

## Installing Eclipse with Qt 4 and the Qt Eclipse Integration Plug-in on Windows XP

### A short tutorial

by Ferenc STELCZ (mfx-)  
ferenc@stelcz.hu

v1.0 – 13. January 2008.

This tutorial is written for developers who want to develop Qt/C++ applications using the Eclipse IDE under Windows. Though there are many online resources regarding this issue, I decided to write a complete step-by-step how-to being as user-friendly as I only can. I hope I will succeed... :)

#### *Requirements and installation*

To be able to use Eclipse IDE for Qt/C++ development you only need a few things. In this section I try to list these requirements and the procedure of the installation of each component.

What you will need:

- Eclipse Europa C++ IDE (fall2)
- Java 5/6 Runtime Environment or SDK (I will use the SDK for now)  
**(I assume you already have a working Java 5/6 JRE/SDK)**
- Qt 4.3.3 Opensource Windows MinGW build
- Qt Eclipse Integration Plug-in 1.0.1 MinGW build

#### *a. Downloading and installing Eclipse Europa IDE*

Go to <http://www.eclipse.org/downloads> and select Eclipse IDE for C/C++ development

### Eclipse Europa Fall Maintenance Packages - Windows [\(compare packages\)](#)

	<b>Eclipse IDE for Java Developers</b> - Windows (78 MB) The essential tools for any Java developer, including a Java IDE, a CVS client, XML Editor and Mylyn. <a href="#">Find out more...</a>	Windows Linux Mac OS X
	<b>Eclipse IDE for Java EE Developers</b> - Windows (126 MB) Tools for Java developers creating JEE and Web applications, including a Java IDE, tools for JEE and JSF, Mylyn and others. <b>Java 5 (or higher) required.</b> <a href="#">Find out more...</a>	Windows Linux Mac OS X
	<b>Eclipse IDE for C/C++ Developers</b> - Windows (63 MB) An IDE for C/C++ developers. <a href="#">Find out more...</a>	Windows Linux Mac OS X
	<b>Eclipse for RCP/Plug-in Developers</b> - Windows (153 MB) A complete set of tools for developers who want to create Eclipse plug-ins or Rich Client Applications. It includes a complete SDK, developer tools and source code. <a href="#">Find out more...</a>	Windows Linux Mac OS X
	<b>Eclipse Classic 3.3.1.1</b> - Windows (140 MB) The classic Eclipse download: the Eclipse Platform, Java Development Tools, and Plug-in Development Environment, including source and both user and programmer documentation. <a href="#">Find out more...</a> <a href="#">Release notes</a>   <a href="#">All Versions</a>   <a href="#">Documentation</a>	Windows Linux Mac OS X

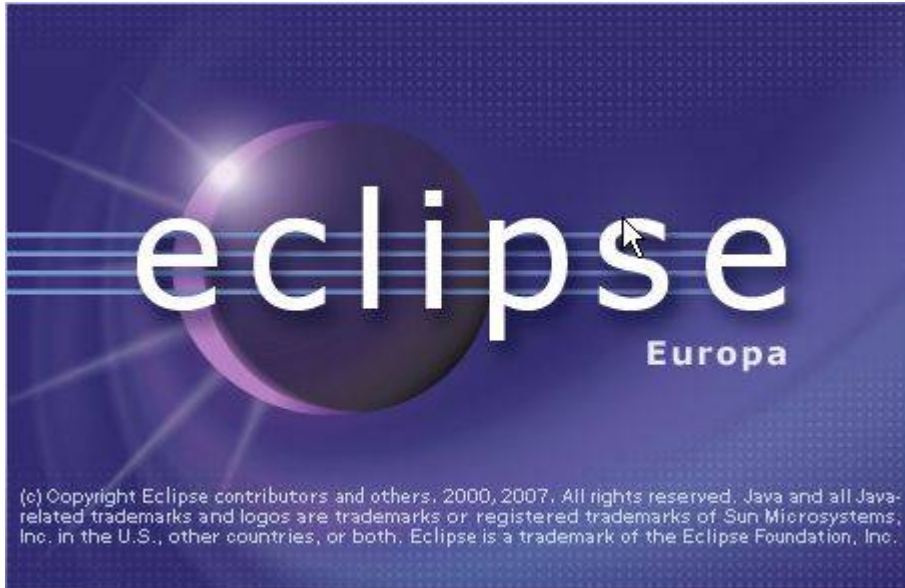
#### *Getting Eclipse Europa*

After downloading extract the zip file in a folder.

**HINT:** You should create a „root” folder for your development environment. In this

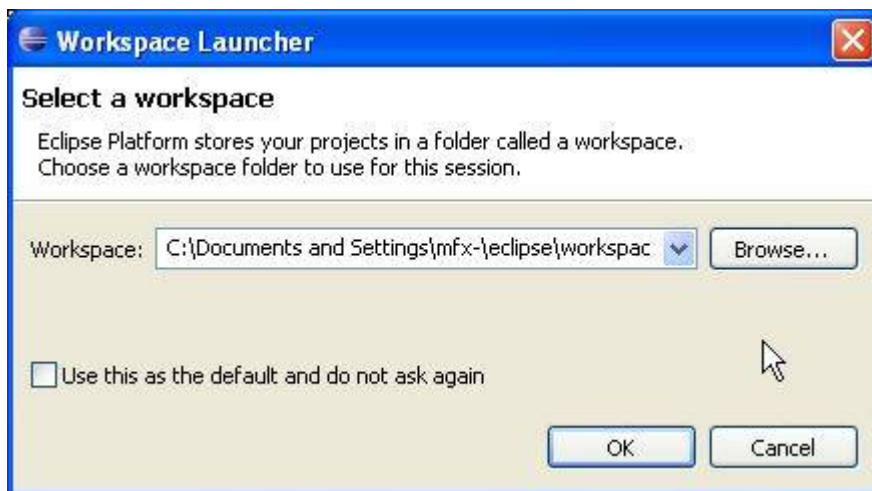
example the root directory will be `C:\devtools`

