Creating and using a static library in eclipse

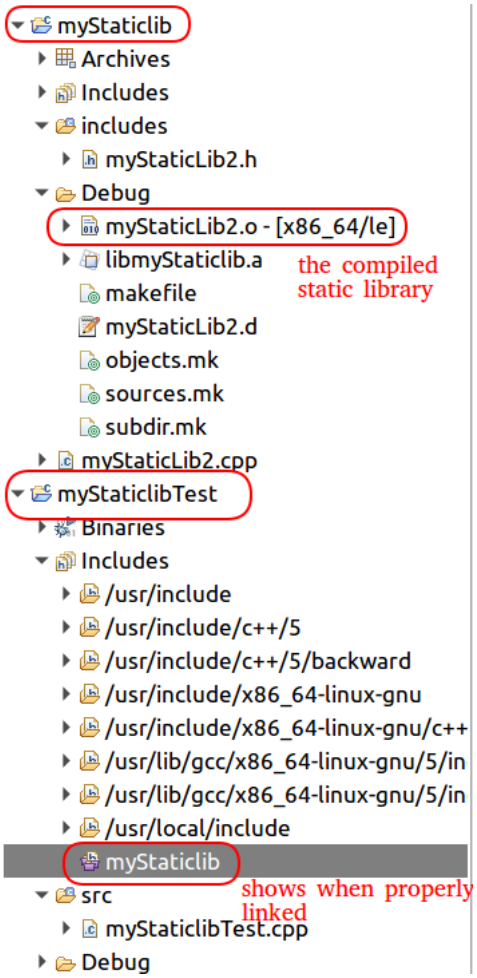
This document the details of setting up a static library in eclipse and using it in a test project.

Projects Created:

myStaticlib
myStaticLibTest

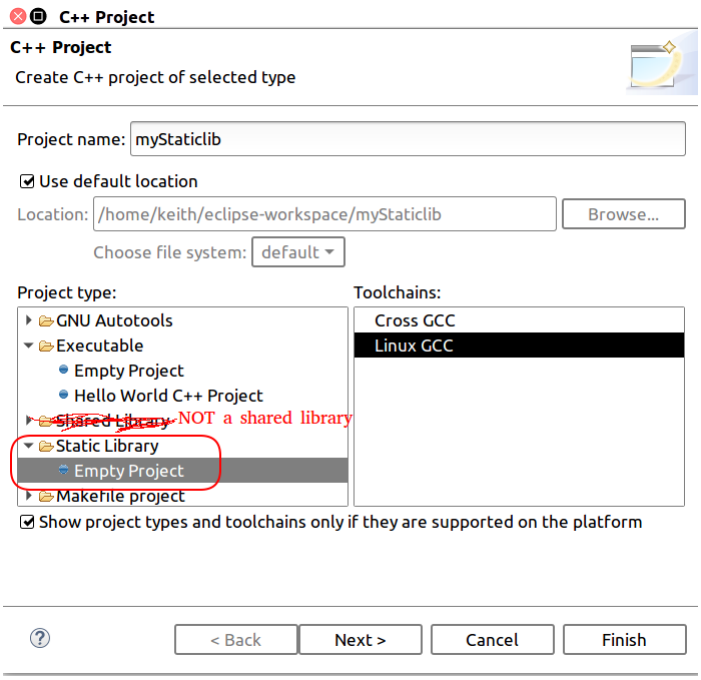
Completed Eclipse Directory Structure

Here is how eclipse's directory structure will look when done

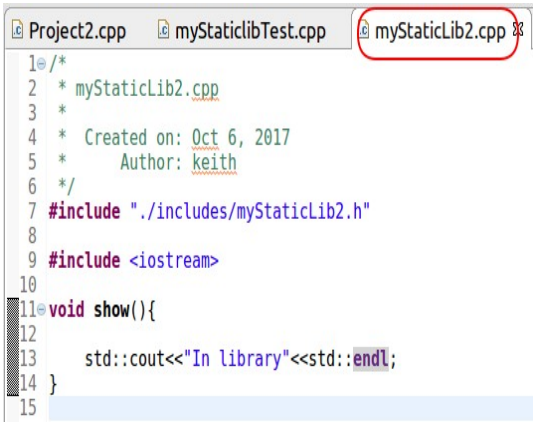


Create The Static library project (myStaticlib)

