

Building in Eclipse

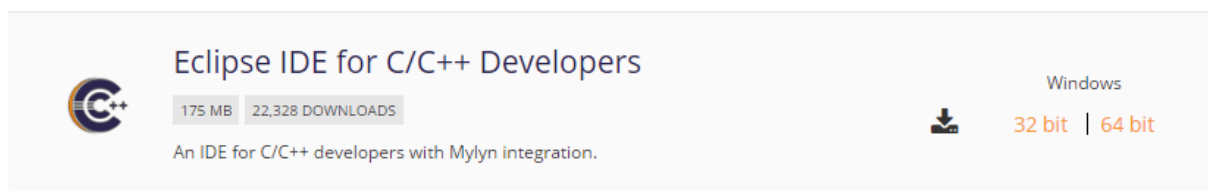
Here is a recipe for building Arduino apps in Eclipse on Windows 7. The end result will be an Eclipse environment in which Arduino projects can be edited, compiled and deployed.

In this tutorial we are using the **very** latest of every release as of 2015-06-28

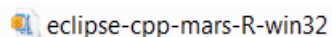
1. Create a folder called C:\Arduinio.

You don't have to use this folder, just ensure that it is a path without a space in its name and that in the following instructions you replace "C:\Arduinio" with your own choice.

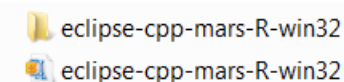
2. Download Eclipse Mars IDE for C/C++ developers



The download is about 175MBytes. Place it in [C:\Arduinio](#).

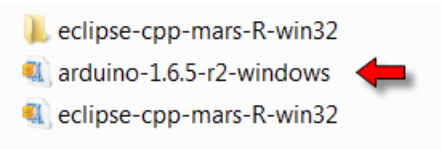


3. Extract the Eclipse IDE to [C:\Arudinio](#)

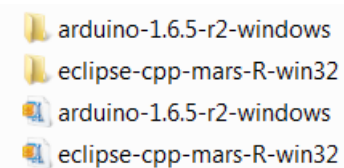


4. Download the latest Arduino IDE

As of writing, that is 1.6.5-r2

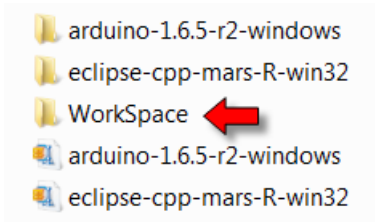


5. Extract the Arduino IDE

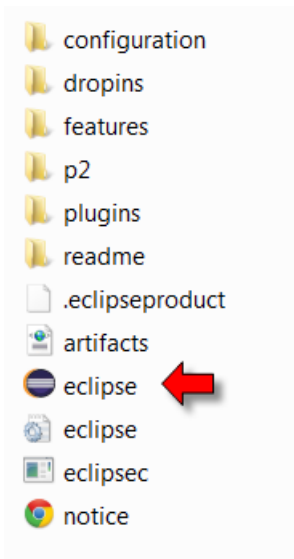


6. Create a WorkSpace folder

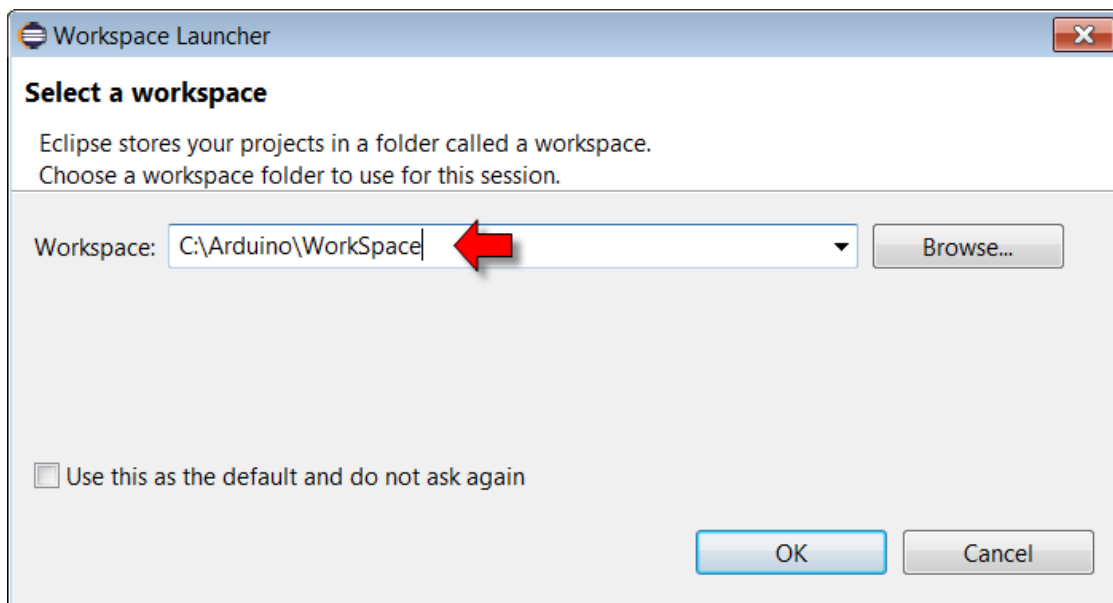
Create a folder to acts as the Eclipse WorkSpace