You should now have a folder called `C:\devtools\eclipse`.  
Go to the folder and start Eclipse for the first time.



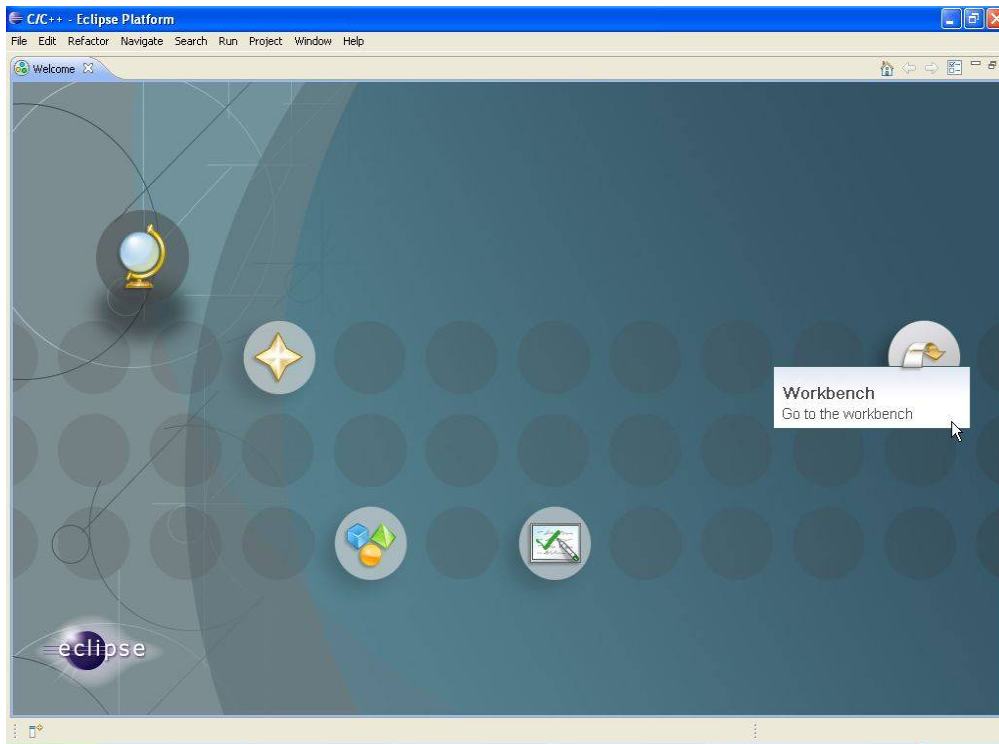
*Starting Eclipse for the first time*

When starting Eclipse for the first time you need to set up a workspace where all your future projects will be stored. To do so enter a path in the pop-up dialog seen on the picture below.



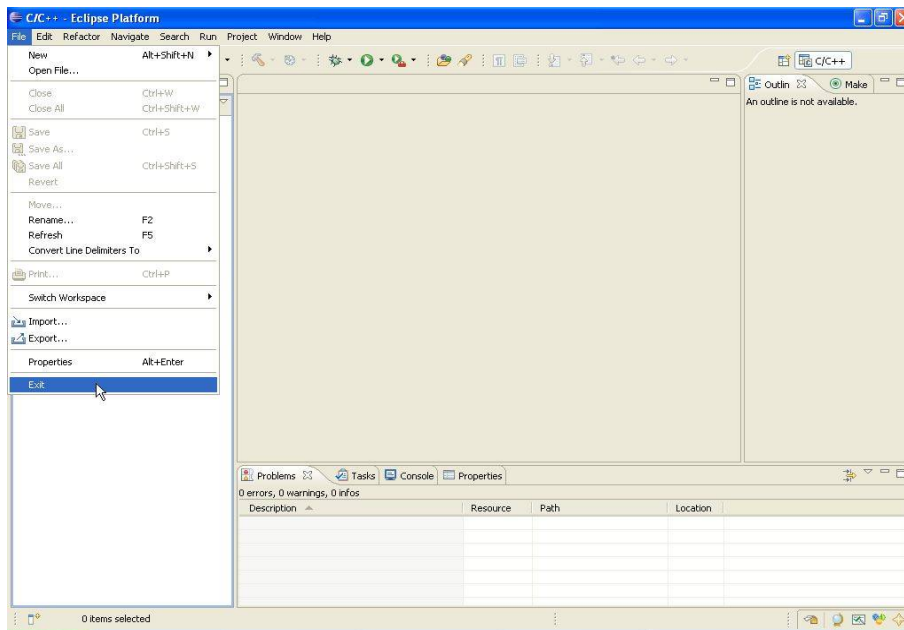
*Creating a new workspace*

After this Eclipse should start up with the welcome screen.



