Camicri Cube

v1.0.*

Camicri Systems © Cube Portable Package Manager for Linux

https://launchpad.net/camicricube

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Author's note

This tutorial will give you the basic knowledge you need in setting up and using the cube system. The content of this tutorial includes :

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Some of the parts of this tutorial might not be the same as the original and latest cube package available (Graphical user interface, some new features) but the content, functionality and steps in this tutorial still the same as the latest.

To check for the latest features of cube, inside the cube.zip, you'll find a file named NEWS. It contains the changes and additional features added to the cube per release.

If you're using cube with versions 1.0.6 and up, try to hover your mouse to any part of the cube interface and if a help is available on that part, a tooltip will appear showing you the information you need to know about that part.

Links

Facebook Page : https://www.facebook.com/camicrisystems
Launchpad Page : https://launchpad.net/camicricube
SourceForge Page : http://sourceforge.net/projects/camicricube/
Translations Page : https://translations.launchpad.net/camicricube

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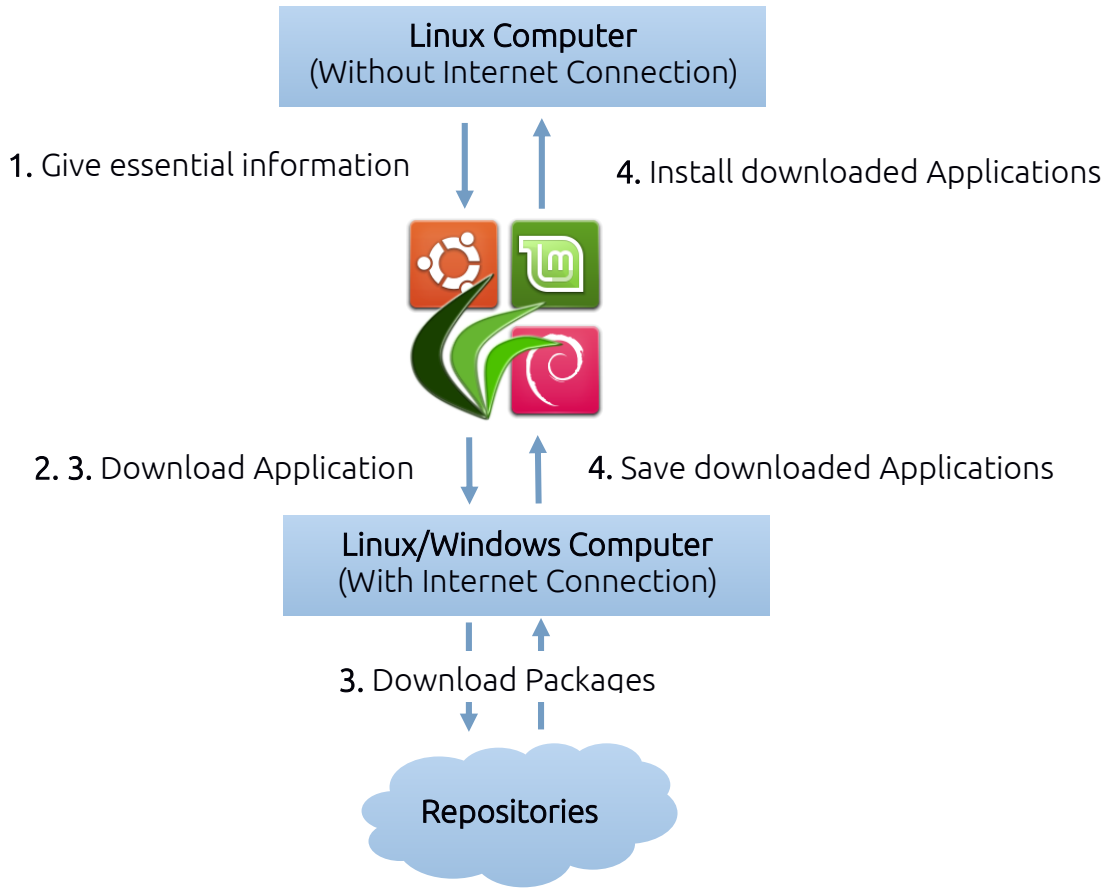
What is Cube by the way?

Cube is an application that enables Linux users (Ubuntu and Linux Mint) to download Linux applications in different computers with internet connection and install it to their computers offline.



Cube acts as a bridge between Linux computer without internet connection and Linux/windows computers with internet connection.

1. From your original computer, Cube will get essential informations such as what operating system you have, what are the applications already installed in your system and so much more.
2. After that, you will find a computer with internet connection, together with your Cube application.
3. Then you can now execute cube to find what applications you want to be downloaded. It connects to a repository, a server with thousands of Linux applications.
4. After you download applications, you can now go back to your original computer with the cube application, open it and install all downloaded applications to your computer.

Brief Introduction

Cube enables Linux users to have Linux based applications in their computer even without internet connection. Because of a centralize software repository implemented in most Linux distributions, and the need of internet to download applications in it, Cube acts like a "bridge" to download desired application to an internet enabled computer and install it back to an offline computer using a USB Stick.

Cross-platform. Cube is written in C# Language, which runs in a Microsoft Windows .Net Framework. And thanks to Mono, an open source implementation of .Net Framework based on ECMA standards, these C# applications can be brought also to open source community.

Portable. Target users are offline users, so we develop a portable and standalone application. Cube in Linux contains bundled mono-framework and additional applications inside of it, so no additional packages are required to be installed. Just simply extract it in your home directory and run.

Camicri Systems also aims to create portable Linux applications, to create applications without installing additional packages in your Linux operating system and running it all at once in a single file. And this is made possible by CDE and AppImageAssistant, that bundles all necessary applications (such as mono and gtksharp) and all third party softwares (Axel and Aria2c downloaders) to make cube portable and can be run anywhere.

Disclaimers

This is a beta stage program and still under development. The Camicri Systems will not be accountable on any problems that might occur. Absolutely no warranty. If you encountered bugs or problems while using this application, kindly give me a feedback and report at camicrisystems@gmail.com. I will try my best to fix the error.

Let's Begin!

Cube Quick Setup

Setup cube in Linux and Windows

Requirements

Before we begin with the setup, please see to it that you have these files :

1) Cube.zip - Contains the cube system including this tutorial
   (This is the downloaded file from launchpad
   https://launchpad.net/camicricube or other referred links)

2) Your computer of course :) Linux or Windows
   The system is tested in Linux Mint Maya (Above),
   Ubuntu 11.10 (Above), and Microsoft Windows.

3) Physical Memory Requirements
   Memory : 500mb or higher
   Processor : Pentium III or higher
   Disk Space :
      Cube Size : Approx. 25 mb
      Projects : Varying

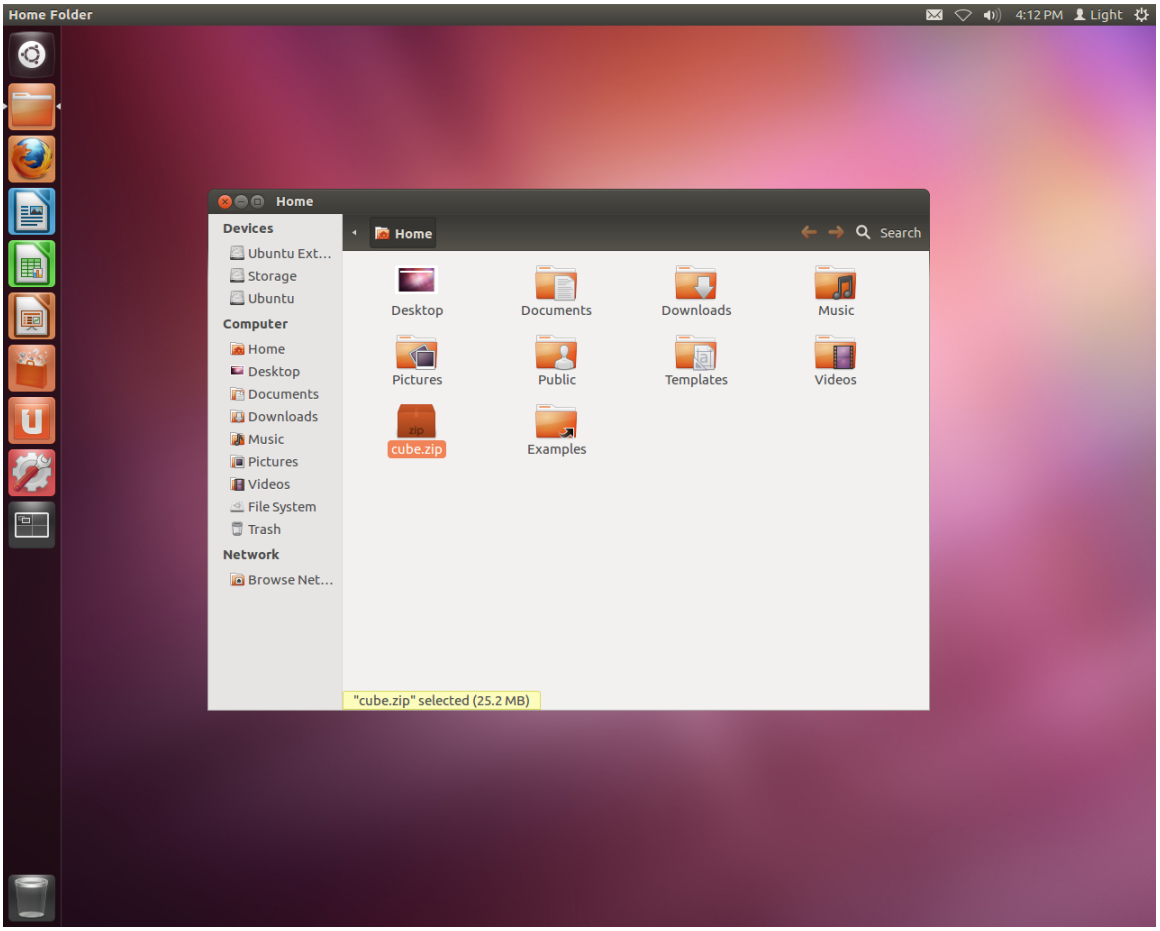
4) For Microsoft Windows, you need to install the following:
   GtkSharp (IMPORTANT)
   http://download.xamarin.com/GTKforWindows/Windows/gtk-sharp-2.12.21.msi
   Microsoft .Net 4.0 (If your computer don't have)
   http://www.microsoft.com/en-us/download/details.aspx?id=17718
   But i think almost windows computer have this installed.

5) Your Flashdrive

If you're wondering why there were still applications needed to be installed in Windows, currently, the cube doesn't have a portable version in windows. In Linux however, all third party applications and the mono framework + gtksharp itself is provided and bundled :) Yey!

Setup in Linux (Your computer)

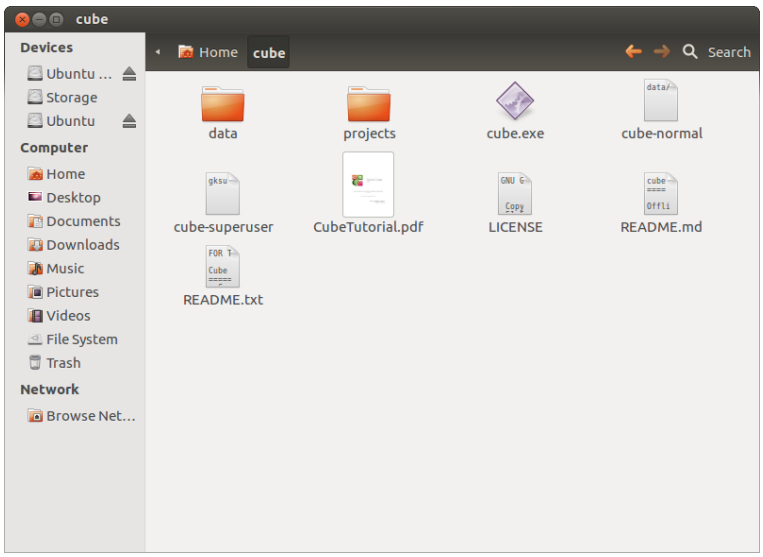
Ubuntu 12.04 - Freshly installed :)



I'll be using Ubuntu 12.04 as my host computer. This is a freshly installed Ubuntu OS, and today we'll be going to add some apps to this computer :)

Setup in Linux (Your computer)

1.) Extract the cube.zip in your home directory, or anywhere you like. But for now, in the home directory. Just right+click the cube.zip, and choose '**Extract Here**'.



