OpenModelica Eclipse Setup

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Important notices

- Make sure you use paths with no spaces
  - For Eclipse workspace
  - For OpenModelica project
- Make sure your Eclipse is not running until the slide which tells you to start Eclipse

- If you want omc to include the revision number in the omc version install TortoiseSVN command line svn client and put it in your path

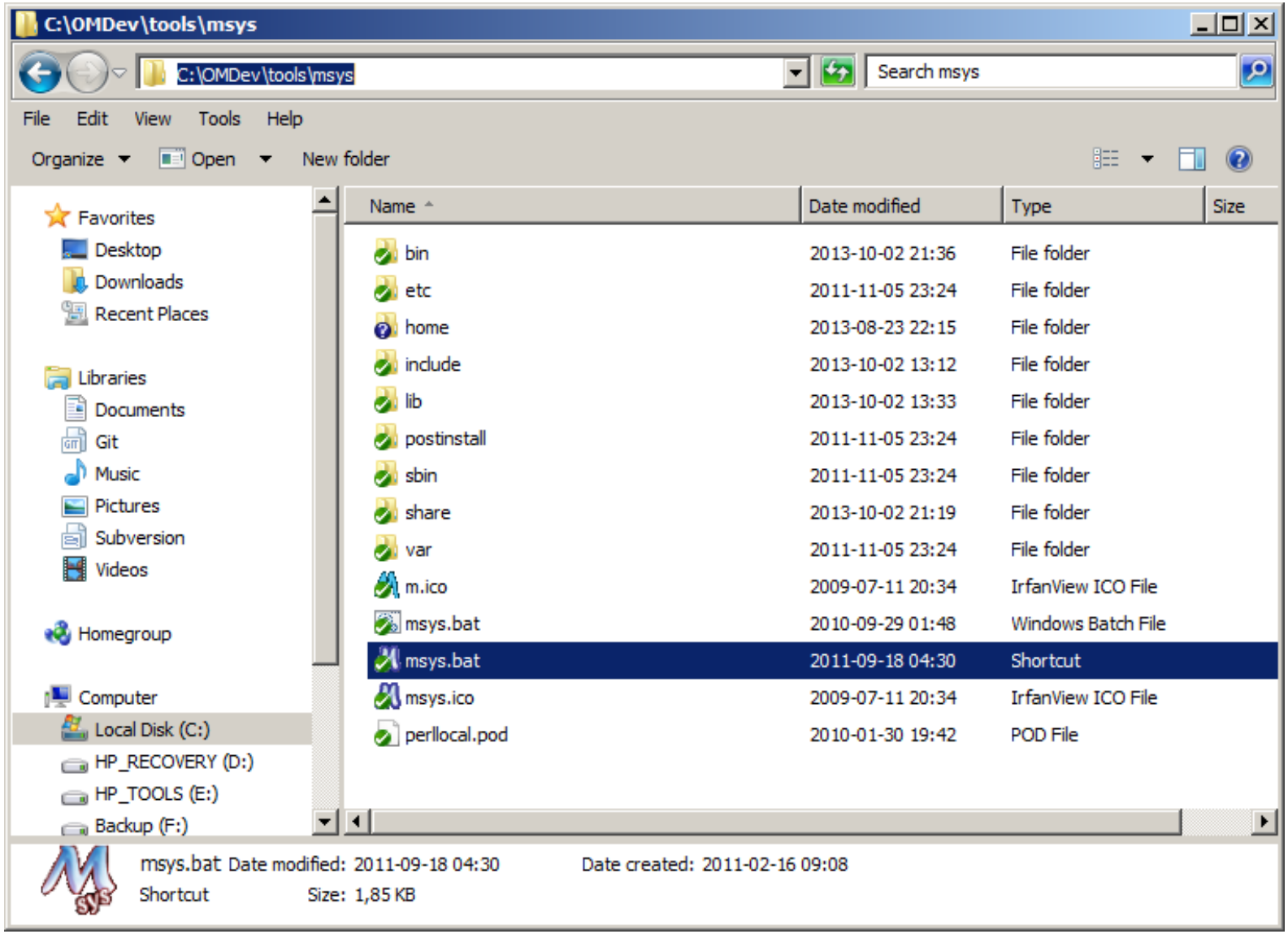
Checkout OMDev into C:\OMDev

- OMDev url:

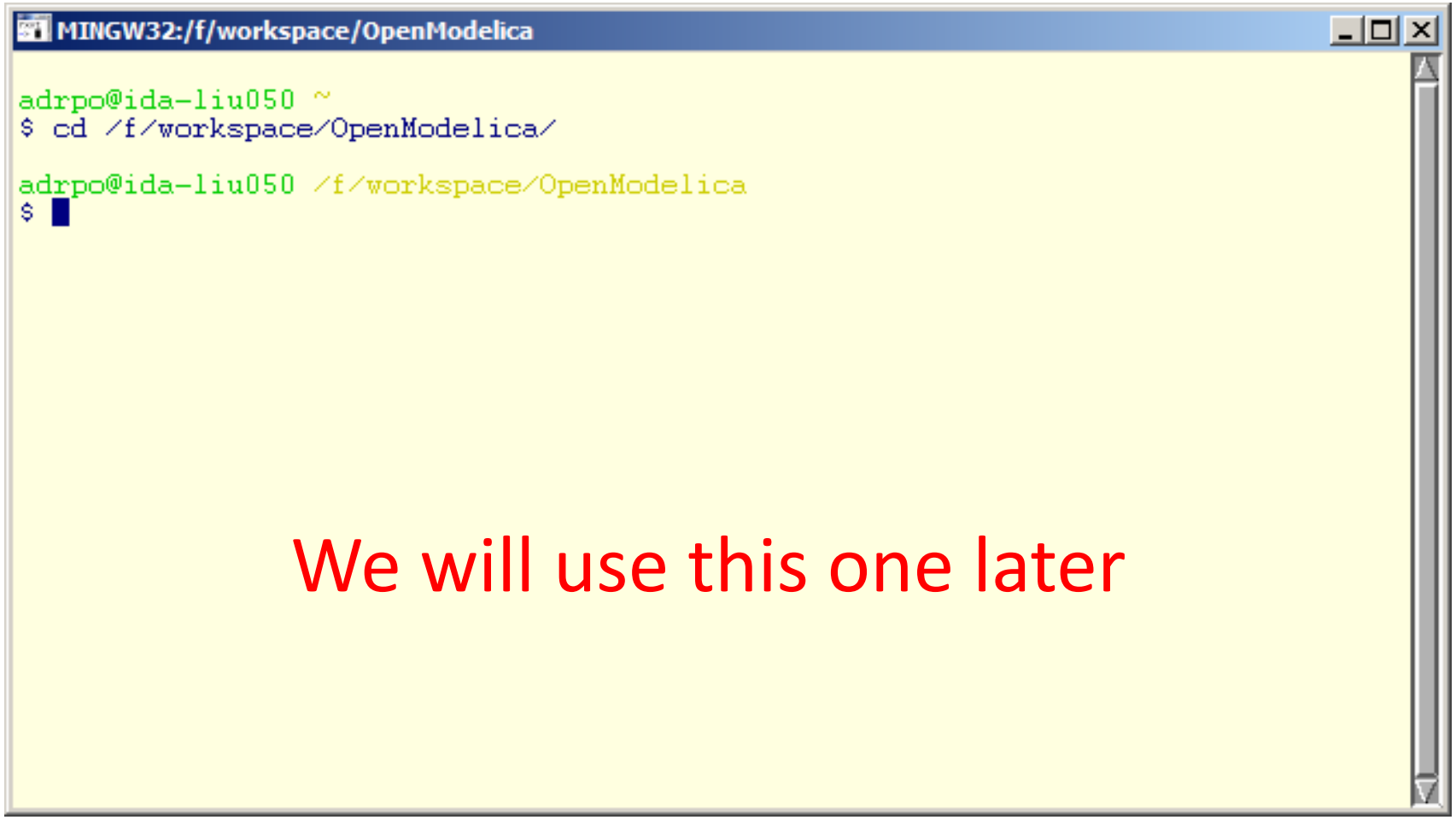
https://openmodelica.org/svn/OpenModelica/installers/windows/OMDev

- Add OMDEV environment variable pointing to C:\OMDev
- JDK 32bit needs to be installed and Msys should be able to find it! Put it in your PATH environment variable.