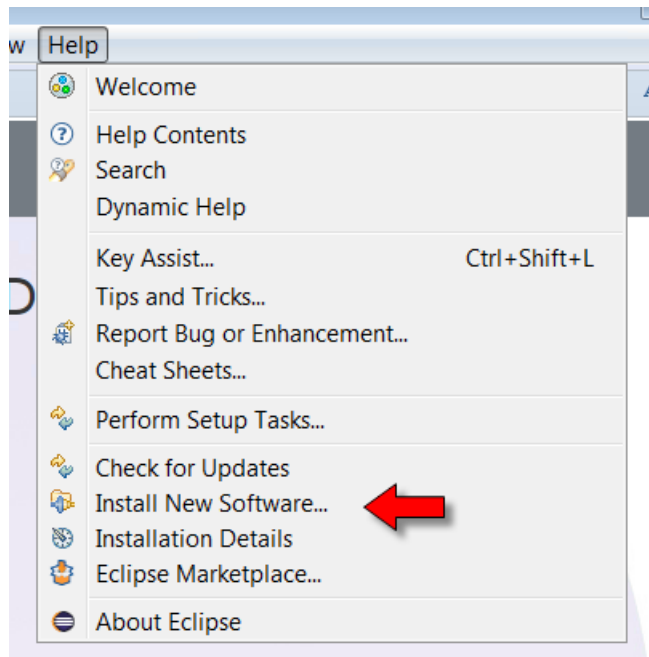
7. Launch the Eclipse you just downloaded



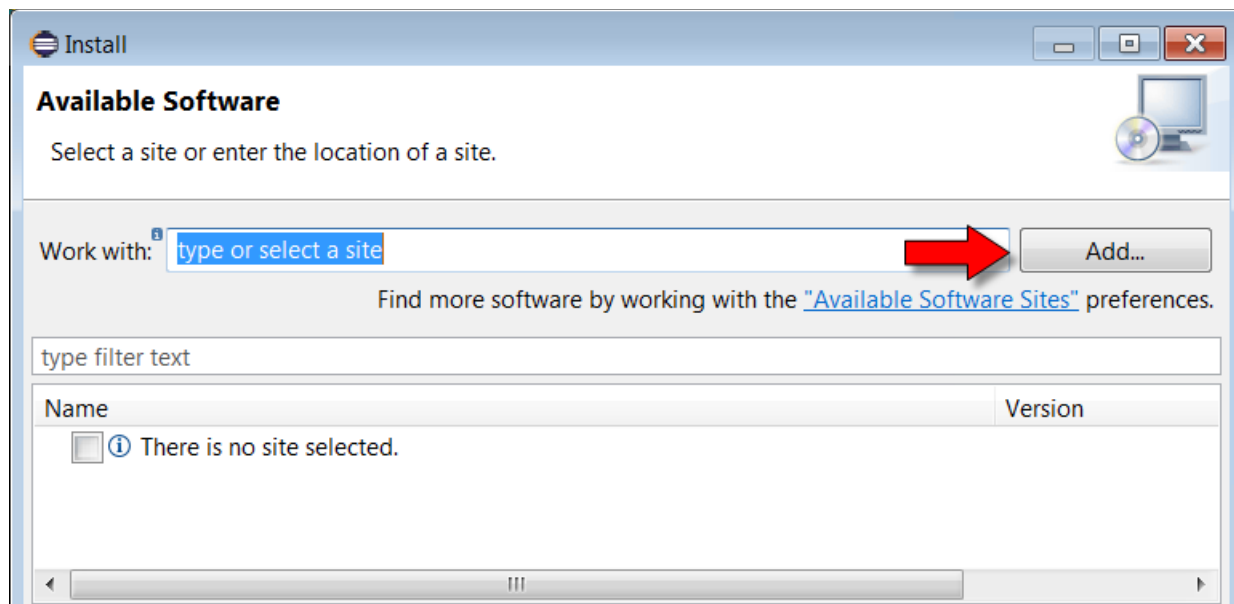
8. Select the workspace you just created:



