Installing Ubuntu from a USB memory stick

This guide will help you install Ubuntu on your computer by using a USB memory stick. USB memory sticks are sometimes known as flash drives, memory pens or USB Mass Storage devices.

Installing from a memory stick is useful if you have a computer without a CD drive (like a netbook), or prefer the convenience of a memory stick. Alternative methods are available, like installing Ubuntu from inside Windows.

It should take around 30 minutes to complete this process, plus the time it takes to download the 700MB installer file (approximately 1.5 hours on a 1Mbit/sec broadband connection). This guide will assume that you are running Windows.

1. What do I need to get started?

To install Ubuntu from a USB memory stick you need:

- A memory stick with a capacity of at least 2GB. It will be formatted (erased) during this process, so copy any files that you want to keep to another location. They will all be permanently deleted from the memory stick.

- A computer that can boot (start-up) from a USB memory stick. Many older computers can't boot from USB – check the boot options in your BIOS (see *Start the Ubuntu installer*) to see if yours can.

- A computer with at least 384MB of system memory (RAM), 6GB of available hard disk space and a 700MHz or faster x86 processor. Most Intel and AMD processors are x86 processors. 32-bit and 64-bit processors are supported.

- A working Internet connection.

2. Get a copy of the Ubuntu installer

You need a copy of the Ubuntu installer CD image (*.iso*) so that you can put it on a memory stick.

1. Go to *www.ubuntu.com/getubuntu/download*.
2. Choose your country (or one nearby) from the *Download location* drop-down list.
3. Click **Begin download** to download the *.iso* image file needed to install Ubuntu. This will be about 700MB in size.

You can choose other options, like a 64-bit CD image or a BitTorrent download, by clicking *Alternative download options*.

3. Put the installer on a memory stick

You need to download a program that can properly put the installer onto a memory stick. You can't just copy the *.iso* file onto the memory stick.

1. Plug-in your USB memory stick.
2. Go to *www.pendrivelinux.com/downloads/Universal-USB-Installer* and download the *Universal-USB-Installer.exe* file. Put it on your Desktop or somewhere convenient.
3. Double-click the file to run it.
4. Click **I agree** and you will be taken to the *Setup Your Selections* screen.

5. Under **Step 1**, choose *Ubuntu 10.04 Desktop i386* and uncheck *Download the ISO*.

6. Under **Step 2**, click **Browse** and select and open the *.iso* file you downloaded earlier.

7. Under **Step 3**, select your memory stick from the list (make sure you choose the right one). Check the box next to the list to say that you want to format the drive.

8. Click **Create** to put the installer onto your memory stick. The whole process should only take a few minutes. All of the files on the memory stick will be erased.

9. When it has finished, close the Universal USB Installer window and safely remove/eject and unplug your memory stick. This is necessary to make sure all of the files were put on the memory stick properly.

4. Start the Ubuntu installer

To start your computer from a memory stick, you might need to change the order of boot devices:

1. Plug-in the memory stick and restart your computer.

   - If you see an Ubuntu boot screen where you're asked to choose your language, your computer has successfully booted from the memory stick. Skip to the *Install Ubuntu* section.

   - If your computer boots back into Windows, it is not yet set-up to boot from USB, so continue following these steps.

2. Restart the computer again. As soon as the first text appears on the screen, press the button to enter your BIOS/system setup. There should be a message telling you how to do this. You normally need to press one of the following keys: F1, F2, Del, Esc, F10, or F11.

3. A BIOS screen should appear. Find the option to change the Boot Order and change the first item in the boot order list to be *USB Disk*, or similar.

   - The USB Disk option may have a different name on your computer, for example: Removable Drive; USB-HDD; USB Mass Storage; or USB.

   - If there is no option to boot from USB Disk, your computer may not be able to boot from USB. See [1] for a tool to test if your computer can boot from USB.

4. After you have changed the boot order, save your changes and restart the computer. It should now start from the memory stick.

5. Install Ubuntu

If you have successfully booted from your memory stick, you should now be looking at the language selection screen of the Ubuntu boot menu. To start the Ubuntu installer:

1. Use the keyboard arrow keys to select your language and press Enter.

   - Press the F5 key to access universal access options like the screen reader and magnifier.

2. Select *Install Ubuntu* and press Enter. The Ubuntu installer will load – this may take a few minutes.

3. When the installer screen appears, follow the instructions on the screen to select your language, country and keyboard layout.

4. When you get to the *Prepare disk space* screen, choose one of the following options to determine how to put Ubuntu on your hard disk:

   - If you want to **keep Windows installed** and choose whether to start Windows or

Ubuntu each time you start the computer, choose *Install them side by side*. This is called a *dual-boot* setup. Use the slider on the colored bar at the bottom of the screen to choose how to share disk space between Windows and Ubuntu (Ubuntu should have at least 4GB of space).

- If you want to **remove Windows and replace it with Ubuntu**, choose *Erase and use the entire disk*. All of the files on the disk will be deleted before Ubuntu is put on it, so make sure you have backup copies of anything you wanted to keep.

- For more complicated disk layouts, choose *Specify partitions manually*. You can manually add, modify and delete disk partitions using this option.

5. When you click **Forward**, the changes you

6. Follow the rest of the instructions to choose a username and password and migrate files and settings from Windows.

7. Click **Install**. The installation will begin, and should take 10-20 minutes to complete. When it is finished, choose to restart the computer and then remove your memory stick. Ubuntu should start to load.

6. What next?

You should now be able to log in to Ubuntu and start using it. Here are some tips to help you get started:

- Click the **Applications** menu at the top of the screen to start a program.

- Click the Network Manager icon (near to the speaker icon) at the top right of the screen to connect to the Internet.

- Use the **System** menu to change settings.

- You can find help by clicking **System→ Help and Support**.

What if things go wrong?

I can't boot from USB even though I have USB Disk (or similar) as the first option in my boot list

Sometimes the memory stick will not be recognized when you boot. Leave it plugged in for 30 seconds or so, then restart with it left plugged-in. Or, unplug the memory stick, restart the computer and then plug it in as soon as anything appears on the screen (i.e. as early in the boot process as possible).

Also, some BIOS options could interfere with USB booting. Go into the BIOS and try enabling or disabling options like Fast Boot, USB keyboard support and USB 2.0 support. Finally, make sure you haven't selected a USB-FDD or USB-ZIP boot option. These will not work.

References and further help

[1] – http://www.pendrivelinux.com/testing-your-system-for-usb-boot-compatibility/

For further help, see *www.ubuntu.com/support*.