# Installation process on Linux

General notes:

Nothing is written to the hard drive until "Finish" button is pressed. This can happen at any time, even the first screen. All the settings have safe initial (recommended setting), so that finishing without setting everything will always result into working installation.

This process takes place upon the first run of TheIDE, but can be invoked on request using command line parameter *-install* when starting TheIDE. It can be also invoked from running TheIDE using the item *Source management..* in *Setup* menu.
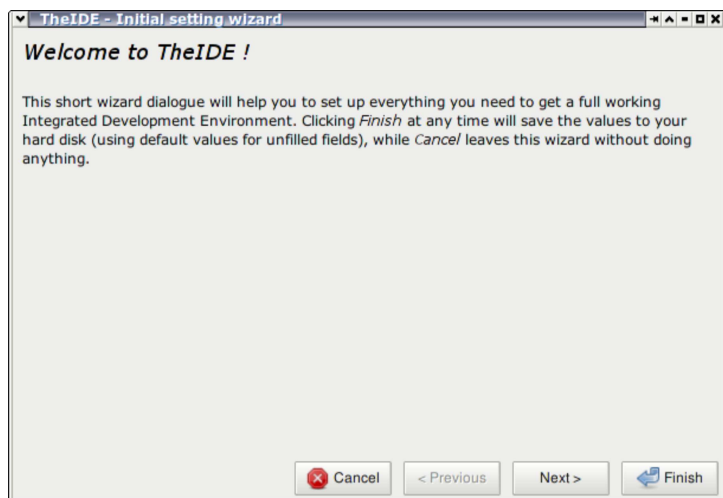
Upon the first run of your new TheIDE on your Linux machine, you will be presented with an "Initial setting wizard". This is a simple tool that will ask you a couple of questions and set up how your U++ sources should be handled by automatic update mechanism.
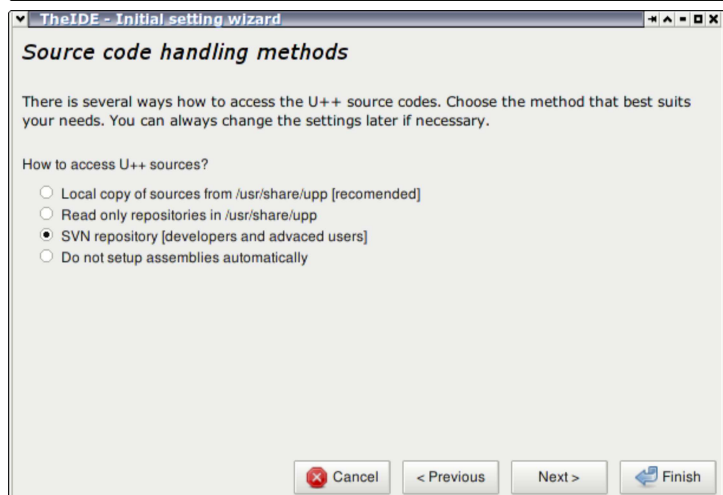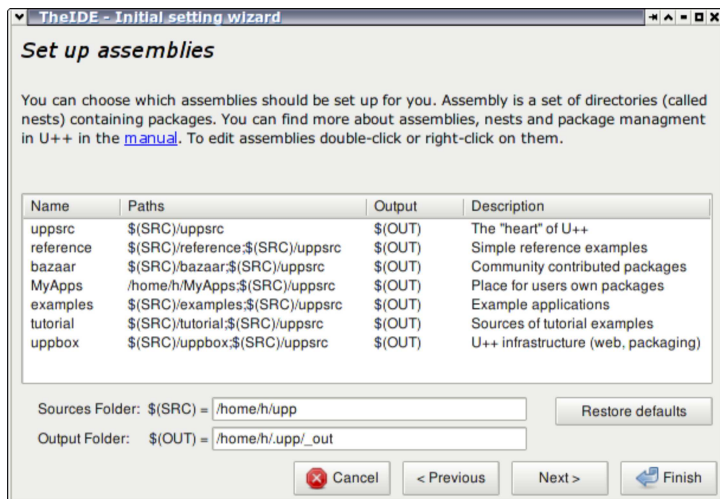