*Eclipse welcome screen*

On the welcome screen click on the „**Workbench**” icon to launch the workbench. A default perspective should appear.



### *Eclipse default workbench with C/C++ perspective*

Ok. So far so good. Now exit Eclipse by clicking on „*File->Exit*”.

#### *b. Installing Qt 4.3.3 for Windows*

To get Qt go to <http://trolltech.com/downloads/opensource>.

Scroll down the page to find various packages for supported platforms and choose the „*Qt Open Source Edition for C++ Developers: Windows Download*”.

#### Qt Open Source Edition for C++ Developers

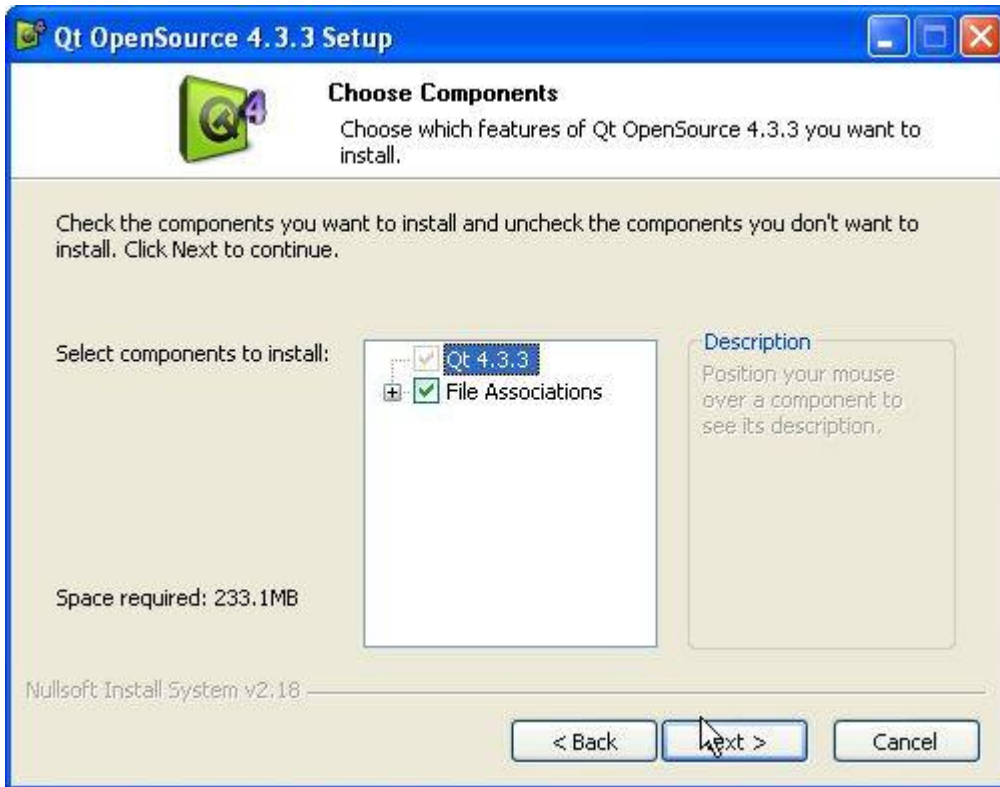
download	description
	<b>Qt Open Source Edition for C++ Developers: Windows Download</b> Qt is a cross-platform application development framework. The Open Source Edition of Qt is available to open source developers under the terms of the GPL version 2.0, and is not intended for commercial, proprietary source projects.
	<b>Qt Open Source Edition for C++ Developers: Mac Download</b> Qt is a cross-platform application development framework. The Open Source Edition of Qt is available to open source developers under the terms of the GPL version 2.0, and is not intended for commercial, proprietary source projects.
	<b>Qt Open Source Edition for C++ Developers: X11 Download</b> Qt is a cross-platform application development framework. The Open Source Edition of Qt is available to open source developers under the terms of the GPL version 2.0, and is not intended for commercial, proprietary source projects.

Select an appropriate mirror and download the installer exe.

