



Compiz How-To



What is Compiz?

Compiz is one of the first compositing window managers (component of a computer's graphical user interface that draws windows and/or their borders) for the X Window System that uses 3D graphics hardware to create fast compositing desktop visual effects for window management. In short it is a program which makes your work with windows much more easier and fun, enhances the look of your desktop and gives you new experience with your PC like never before. By default Compiz comes pre-installed in Ultimate Edition.

Hardware requirements:

In order to run Compiz, it is required to have more-less advanced graphics controller (video card 64Mb and up). Most NVIDIA and ATI graphics cards are working with Compiz, some Intel cards are supported as well.

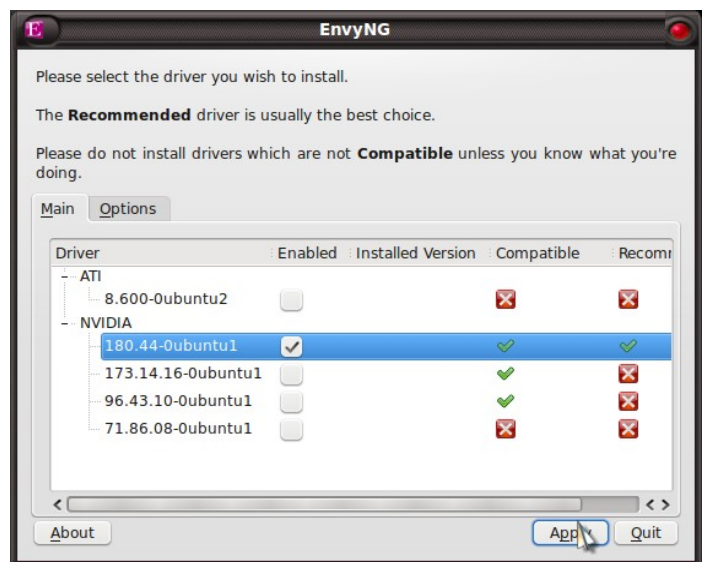
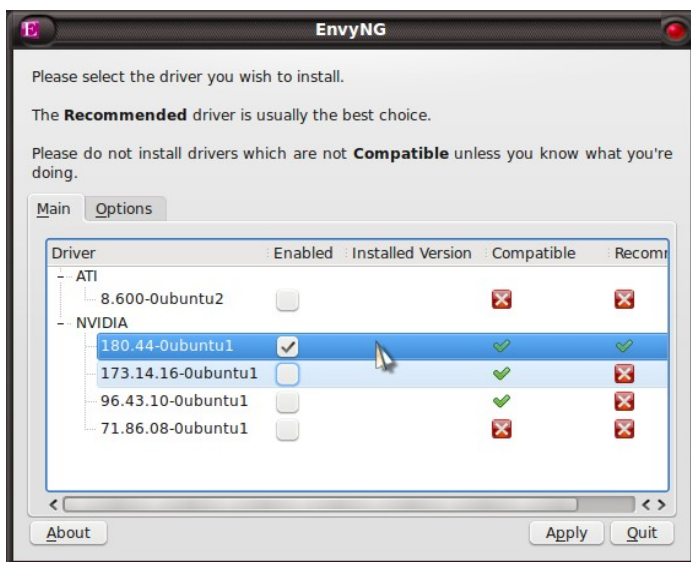
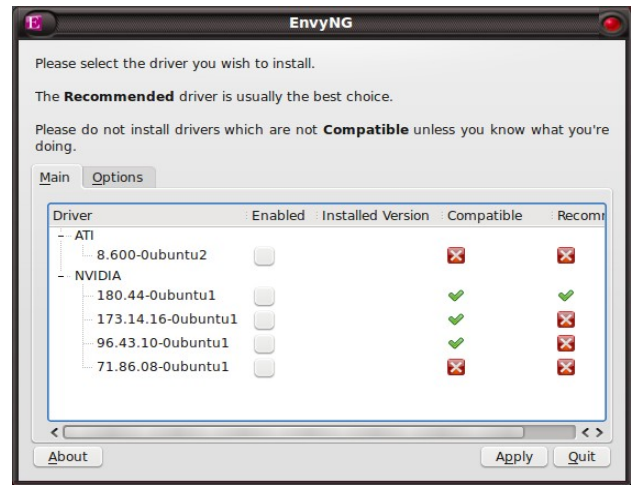
Installing and configuring video hardware to run Compiz:

In most cases advanced video hardware is not going to be installed during installation process of operating system, sometimes there are exceptions and you may experience that video driver will be up and running after install of Ultimate Edition.