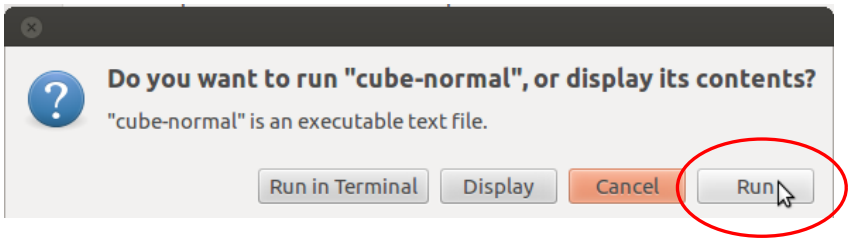
2.) Open the '**cube**' folder under your home directory, you should see these files.

3.) Open your **terminal** (Press **ctrl+alt+t**) or find it in your application menu or dash. Type the following below (Assuming that you extract it in the home directory)

chmod -R +x cube
(Then press enter)

This will enable all programs in the cube folder to be **executable**. Change the word '**cube**' by your cube folder name if it is not same.

4.) Right click on the file '**cube-normal**', and click '**open**'

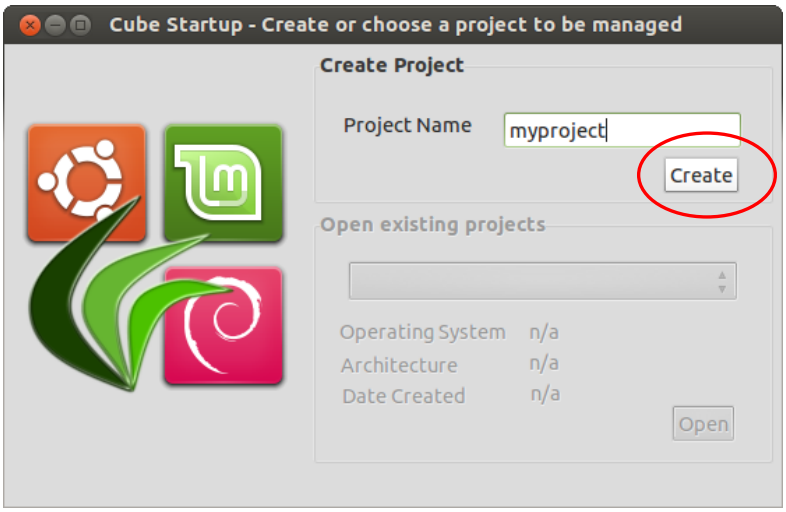


In Cube 1.0.9, cube-normal is replaced by cube-linux.

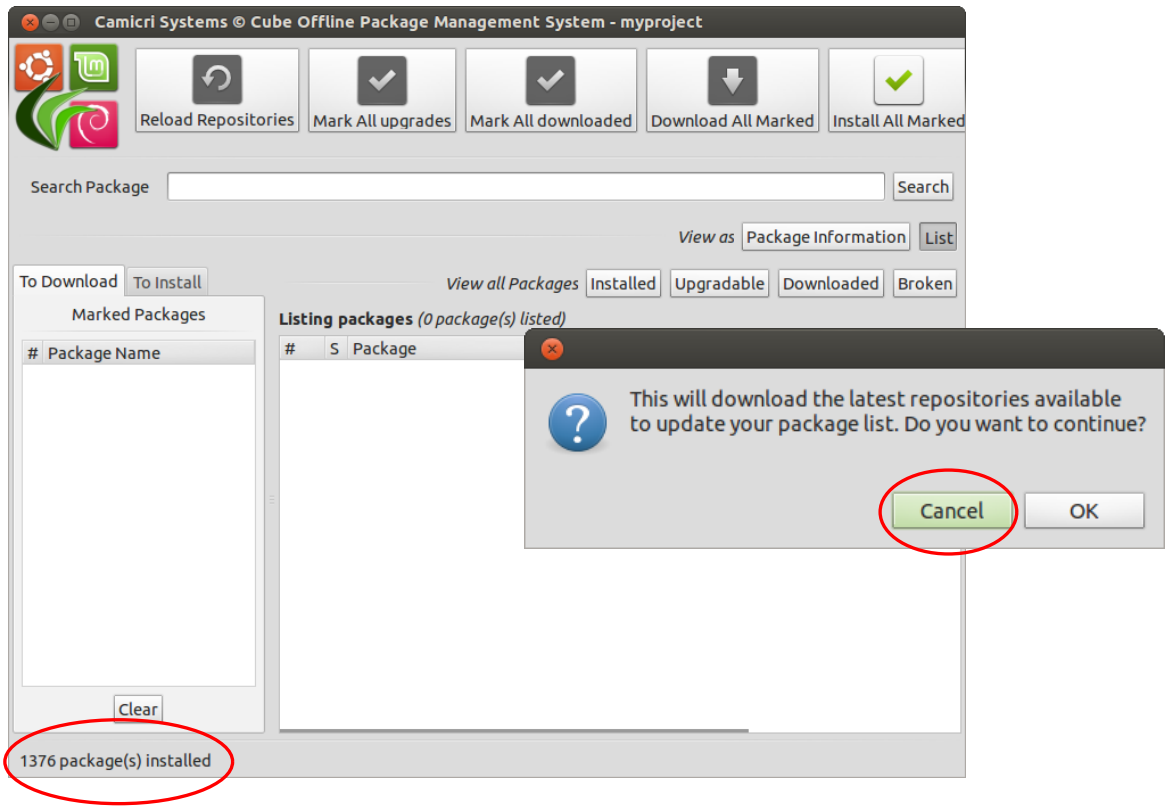
5.) Click the button '**Run**'

If this dialog does not appear and instead, a text editor appears, the chmod failed to make it executable. In some cases, in my experience, chmod fails to make it executable when I extracted cube in a non-ext4/3/2 filesystems (Such as Windows NTFS or FAT), so in linux, it is recommended to paste it in the home directory.

6.) Its now time to create a project. A **Project** contains set of information about your computer's essential data such as your installed applications, what type of distribution you have, and your list of repositories. This will uniquely identifies your computer.



You can change the name of your project (No spaces), and click **Create**.

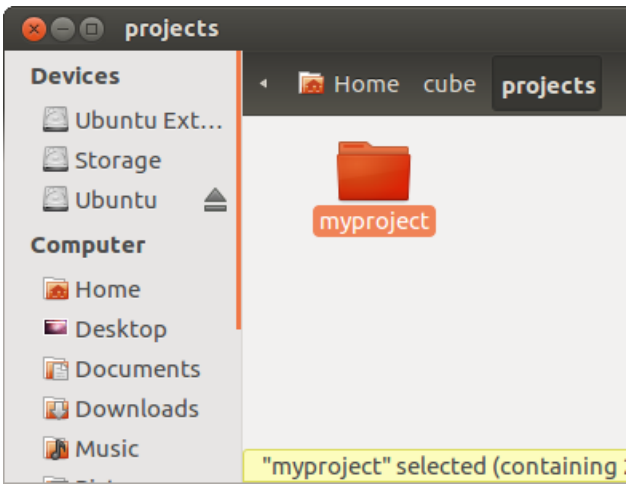


7.) Then, the main Cube Interface will be showed, it will ask you if you want to download repositories. Downloading repositories will update your application list to the newest available. It is necessary for newly installed Linux operating systems to update their repositories to have additional application list. As you could see, under the status bar, you only have 1376 installed packages, and you can't see other available packages, its because your repositories are not updated yet. But remember, YOU DONT HAVE INTERNET CONNECTION :P So click the 'cancel' button.

8.) Close the program and go back to the cube folder

9.

10.) Open the **projects** folder, you should see a folder named **myproject** or the name of your project.



11.) Copy that **myproject** folder and paste it to any removable devices (Flashdrives, HDD, etc)

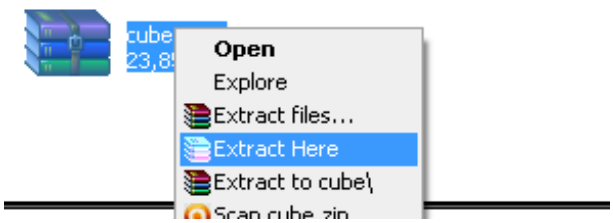
12.) Copy also the **cube.zip** in your flashdrive, because it is still needed

13.) You could also **copy the whole cube folder** to your flashdrive, but if you want to save space, just copy the project folder.

14.) Now find a computer with internet connection! Hurry while its hot!

If you will use same Linux operating system, maybe same or different Linux distribution (Linux Mint or Ubuntu), just repeat the steps from step 1 to 3, and then on the project's directory of cube, paste your **myproject** folder on the project's directory, and continue to step 4 and 5.

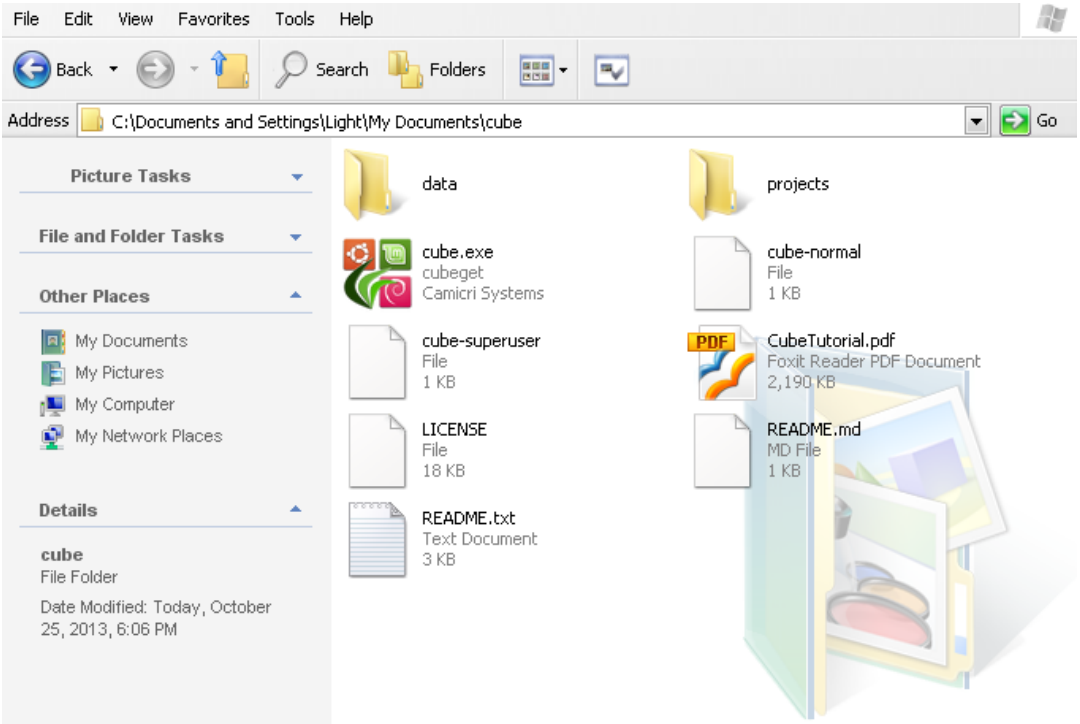
But if you will use **Microsoft Windows** with internet connection in downloading packages, follow these steps :



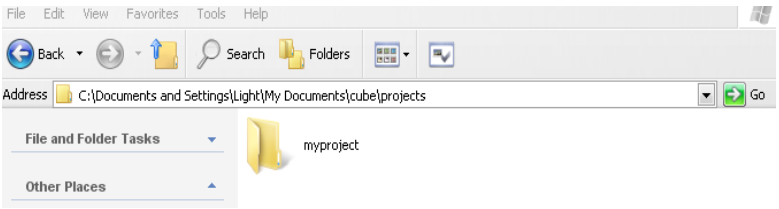
1.) You must have your flashdrives containing the **cube.zip** and **myproject** project folder.