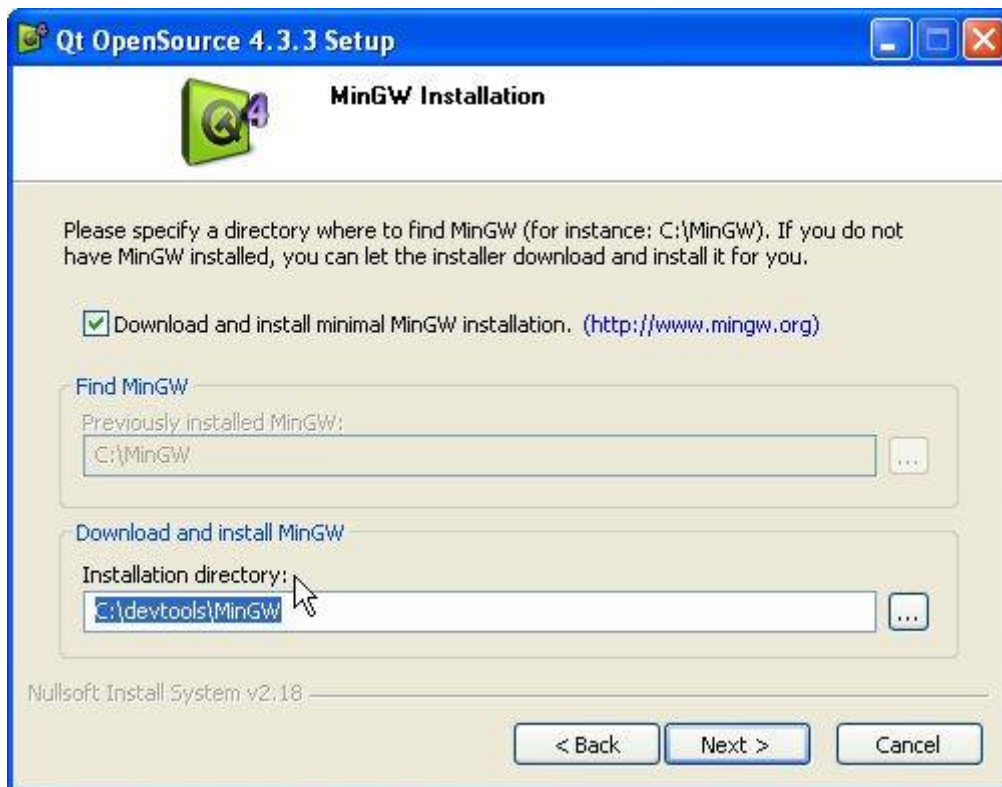
#### **Download from [ftp.trolltech.com](http://ftp.trolltech.com):**

- [qt-win-opensource-src-4.3.3.zip \(about 48 Mb\)](#)
- [qt-win-opensource-4.3.3-mingw.exe \(about 70 Mb\)](#)

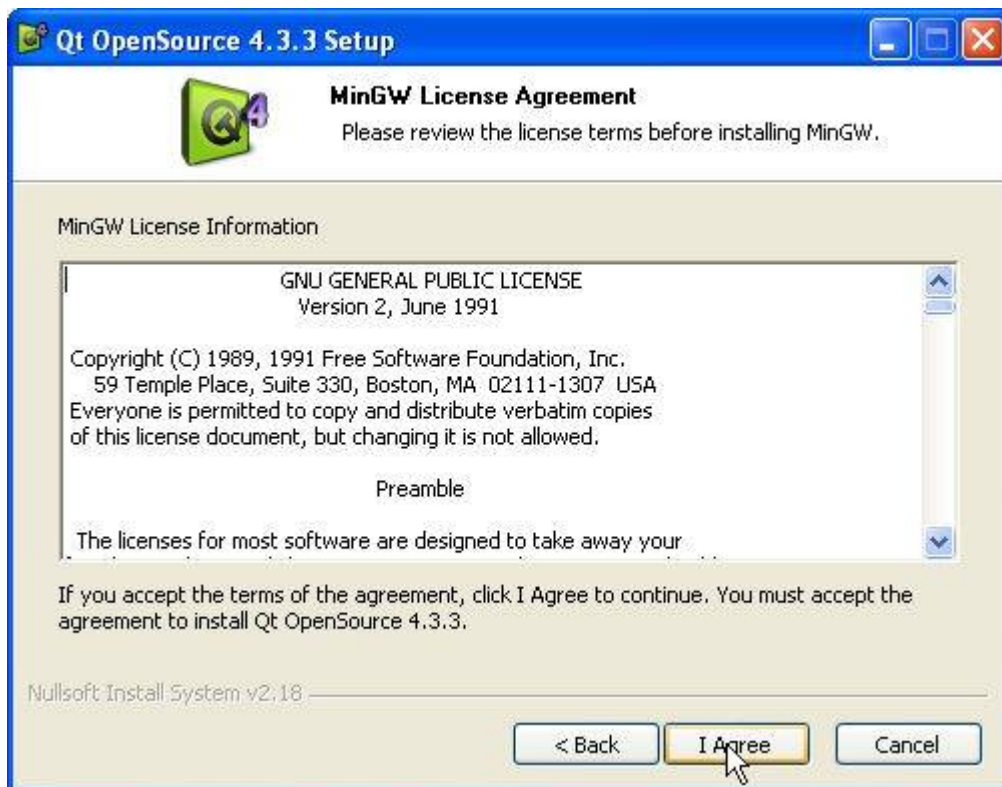
After the download has finished, run the installer and follow the steps.