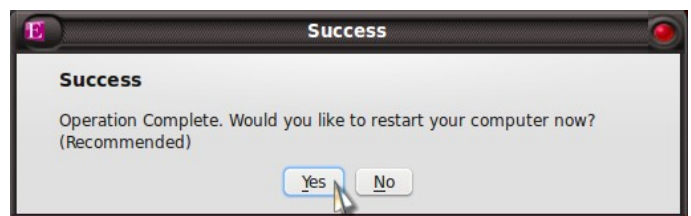
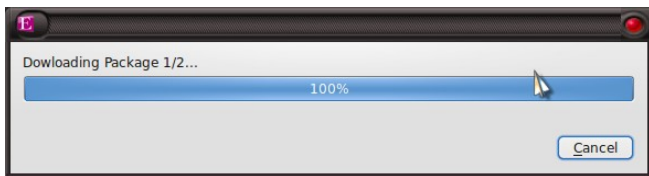
So let's proceed to the installation part. There is a small but powerful script pre-installed in Ultimate Edition called "**EnvyNG**", you can find it under **Applications>System Tools>EnvyNG** (figure 1):



Just click on it and system will open up a program window, it will analyze and suggest the right driver available for you, (see figure 2), there is a “compatible” and “recommended” columns and they both have to be approved (checked) by EnvyNG, so to speak. There are other compatible but not recommended drivers and they can be just fine, however I've experienced some issues with them on certain machines as it was not recommended by EnvyNG script. So all you have to do is check the box and click “apply” in the right corner of the window (figure 3/4).



It will do the rest for you (figure 5) and prompt to reboot computer after installation is finished (figure 6).

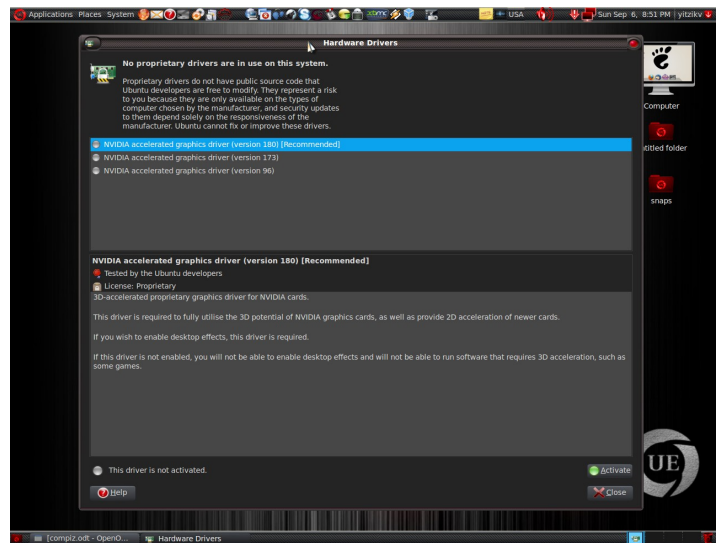


Now, it is very important to restart the system after installation process have finished due to some major system changes, so do not ignore the message and choose “yes” - restart now.

Now you are all ready for Compiz. Piece of cake, isn't it?

As I have mentioned before, this will work on 95% of hardware, but sometimes, with very powerful cards you'll see that envy cannot handle it and not finding any appropriate driver, so if that is the case there are a lot forums and discussions out there on Internet about this stuff, so don't worry and stay calm, there is nothing impossible in Linux world, especially when it comes to hardware, there is definitely a solution for everything, it is just a matter of finding it.

However there is one more point considering drivers: Ultimate Edition is based on Ubuntu operating system and there is a feature or better say small system application called “**Hardware Drivers**” you can find it under **System>Administration>Hardware Drivers** (figure 7/8)



which can and probably will automatically tell you in notification area (top right corner of the screen near the clock) after you install Ultimate Edition and restart your computer, that there is some restricted drivers available to install (in most cases it will be some graphic cards or wireless cards) and similar to EnvyNG, it will give you some options of compatibility and recommendation to install them. Well it might work for you as well, but I've faced some problems with that, it can give you right compatibility but wrong recommendation and after installation, the system can simply crash and even lead sometimes to full re-installation, so I highly recommend to use EnvyNG.