2.) Extract the cube.zip to your **My Documents** folder, or any folders inside your Windows OS. But for now, just paste it on the My Documents. I used **winRar** in extracting cube.zip, I've just paste the cube.zip in the My Documents, right click it and click **Extract Here**. A cube folder will be created.

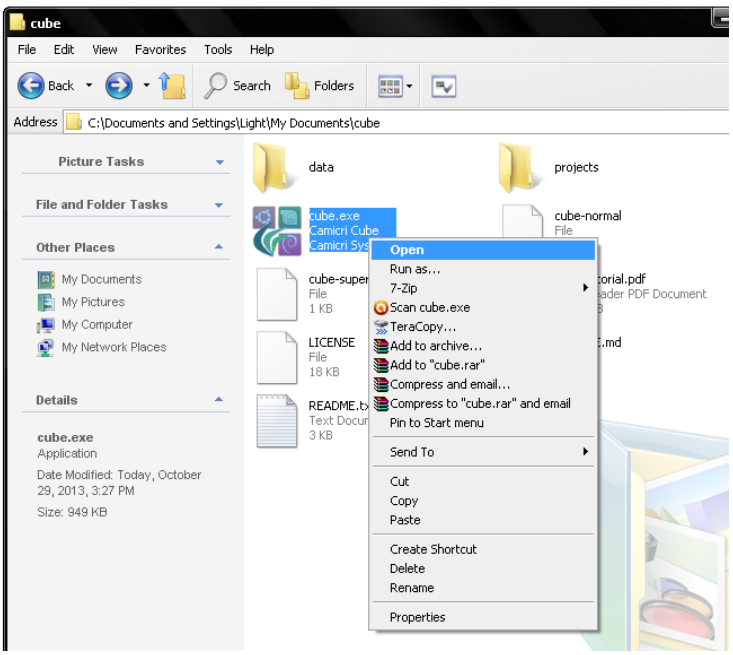
3.) Open the folder named **cube**, and you should see these files (Same files previously in your Linux Computer).



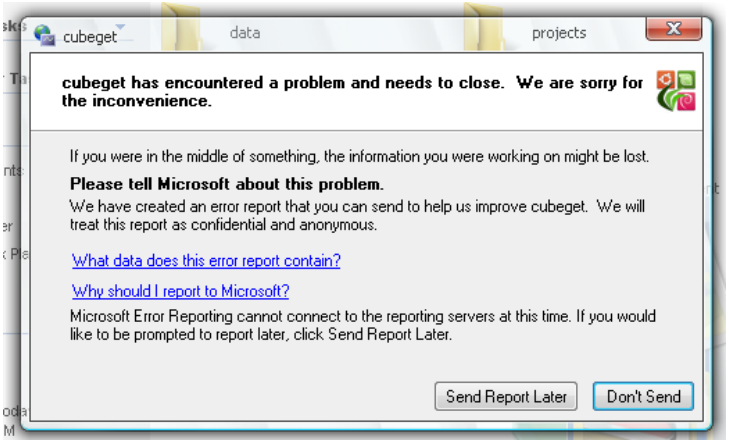
4.) Open the **projects** folder, and from your flashdrive, copy the **myproject** folder and paste it on the projects folder of cube.



5.) Go back to the cube folder, and right click **cube.exe**, and click **open.**



6.) If you see this message, cube failed to run because some of its dependencies were not installed in your computer. Cube depends on GtkSharp and Microsoft .Net 4.0 in Windows.

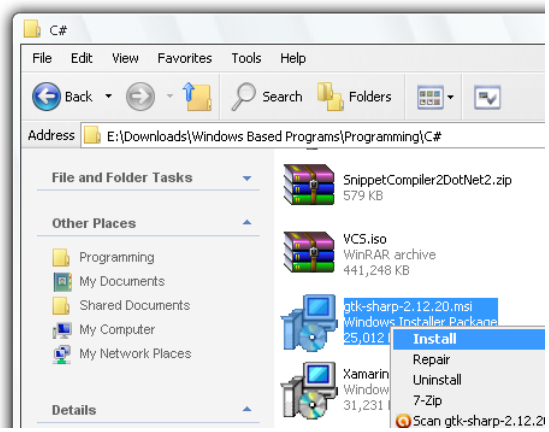


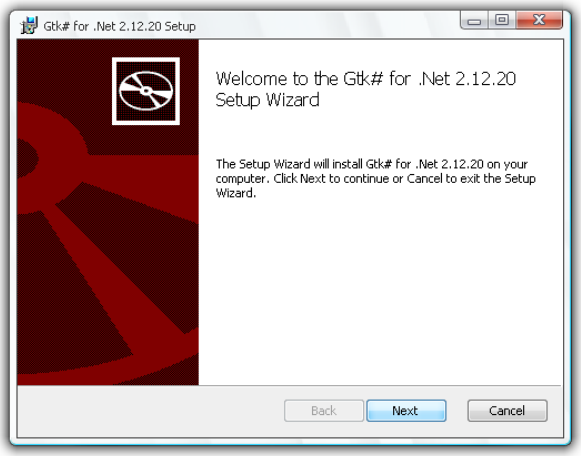
Microsoft .Net is pre-installed in most Windows OS, especially to those newer ones.

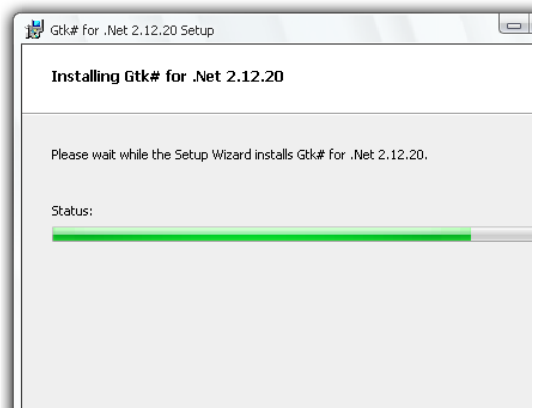
GtkSharp however, is a framework and add-on for .Net, and it provides the GUI of cube. So it is important to be installed on your system. To do so, download GtkSharp installer :
http://download.xamarin.com/GTKforWindows/Windows/gtk-sharp-2.12.21.msi

If you don't have Microsoft .Net 4.0 (Please check your control panel -> add or remove programs) and check if .Net 4.0 is listed, if not, please install it also)
http://www.microsoft.com/en-us/download/details.aspx?id=17718

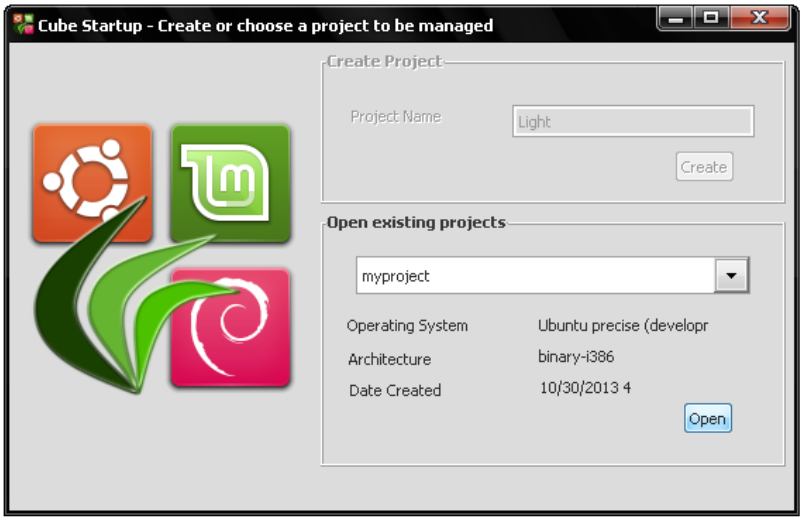
A.) If you finished downloading gtksharp, right click on it and click Install. Then continue with the installation, just click 'next' and so on.







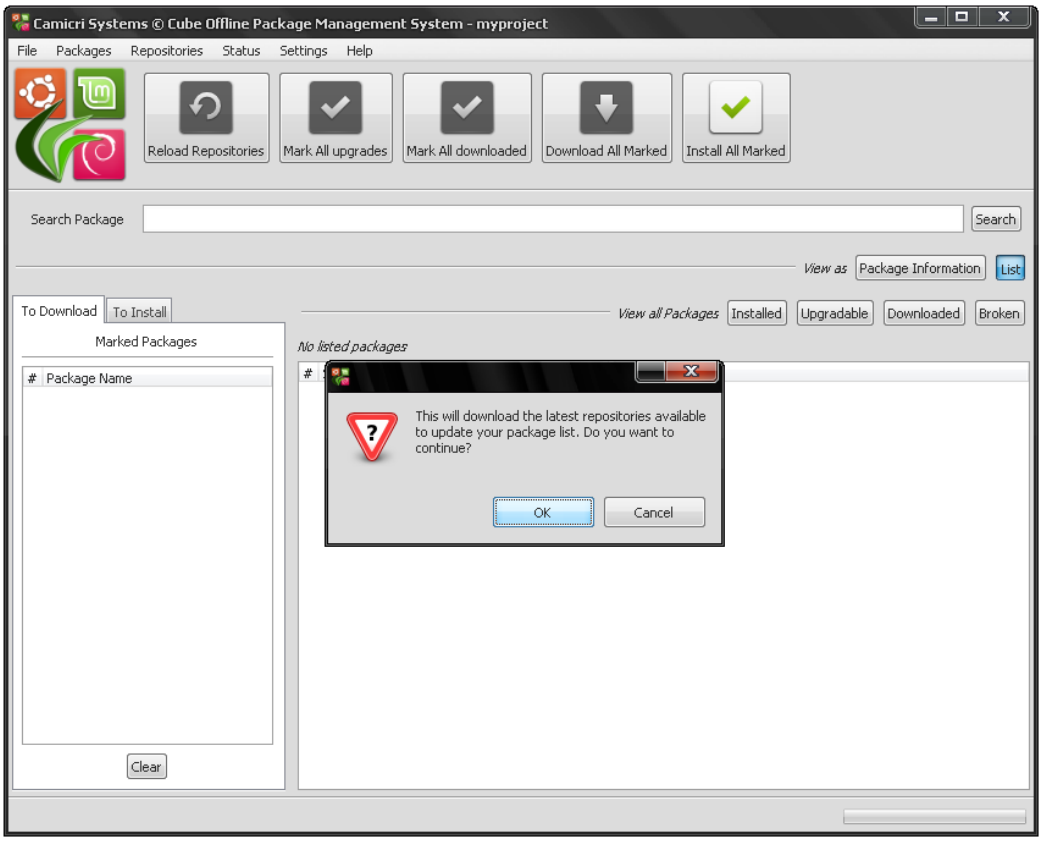
7.) Now that you were done in installing the dependencies of cube. Its now time to run the cube.exe again. Just right click on the **cube.exe**, and click **open**. And if all goes right and smooth, you should see this --->



As you can see, your **myproject** project is now listed in the combo box under the existing projects. If it not listed, please check the **projects** directory and see to it that your myproject is there, or you forgot to paste it there.