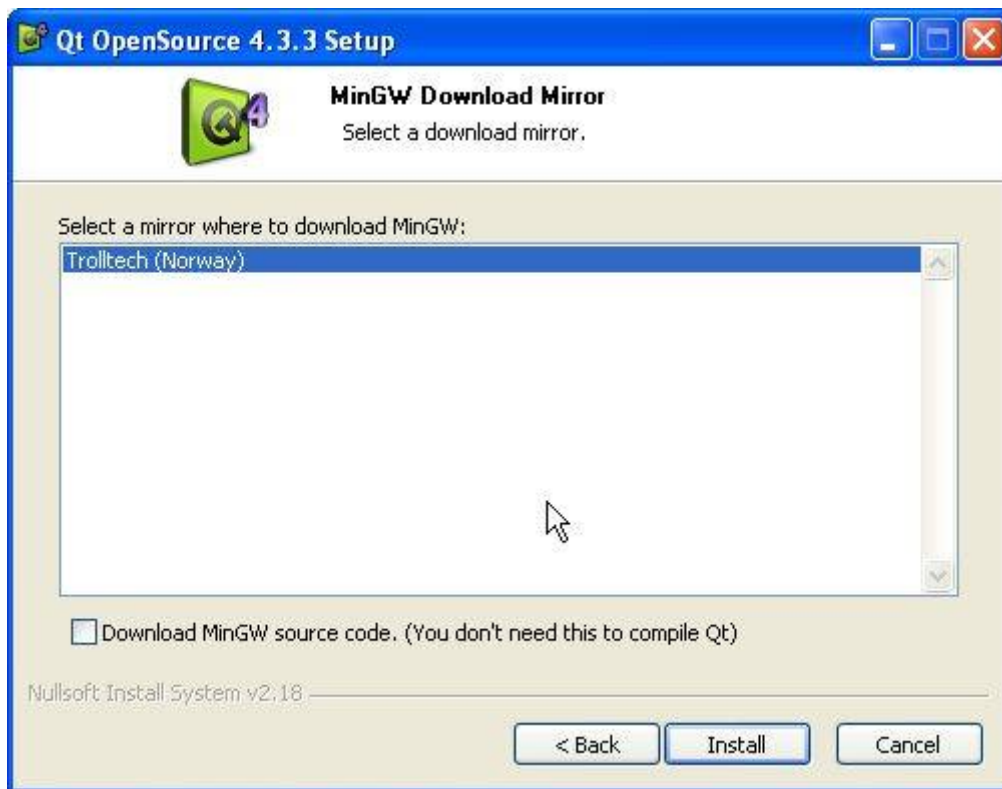


*Select folder to install Qt in*

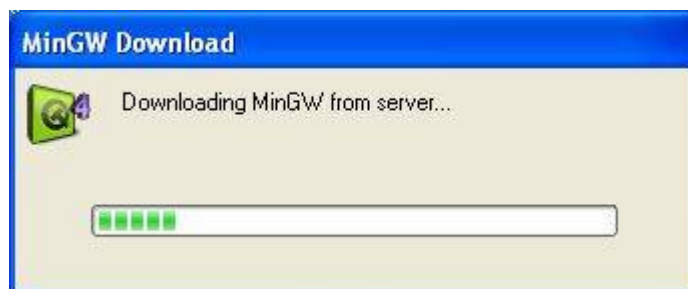


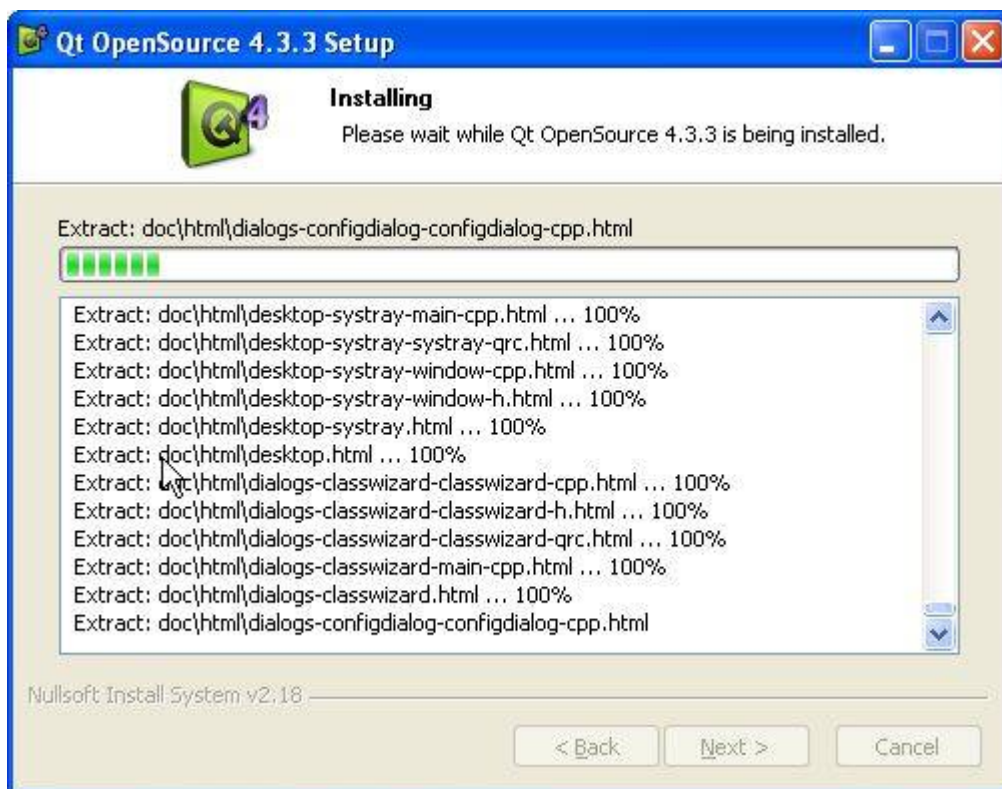
*When asked for MinGW select "Download and install a minimal MinGW installation" and set MinGW installation path*