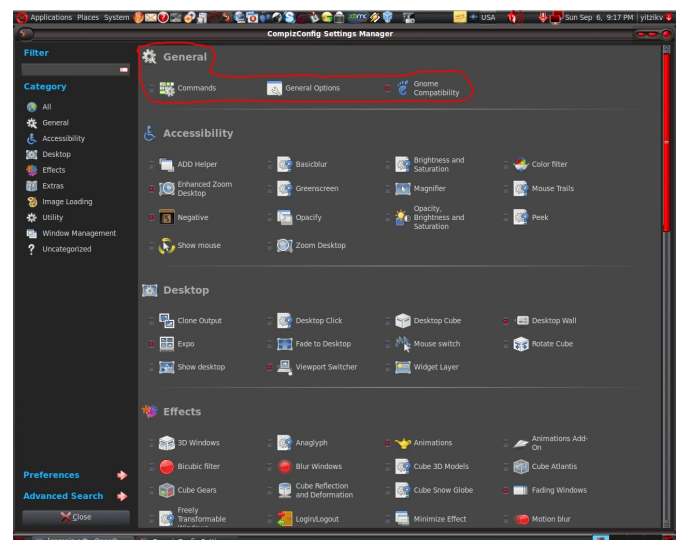
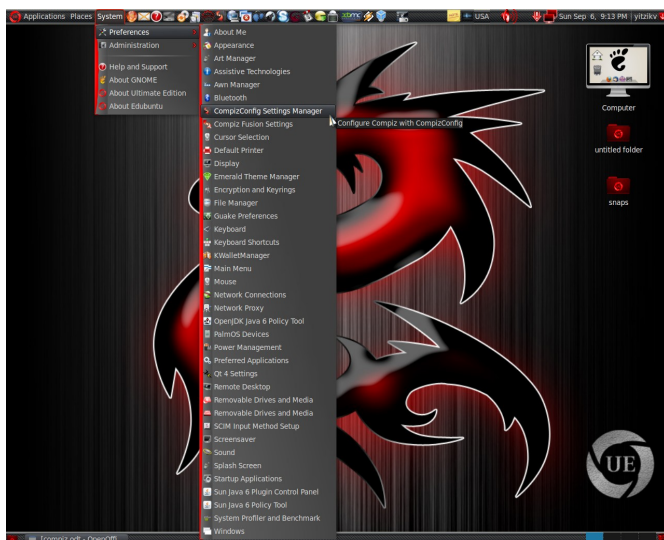
Compiz Plug-Ins:

Compiz plug-ins are basically add-ons to Compiz core program which extend it's capabilities and features towards management of windows/desktop. There are some of them pre-installed in Ultimate Edition and there are quiet a few out there to download, free of charge of course. We will review plug-ins download and installation step-by-step in later section.

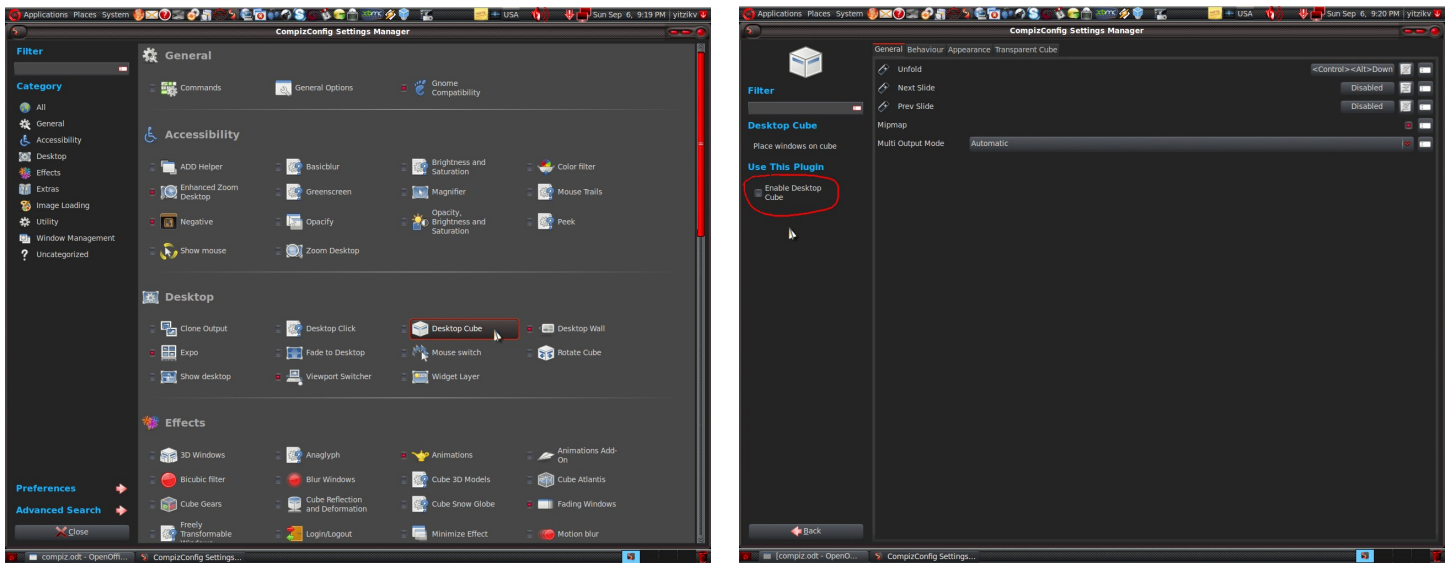
Operating Compiz: CompizConfig Settings Manager.