9. Open Help → Install New Software...



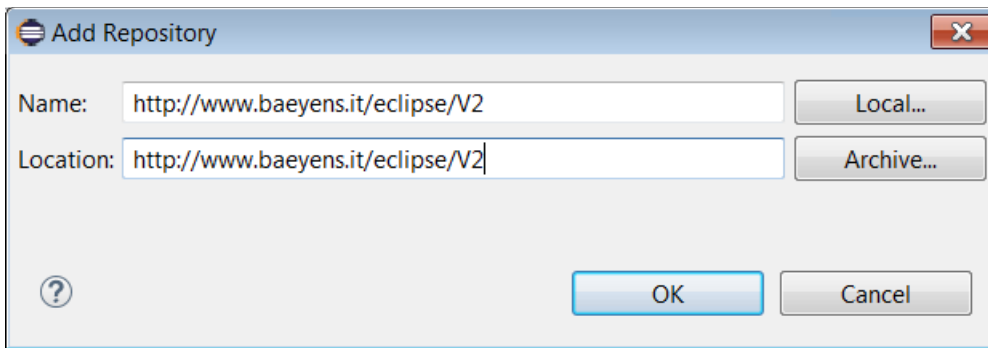
10. Add a new software site



11. Supply the Eclipse plugin for Arduino URL

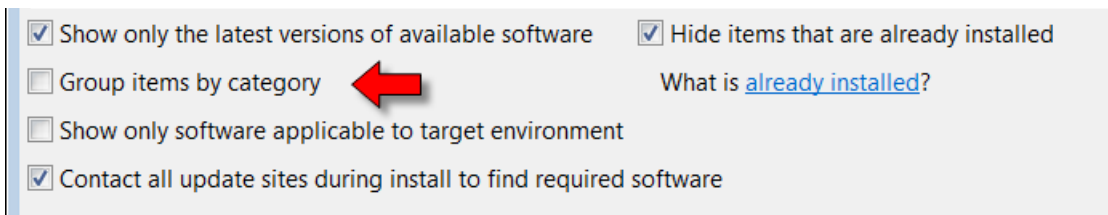
The URL for the Eclipse plugin for Arduino is:

<http://www.baeyens.it/eclipse/V2>




12. Un-check "Group items by category"

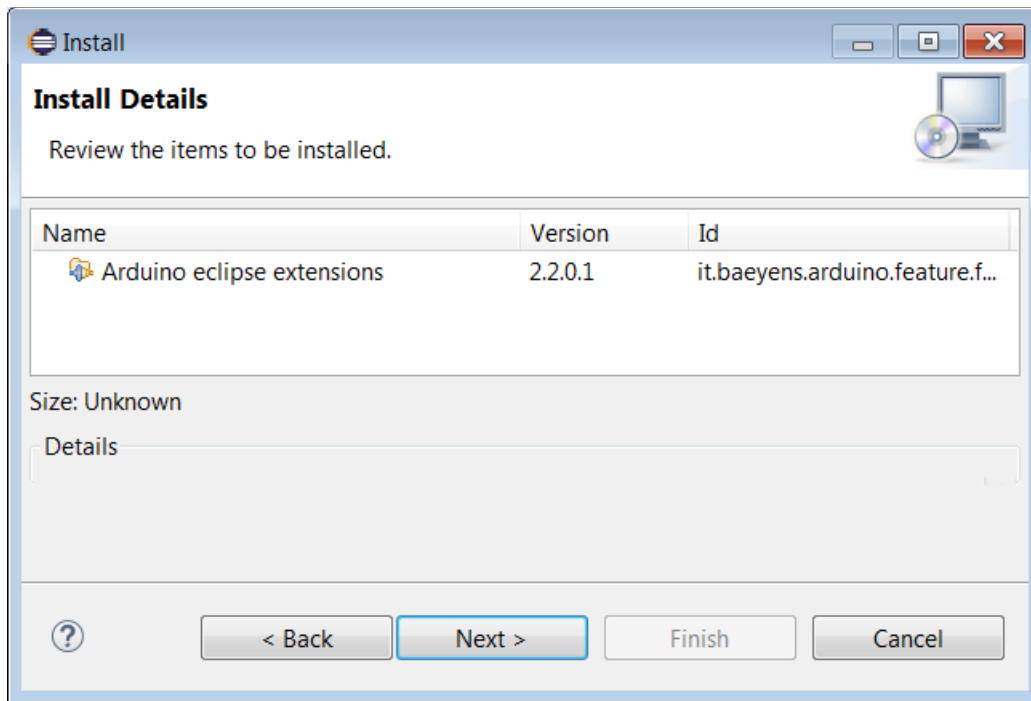
By default, there is a check mark beside "Group items by category". This prevents us from seeing the plugins to install. Un-check that box.