First you have to choose where should your sources come from. If you use one of the distributions that U++ has packages for, than you can select one of the first two options. The second, read only, option is however good only if you are sure you will not want to modify the U++ sources. The third option is designed to use SVN versioning system (more about that later) and the fourth is for advanced users who prefer to manage the sources manually.
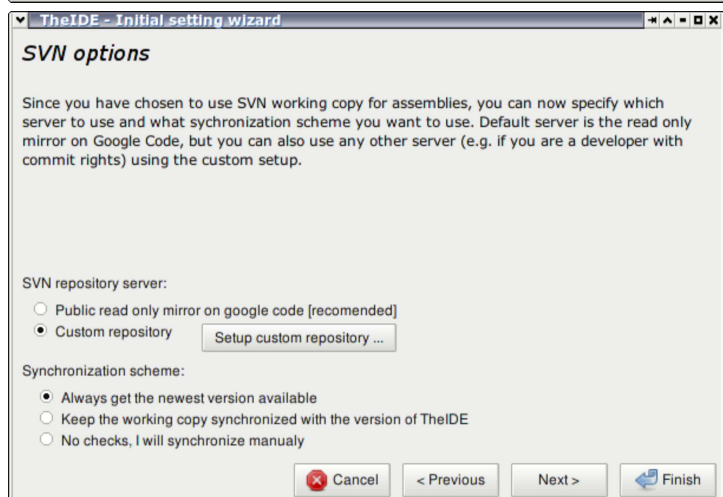
This step only appears if you have previously chosen SVN. You can use either the public mirror on google code, or setup all the information manually (intended mainly for U++ developers to use with head server).

You can also chose whether the automatic updater should offer you every new version available, or only those matching with your current TheIDE version (e.g. when you want to use only stable releases) or if you want to check only manually.

Set up assemblies

You can choose which assemblies should be set up for you. Assembly is a set of directories (called nests) containing packages. You can find more about assemblies, nests and package managment in U++ in the manual. To edit assemblies double-click or right-click on them.

Name	Paths	Output	Description
uppsrc	$(SRC)/uppsrc	$(OUT)	The "heart" of U++
reference	$(SRC)/reference;$(SRC)/uppsrc	$(OUT)	Simple reference examples
bazaar	$(SRC)/bazaar;$(SRC)/uppsrc	$(OUT)	Community contributed packages
MyApps	/home/h/MyApps;$(SRC)/uppsrc	$(OUT)	Place for users own packages
examples	$(SRC)/examples;$(SRC)/uppsrc	$(OUT)	Example applications
tutorial	$(SRC)/tutorial;$(SRC)/uppsrc	$(OUT)	Sources of tutorial examples
uppbox	$(SRC)/uppbox;$(SRC)/uppsrc	$(OUT)	U++ infrastructure (web, packaging)

Sources Folder: $(SRC) = /home/h/upp   Restore defaults

Output Folder: $(OUT) = /home/h/.upp/_out

Cancel   < Previous   Next >   Finish

Thank you ...

That is all, thank you for your patience. Now just click *Finish* to save all the changes to your hard drive. TheIDE will now proceed to start up normaly.

Happy coding with TheIDE!

Cancel   < Previous   Next >   Finish

The final step allows you to set up your assemblies (unless you said you will do it manually at the first step). By default, the 6 basic assemblies will be offered (plus uppbox in case of SVN based installation). Any other assemblies that might already exist on your computer are detected and manageable as well. To save you some typing, two "variables" might be used to specify often appearing paths. Please note that the value of $(SRC) is also used to determine where the source files should be installed.
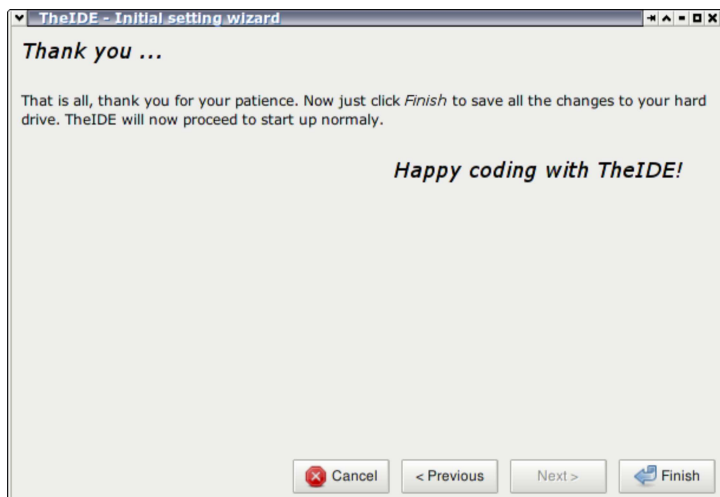
And that's it! It did not take too long, did it? After pressing finish, the sources will be copied/downloaded from SVN as necessary, assemblies will be set up and TheIDE will be started. No files will be deleted (with only exception of deleting assembly, which asks for confirmation) in the installation process, but if there are files with matching names (e.g. from older U++ installation), they will be overwritten.