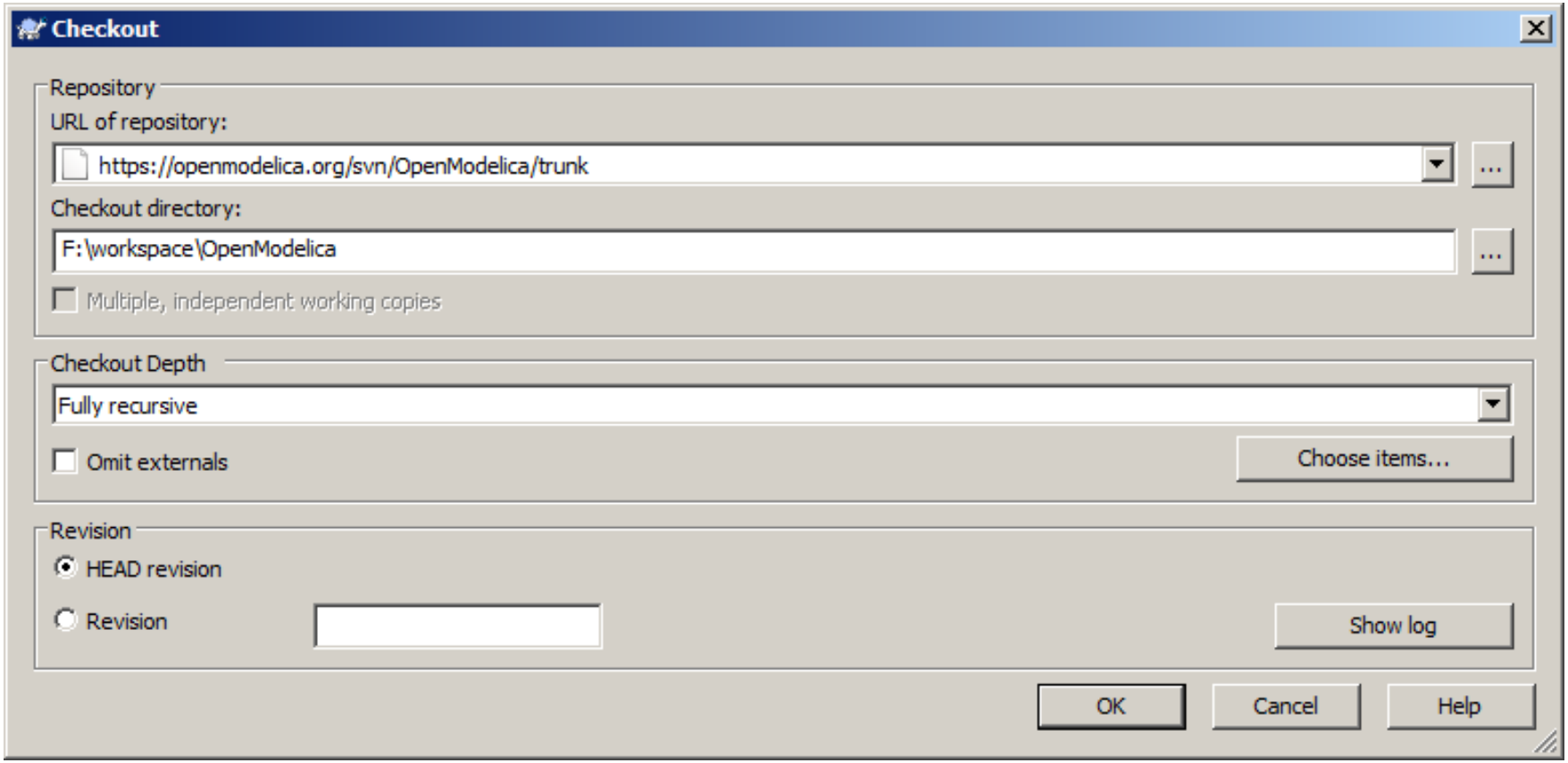
Msys location – use the shortcut



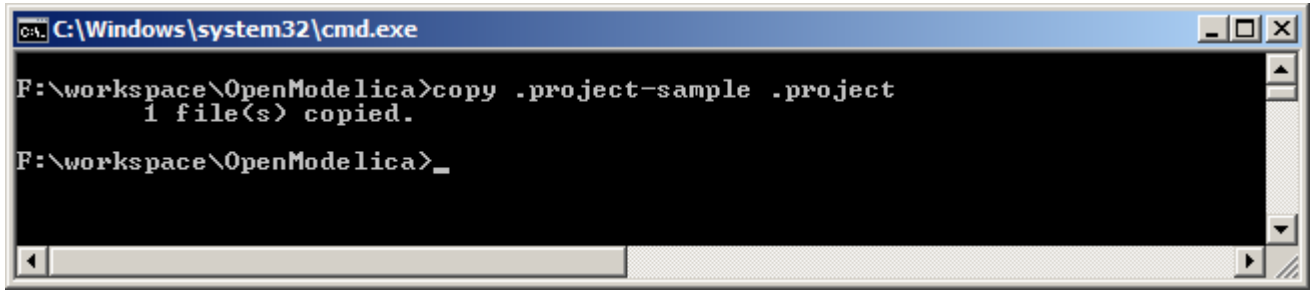
Msys – a Linux like terminal

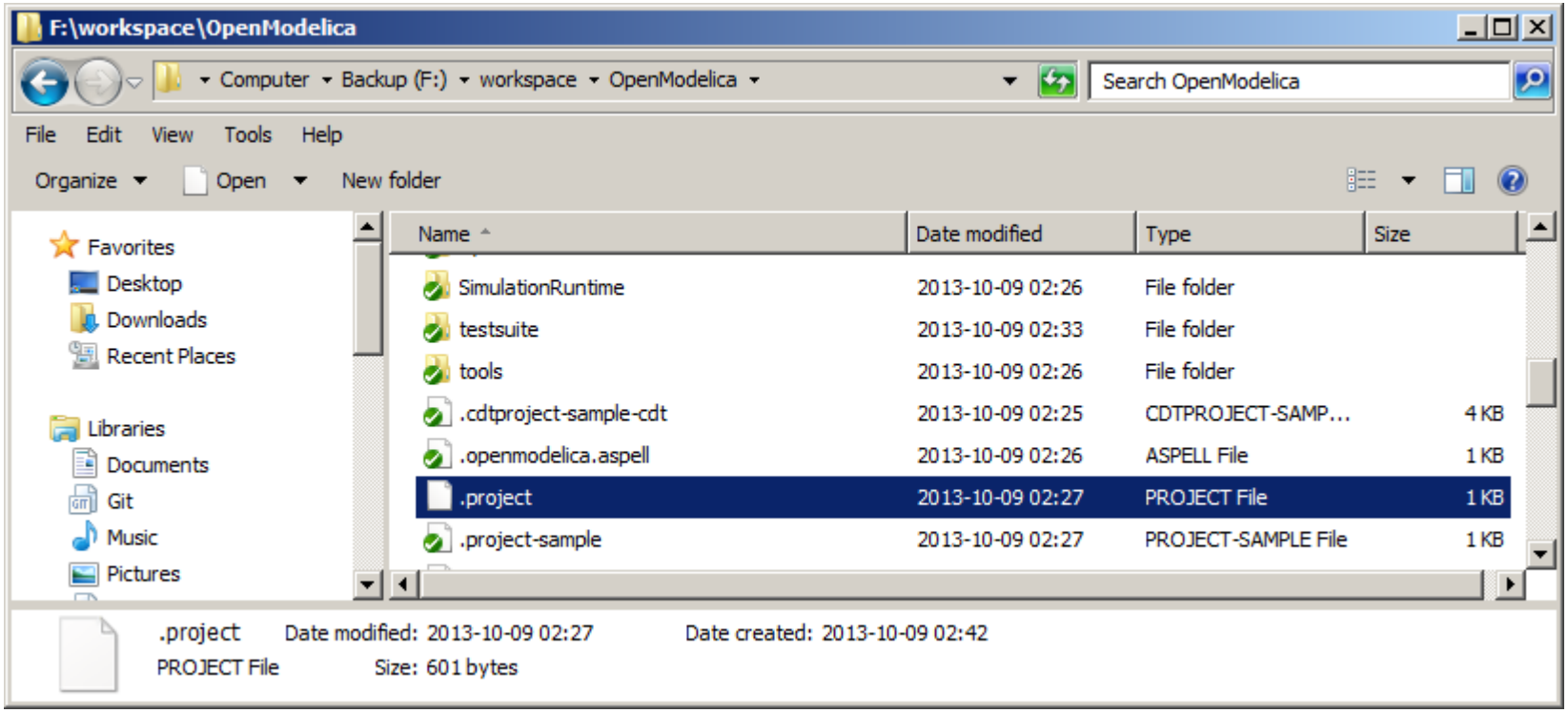


Checkout OpenModelica

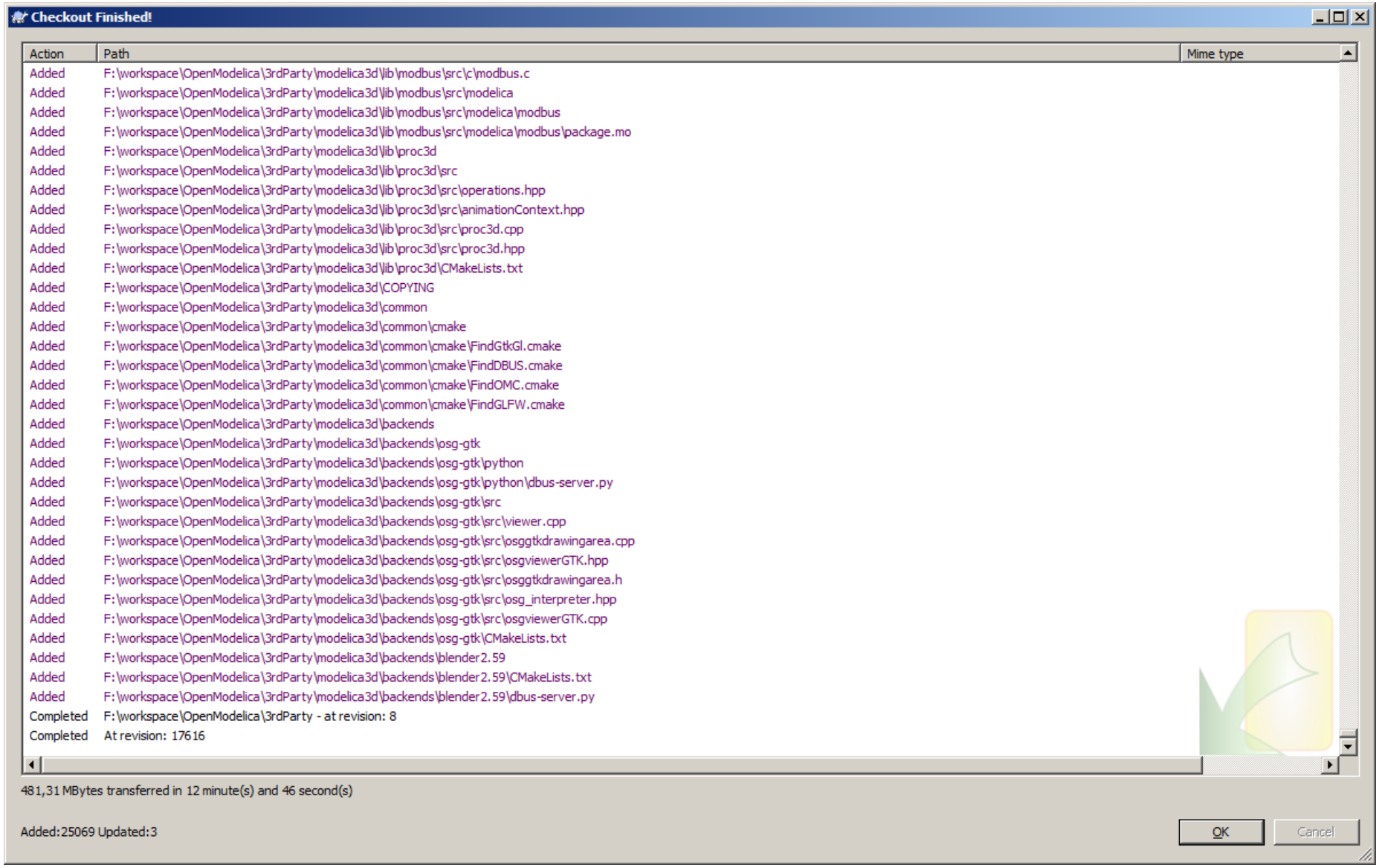


Copy .project-sample to .project

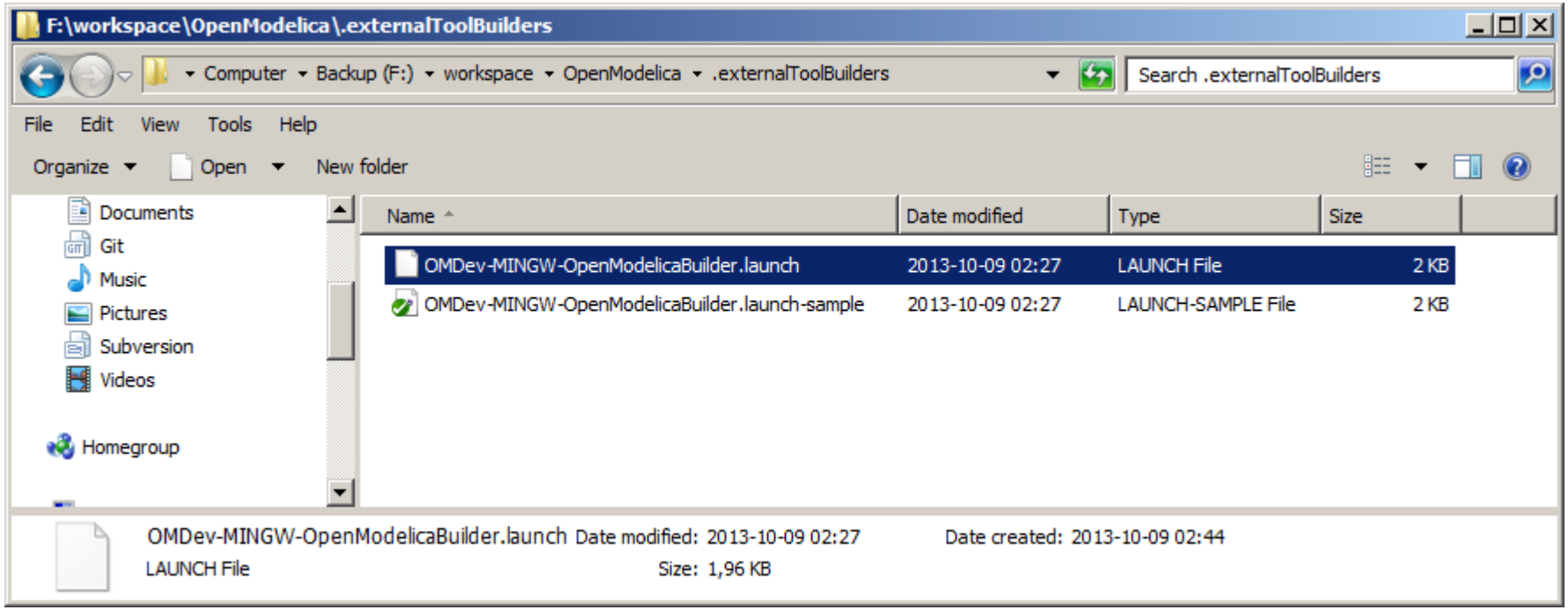




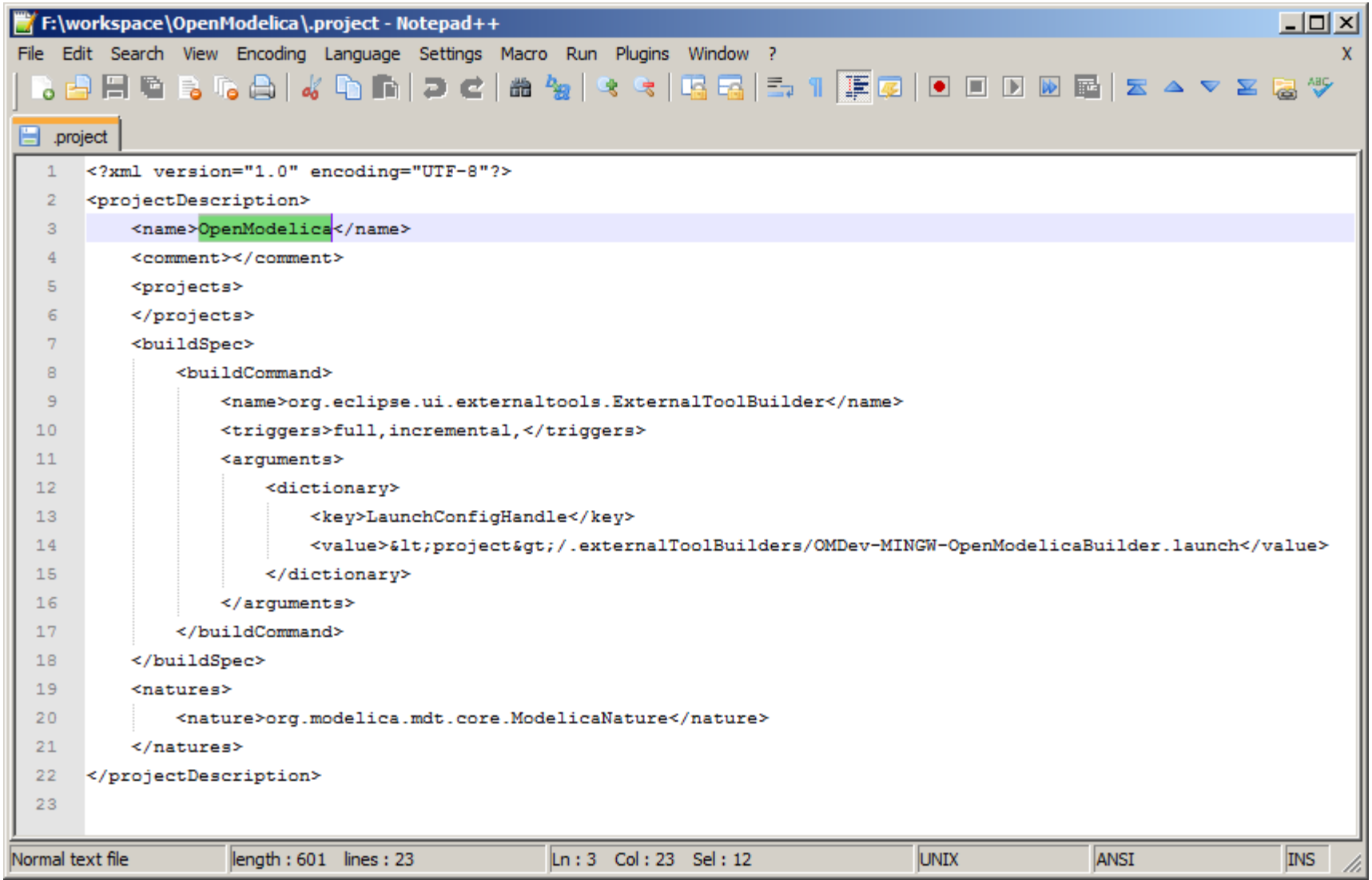
Checkout OpenModelica - done



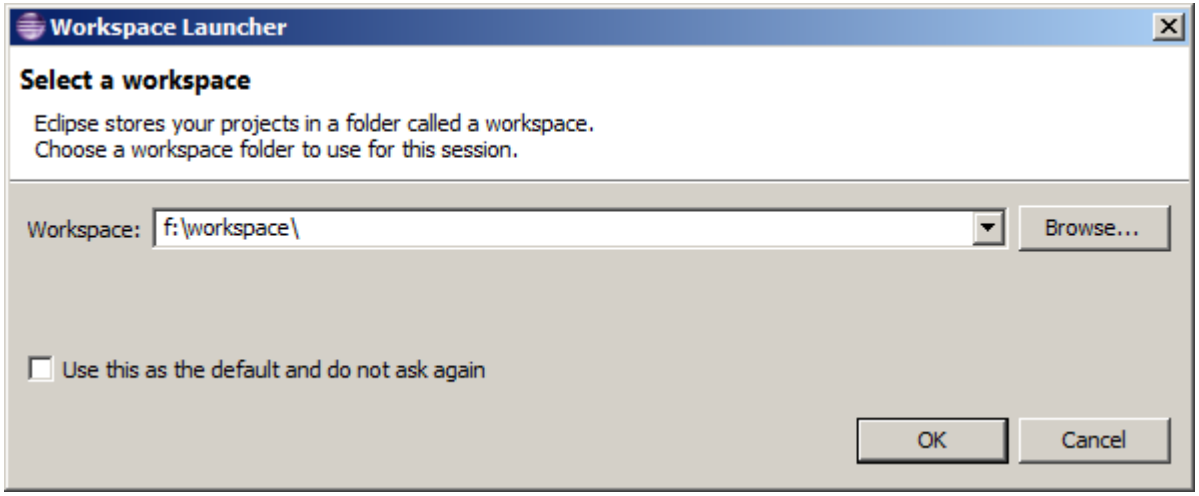
Copy OMDev-MINGW-OpenModelicaBuilder.launch-sample
to
OMDev-MINGW-OpenModelicaBuilder.launch
in workspace\OpenModelica\.externalToolBuilders