If you're having a problem in this step, please email me at camicrisystems@gmail.com

8.) Click open, it will now ask if you want to update your repositories. Please click 'OK', since you are in a computer with internet connection. It is recommended for you to update your repositories, I guess daily. You can skip this if you already updated your list.

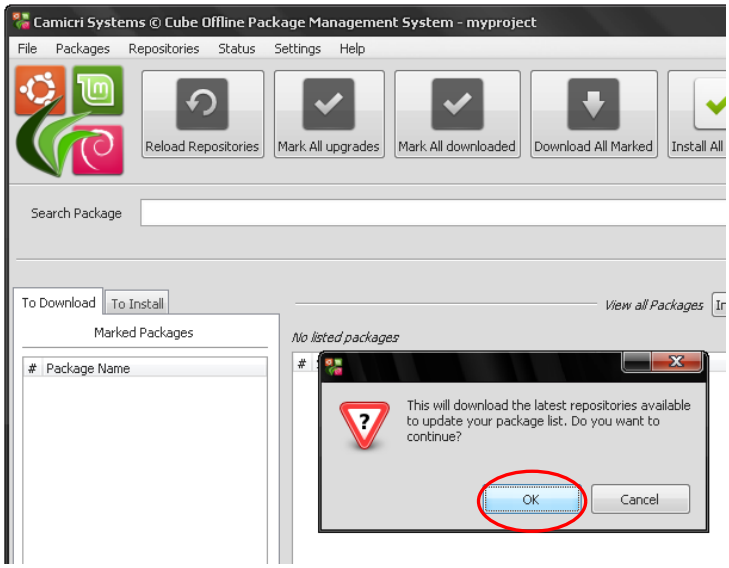


Download in Progress!
Updating your Packages and Downloading new Apps using Cube

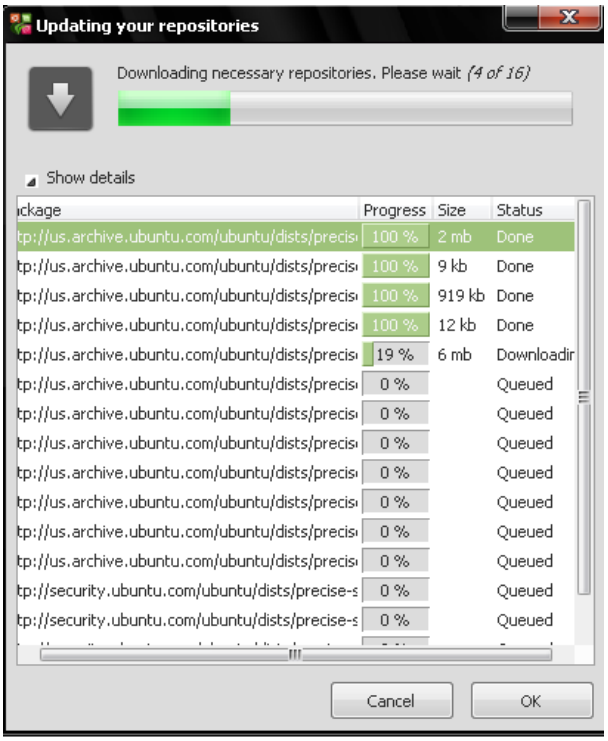
Both Linux and Windows

In this stage, I'll just show you how to update your applications, and downloading new apps such as games, browsers, etc., using Windows, but don't worry Linux users, all the steps here are also same as in Windows :) All you'll see in Windows will also appear in your Linux Cube.

Going back to the previous step, the first thing that you need to do is to update your repositories. **Repositories** contains the list of thousand linux applications, and by updating it, you will have new and updated list of apps also :)

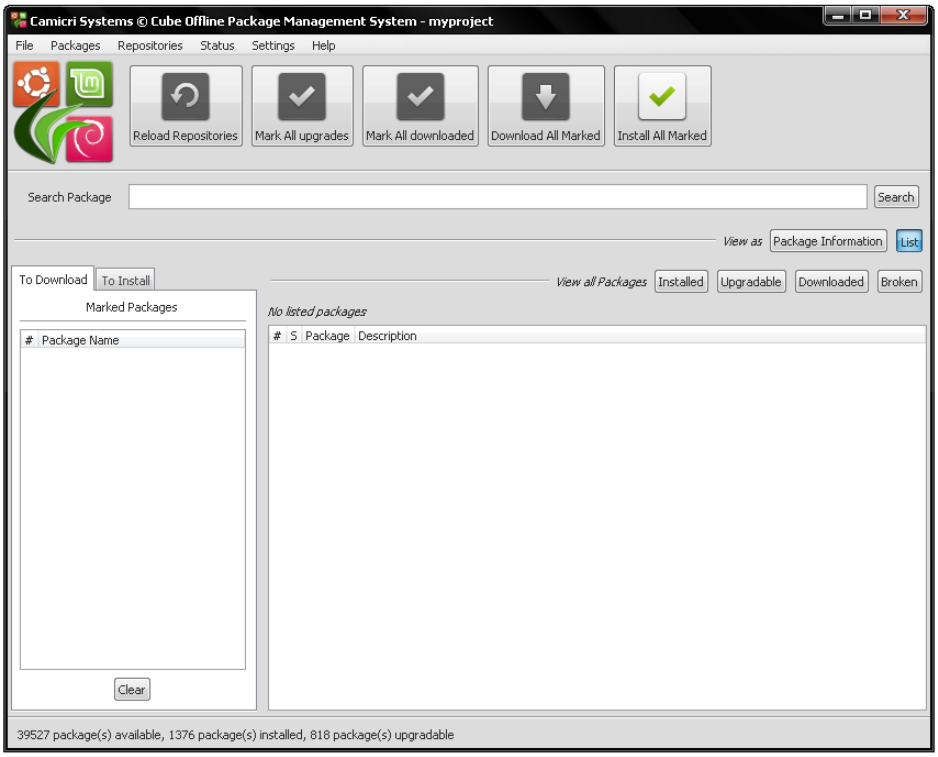


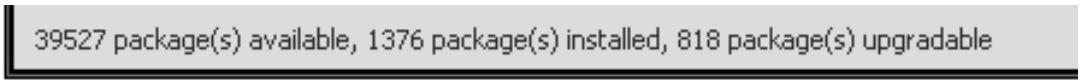
A window will appear, showing the download status of all your repositories, in my computer, I have 16 repositories. Just wait for a couple of minutes, depending on the number of your repositories.



Updating your outdated applications

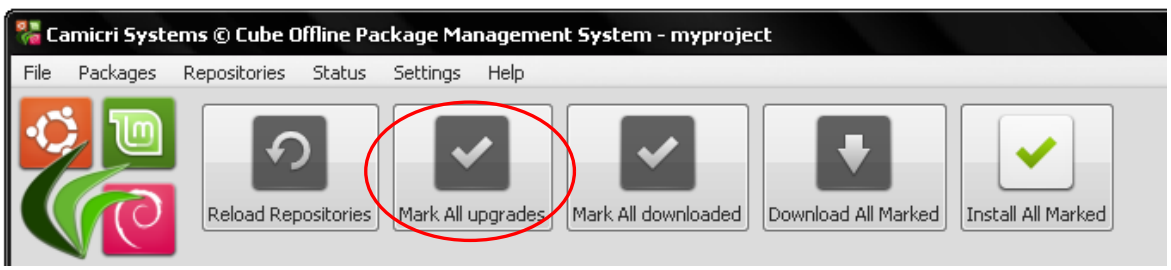
After downloading new repositories...



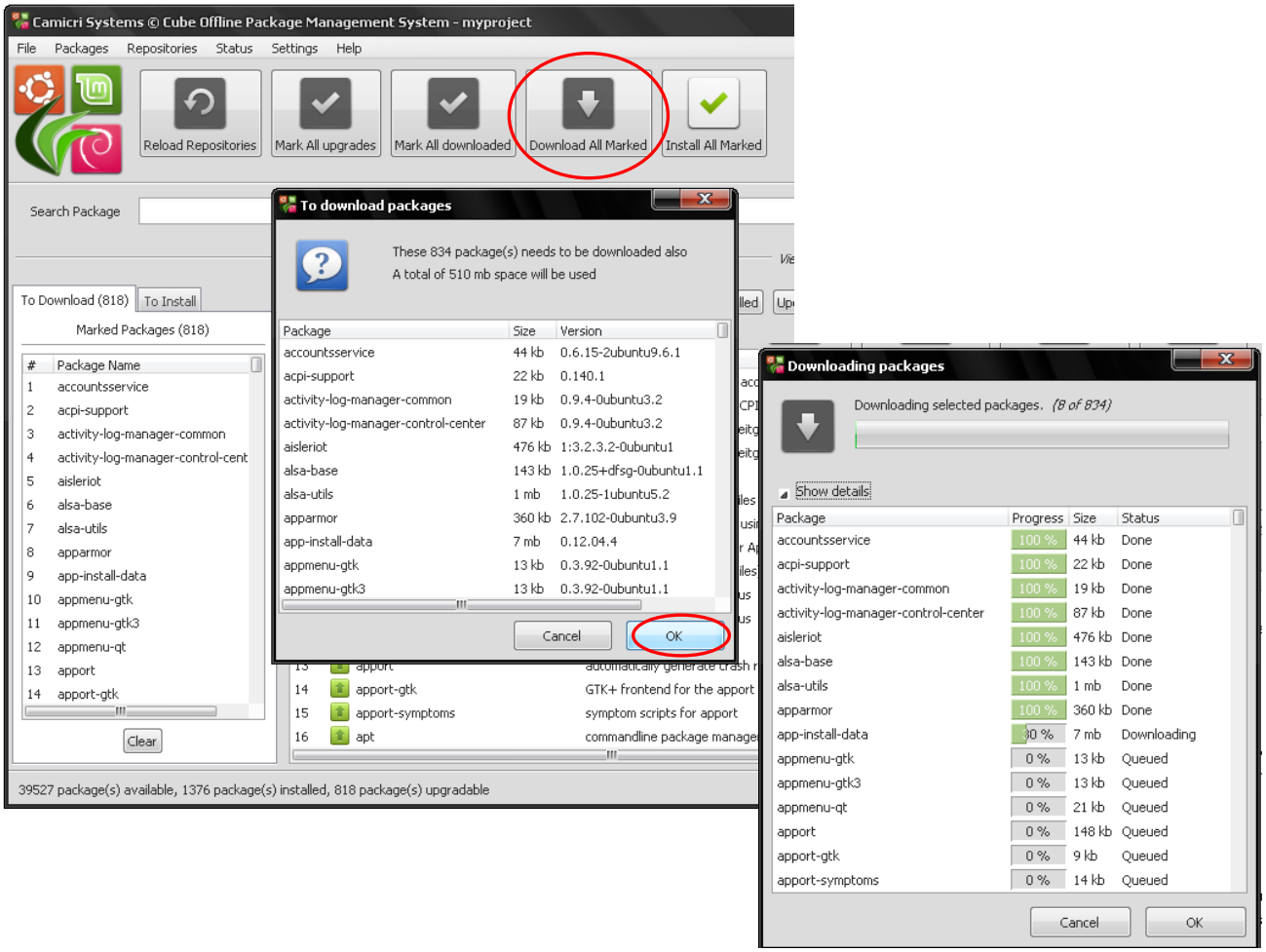


After downloading new repositories, you might have notice that additional packages count shown now in the status bar! Almost 40,000 available packages, and 818 packages upgradable, because the list is updated, some of the installed packages/applications on your original computer (that 818 packages) might be outdated, or your application needs to be updated. So on the toolbar, click the 'Mark All Upgrades'. This will find all packages that needs to be updated.