There is a Settings Manager coming along with Compiz, which allows to change various settings of Compiz to user's taste.

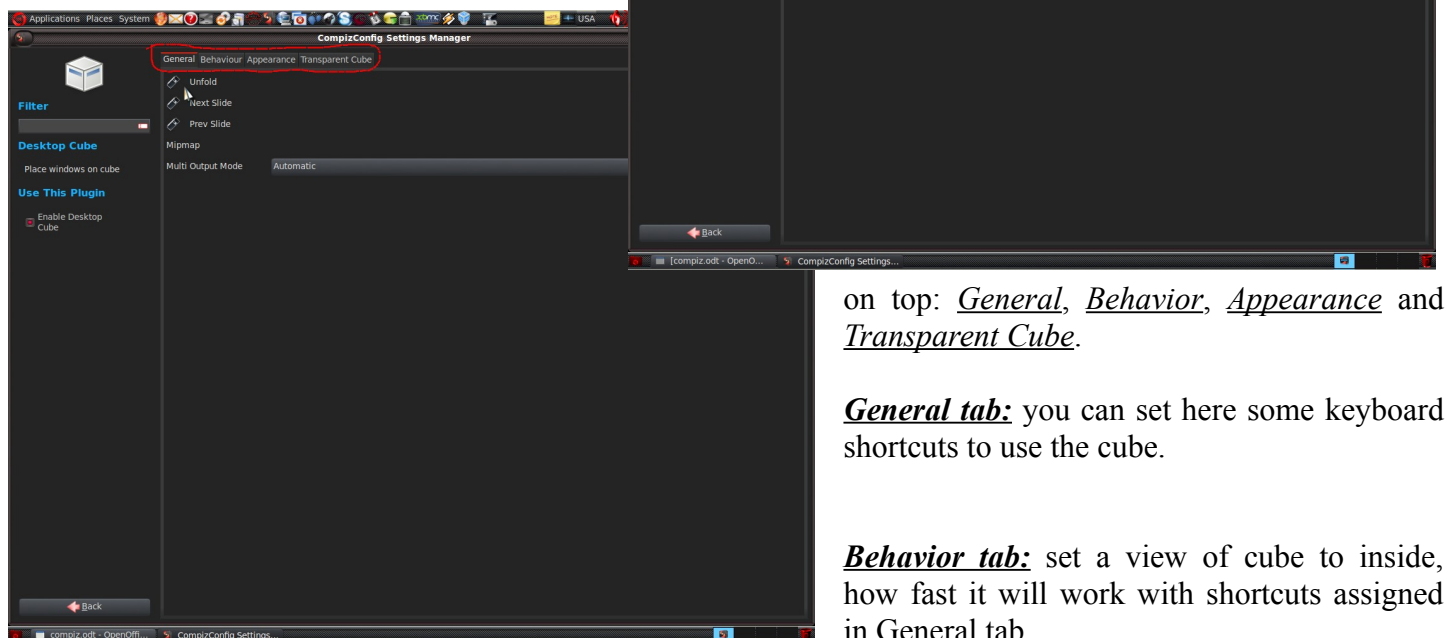
Let's Take a look at it, you can find it under **System>Preferences>CompizConfig Settings Manager** (figure 9) As you can see there are a few options of Compiz core settings under General category (figure 10)



and a bunch different plug-ins/add-ons with their settings under other categories. Let's take a detailed look on settings of one of the most famous plug-in called “***Desktop Cube***”, so go ahead and click on “***Desktop Cube***” (figure 11) and Compiz will show you a sub-window of Desktop Cube settings (figure 12).