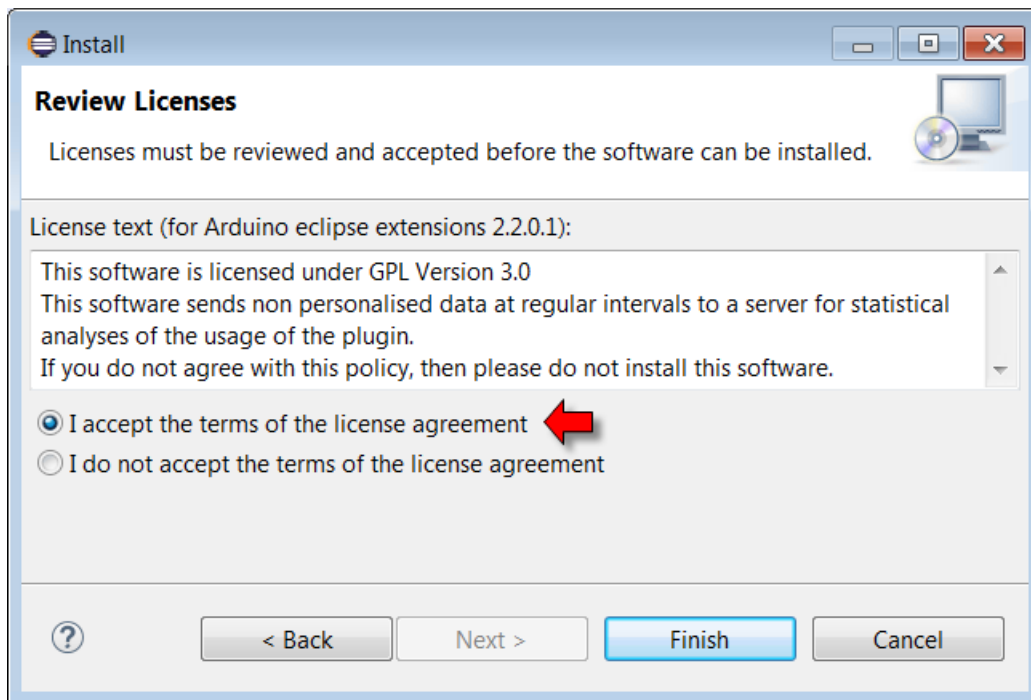
13. Select the Arduino eclipse extensions

Name	Version
<input checked="" type="checkbox"/>  Arduino eclipse extensions	2.2.0.1