If your project is not named OpenModelica change it in .project

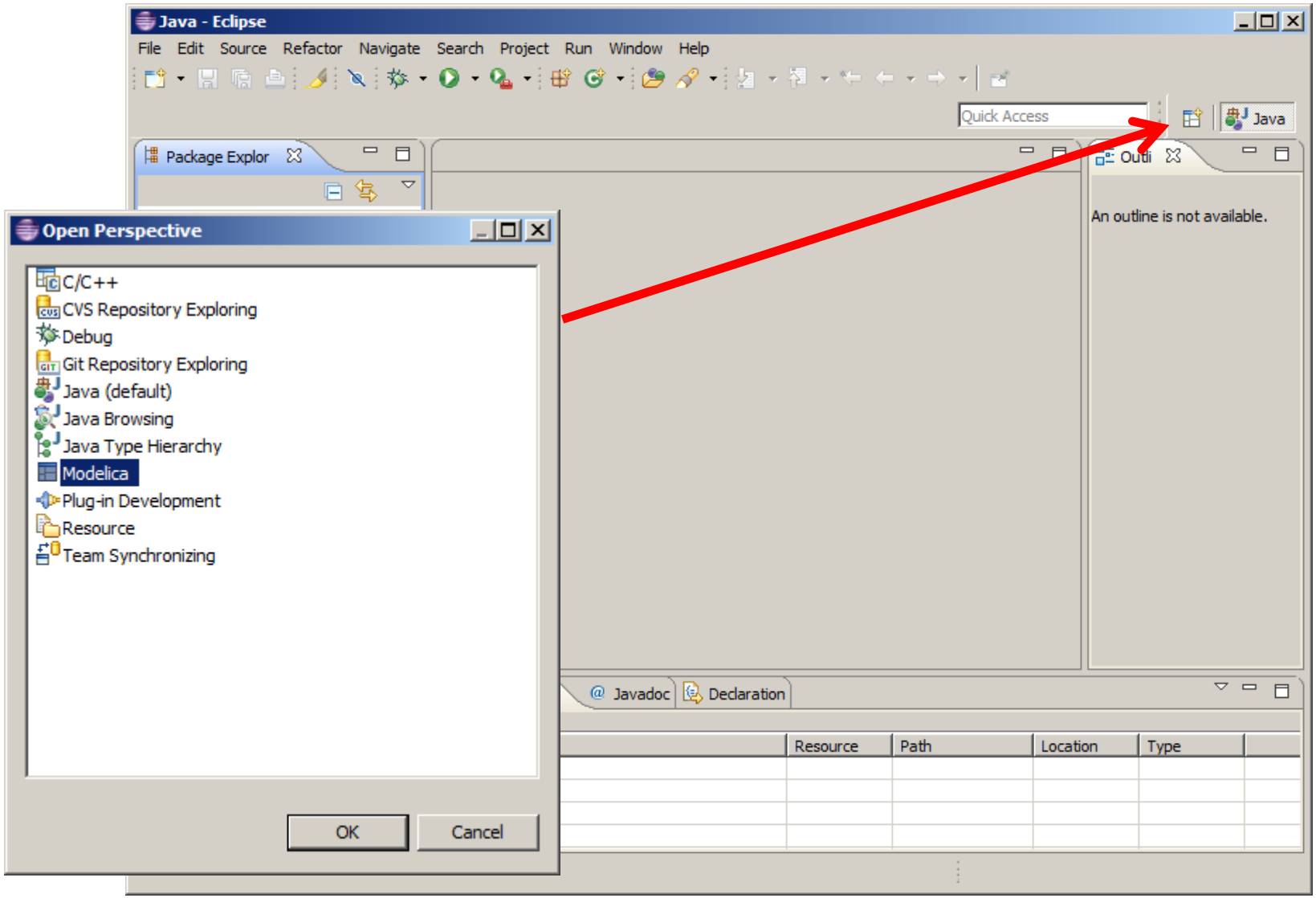


Start Eclipse

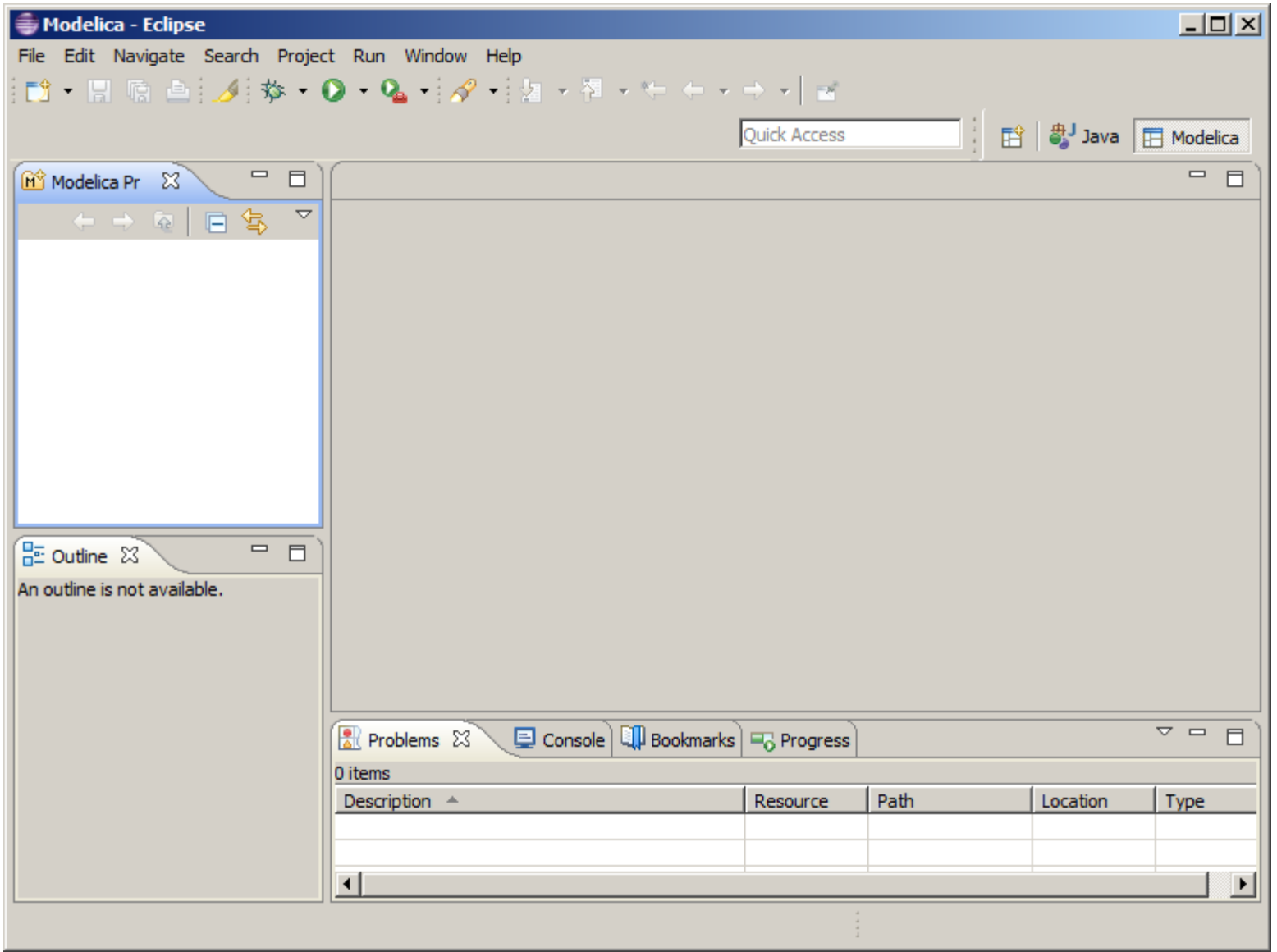


Install MDT in Eclipse if you haven't done that yet:
https://trac.openmodelica.org/documents/MDT/install/