On the very left side there is a check-box saying enable (same figure 12), so check it and it is now in use. Sometimes when checking the box of certain plug-ins the pop-up window will appear (figure 13), telling you about conflict with another plug-in, what it means is that every plug-in has a keyboard shortcut or a certain purpose which is assigned to it, Compiz analyzes that conflict and gives you a suggestion with a quick fix for it, so if you will face this issue and most likely you will, just make sure to read carefully what does Compiz offer you to do and choose the option you like. Now, as you can see on picture (figure 14), there are 4 tabs



on top: General, Behavior, Appearance and Transparent Cube.

General tab: you can set here some keyboard shortcuts to use the cube.

Behavior tab: set a view of cube to inside, how fast it will work with shortcuts assigned in General tab.

Appearance: here you can set a picture/s to show on caps (top and/or bottom) of the cube, set a background image to appear behind the cube when rotating (**skydome option**). You can also apply some cool animation to it (**animate skydome check-box**), in order to do that you need to download special kind of image named **panorama**, in particular **equirectangular panorama** (sometimes called **perspective projection**, **fish eye image**, **cylindrical panorama**, **spherical panorama**) you can easily find some on Internet using image search of your favorite search engine with keywords I have provided you above.

Note, the image should be in a high resolution and it depends of the size of your screen as well.

Here is a sample to show you how does it look like:

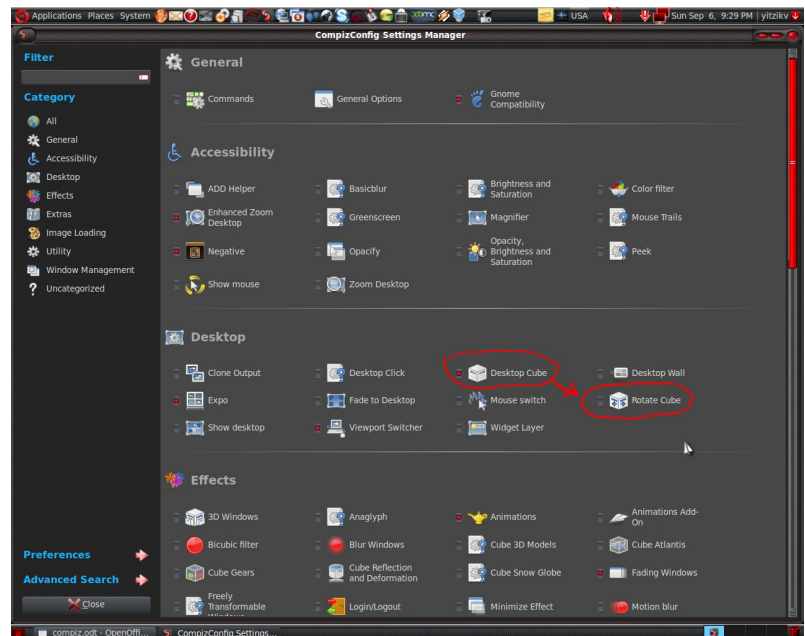


Transparent Cube: here you can set the transparency level of the cube when rotating.

OK, finish here let's move on.

Desktop Cube plug-in is slightly different than the other ones, there is an important add-on to it, which extends it's capabilities, the plug-in is called "**Rotate Cube**" and it is a few plug-ins further in main Settings Manager window (figure 15), so hit back in the bottom left corner of the window and it will bring you back to the main list of all plug-ins. Repeat all steps with Rotate Cube as you have done before with Desktop Cube. The settings are similar just some more stuff to play with, for example how far should the cube zoom when rotating, smoothness of rotation etc. Here you will see 2 tabs: General and Bindings. Note: The second Bindings tab here is some other keyboard shortcuts and in most plug-ins it's being called that way.

Note: All sub-windows with settings of all plug-ins are very similar one to another so go ahead and have some fun with them.