The Cube's Toolbar



You might notice that after you click the 'Mark All upgrades', the 'To download' tab has now applications listed on it. In the picture below, there were 818 packages that are upgradable in my case. To download these packages, click on the 'Download All Marked' and a dialog will appear. It will show the total applications + other applications it depends on, and the total space it will use. Click OK to download.

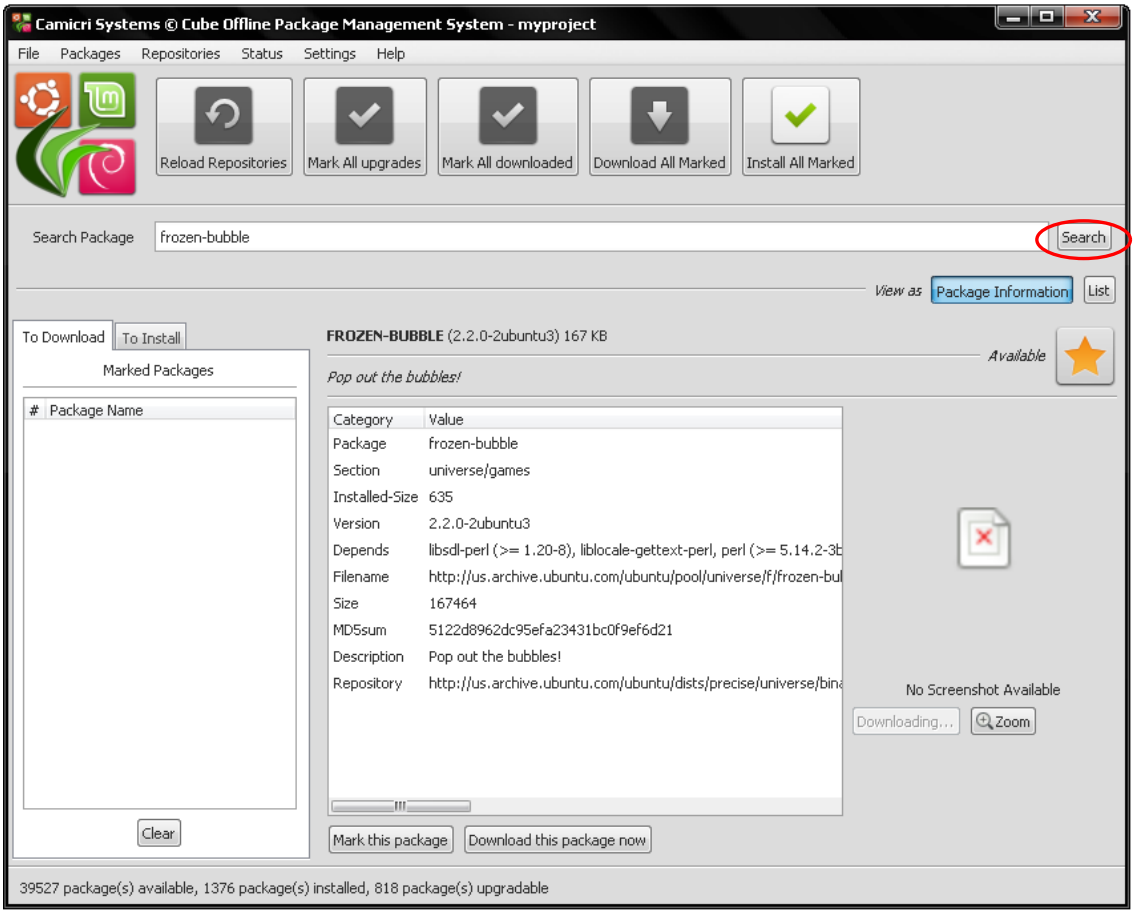


Please complete the update of your packages, because all of these are essential to your system, especially to those freshly installed linux systems. It is important that your OS will have **up-to-date applications**.

You might encounter problems if you don't download all of these packages when you install it. So please have patience and wait for it.

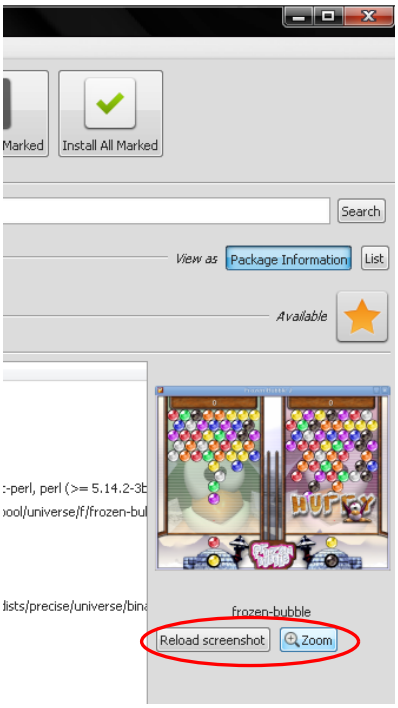
Now that you've downloaded all newest repositories and packages, you can now download applications you want to install such as chromium-browser (google chrome) or firefox, or any other application available in linux ('supertuxkart' if you want a racing game). Just seach the application name in the search text box. You can click the search button to search or just press enter.

Showing the frozen-bubble application (game)

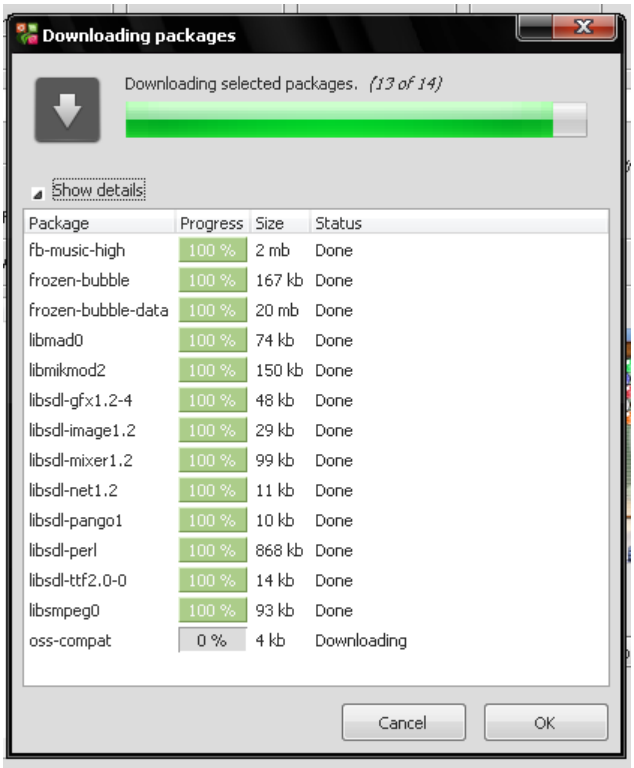


You can 'Mark' an application by clicking the 'Mark' button. This will add the specific application (frozen-bubble) to the 'To download' List. And you can remove it by clicking 'Unmark'. By marking applications, you can select other application that you want to be downloaded later, and by clicking 'Download all Marked' , all in the 'To download' list will be downloaded.

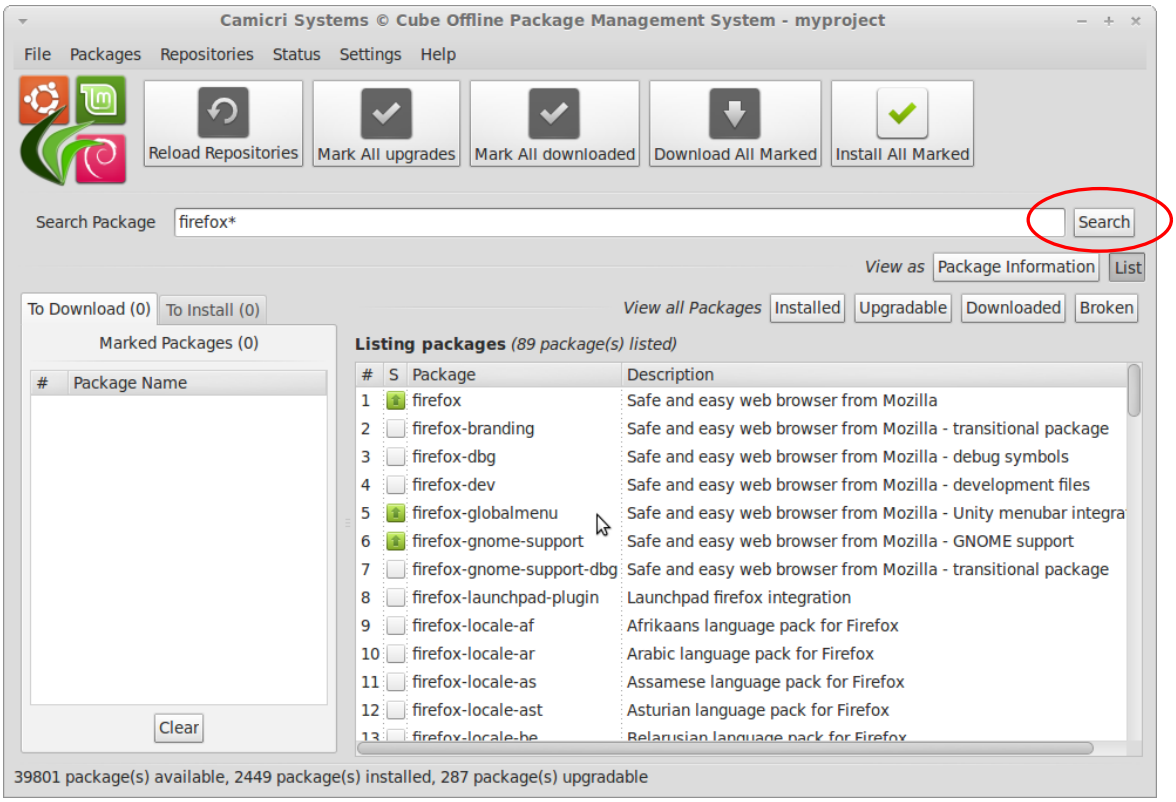
You could also see the screenshot of the selected application (frozen-bubble). This contains the preview image of the application you want to view. Just click the '**View Screenshot**' button, and click the '**Zoom**' button to view it larger.



By clicking **Download all Marked**, if you choose to click the **Mark This** button, or if you click the **Download this package now**, A message dialog will appear, to show you all other packages that needs to be downloaded also together with frozen-bubble. Then after clicking **OK**, a window will appear (Right picture) that shows the download status of every packages.



The search text box does not only search one application, it can also search an occurrence of an application name. Firefox* will show all the application that starts with the word 'Firefox', *Firefox will show all aplications that ends with 'Firefox' and *Firefox* will shows all applications that contains the word 'Firefox'. Double clicking listed package will show its package information, like searching for that specific package.