*Select a mirror but don't select "Download MinGW source code."*





*c. Installing the Eclipse integration plug-in*

While you are on the Trolltech website get the Qt Eclipse Integration Plug-in as well. To get it go to <http://trolltech.com/developer/downloads/qt/eclipse-integration-download>

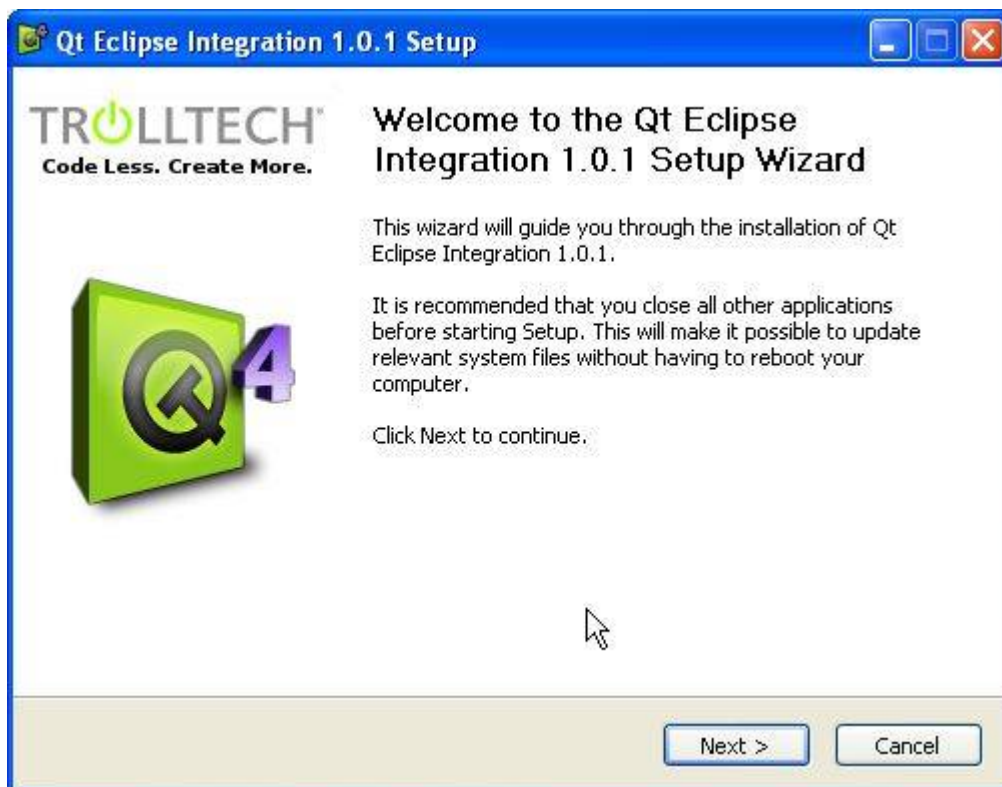
## Qt Eclipse Integration for C++

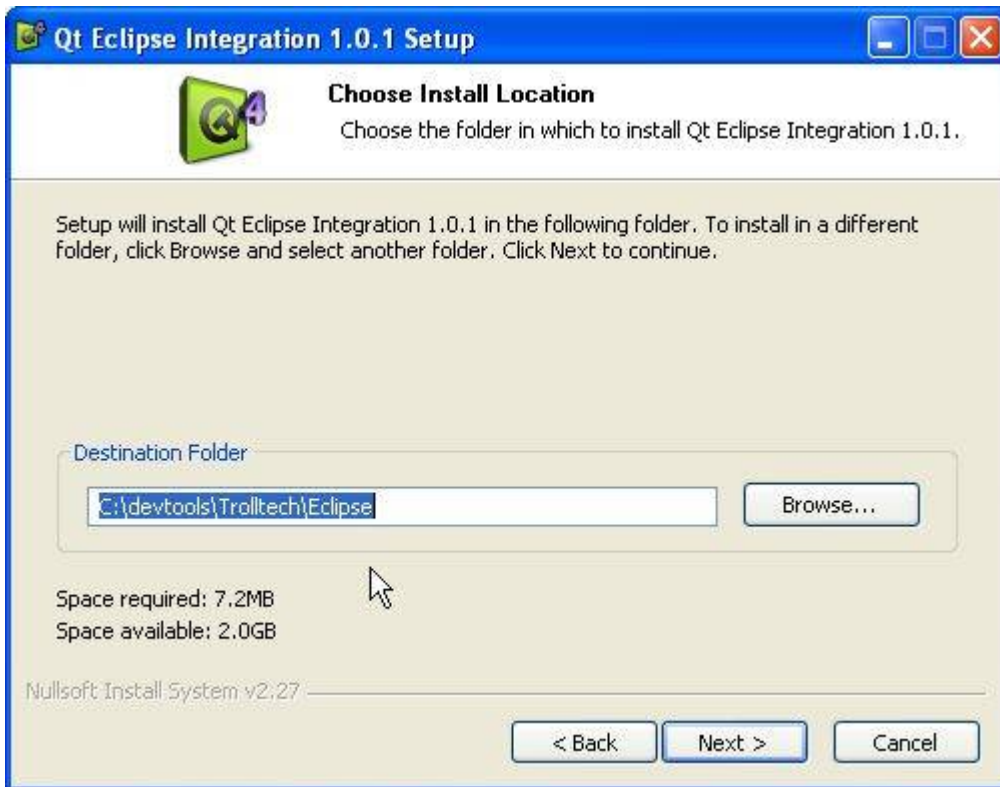
The Eclipse plugin can be used to create programs using any Qt version since 4.1.0.