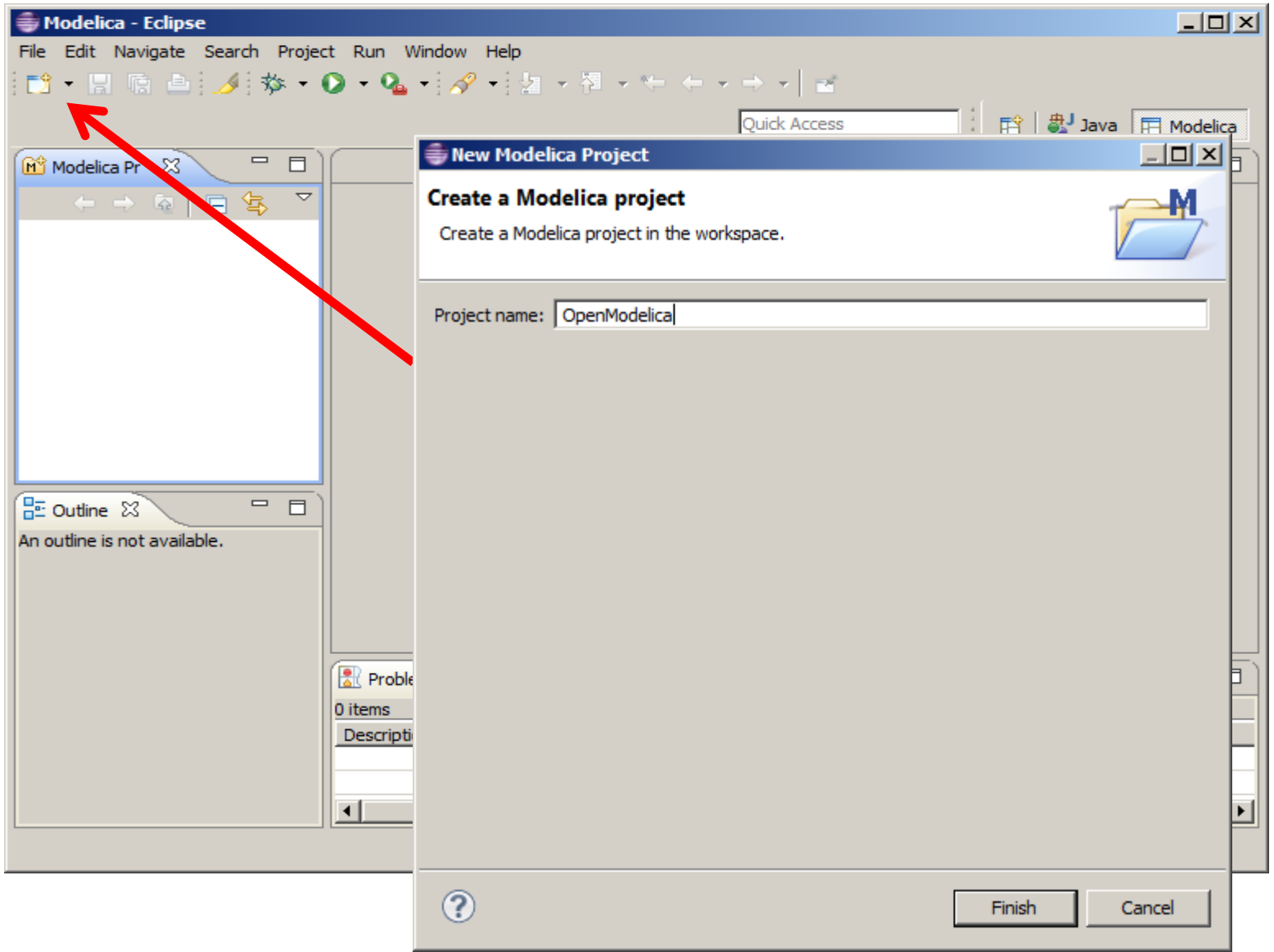
Switch to Modelica perspective



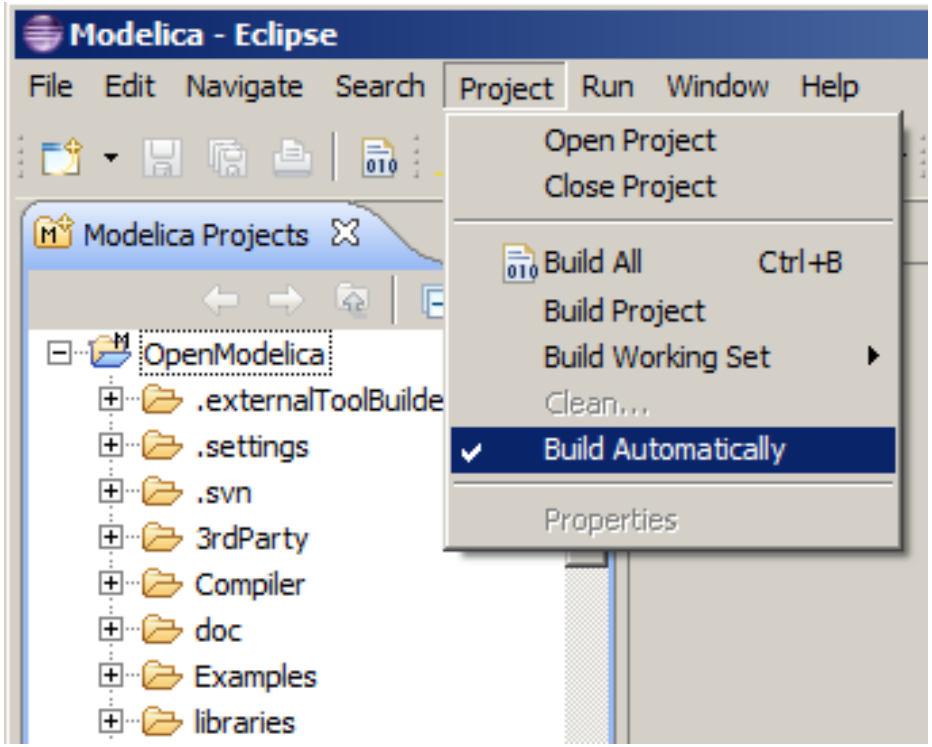
Modelica perspective



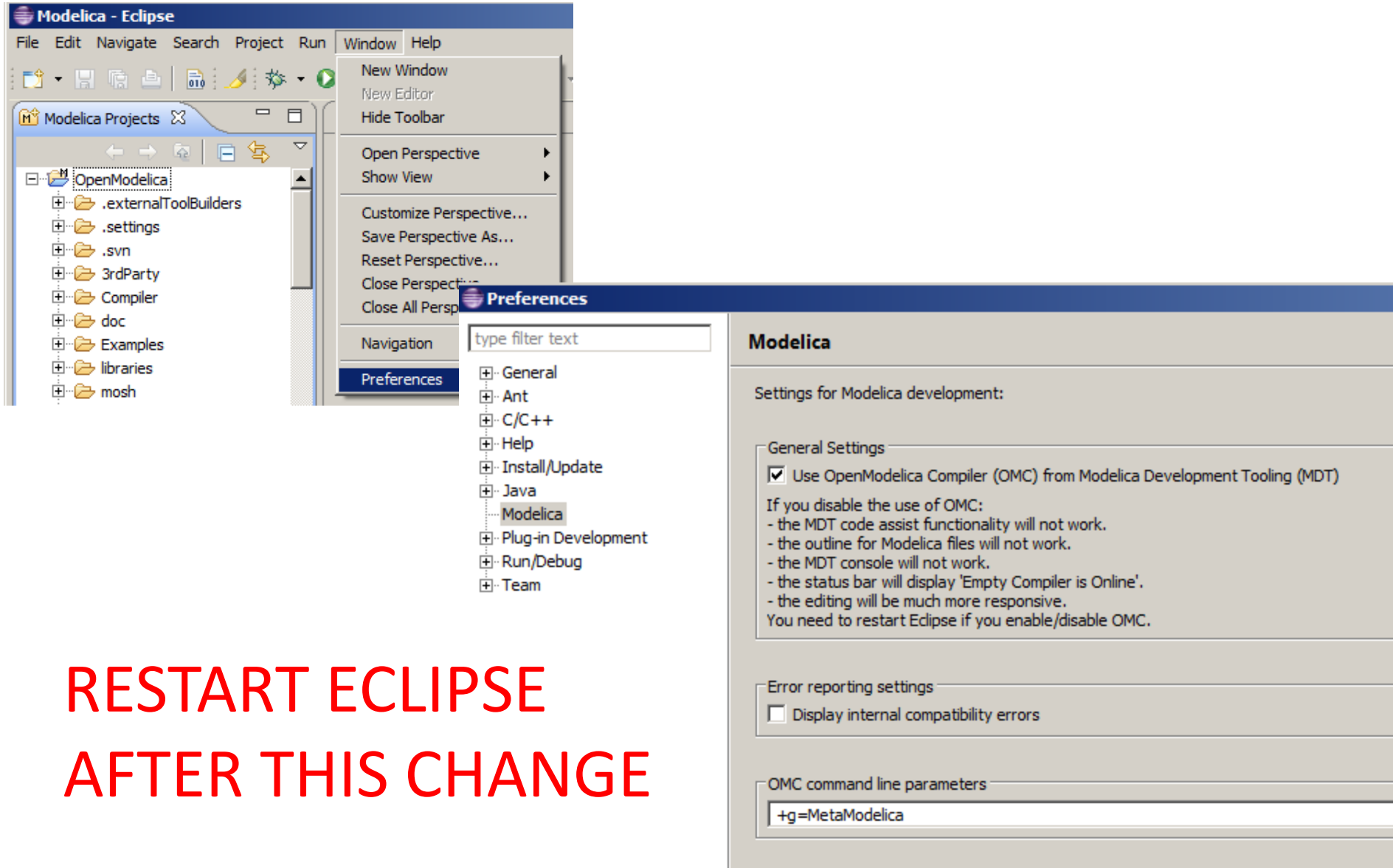
New Modelica project named OpenModelica (or the name you chose)



Remove Build automatically from Project



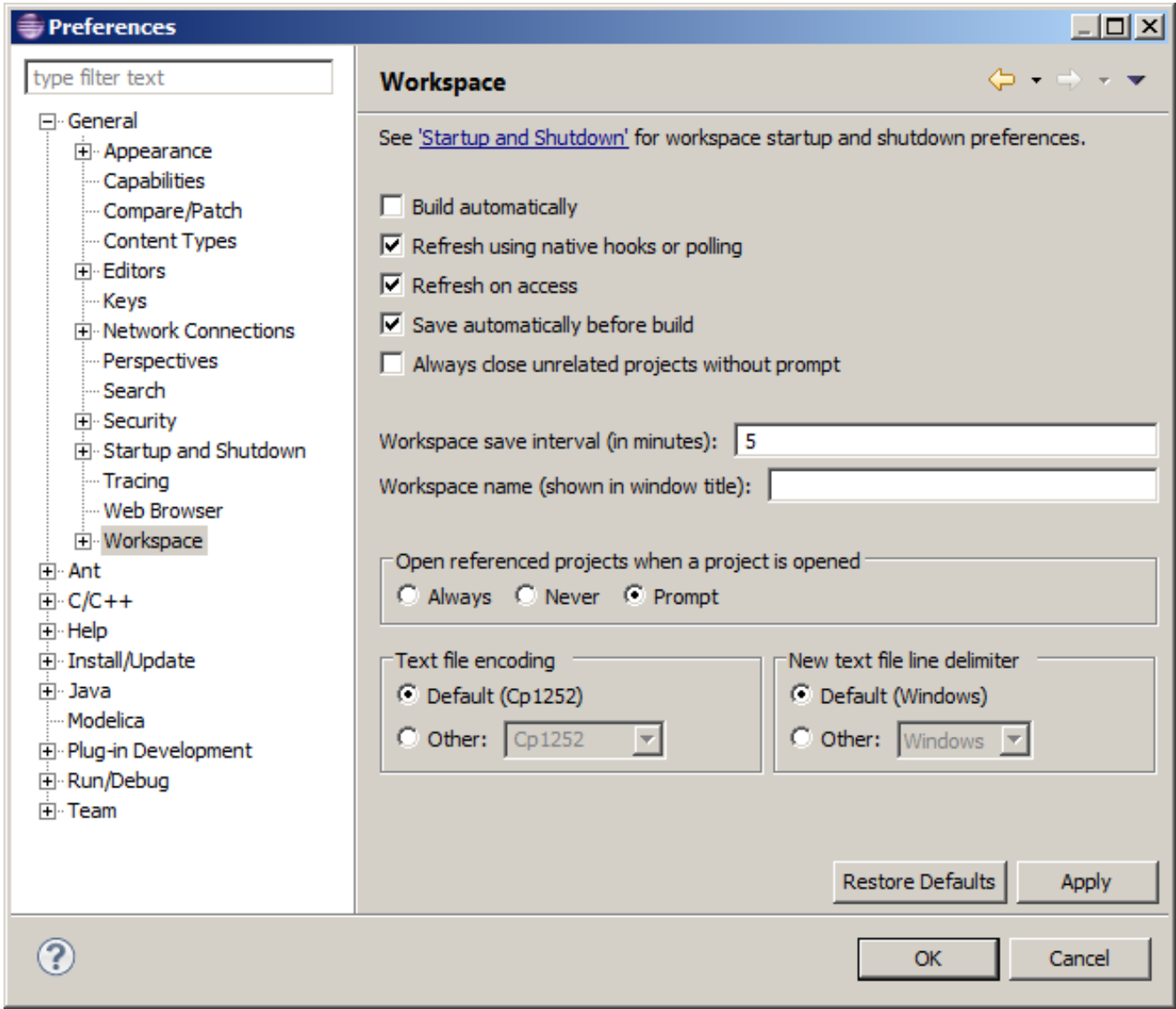
Add +g=MetaModelica to omc flags



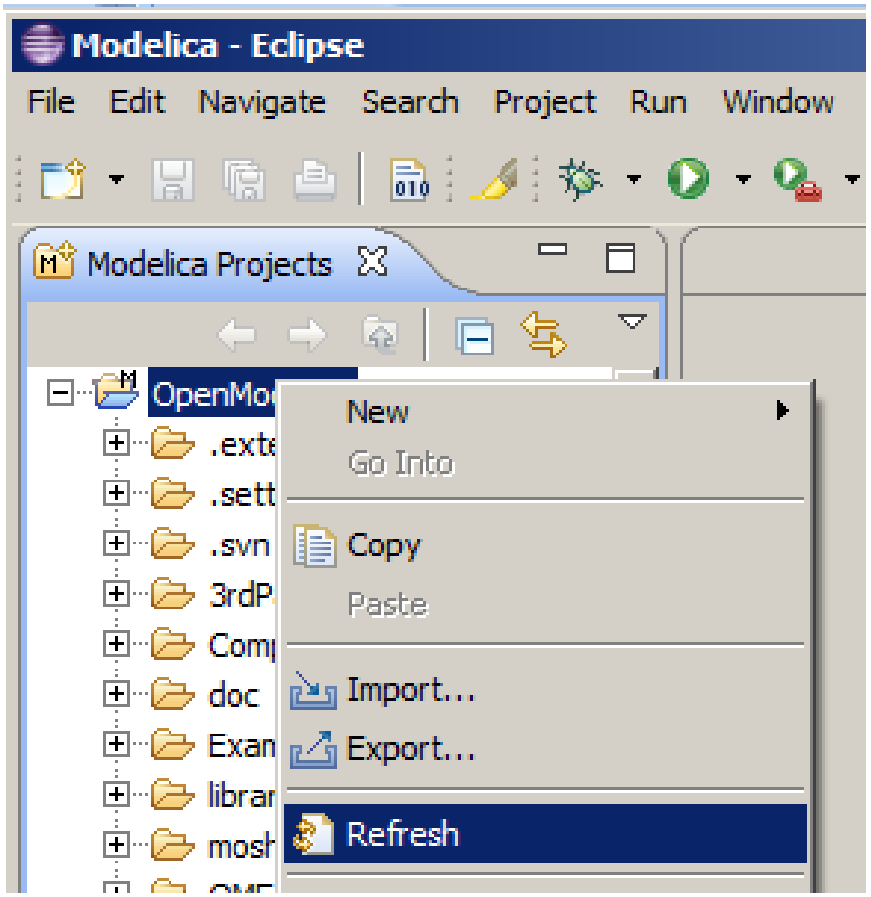
RESTART ECLIPSE
AFTER THIS CHANGE

Important notice

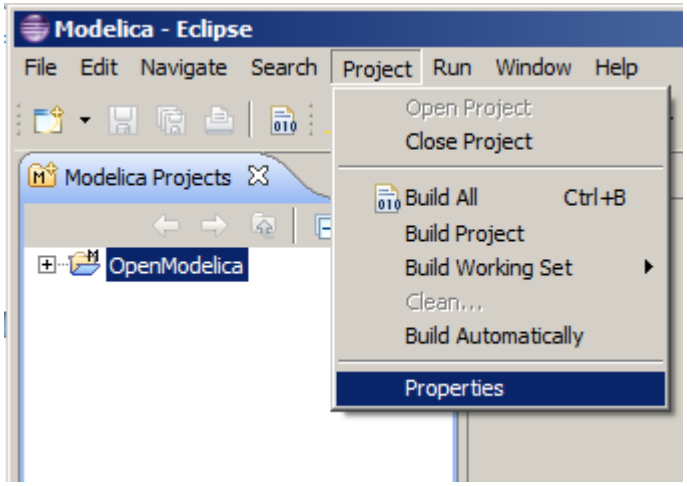
- In Eclipse is best to do refresh on a workspace automatically, via
- Window-> Preferences