Automatic updates of sources

(POSIX specific)

If user selected one of the methods allowing for source updates (local copy or SVN) in the initial setup wizard, TheIDE will check periodically if there is a newer version available. The check can also be initiated manually from the *Setup* menu.

The check is performed every 15 minutes and happens in a background process, so it should not distract user in anyway. Also, if an update is found, no startling "update now" window pops up. The only indicator of available update is that the icon of *Check sources..* button in the top bar and in *Setup* submenu changes from yellow question mark () to red exclamation mark ().

When clicking on this button (or choosing equivalent *Check sources..* or *Install updates..* commands in *Setup* menu) the sources availability is checked and in case the update is found (and is accessible) an informative dialog appears, displaying current and available version and asking what to do.
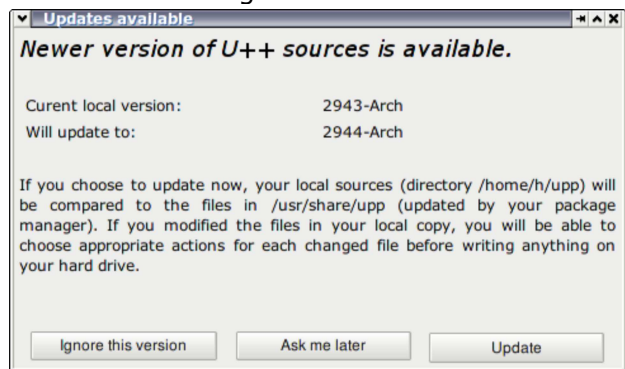
The options are always:
- *Ignore this version.* This suppresses the "updates available state" until next version is found or you click on *Check for sources..*
- *Ask me later.* This just postpones the dialog. TheIDE will still offer you to update through the *Install updates..* icon.
- *Update now.* Initiates the update.

The updater is aware of changes in users local copy (working copy in case of SVN), so it always analyzes and displays the differences. To resolve which files to update and how, the user can overview the changes and choose from selection of possible actions. The interface is usvn in case of SVN based installation and a very similar dialog in case of user copy of local sources (just operating on local sources, see the image below).
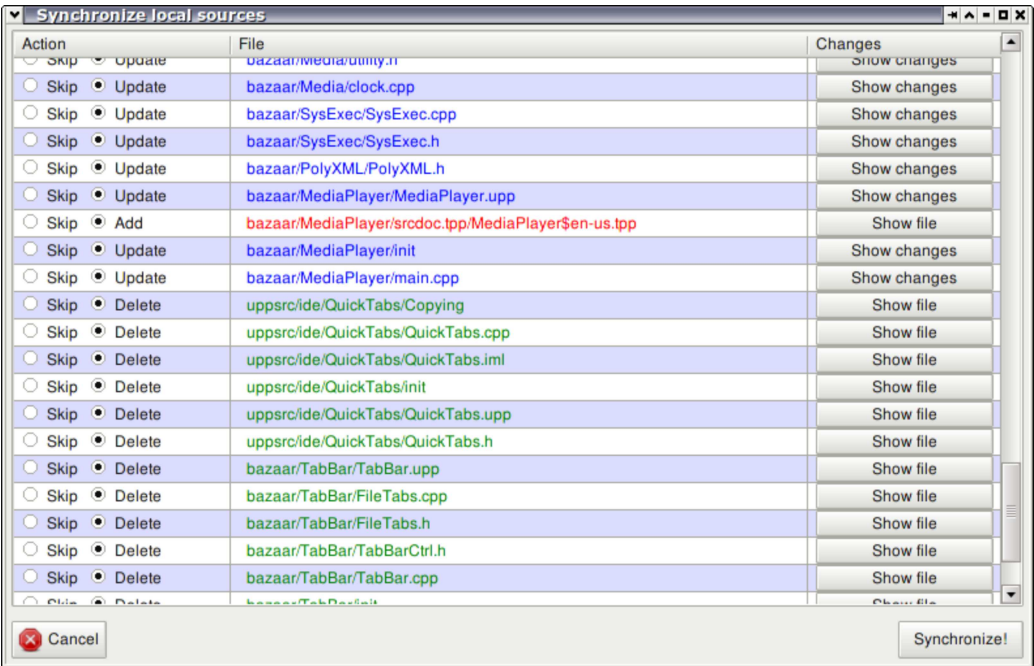
The update process can be safely exited (without writing anything to hard drive) at anytime. The changes are applied only when the user is happy with the settings and clicks on the *Synchronize!* button.