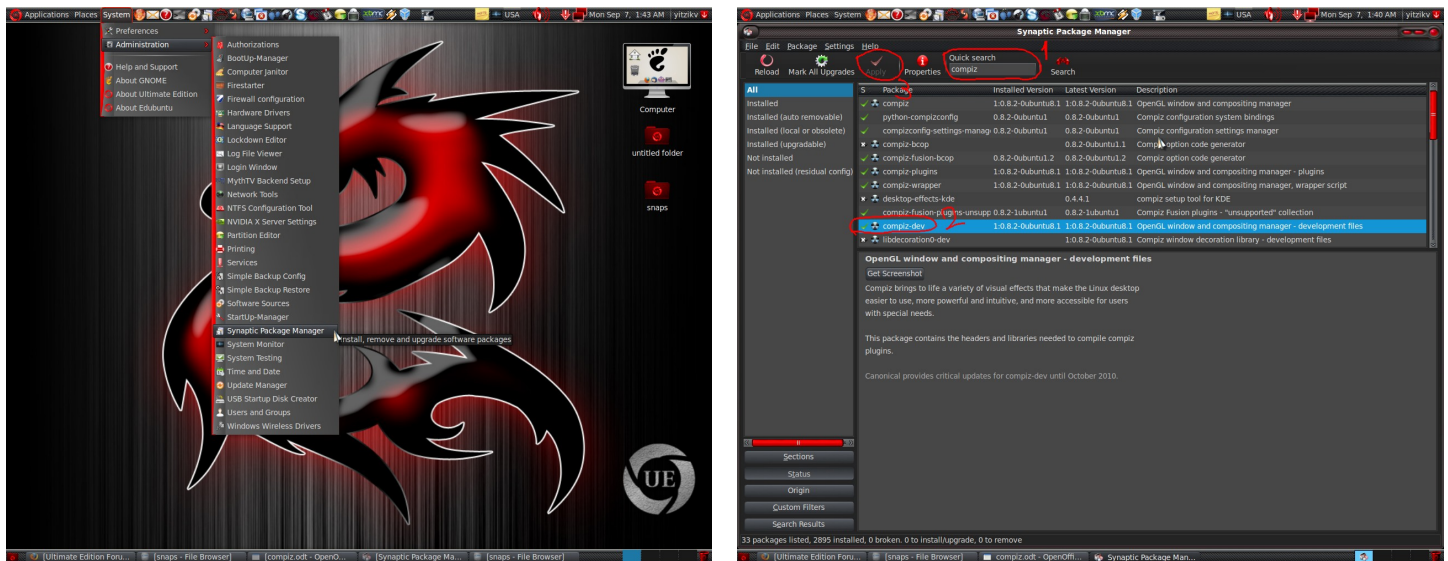
Additional Plug-Ins Installation:

Optionally you can install additional plug-ins/add-ons to use with your Compiz core program. In order to do that, there are 4 main steps:

- 1: Install development packages for Compiz.
- 2: Find and Download Plug-In.
- 3: Compile and Install.
- 4: Restart X (log off and log back on)

1: Install development packages for Compiz.

Go to System>Administration>Synaptic Package Manager (figure16), when the window opens up (figure 17)



go to quick search box (marked “1” in red) and type in compiz, then find “compiz-dev” (marked “2” in red) click on it and choose mark for installation, then click apply (marked “3” in red).

Tip: before you click apply you might want to repeat the search and choose some additional packages to download and install, we will need them optionally for some great source of plug-ins;

The names are “git-core” and “git-buildpackage”

2: Find and Download Plug-In.

After all changes has been applied, close Synaptic Package Manager and open up Terminal

Applications>Accessories>Terminal

Now let's do some typing, shall we? You can simply copy-paste these commands (in red)...

mkdir compiz (creates a directory in home folder named compiz)

cd compiz (enters the directory “compiz”)

Now, all plug-ins you will find online and download, should be put in this directory. So download the plug-in and extract it, why extract? It is because most of the files you will download comes in archives.

3: Compile and Install.

Terminal again:

cd name of the plugin directory (enters the plug-in derectory)

make clean (makes clean modules in order to compile in a right way)

make (compiles the plug-in)

sudo make install (installs the plug-in)

cd .. (goes one directory up)

4: Restart X (log off and log back on).

I think you can do this yourself by now, LOL :)

Gitweb:

I suggest to perform this if you know what you are doing.

There is one more source/way, you name it, I want to show you, where you can get the latest and experimental plug-in builds. Remember in step “1” we have installed **git-core** and **git-buildpackage**, so now we will use them to pull some plug-ins from “**gitweb**”

Git is a control system (basically an array of repositories), it can serve as a general tool for directory content tracking.

Gitweb is a web interface for Git, it is written in Perl, it allows to browse git repository (or a set of git repositories) using a web browser.