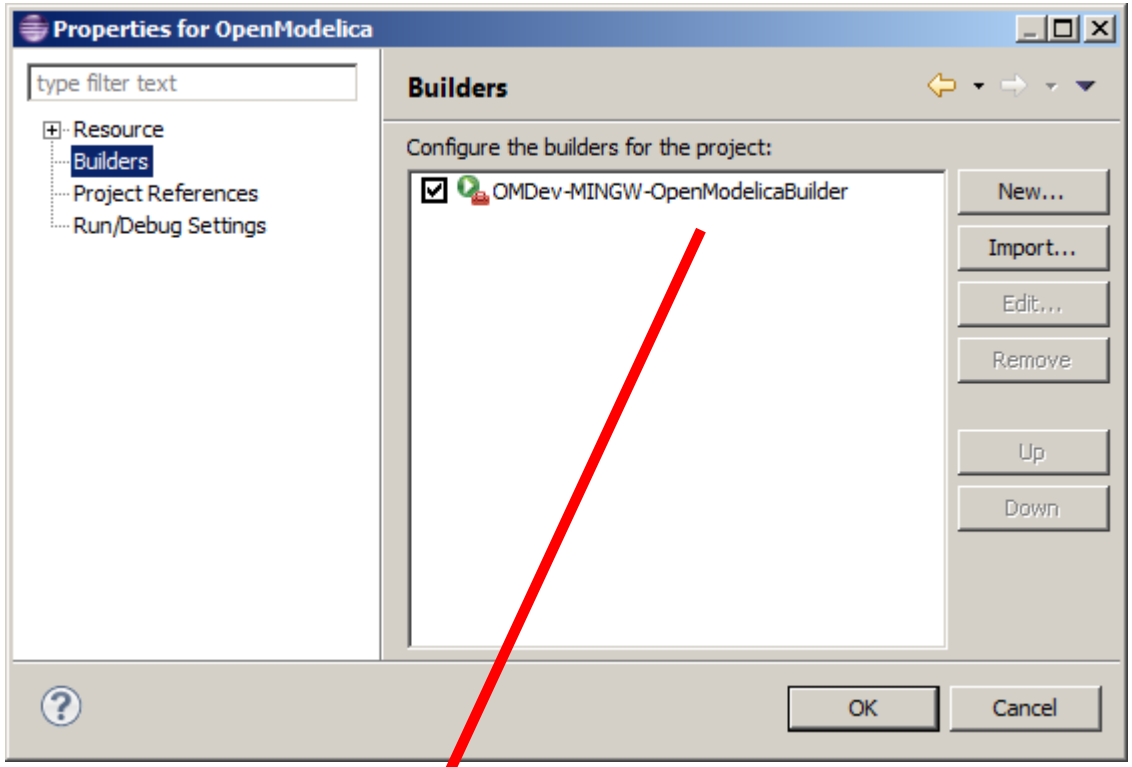


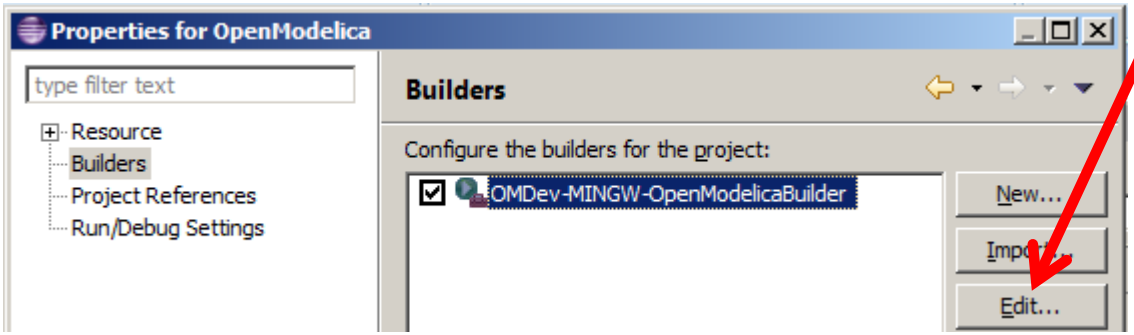
Refresh project, right click->Refresh



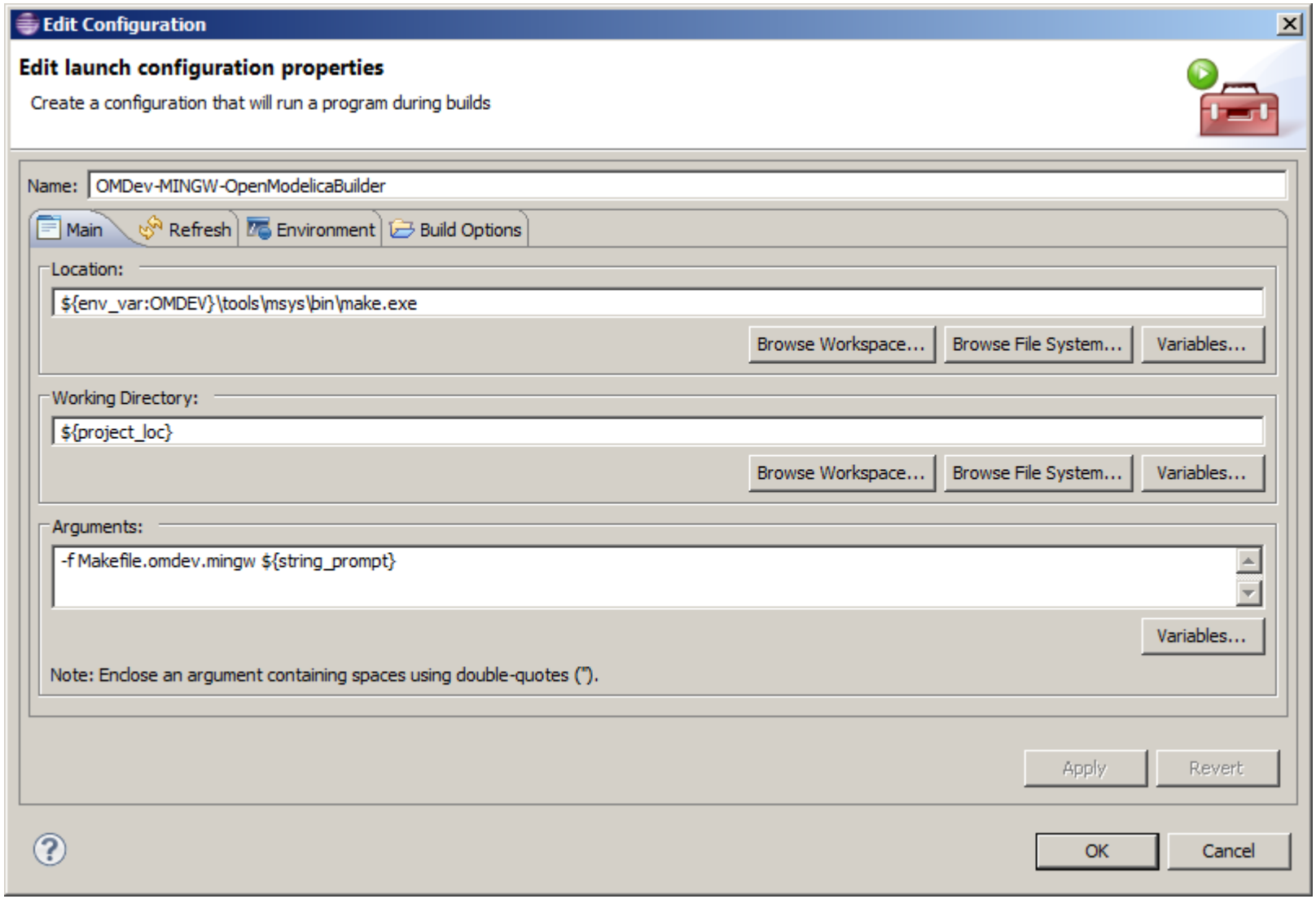
Check settings in Project builder



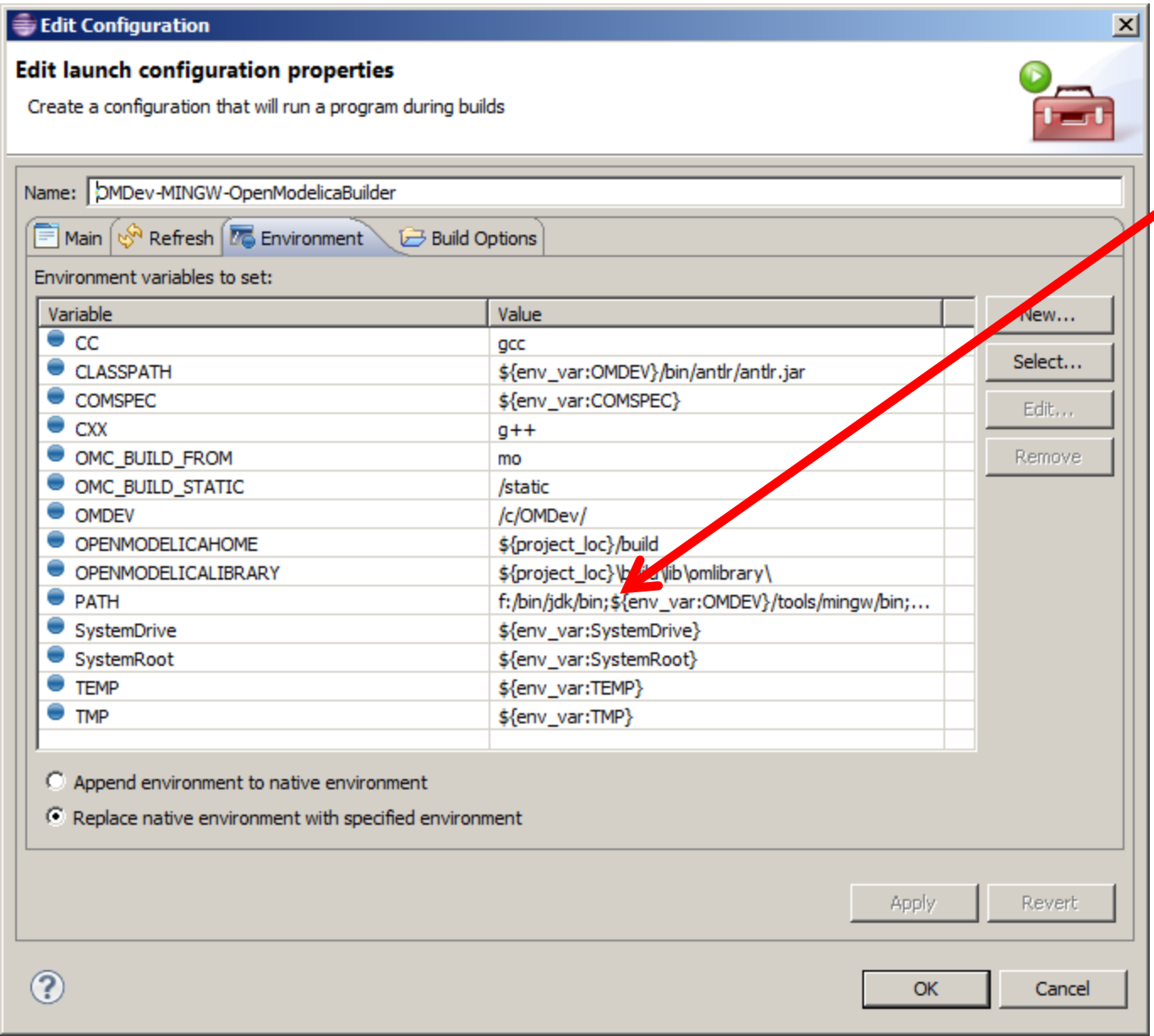




Check settings in all tabs!

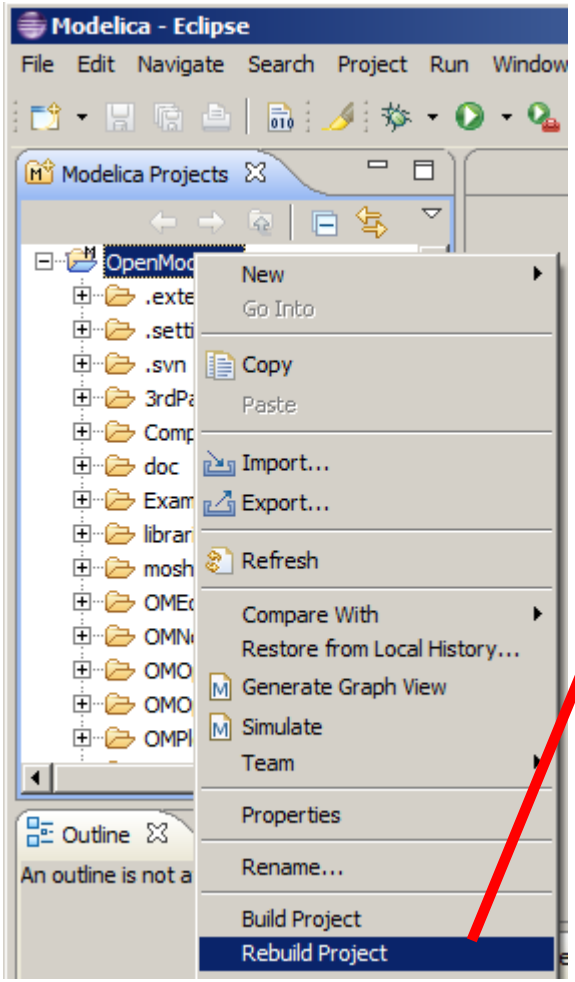


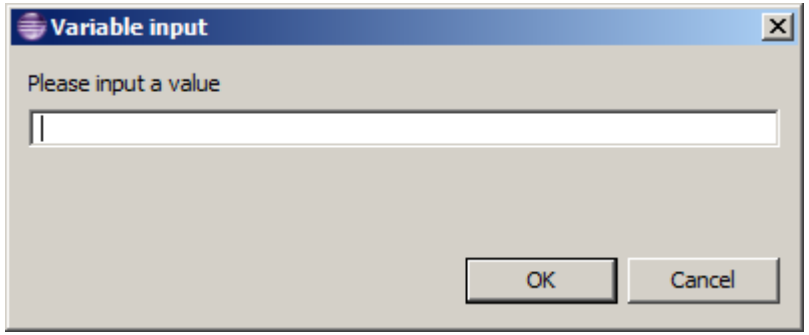
Check settings in all tabs!