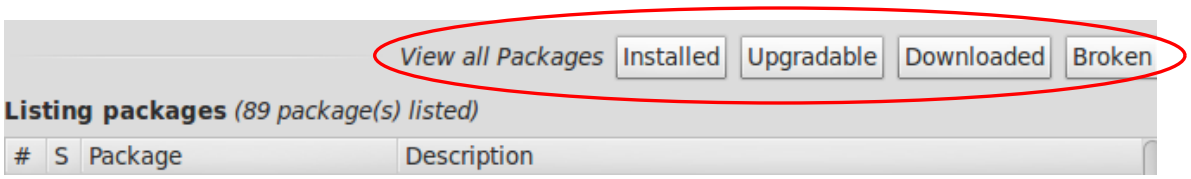


Applications/Packages in the Cube are divided into four statuses :

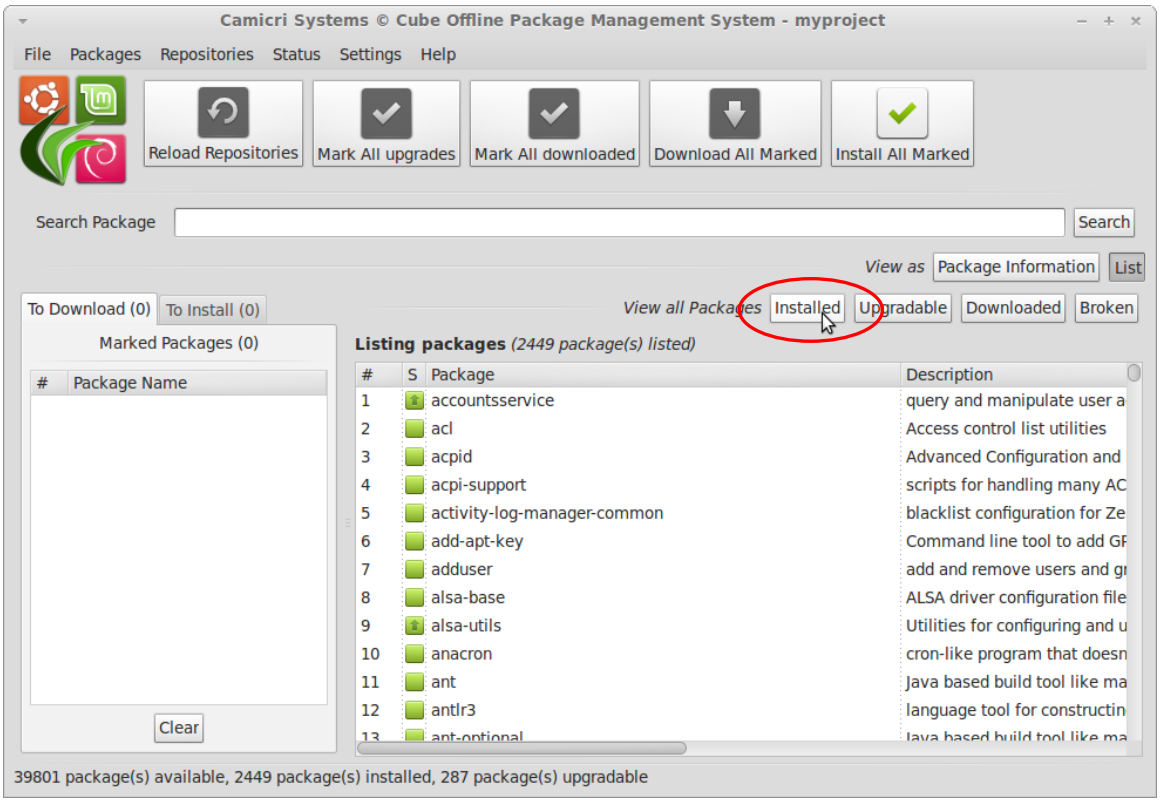
- Means that package is available and can be downloaded
- Means that package is installed and updated
- Means that package is installed but needs to be updated
- Means that package is downloaded
- Means that package is broken (The package is not fully downloaded)

If you encounter broken packages, don't panic, broken packages in cube just reminds you that some of your downloaded packages did not downloaded completely or corrupted. Redownloading these packages will solve the issue.

To view these packages, under the 'View all Packages', you can click 'Installed' to list all the installed packages on your system, 'Upgradable' to list all packages that needs to be updated, 'Downloaded' to list all packages that you downloaded, and 'Broken' to list all packages that downloaded but corrupted or unfinished.



All installed Packages in the system : By clicking 'Installed' button



After you finished downloading new repositories, updating your outdated packages, and downloading new Linux applications, its now time to close the cube and transfer your project back to your flashdrive.

1.) Close the cube (File -> Exit)
2.) Go to the cube directory and open the **projects** folder
3.) Copy the **myproject** folder from the cube's projects folder
4.) Delete the old **myproject** folder in your flashdrive and paste the new **myproject** back to your flashdrive
5.) Go back to your original linux computer and lets go installing! :)

Finally!

Updating your own computer
&
Installing Applications Offline

Going back to your original computer

Now that you already finished downloading from Linux/Windows computer with internet connection, we are now going to update your original computer with new repositories and install your previously downloaded applications, including the updated packages to your system, **offline** :)

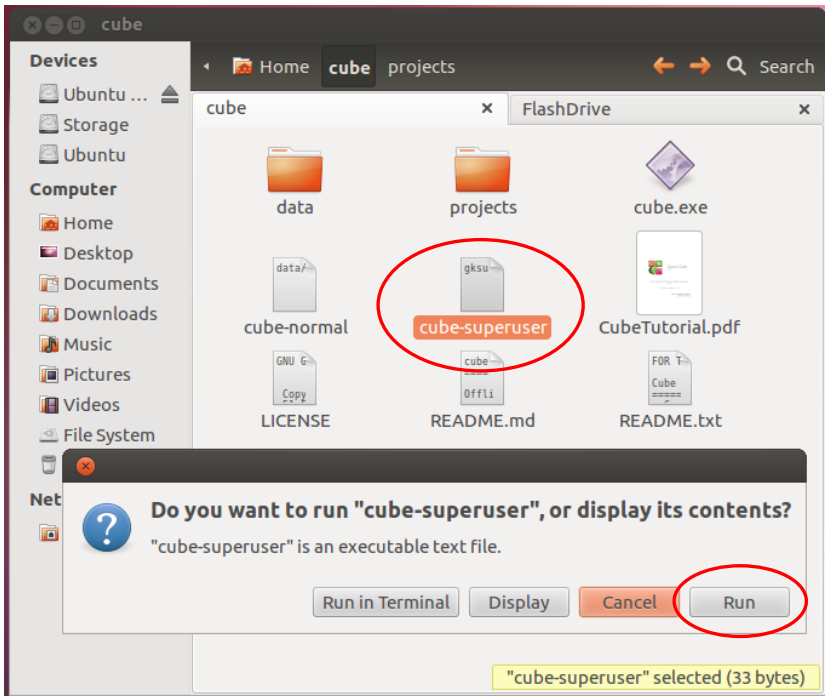
Expecting that your cube is previously configured in your original computer (The cube's directory is extracted in the home directory). If not so, kindly repeat steps 1 to 3, in the **Setup in Linux**, page 7.

1.) From your flashdrive, copy the **new myproject** folder.

2.) Go to your home directory and open the **cube** folder and open the **projects** directory.

3.) Delete the **old myproject** folder (If exists), and paste your **new myproject** folder.

4.) Go back to the cube's directory, right click on the **cube-superuser**, and click **open.** Click **Run** afterwards



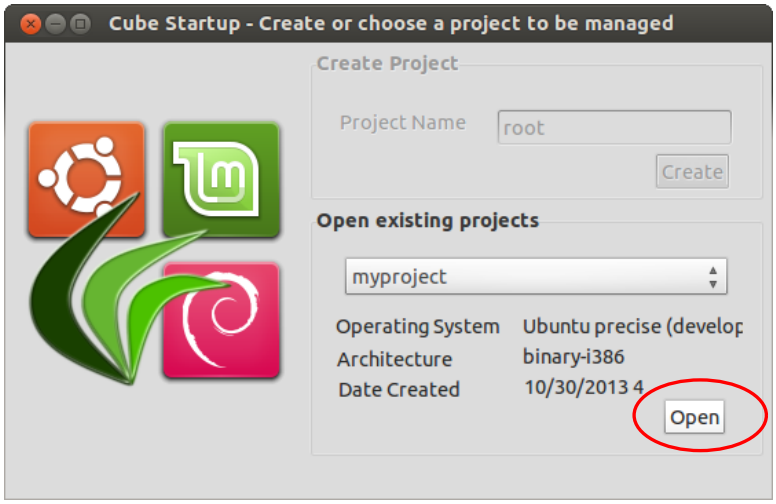
In Cube 1.0.9, cube-superuser is replaced by cube-linux. If 1.0.9 user, step #5 is not applicable.

5.) A dialog box will appear, and asking for your password. This password will elevates the cube to be **superuser** in order the cube to install applications in your system and to manipulate data that needs administrative rights. Just supply your password and click **OK.**

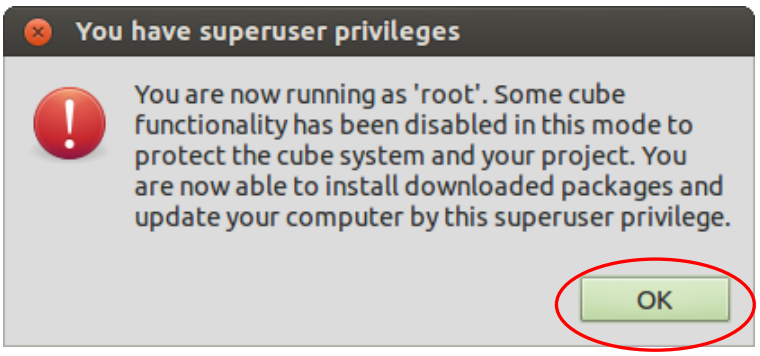
If you're having a problem in this step, please email me at camicrisystems@gmail.com

6.) After entering your computer's password, the cube's project selector window should appear.

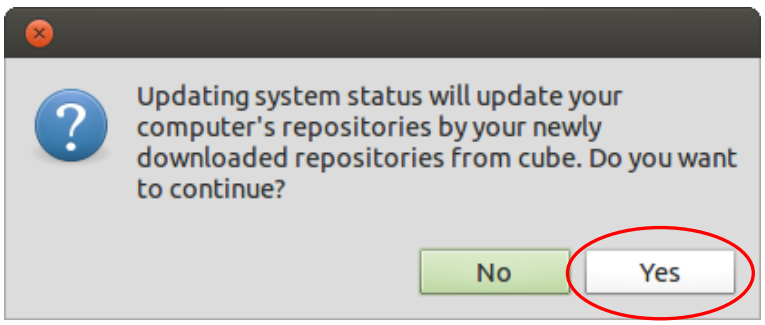
7.) Your new project will be now listed to the **Open existing projects** combo box. Choose your project **myproject** and click **Open**



8.) A message prompt will appear after you open your project. In the superuser mode, you could only install downloaded applications and update your system. Click **OK**

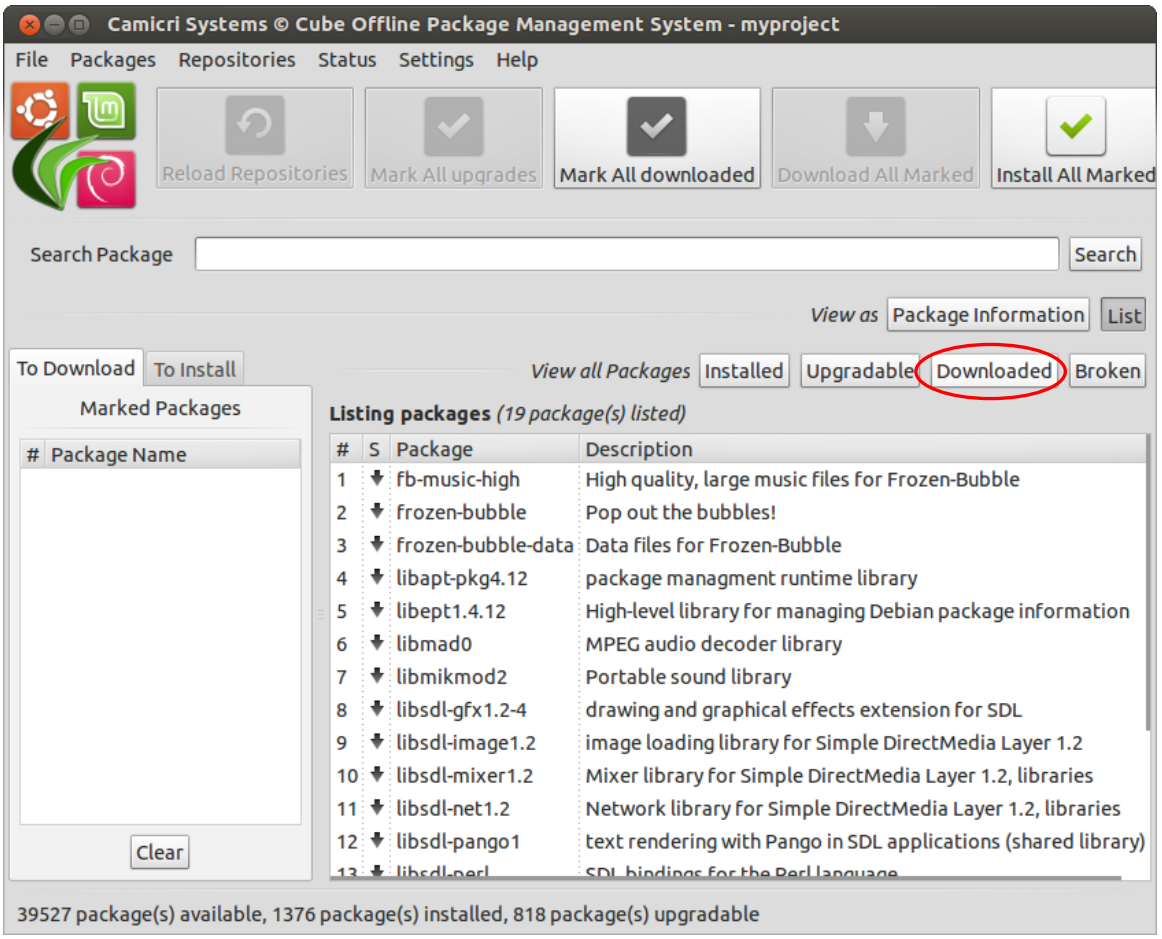


A new message prompt will appear again after the loading of list of applications.