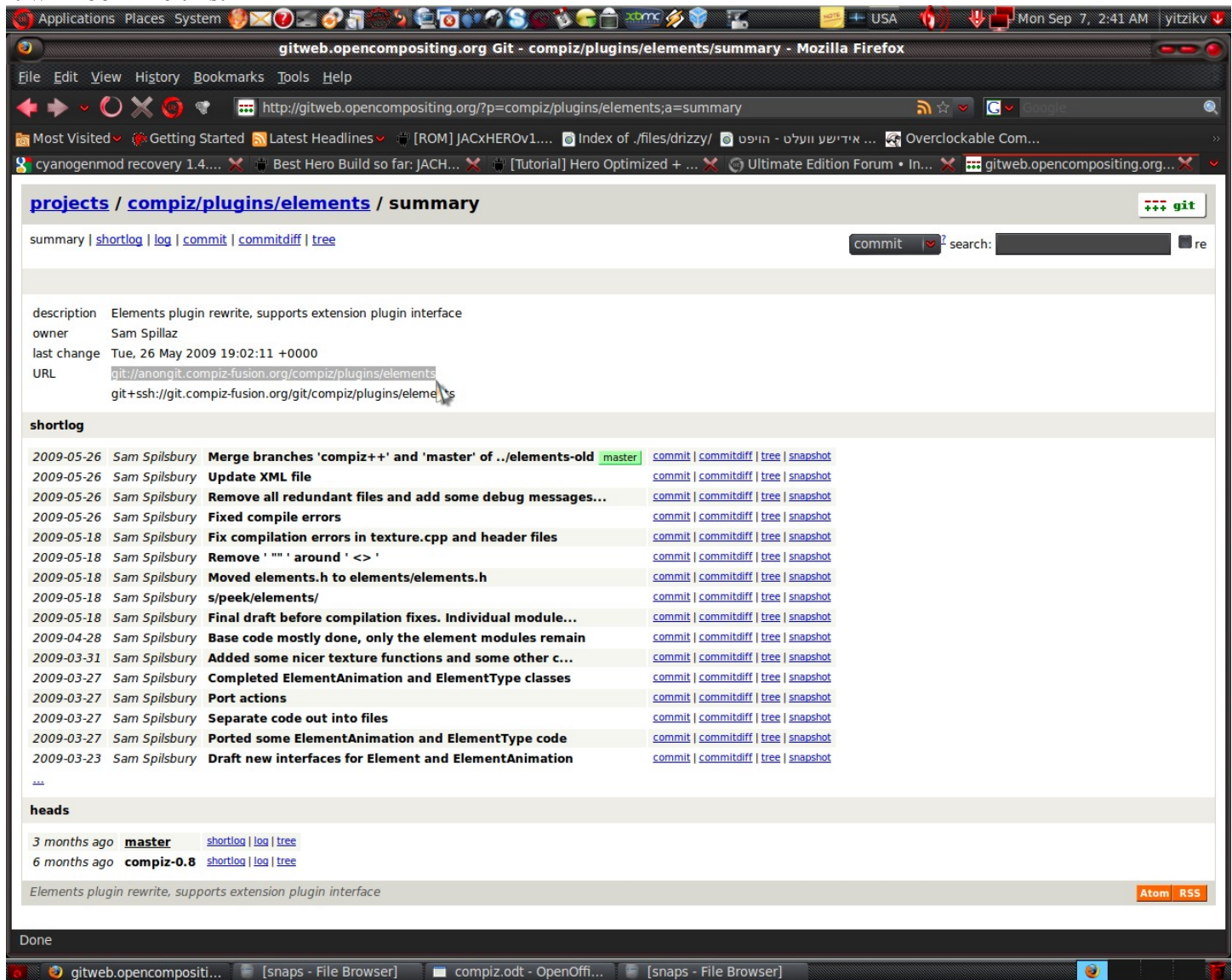
So this step goes between step “2” and “3”.

Go to your web-browser to <http://gitweb.opencompositing.org/> and you will see the whole list of plug-ins and stuff. So let's take for example the “elements” plug-in (highlighted) click on it and browser will redirect you to a new page...