Make sure jdk 32 bit is in your PATH

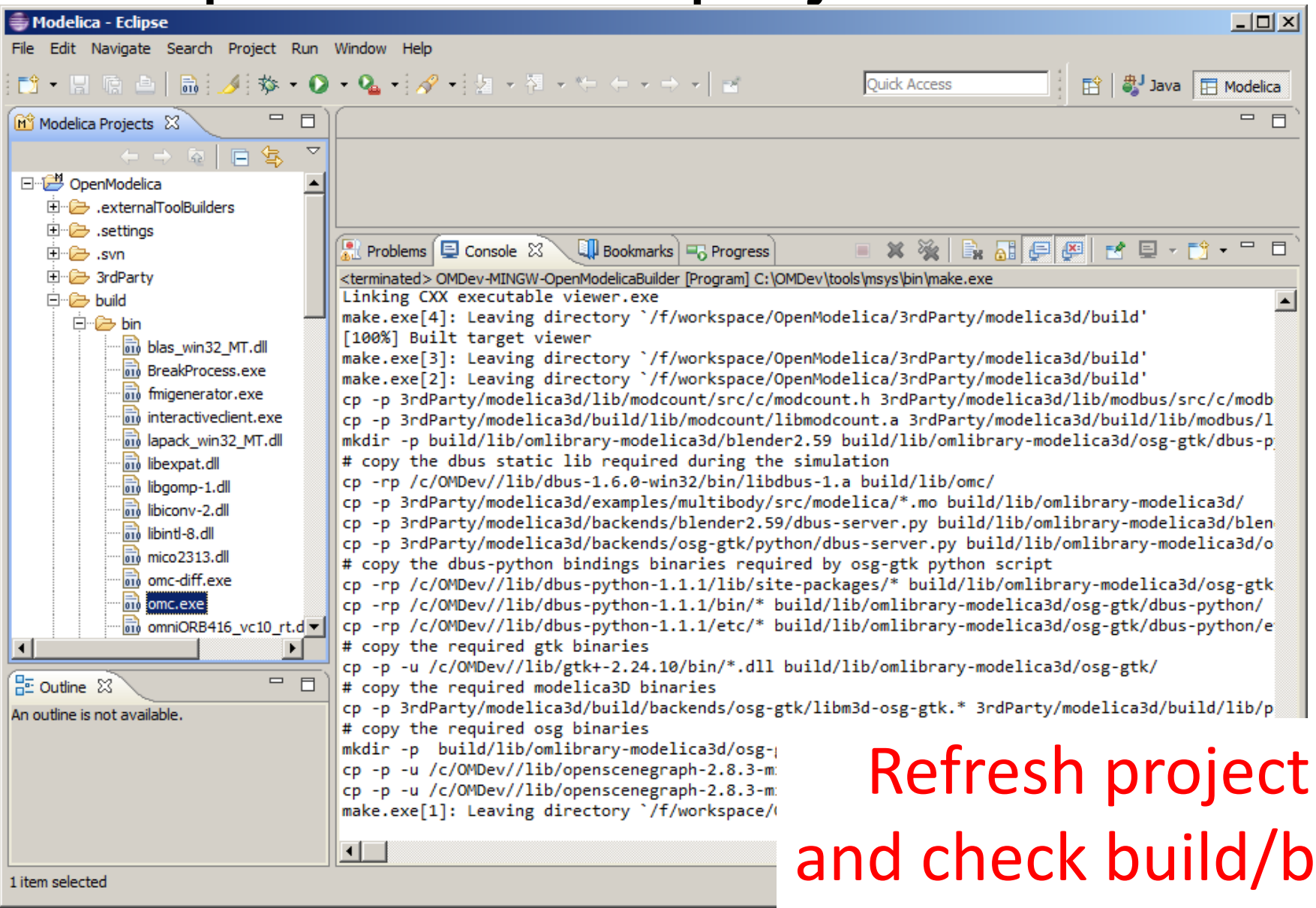
Build Project





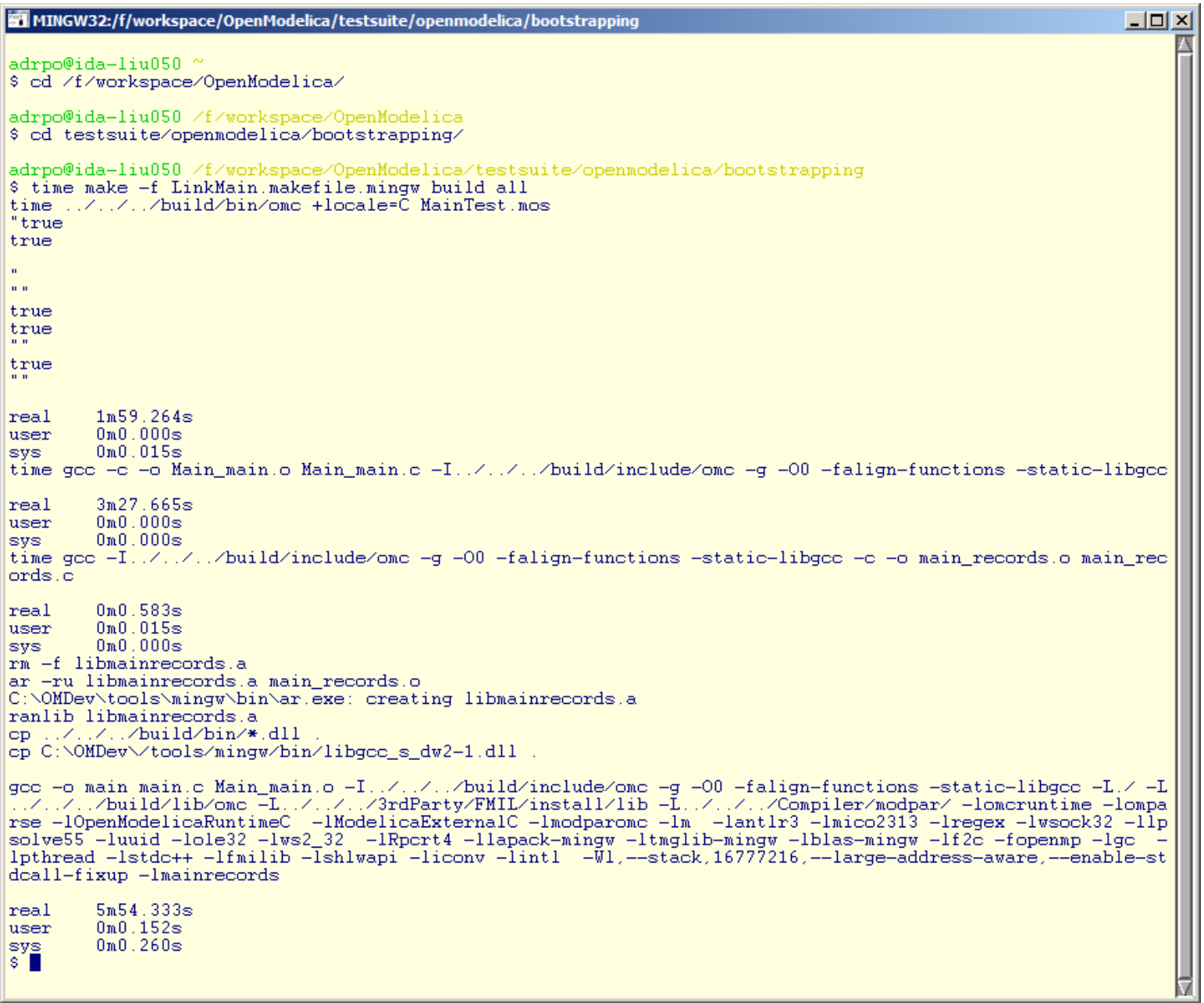
Leave empty and
click OK to build omc
.....
It does take a while.
Check the builder settings
if there are errors