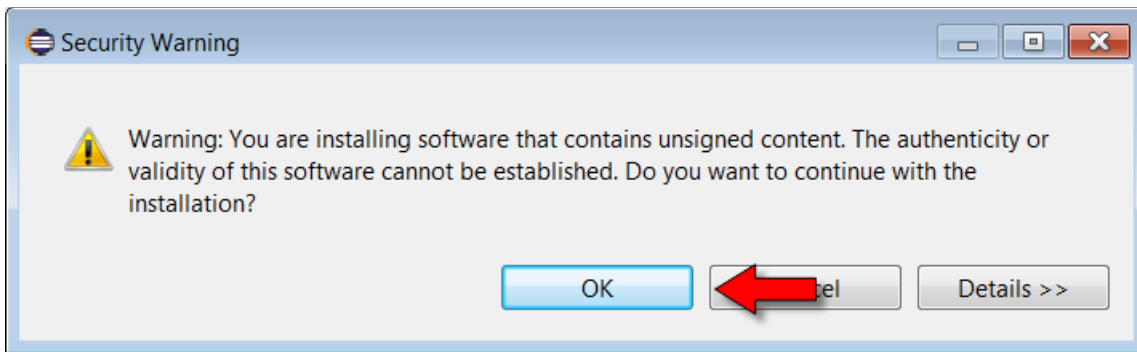
14. Review the Install Details



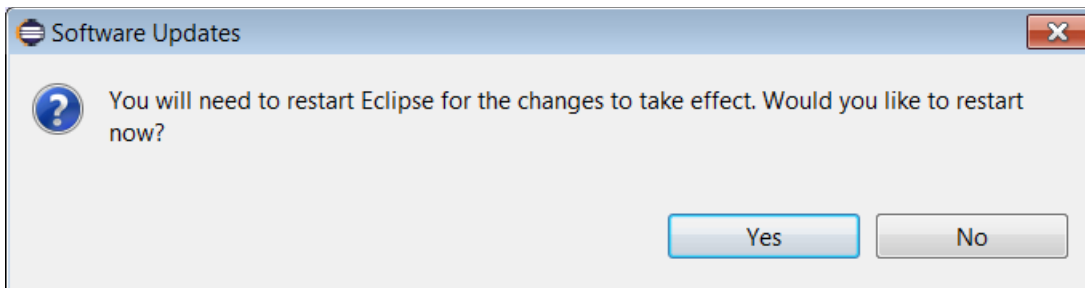
15. Review and accept the license



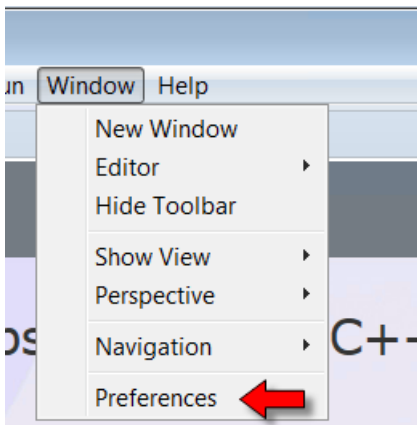
16. Accept the Security Warning



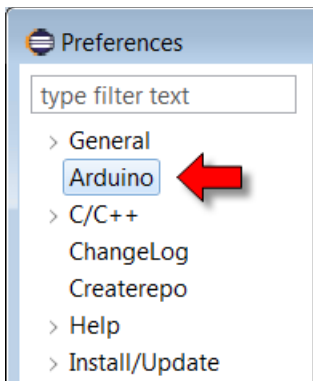
17. Restart Eclipse



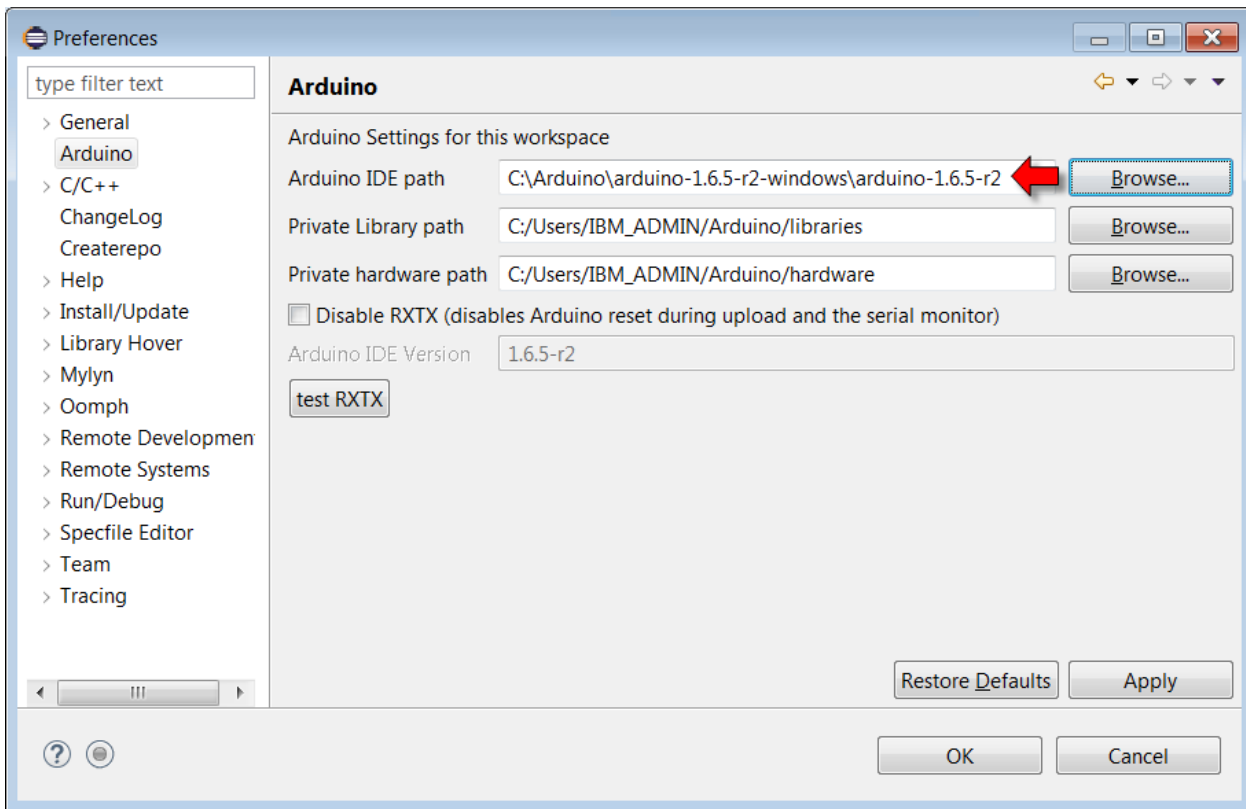