### Downloads

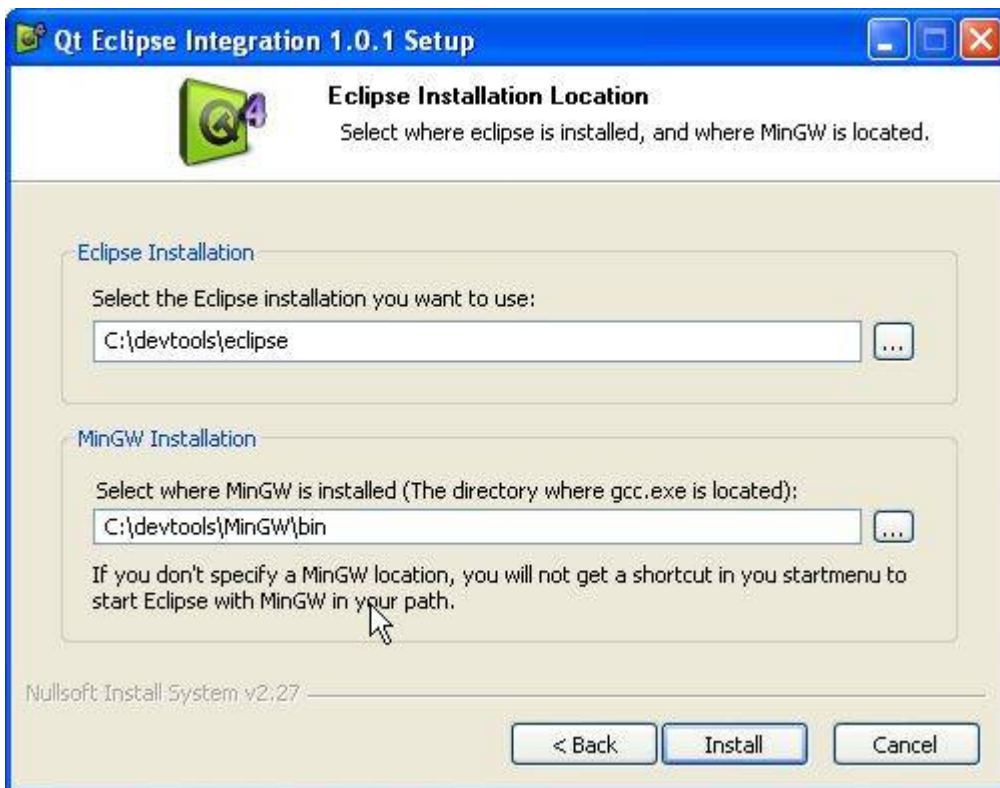
platform	specification	usage guidelines	built with version	download
Windows	Win32	All editions	Qt 4.3.3	<a href="#">Download</a>
Linux (32 bit)	gcc 3.3	All editions	Qt 4.3.3	<a href="#">Download</a>
Linux (32 bit)	gcc 4	All editions	Qt 4.3.3	<a href="#">Download</a>

Select „Download” in the row of Windows and save the executable. When finished downloading run the installer of the plug-in.