OpenModelica project was build



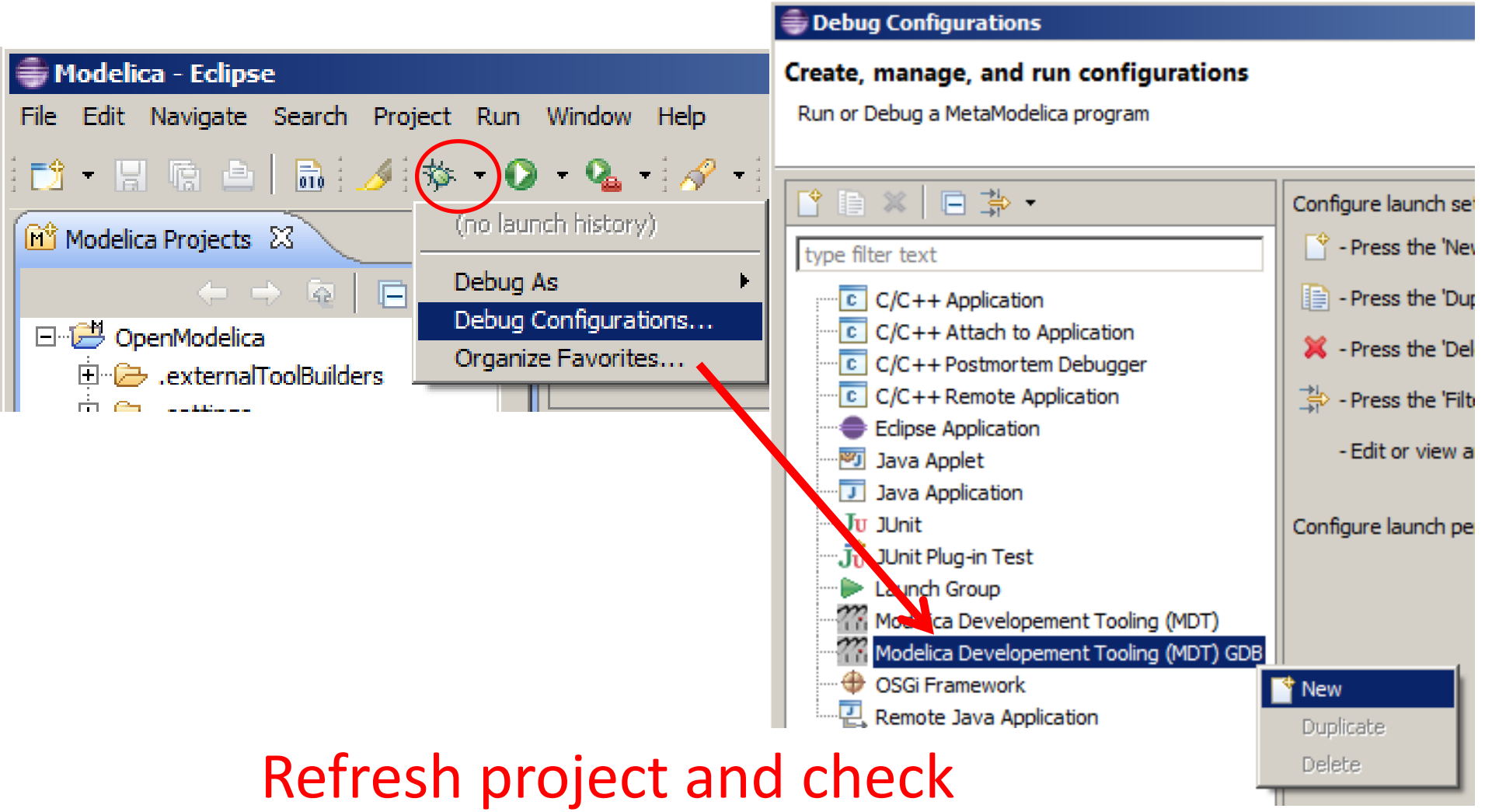
Refresh project and check build/bin/

Build the bootstrapped compiler



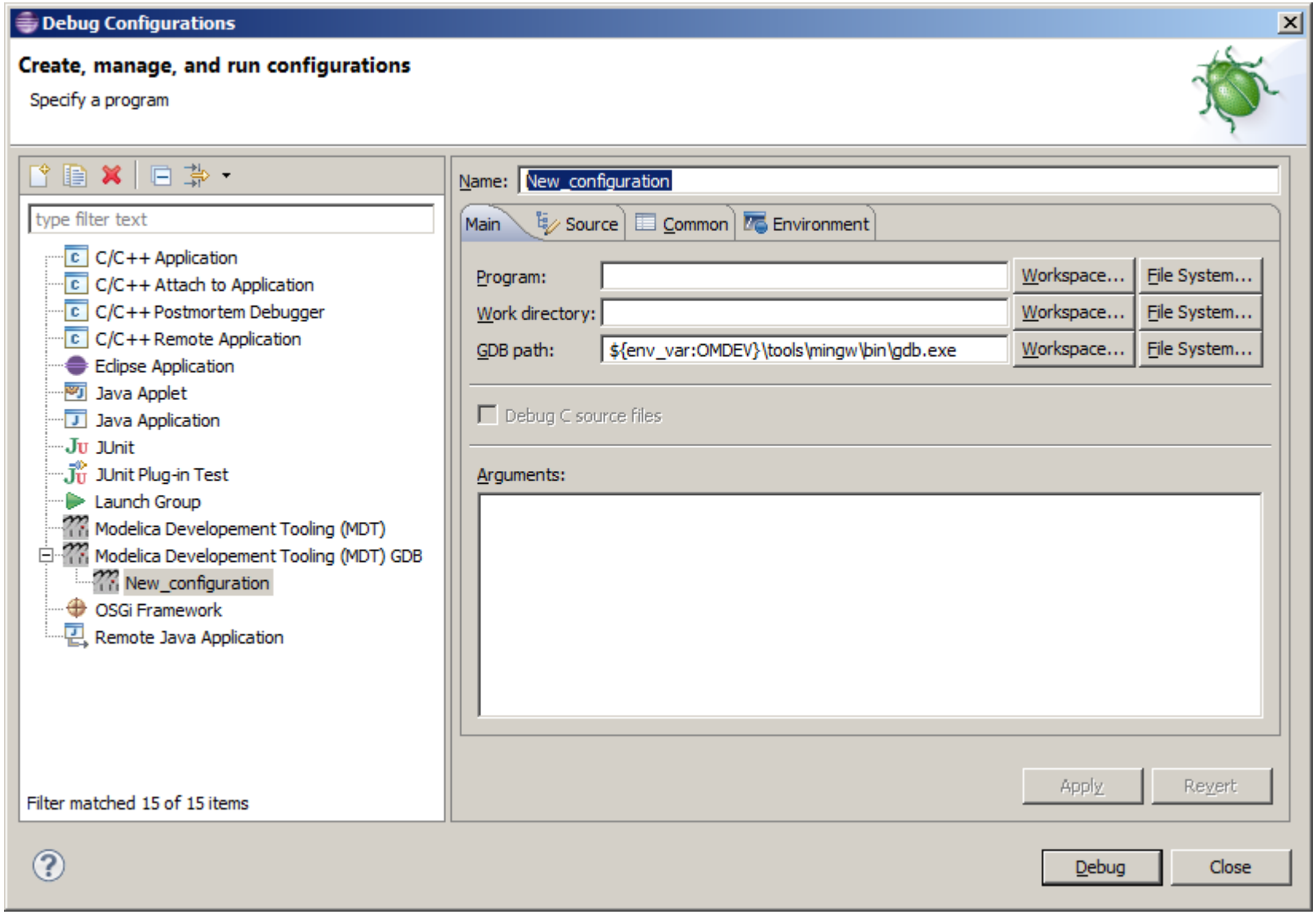
Use Msys

Setup Eclipse Debugging

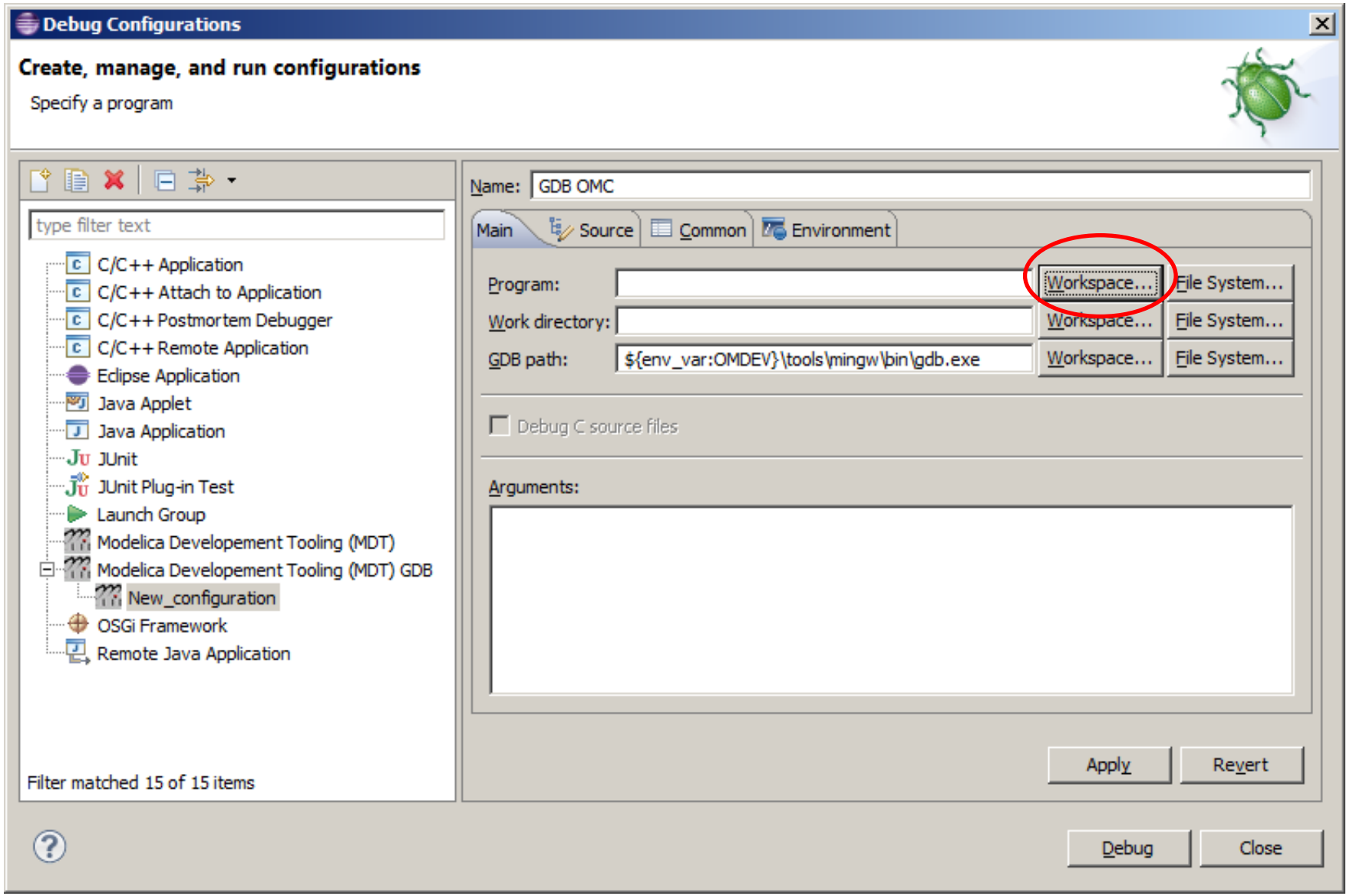


Refresh project and check testsuite/openmodelica/bootstrapping

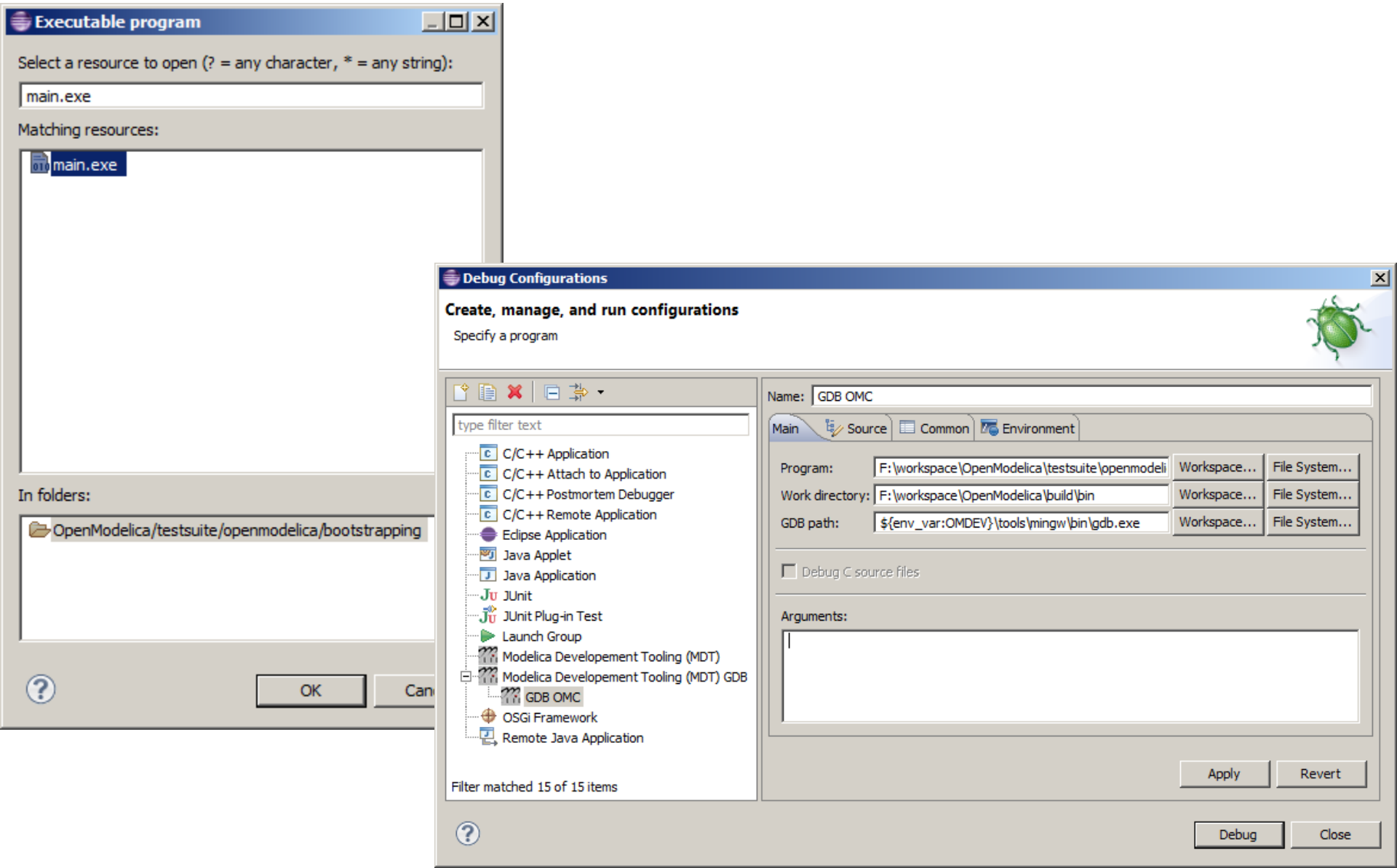
Change name


Debug Configurations
Create, manage, and run configurations
Specify a program
type filter text
C/C++ Application
C/C++ Attach to Application
C/C++ Postmortem Debugger
C/C++ Remote Application
Eclipse Application
Java Applet
Java Application
JUnit
JUnit Plug-in Test
Launch Group
Modelica Developement Tooling (MDT)
Modelica Developement Tooling (MDT) GDB
New_configuration
OSGi Framework
Remote Java Application
Filter matched 15 of 15 items
Name: New_configuration
Main
Source
Common
Environment
Program:
Work directory:
GDB path: ${env_var:OMDEV}\tools\mingw\bin\gdb.exe
Workspace...
File System...
Debug C source files
Arguments:
Apply
Revert
Debug
Close