18. Open Window → Preferences



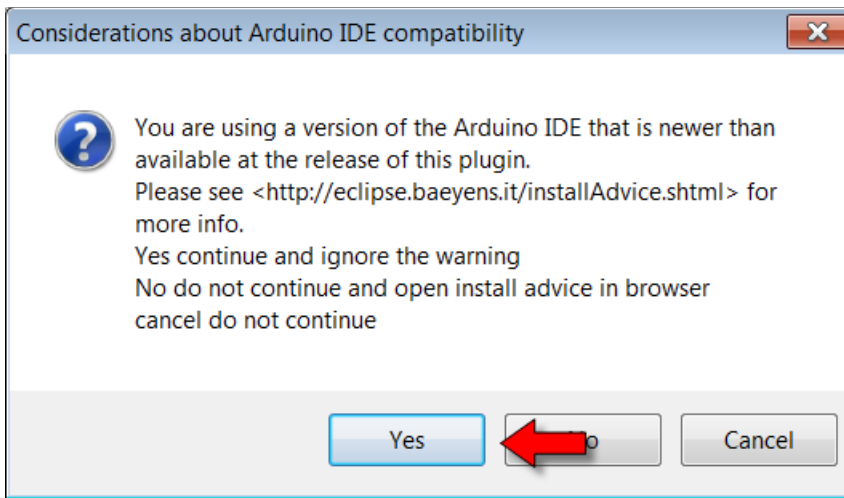
19. Select the Arduino settings



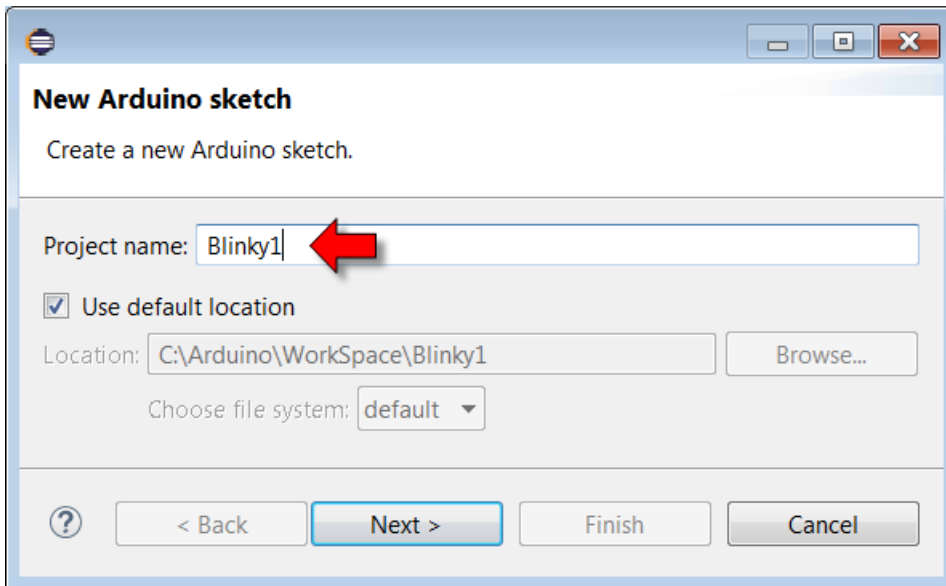
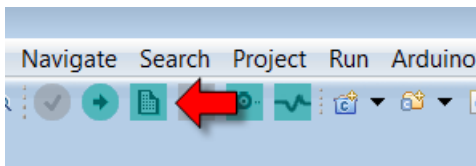
20. Specify the path to the Arduino IDE

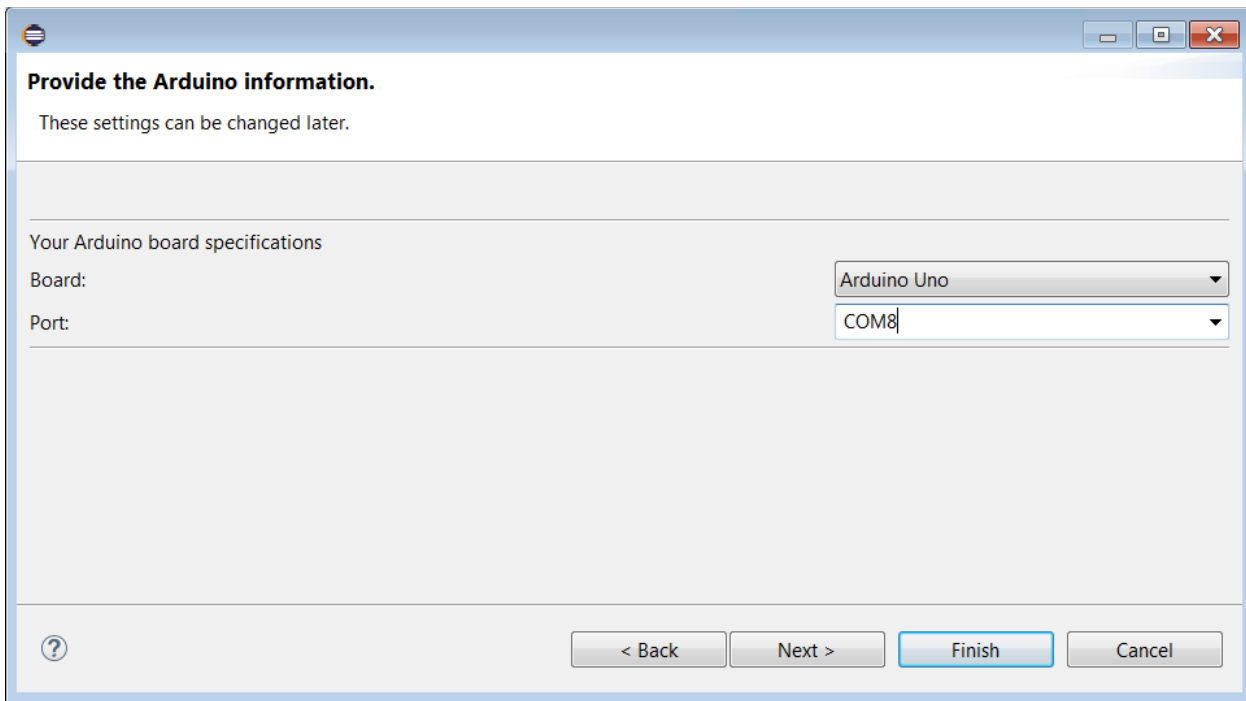


Accept the warning about the version of the Arduino IDE being untested:

