Troubleshooting Linux Live DVDs

1) How to check if you have a correctly burned Linux live DVD.

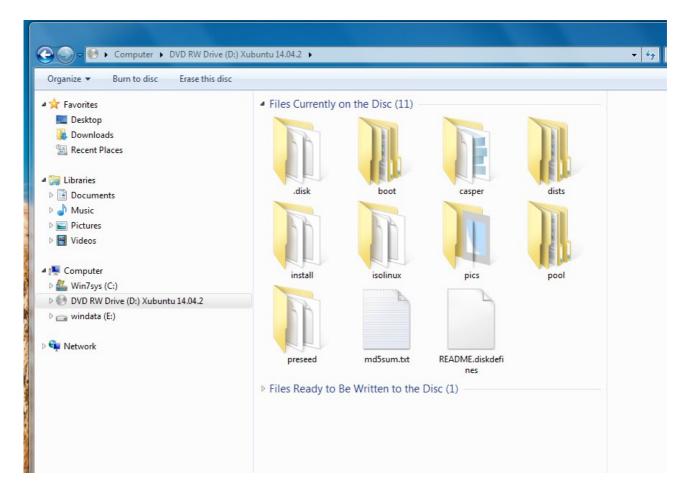
One method of trying out Linux distributions is by using "Live DVDs". These DVDs are created using files designed to be burnt to a blank DVD in such a way as to create a stand alone bootable disk. The filenames, by convention, have a .iso three letter extension – for example ..

xubuntu-15.04-desktop-i386.iso

Disks created this way can be used to boot and run Linux directly from the DVD, without any interaction with the computer hard disk. This enables you to try out different Linux distributions without having to install them on your computer. Note that this method of trying out a Linux distribution will result in the software running slower than if it was installed, but that is not a big price to pay to thoroughly check out Linux running on your specific computer.

If you are not be able to boot your Linux Live DVD, you may find it has not been created properly. This may be due to using unsuitable software to burn the .iso file, or simply choosing incorrect options.

You can easily check if your Live DVD has been created correctly by loading it into a computer running Microsoft Windows or Mac OSX and inspecting the disk in the file manager. The examples given below are screenshots from a computer running Windows 7 – similar results will be obtained from other versions of Windows and Mac OSX.

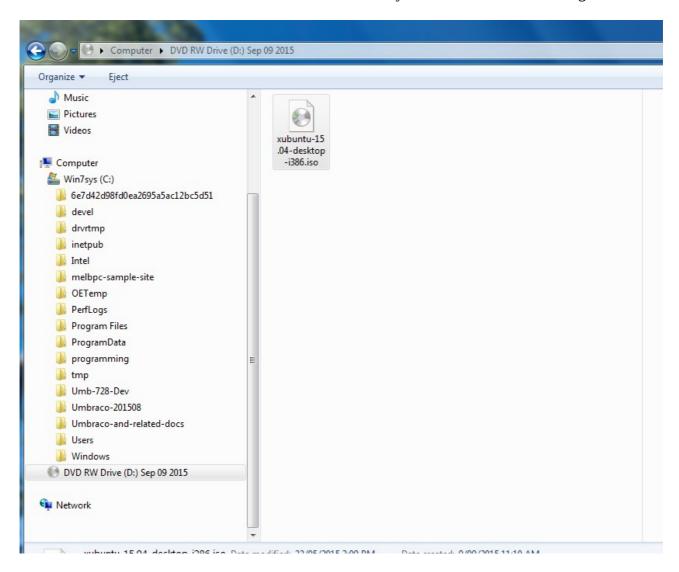


Screenshot 1 – files visible on a correctly created Live DVD

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Screenshot 1 above shows the files present in a typical Linux Live DVD. Note that there are a number of folders and files – the exact number and type will vary slightly depending on the Linux version. This indicates that the DVD has been burned in the correct manner.

In contrast, Screenshot 2 below shows that the iso file has simply been copied to the DVD which has resulted in a disk unable to boot. Note that there is only one file with a name ending in .iso.



Screenshot 2 – an incorrectly created Live DVD – this is not bootable.

2) Creating a new Live DVD from an incorrectly burned DVD.

If your DVD looks like Screenshot 2, you can usually retrieve the .iso file to make a new bootable Live DVD. In summary, you will need to carry out the following 3 steps ...

- 1. Using a file manager for example Windows Explorer copy the .iso file from the incorrectly burned DVD to a temporary location on your hard drive.
- 2. Replace the incorrectly burned DVD with a blank writeable DVD.

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3. Use a DVD burning program or file manager to create a new bootable Linux Live DVD from the file you created in step 1 above. *Make sure you use the option to "burn an image"* to ensure that the DVD burning process creates a disk which will be bootable. You may like to use a rewriteable DVD to try out the various options in your DVD burning program, so you can check that it has been done successfully.

Many Linux Live DVDs have an option in their boot menu to check the integrity of the bootable disk. A Screenshot of the Linux Mint Live DVD boot menu is shown below (Screenshot 3). Some distributions will require you to quickly press the Esc Key when starting to display their boot menu.



Screenshot 3

A typical Live DVD boot menu showing the integrity check option.



Screenshot 4

The boot menu showing the Integrity check option highlighted

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To perform the Integrity check:

When the boot menu is displayed, simply press the down arrow key until the "Integrity check" item on the menu is highlighted, as shown in Screenshot 4 above, and press the Enter key. This will start a check of all files on the Live DVD, which may take a while.

At the completion of the integrity check if all is well the screen will usually display a message ...

Check finished: no errors found

Otherwise, there will be a message stating that the integrity check failed and recommending not to use that particular Live DVD. MelbPC members can ask for help on the MelbPC Yammer Computing Group or send an email to the Northern Suburbs Linux SIG email address.