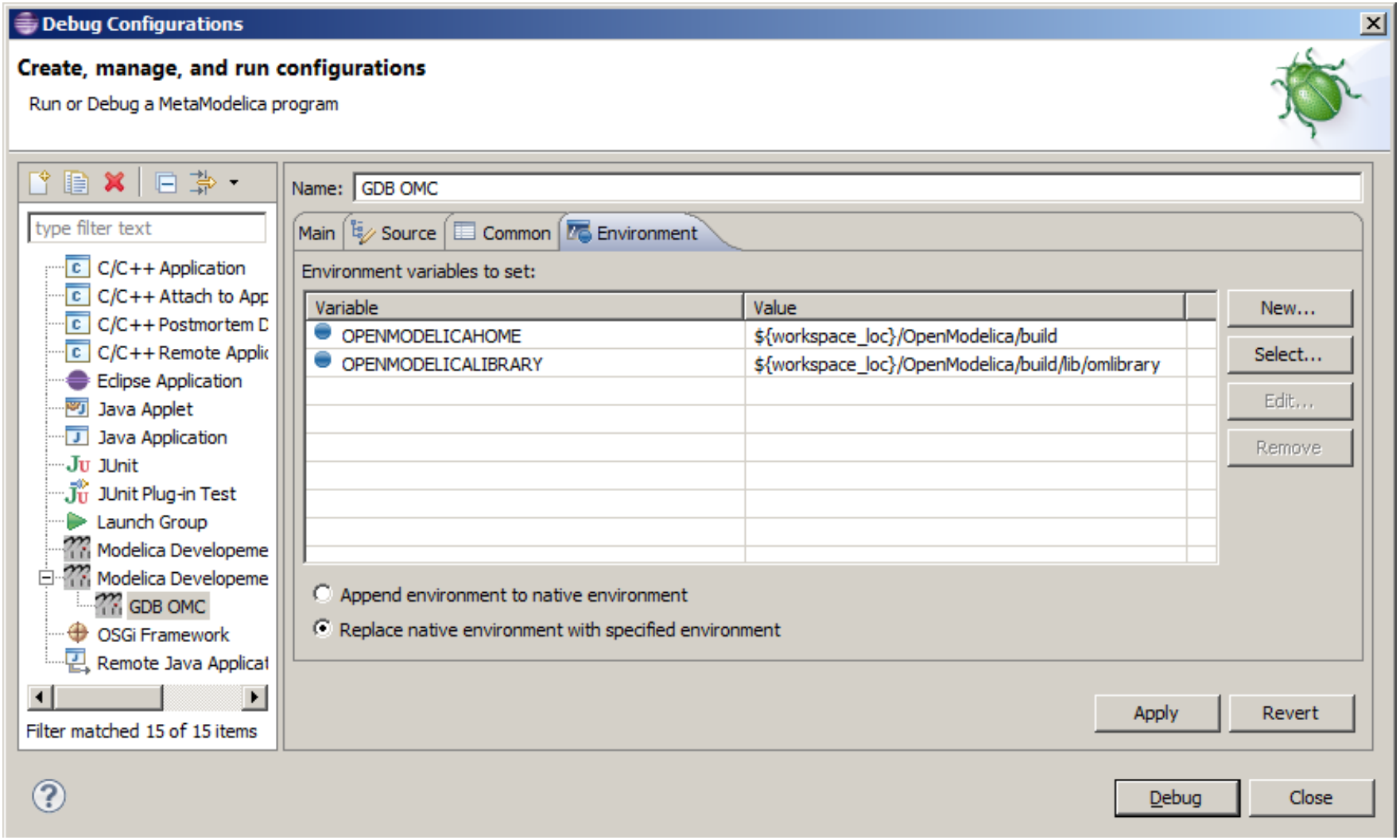
Select program



Select program and work directory

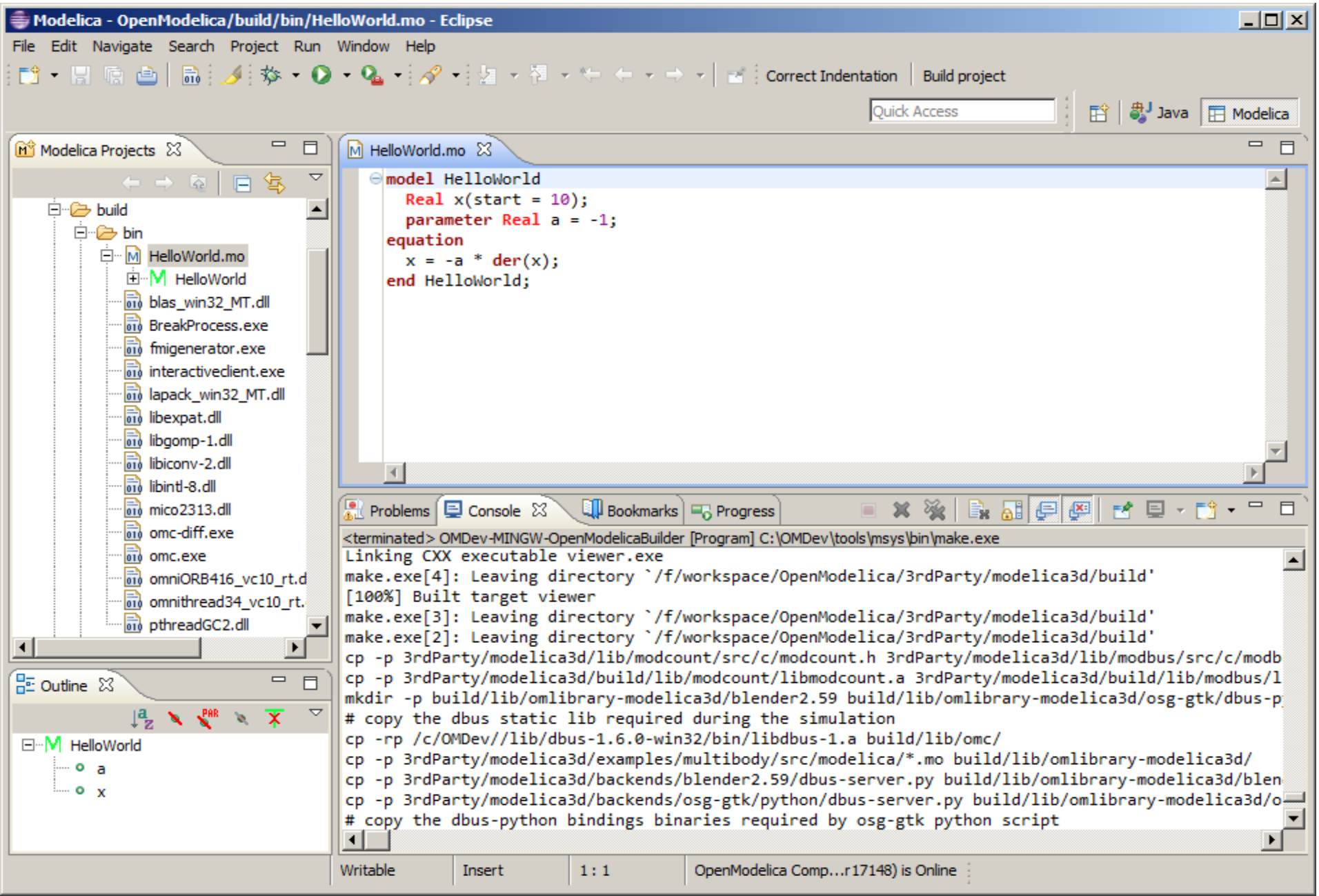


Check environment tab

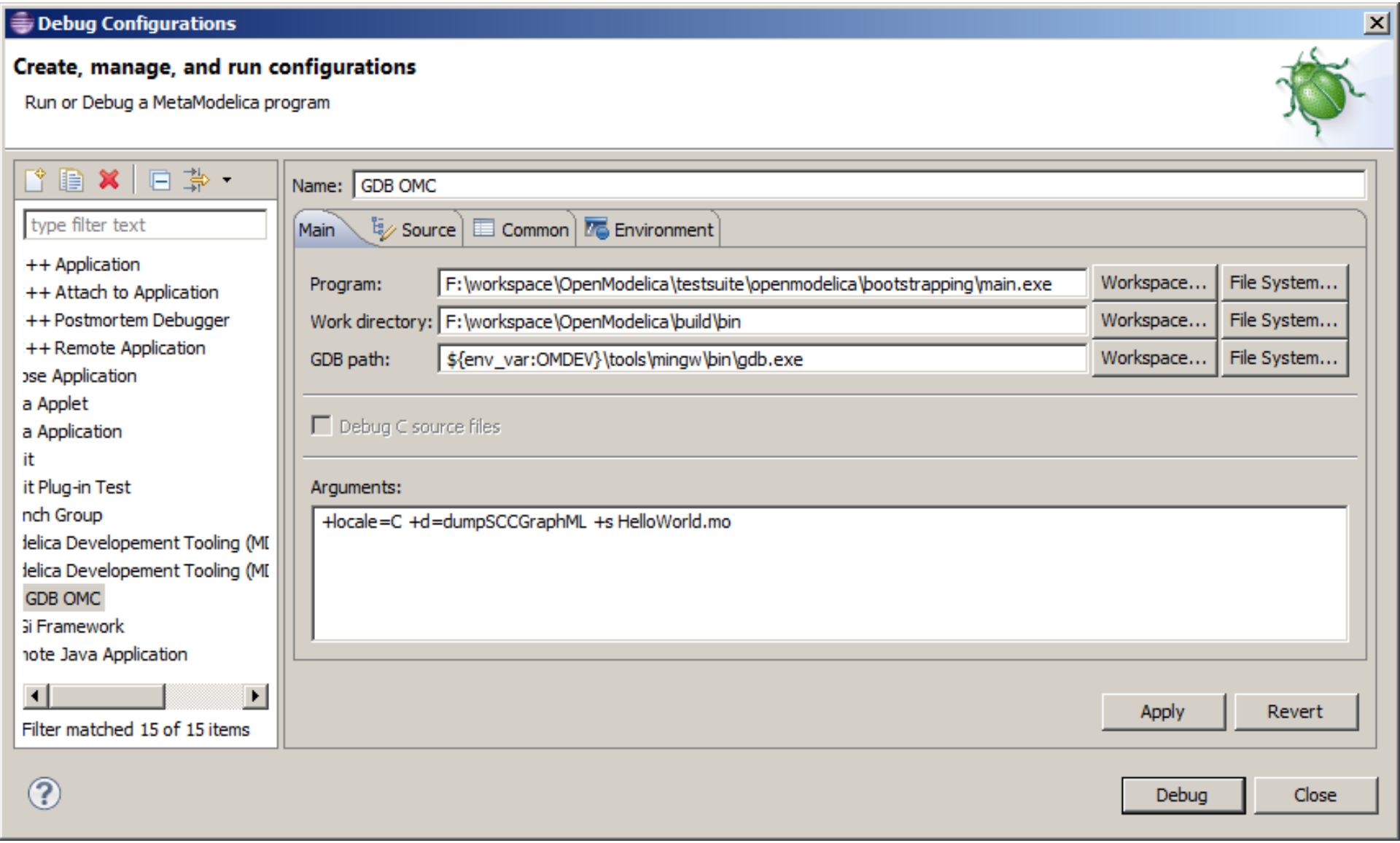


Add OPENMODELICAHOME and OPENMODELICALIBRARY

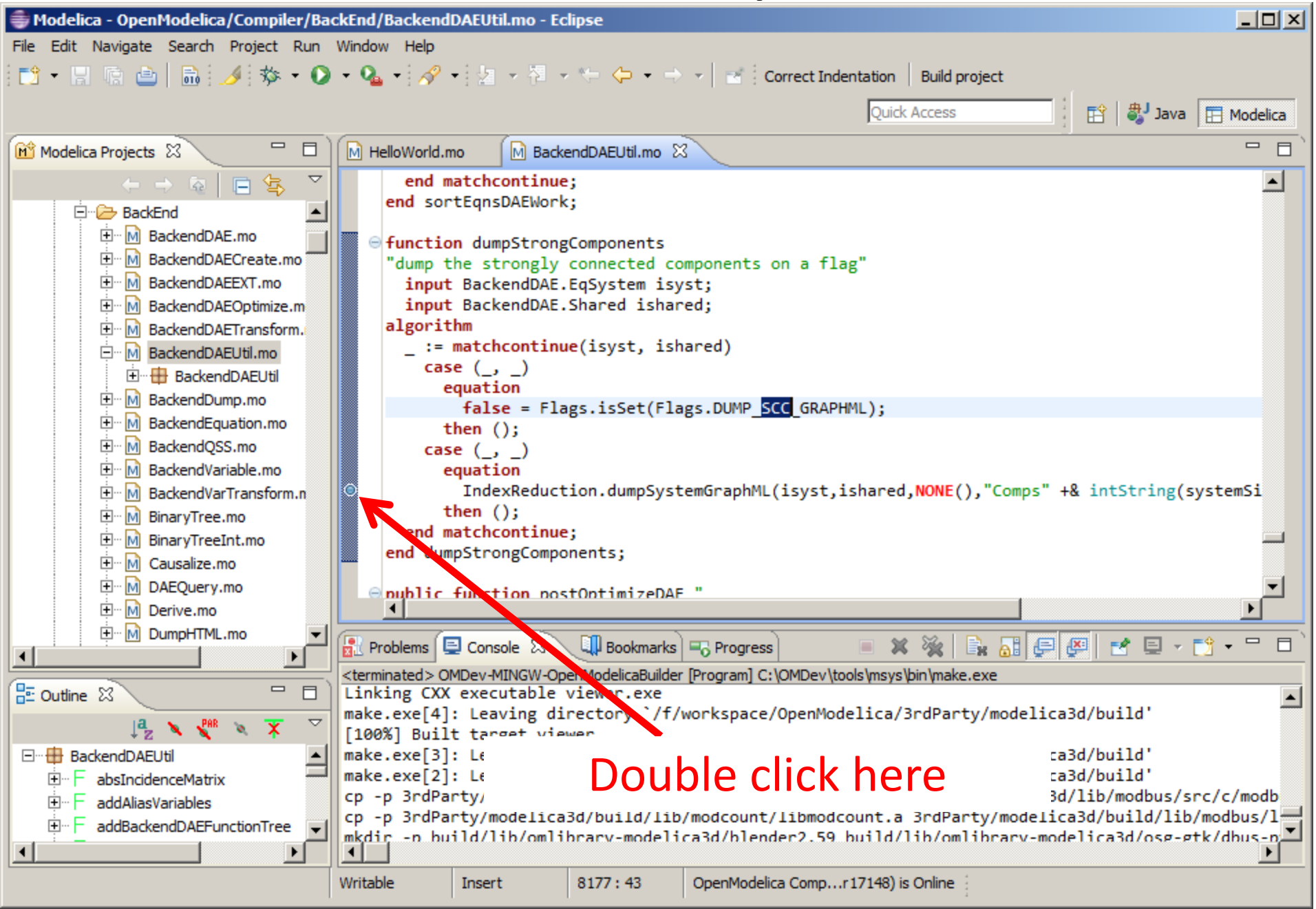
Have a test example



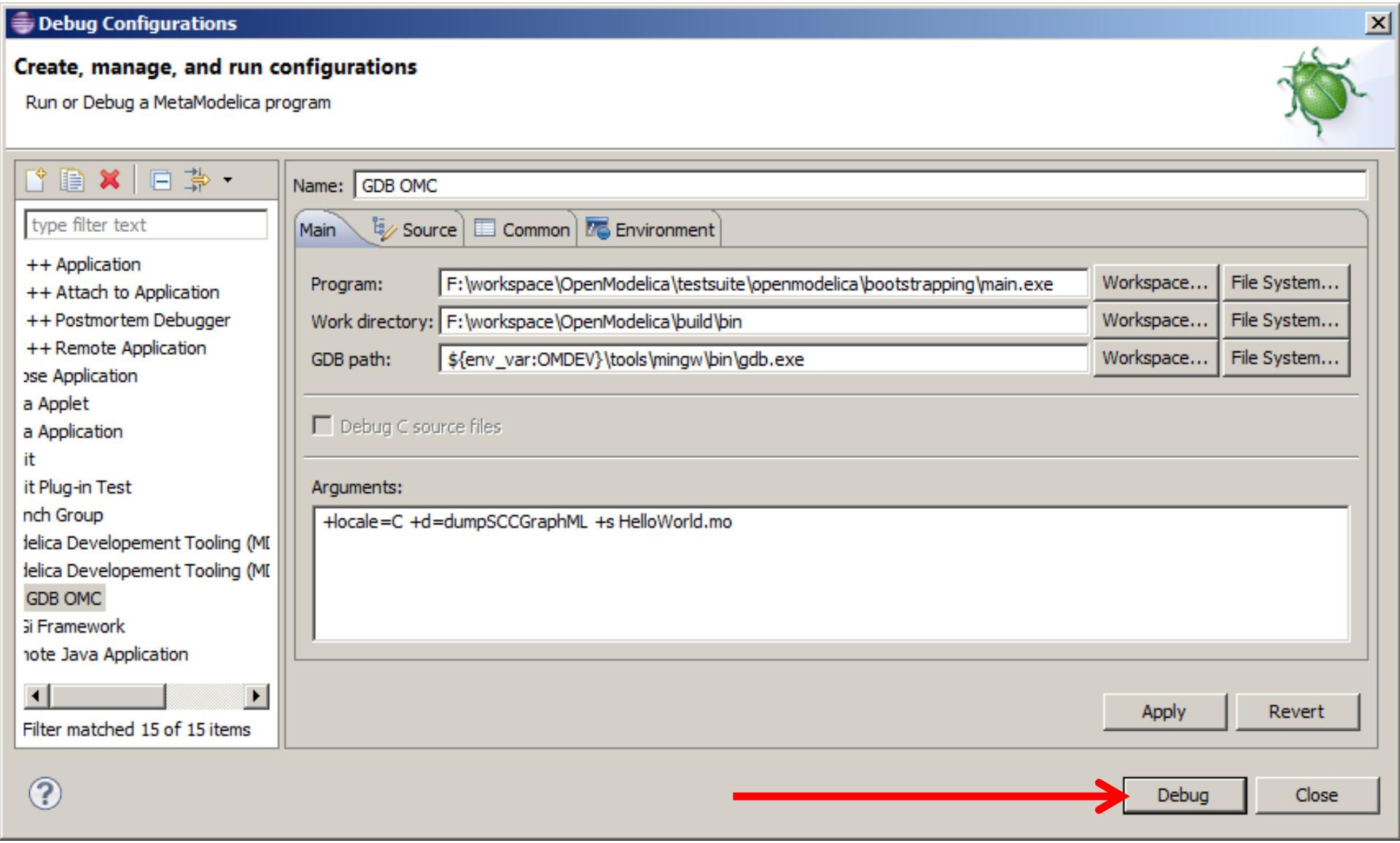
Add command line parameters



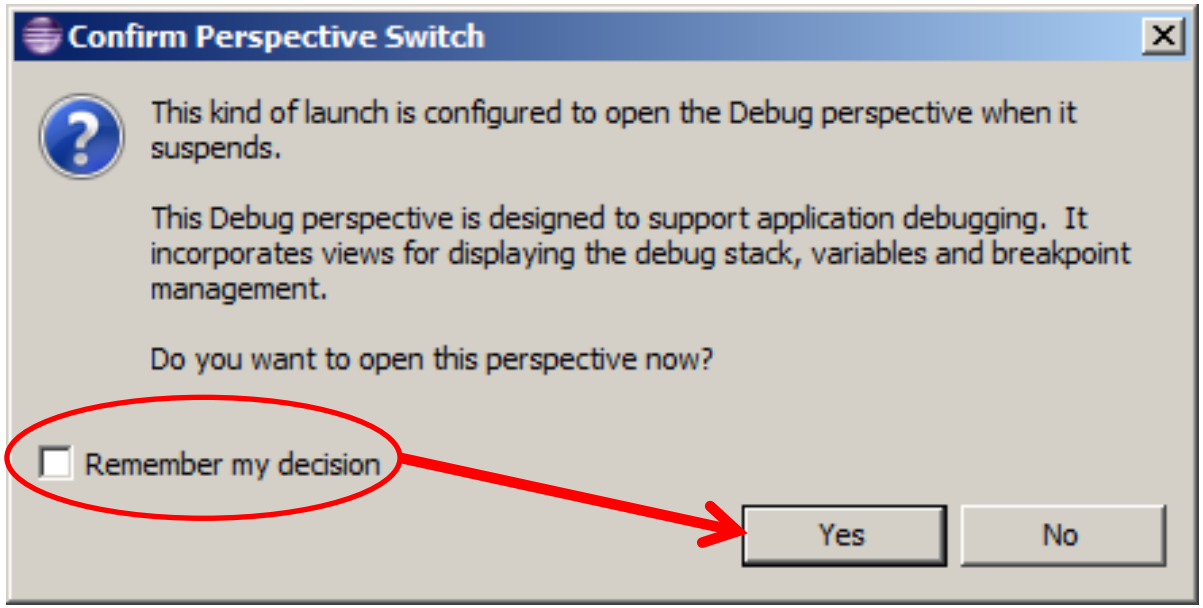
Put a breakpoint



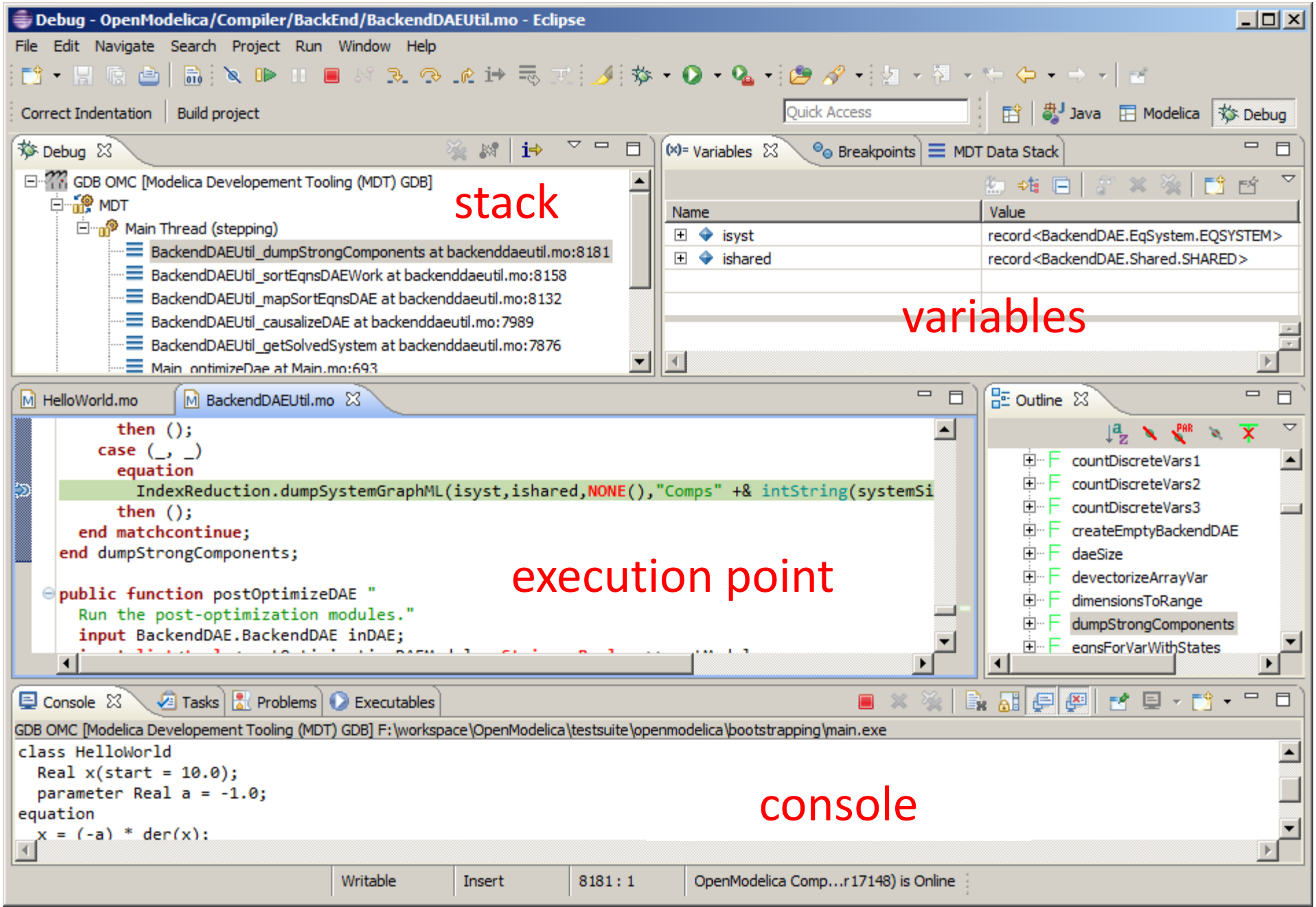
Start Debug


Debug Configurations
Create, manage, and run configurations
Run or Debug a MetaModelica program
type filter text
++ Application
++ Attach to Application
++ Postmortem Debugger
++ Remote Application
ɔse Application
a Applet
a Application
it
it Plug-in Test
nch Group
delica Developement Tooling (MI
delica Developement Tooling (MI
GDB OMC
Gi Framework
note Java Application
Filter matched 15 of 15 items
Name: GDB OMC
Main
Source
Common
Environment
Program: F:\workspace\OpenModelica\testsuite\openmodelica\bootstrapping\main.exe
Work directory: F:\workspace\OpenModelica\build\bin
GDB path: ${env_var:OMDEV}\tools\mingw\bin\gdb.exe
Workspace...
File System...
Debug C source files
Arguments:
+locale=C +d=dumpSCCGraphML +s HelloWorld.mo
Apply
Revert
Debug
Close

Switch to Debug perspective



Debug perspective



The End

- The Eclipse workspace created in this demo (only with the important parts) is here: https://openmodelica.org/documents/
- Also this document should be there

- Contact Adrian.Pop@liu.se for any issues.