFS partition should now show up under */mnt/windows*.

## Try That with Windows



A friend of mine from work was having problems with an earlier edition of Ubuntu (9.04, I believe) right after the GRUB startup. I told him to go back and closely watch the errors that would pop up during bootup and let me know what they were so I could coach him through. This is what I love about Ubuntu and all the Linux distros. Even a relative newbie like my friend could fix his system just by watching the startup messages (he just needed to *fsck* a filesystem). He didn't even bother coming to the expert. Try doing

THAT from a BSOD. He was complaining about not having anything like a cheat sheet to help him through other commands, and lo and behold, Issue 3 of your mag mentioned something from FossWire. That is what I am actually writing about. The links provided (12 and 13) are perfect for what he wants to learn. I also pointed him to use *man -k <keyword >*.

I advocate open source every chance I get, and I've just converted another person (I have him building his own SmoothWall). Thanks to the work you folks do, there is yet another user in the ranks. Ross



Thanks Ross for the kind words, and thank you for promoting open source. If you do a web search, you can find literally hundreds of community-created cheat sheets and guides for using Ubuntu. An exciting new project happening in Ubuntu 10.04 is the Ubuntu Manual Project [7], which is creating a downloadable PDF manual for using Ubuntu 10.04. ■



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