

İSTANBUL TECHNICAL UNIVERSITY Department of Computer Engineering BIL103E – Introduction to Information Systems Lubuntu 14.04 Installation



Option A: Installing Lubuntu onto a USB memory stick

This is the supported option, will work on most computer systems and recommended for most users.

These instructions show how to install Lubuntu onto a memory stick so that you can run it natively directly off the memory stick. You will need:

- To be on the ITÜ campus (for steps I and II).
- An internet connection (for steps I, II and III).
- A USB memory stick with at least 4GB free disk space.
 - <u>Caution</u>: All contents of the memory stick might be erased.
- A Windows computer with a USB port on which you have permission to run programs.

Follow these instructions carefully as there are more steps than you might expect.

- Step I: Download the Lubuntu .iso file from: <u>http://ortanca.cs.itu.edu.tr/downloads/lubuntu-14.04.1-desktop-amd64.iso</u>
- Step II: Download and unzip the files casper-rw and home-rw from
 <u>http://ortanca.cs.itu.edu.tr/downloads/lubuntu-14.04.1-amd64.casper-rw.zip
 http://ortanca.cs.itu.edu.tr/downloads/lubuntu-14.04.1-amd64.home-rw.zip</u>
- Step III: Download the Universal USB Installer program from: <u>http://www.pendrivelinux.com/universal-usb-installer-easy-as-1-2-3/</u>

Step IV: Insert your USB memory stick into a USB port on your computer.

Step V: Run the Universal USB Installer program from the location you downloaded it. This program has several options, listed as steps:

- <u>Step 1</u> Select the "Lubuntu" distribution to install.
- Step 2 Select from your disk the Lubuntu image file you downloaded in Step I.
- <u>Step 3</u> Choose from the drop-down list the USB memory stick you inserted in Step IV.
- <u>Step 4</u> Set the persistent file size to a *small number more than zero*. As long as it is more than zero, the actual size is unimportant as the file will be overwritten.
- $\underline{\text{Step 5}}$ Click Create. This process will take some time to complete, but when it does, you are still not yet finished.

Step VI: Copy the files **casper-rw** and **home-rw** that you downloaded and unzipped in Step II onto the USB memory stick. The casper-rw file that you copy will need to replace the casper-rw file that is already there. You can open your USB memory stick and the download folder with My Computer or Windows Explorer. You can copy the files using right-click "copy" and right-click "paste" or by dragging them.

Step VII: Restart your computer, and use the boot menu to select the memory stick as the boot device. A common way to access the boot menu is to hold down the **F12** key as the computer is starting. However, different computers have different methods. You may have to change a setting in the BIOS to allow this (this can usually be accessed by pressing **F2** or **DEL** keys).

Step VIII: Choose "Try Lubuntu without installing" from the start-up menu. Shut down Lubuntu properly when finished to ensure changes you make are saved. Enjoy Lubuntu.

Accessing your memory stick files from Windows

Normally when you are using Windows, you have no easy way of accessing the files that you change on your memory stick while you are using Lubuntu (such as documents that you create). Briefly, here are your options for accessing files from Windows (Mac and Linux users need to do something different):

- Option 1: Use a second memory stick and save your files onto that.
- Option 2: Use a file synchronisation service like <u>Dropbox</u> (which is already installed on the USB install of Lubuntu that we provide).
- Option 3: Transfer any files to and from your ITÜ web space via FireFTP.
- Option 4: Make use of the following disk image mounting and linux filesystem reading tools from Windows: <u>http://www.ext2fsd.com/</u> <u>http://www.osforensics.com/tools/mount-disk-images.html</u>

Keep in mind that accessing files from Windows is not a course requirement so you generally cannot expect your assistants and lecturers to help you with this if you run into trouble.

Option B: Installing Lubuntu to hard drive

This is the option with highest performance but without support so recommended for advanced users only.

1. Go to the appropriate installation website and follow the installation instructions:

<u>https://help.ubuntu.com/community/Lubuntu/GetLubuntu</u> You will most likely need a DVD, CD or big enough USB stick.

2. After you have installed Lubuntu you will need to install the course-related programs (as this is not a supported option you are wholly responsible for determining the appropriate packages to install). This can generally be done through the package manager, with some exceptions. For example, madedit must be installed by following the instructions at its website:

http://sourceforge.net/projects/madedit/

Option C: Installating Lubuntu in a virtual machine

This is the option with **lowest performance** and **no support** but will work on most systems so is a good **backup option**.

1. Download and install VirtualBox virtualiser (you just need the "platform packages" for your operating system):

https://www.virtualbox.org/wiki/Downloads

2. Download the virtual machine image and load it into VirtualBox (note the user name and password for the Ubuntu login supplied on that page): <u>http://virtualboximages.com/Ubuntu+14.04.01+amd64+Desktop+VirtualBox+VDI</u>

3. After you have installed Lubuntu you will need to install the course-related programs (as this is not a supported option you are wholly responsible for determining the appropriate packages to install). This can generally be done through the package manager, with some exceptions. For example, madedit must be installed by following the instructions at its website:

http://sourceforge.net/projects/madedit/