The screenshot shows a web browser window with the address bar displaying <http://gitweb.opencompositing.org/>. The page title is "gitweb.opencompositing.org Git - Mozilla Firefox". The browser's menu bar includes File, Edit, View, History, Bookmarks, Tools, and Help. The address bar shows the URL and a search icon. The page content is a list of projects, with the following columns: Project, Description, Owner, and Last Change. The 'compiz/plugins/elements' project is highlighted. The list of projects includes various compiz plugins and core components, each with a description, owner, and last change date. The 'elements' project is highlighted in blue, and its description is 'Elements plugin rewrite, suppo...'. The browser's status bar at the bottom shows the page title and several open tabs.

Project	Description	Owner	Last Change
Documentation	Documentation	Kristian Lyngstol	8 months ago
compiz/compizconfig/ccsm	Compizconfig Settings Manager...	Quinn Storm	8 days ago
compiz/compizconfig/compizconfig-python	Compizconfig bindings for...	compiz	5 months ago
compiz/compizconfig/libcompizconfig	Compiz configuration system...	compiz	6 days ago
compiz/core	Compiz core components	compiz	7 hours ago
compiz/plugins/addhelper	Addhelper plugin	Kristian Lyngstol	4 weeks ago
compiz/plugins/animation	Animation plugin	Erkin Bahçeci	26 hours ago
compiz/plugins/bench	Benchmark plugin	Dennis Kasprzyk	5 weeks ago
compiz/plugins/crashhandler	Crashhandler plugin	Dennis Kasprzyk	5 months ago
compiz/plugins/elements	Elements plugin rewrite, suppo...	Sam Spillaz	3 months ago
compiz/plugins/expo	Expo plugin	Robert Carr	5 days ago
compiz/plugins/extrawm	Extra WM functions plugin	Danny Baumann	5 months ago
compiz/plugins/fadedesktop	Fadedesktop plugin	Robert Carr	5 months ago
compiz/plugins/fakeargb	Fakeargb plugin	Robert Carr	3 weeks ago
compiz/plugins/grid	Keyboard shortcuts to tile...	Stephen Kennedy	5 months ago
compiz/plugins/jpeg	Jpeg image loader plugin	Nicholas Thomas	5 weeks ago
compiz/plugins/loginout	Login/Logout effect Plugin	compiz	5 months ago
compiz/plugins/mag	Magnifying glass plugin	compiz	4 weeks ago
compiz/plugins/maximize	Resizes a window to the maximu...	Kristian Lyngstol	5 months ago
compiz/plugins/mousepoll	Mouse position polling plugin	compiz	25 hours ago
compiz/plugins/neg	Negative plugin	Dennis Kasprzyk	7 weeks ago
compiz/plugins/notification	Notification plugin to show...	Danny Baumann	25 hours ago
compiz/plugins/opacify	Opacify plugin	Kristian Lyngstol	5 days ago
compiz/plugins/put	Put windows plugin	compiz	5 days ago
compiz/plugins/resizeinfo	Metacity like info on resize.	Robert Carr	5 months ago
compiz/plugins/scalefilter	Scale window title filter...	Danny Baumann	3 weeks ago
compiz/plugins/session	Session support in a plugin...	Travis Watkins	26 hours ago
compiz/plugins/shelf	Miniwin reinvented	Kristian Lyngstol	5 days ago
compiz/plugins/showdesktop	Showdesktop plugin	Danny Baumann	10 days ago
compiz/plugins/showrepaint	Shows repainted regions in...	compiz	7 weeks ago
compiz/plugins/snap	Window snapping plugin	Guillaume Seguin	11 hours ago
compiz/plugins/splash	Splash screen plugin	Dennis Kasprzyk	5 months ago
compiz/plugins/staticswitcher	Switcher plugin with simplere...	Danny Baumann	5 days ago
compiz/plugins/text	Text render plugin	Patrick Niklaus	13 hours ago
compiz/plugins/thumbnail	Window thumbnail plugin	Dennis Kasprzyk	13 hours ago
compiz/plugins/tile	Window tile plugin	compiz	5 months ago
compiz/plugins/traillfocus	Traillfocus plugin	Kristian Lyngstol	5 months ago

it will look like this:



notice the highlighted line, that's all we need to copy, but if you are curious enough, feel free to sniff around and see the changelog. Now going back to step “3”, but before you repeat the step “3” put this in terminal:

git clone paste URL from web-browser, in our case **git://anongit.compiz-fusion.org/compiz/plugins/elements**

what it basically does, is copies/clones the content from gitweb in a current folder on our hard drive. So now you have a sub-directory “elements” in /home/username/compiz/ - our current directory in Terminal session. Now access this directory:

cd elements

and then step “3”:

make clean

make

sudo make install

HAVE FUN :)