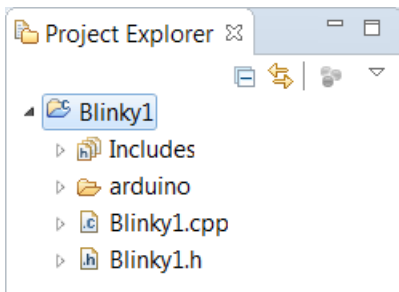


21. Create a new Sketch (Project)

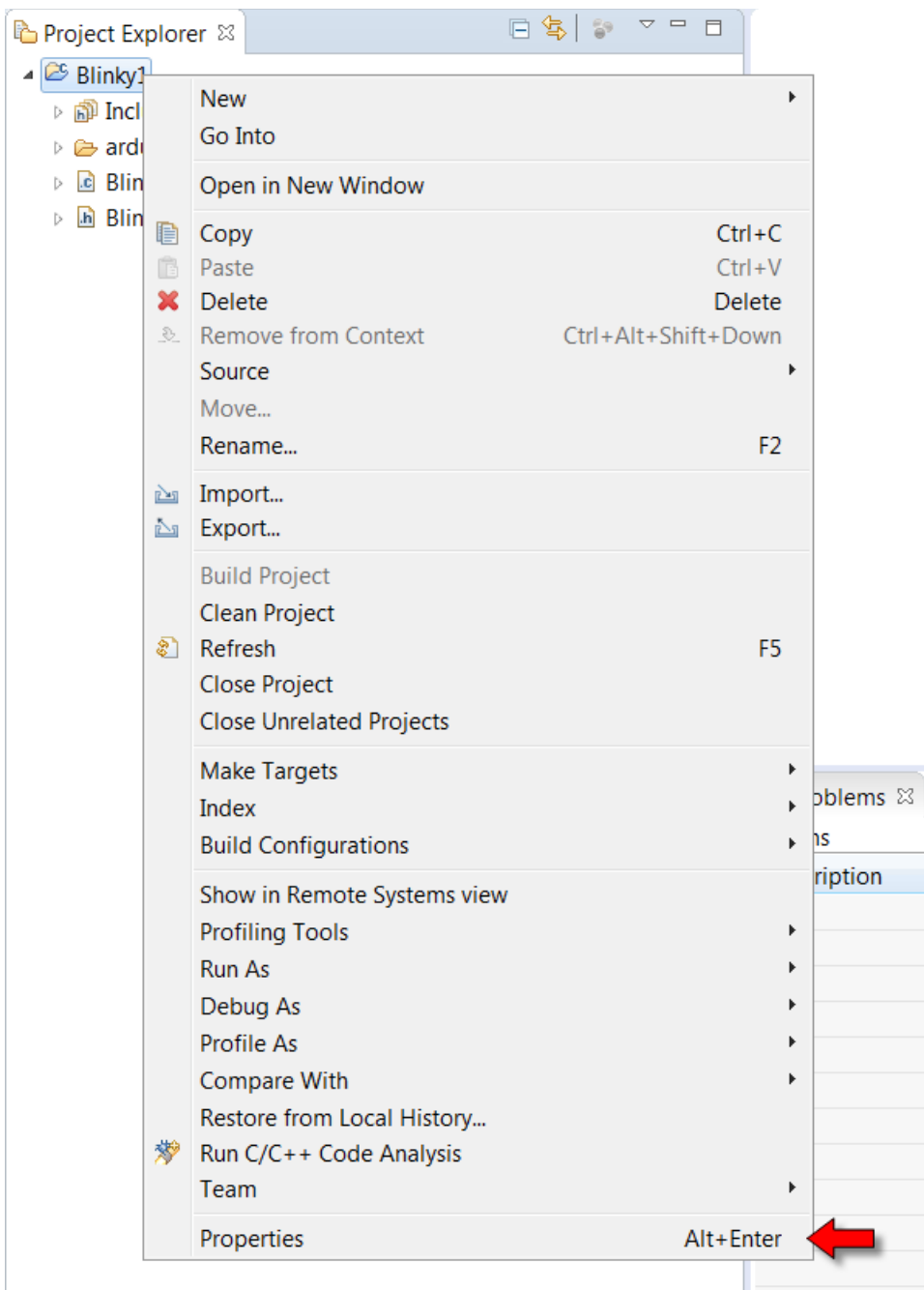




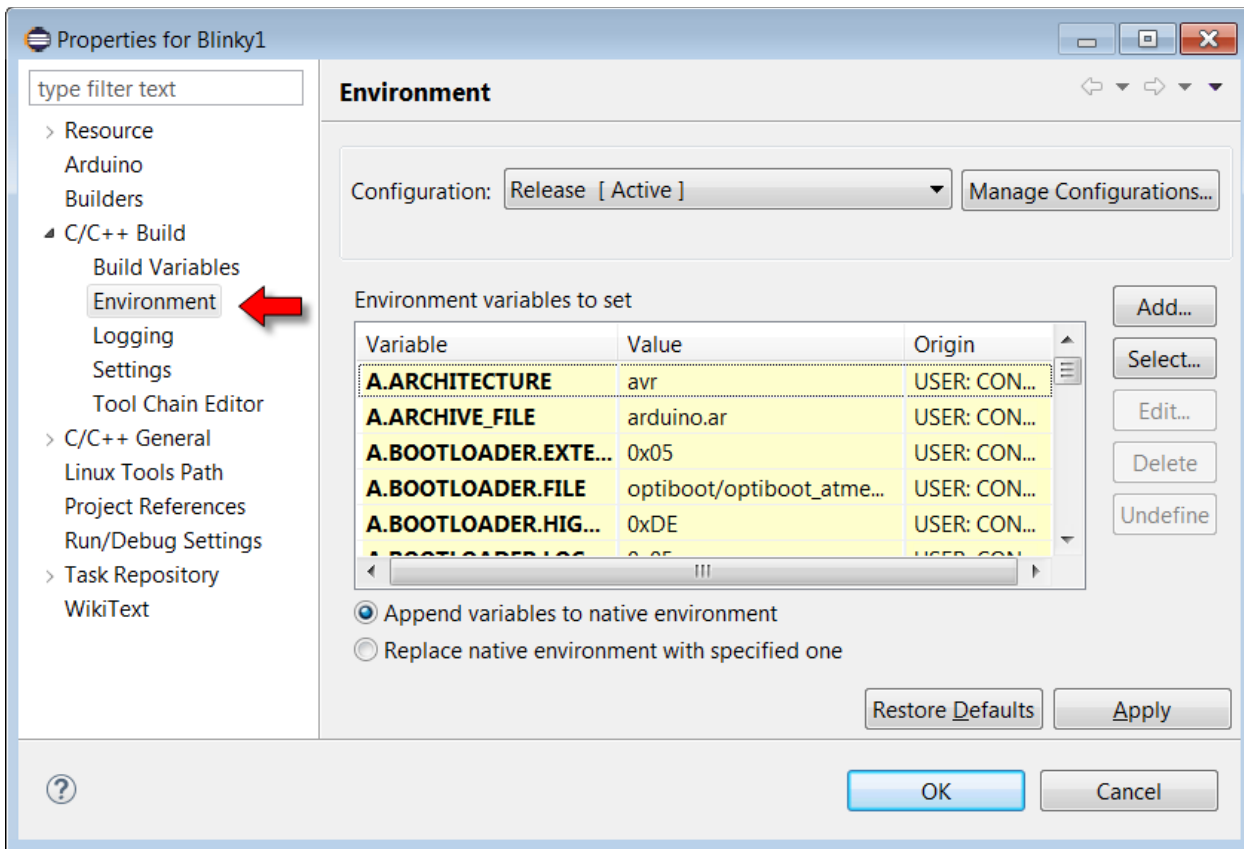
22. Review the generated code



23. Edit the compiler settings



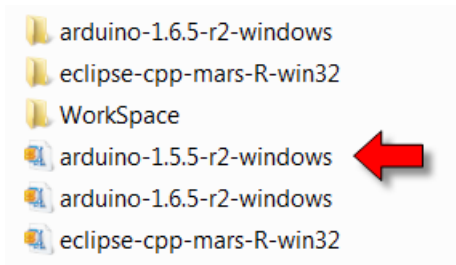
24. Open the C/C++ build Environment



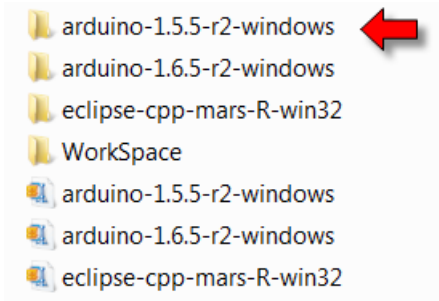
25. Add two new variables

- A.TOOLS.BOSSAC.PATH → \${A.RUNTIME.HARDWARE.PATH}/tools/avr
- A.RUNTIME.TOOLS.AVR-GCC.PATH → \${A.RUNTIME.HARDWARE.PATH}/tools/avr

26. Download Arduino 1.5.5-r2



27. Extract Arduino 1.5.5-r2



28. Copy "make.exe"

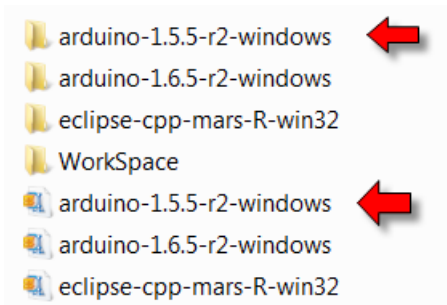
Copy the file called "make.exe" from

C:\Arduino\arduino-1.5.5-r2-windows\arduino-1.5.5-r2\hardware\tools\avr\utils\bin

to

C:\Arduino\arduino-1.6.5-r2-windows\arduino-1.6.5-r2\hardware\tools\avr\bin

(Optional: You can now delete the arduino-1.5.5-r2-windows ZIP and folder)



29. Use the environment

You now have an environment ready to run and use. Full documentation on the Eclipse plugin for Arduino can be found here:

<http://www.baeyens.it/eclipse/>

Debugging – The debug log for a build can be found in
Workspace/.metadata/.plugins/org.eclipse.cdt.ui/*.build