Updating your system means that the cube will transfer newly downloaded repositories to your computer's repository so that your computer will have new list of applications. Just click **Yes** to proceed.

You should see this window now. Some of the functionalities are disabled in this mode.



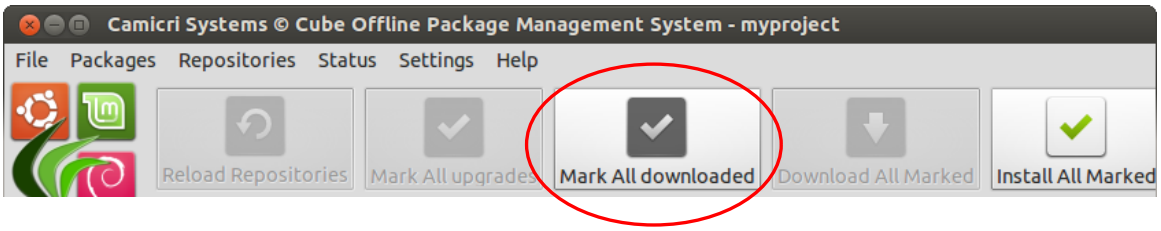
So I think that you were wondering now, where is my downloaded applications?? Well, there are two ways in showing your downloaded applications, one is by clicking **Downloaded** button under the **View all Packages**

This will show all your downloaded packages in a list. Double clicking the listed application that you want to be installed will open the package information of that package.

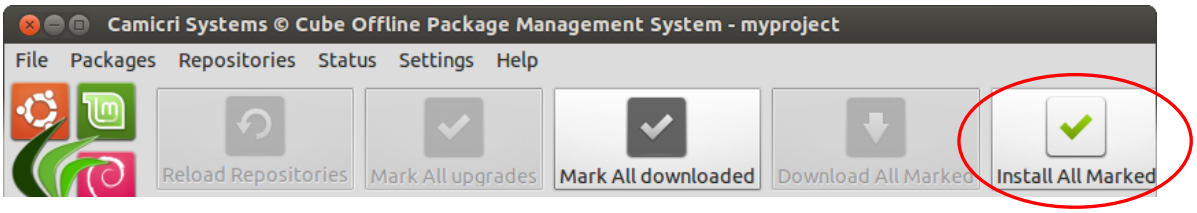
And I'm sure that you noticed that the upgradable packages are still 818, that's because I've skipped downloading updates in this tutorial (Because it is too many, but don't skip it okay!, Its just for the sake of showing you the tutorial :P)

So, how to install previously downloaded upgradable packages (including your chosen applications)? Follow these steps :

1.) On the Cube's Toolbar, click the **Mark All downloaded** button, this will mark all your previously downloaded packages to be installed later. You can see these marked packages at the **To Installed** tab at the left side of the cube.



2.) On the Cube's Toolbar again, click the **Install All Marked**, and after that, a dialog box will appear showing all packages that are going to be installed. If, if ever, a different message box will appear, that says that you have **Unmet Dependencies**, this means that some packages are needed to be downloaded to continue the installation (It may occur if you cancel download during an upgrade or a certain application)

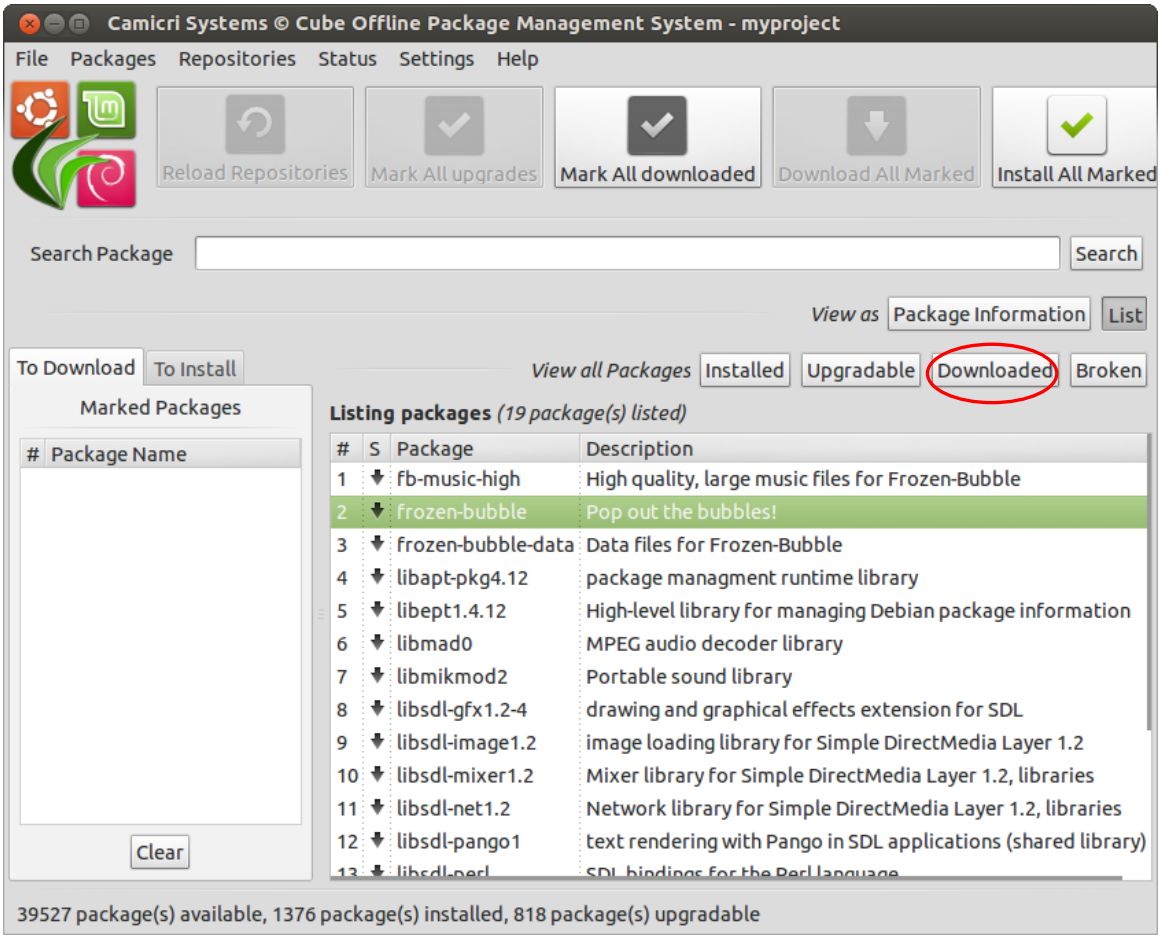


3.) Then a window will appear, showing the status of the installation, please **do not cancel it**, just wait for it to disappear

On the next page, I'll show you how to install a specific application :)

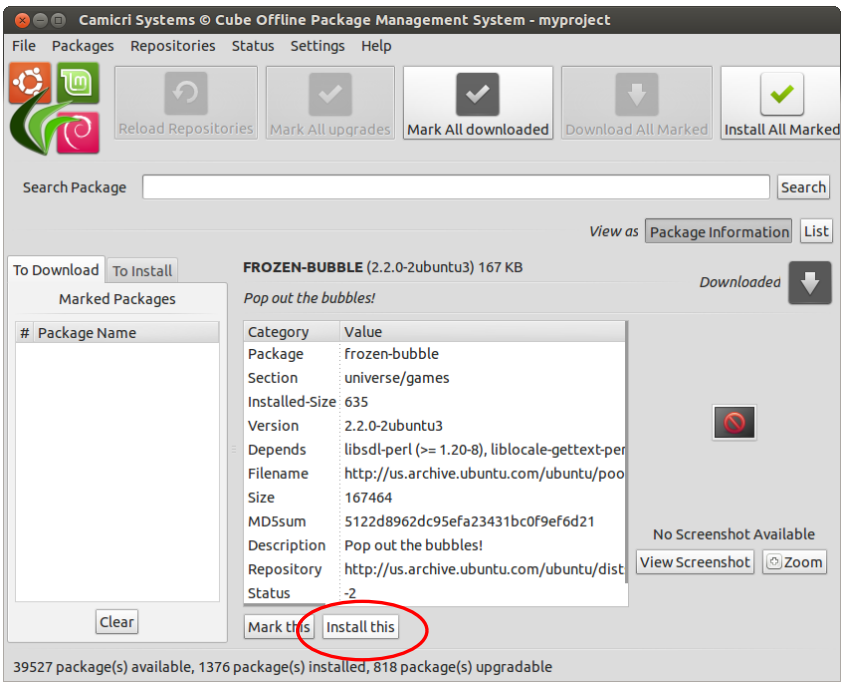
Sample Installation

So, even if I did not download all the upgrades, still, I've decided to download some useful applications, such as **frozen-bubble**, and **synaptic**. So click the **Downloaded** button, and all downloaded packages will appear, you could also search that package in the search bar.