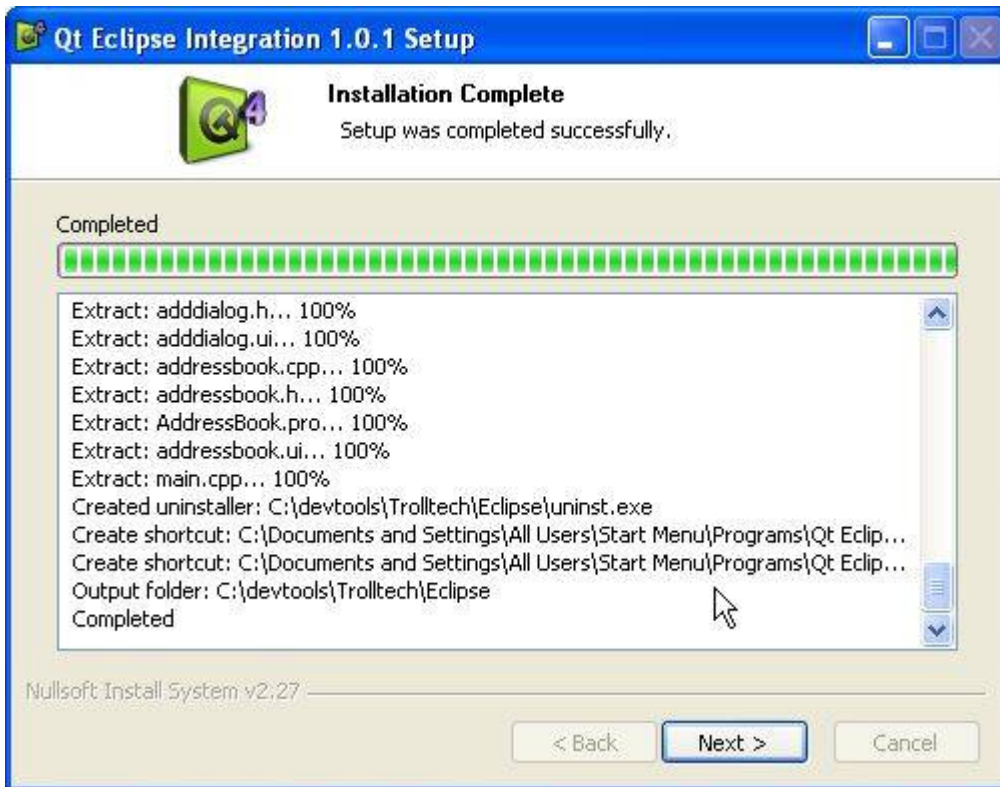




*You can enter a destination path for installation - this is not so important*



*This screen is very IMPORTANT - Enter the path of your Eclipse installation and the path of your MinGW bin directory*



After installing the Eclipse plugin everything should be ready for developing Qt applications using Eclipse except one thing - environment variables for MinGW.

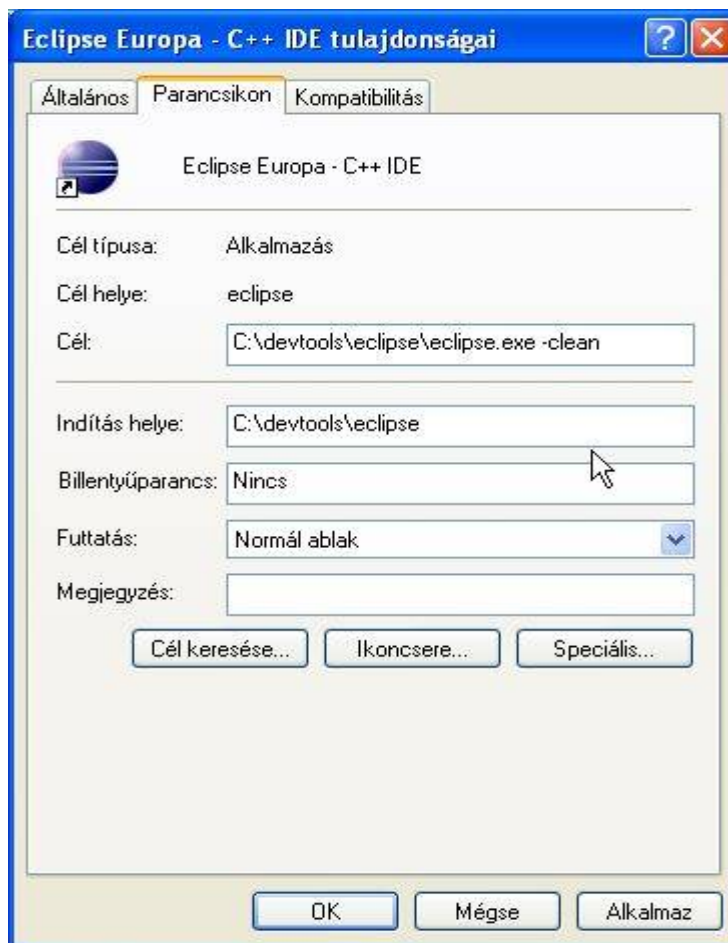
The MinGW bin dir is by default not added to the `PATH` variable of your system. To fix this, right click on „My Computer”, select *Properties->Special Tab->Environment variables*. Find the value „Path”, select „Edit” append a „ ; ” and the path of your MinGW `bin` directory.



*Adding the MinGW bin directory to your PATH environment variable*

Ok, almost! :)

Before you begin, you need to fix a little „bug” in Eclipse. It's documented and should be fixed. If you have a shortcut to Eclipse on your desktop, right click it -> „*Properties*” and append a „`-clean`” (without quotemarks) to the executable, as seen below.



So now you are really ready. :) Let's start Eclipse! If everything is OK, after selecting the previously created workspace, you should get a screen like this:



Eclipse starts up and asks you if you want to launch the „Qt Cheat Sheet“. Click on yes and read the tutorial on how to create Qt applications using Eclipse.

*Additional comments:*

- Before doing anything you need to set which Qt install to use. To do this, in Eclipse select „*Window->Preferences*“ and the „*Qt*“ item in the tree. Click on „*Add*“. Fill in the version name box (for example with 4.3.3), then in the „*Bin path*“ line click on „*Browse*“ and select your Qt install's bin directory (for me it is `C:\devtools\qt\bin`). The rest will be filled automatically. Click on „*Finish*“. In the settings dialog, select the new Qt installation item (4.3.3) and click the „*Default*“ button. This makes the current Qt installation to be the default to use by Eclipse.

- AFTER creating a new Qt project via „*File->New->Other...->Qt*“, you have to add the Qt includes to your project. To achieve this, right-click your project in the „*Project Browser*“ select „*Properties*“. In the settings dialog choose „*C/C++ Include Paths and Symbols*“. Click on „*Add External Include Path...*“ and add all subfolders of `$QTDIR$\include\` (for example `C:\devtools\qt\include\QtCore`, `C:\devtools\include\qt\QtGui` and so on...). You can simply add `C:\devtools\qt\include` but then the C/C++ Indexer of Eclipse won't index methods/functions found in the subdirectories...

I hope you will succeed and have fun developing applications using Qt/Eclipse. ;)