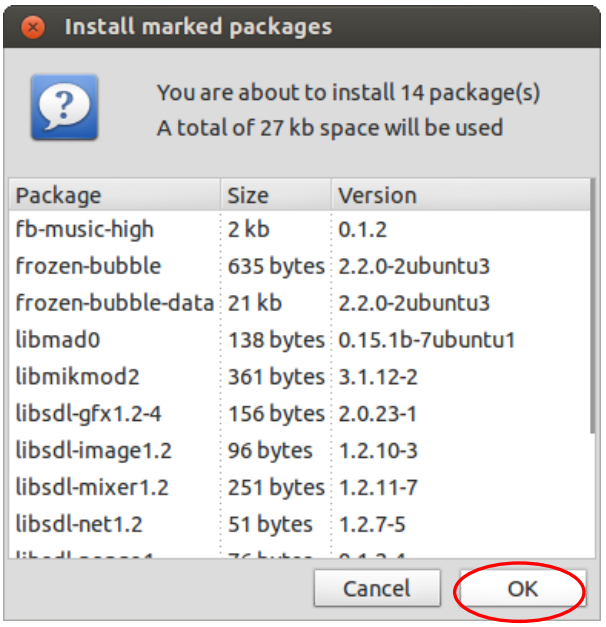
Double click the **frozen-bubble** in the list, and you'll see this --->

Click the **Install this** button to install frozen-bubble now



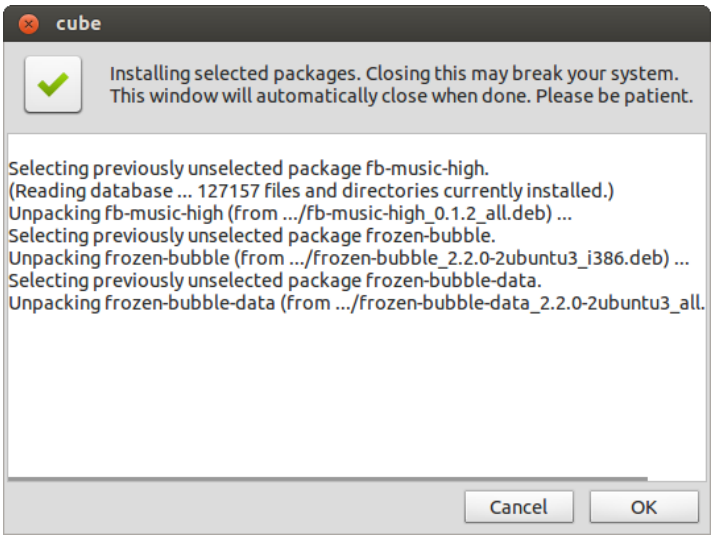
A message dialog will appear, that shows all the packages that will be going to be installed also. These packages are the **dependencies** of frozen-bubble, these packages are needed by the app so all of these are now selected.

Click **Ok** to continue.



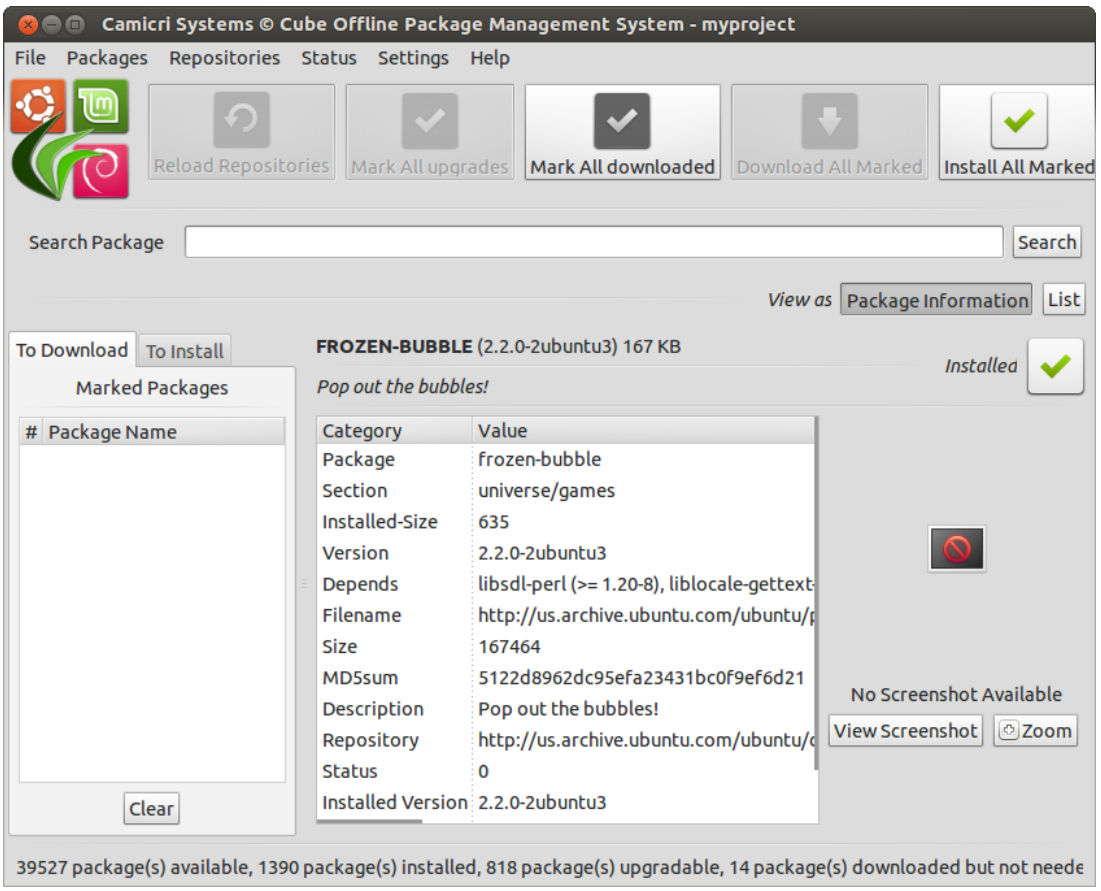
This dialog will show the current happenings in installing your packages. The window closes automatically when all packages were properly configured and installed.

WARNING : Do not attempt to cancel or close the window while installing selected applications. The window will close automatically. Doing so may break some applications, and may break your whole system Please wait and be patient.

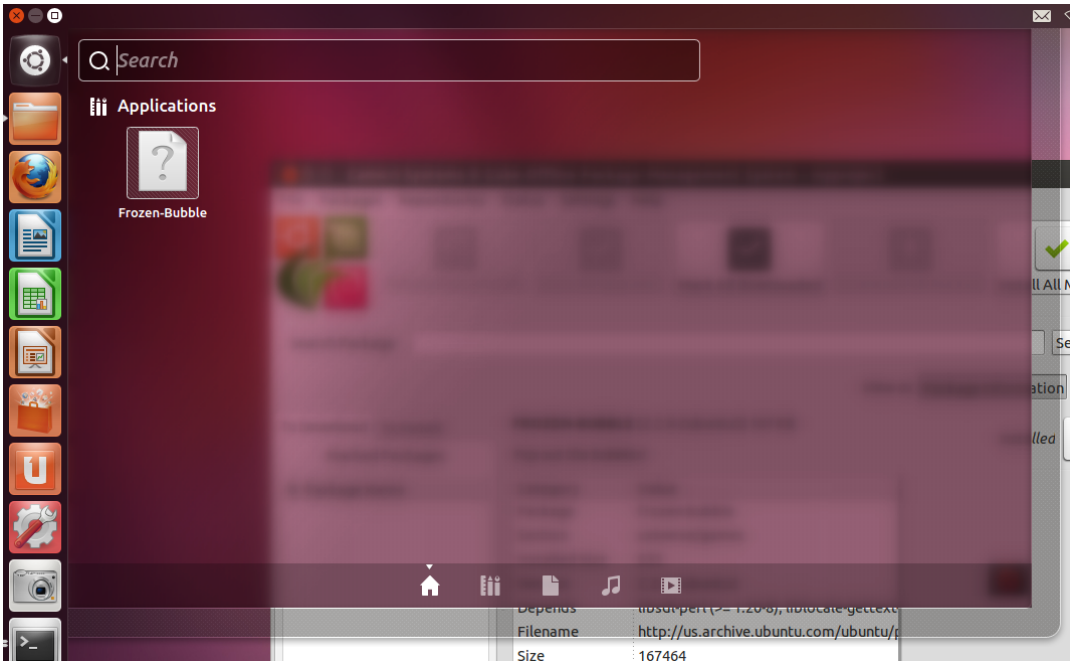


If you're having a problem in this step, please email me at camicrisystems@gmail.com

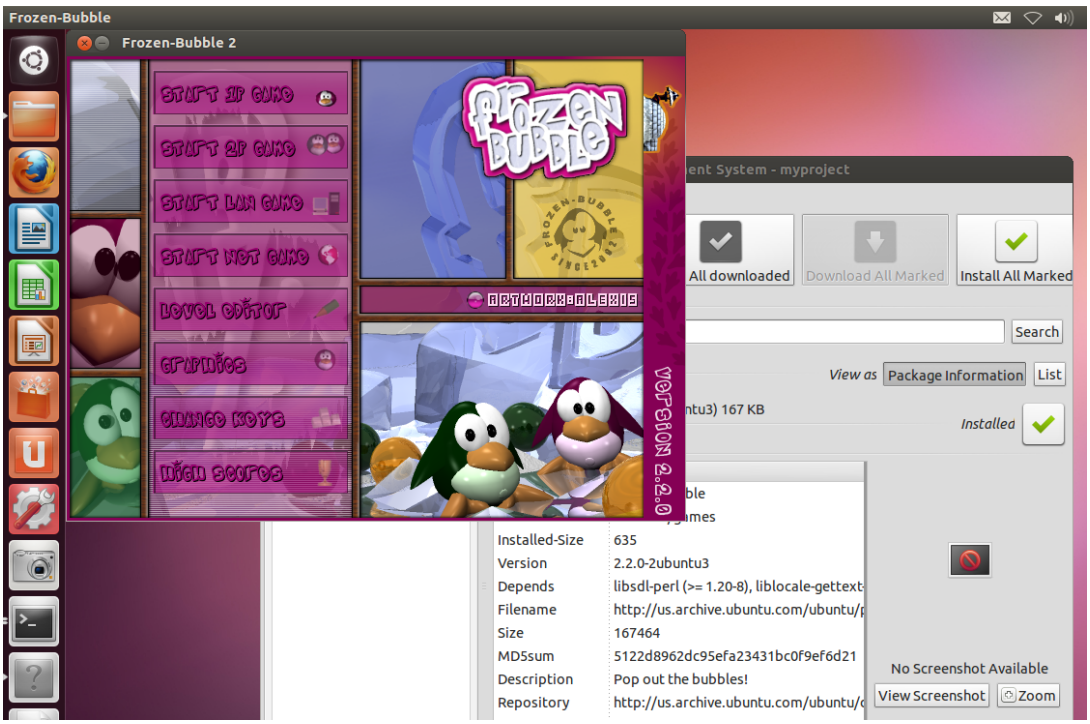
After the installation process, the frozen-bubble is now **Installed**



To check if frozen-bubble is already installed in your system, try to find it in you **dash** if you're using Ubuntu or on the **application menu** if you're using Linux Mint.



And that's it! Your app is installed :)



For Advance Users :

If you want to do manual installation of your applications, your downloaded packages are located at the cube's directory -> projects -> [your project folder] -> data -> packages. A program named Synaptic can use these packages to install it in your system. You can use the cube to download synaptic also, just search for synaptic in the cube.

For computers with Synaptic installed, just open synaptic, supply your password and follow this steps :

1.) File -> Add Downloaded Packages -> [Find the packages folder of your project]
2.) Click Apply in the Synaptic's toolbar

I hope that this program will solve lots of problems about having Linux applications installed in their computers even though they don't have internet access. Lets go in creating useful applications in Linux :) That's all

Used Applications (Third Party)

Axel - A light download accelerator for Linux.
COPYRIGHT
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Wilmer van der Gaast. <wilmer@gaast.net>

aria2c - The ultra fast download utility
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Used Applications (Frameworks)

Mono Framework (Linux)
Gtk+ and the GtkSharp (Linux and Windows)
Microsoft .Net 4.0 (Windows)

Application Portability and Bundling

CDE: Code, Data, and Environment packaging for Linux
Copyright 2010-2011 Philip Guo (pg@cs.stanford.edu)
http://www.stanford.edu/~pgbovine/cde.html

AppImageAssistant and AppDirAssistant
Copyright (c) 2004-13 Simon Peter <probono@puredarwin.org>
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Version 2013-04-19

Cube App Share

This program puts humpty-dumpty back together again.
dpkg-repack is Copyright (c) 1996-2006 by Joey Hess <joeyh@debian.org>

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Themes and Resources

Faenza Icons
Linux Mint gtk2 themes

Thanks to the following applications in making the Camicri Cube possible and running in different operating systems, with no worries :)