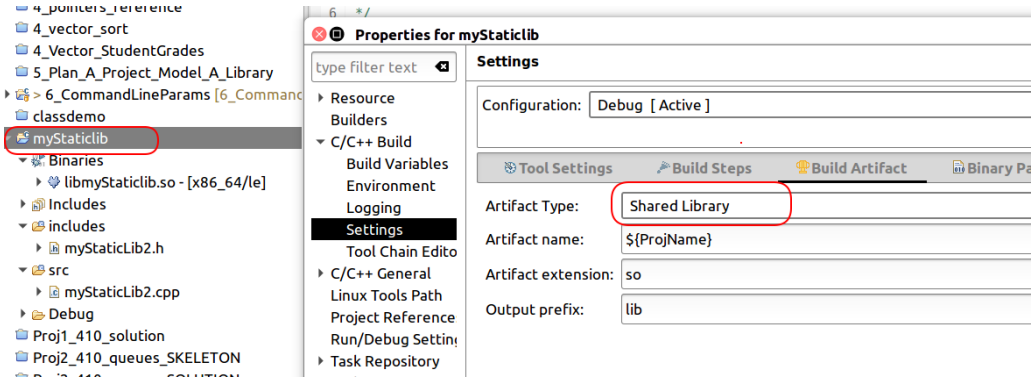
1. Create static library project.



2. Add a src folder to the project (not a plain folder)
3. Add a cpp and corresponding .h file. Add a function (no main()) to this library in both the cpp and header. For instance;

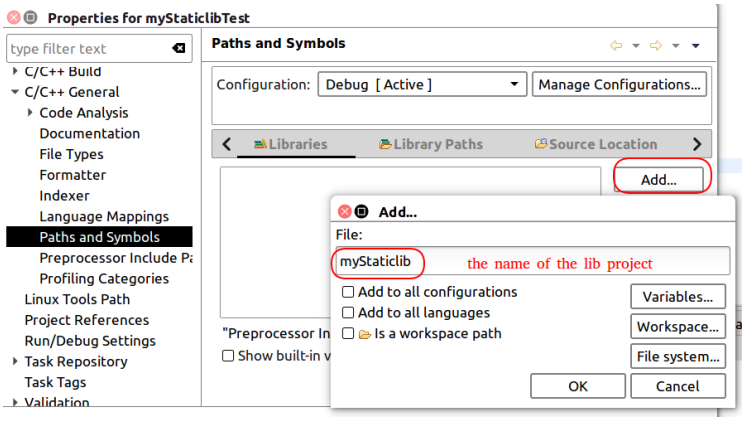


4. Compile it. The library will have the prefix ‘lib’ and suffix ‘.so’. You can look at its properties to verify that it’s a static library (select project, Properties, then in the following UI)

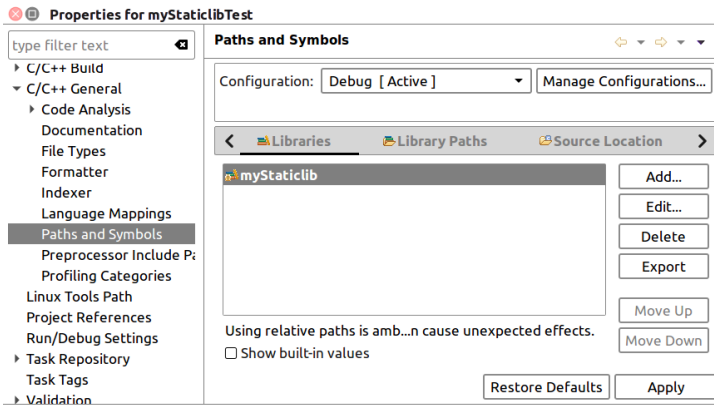


Create a test project that uses the static library (myStaticLibTest)

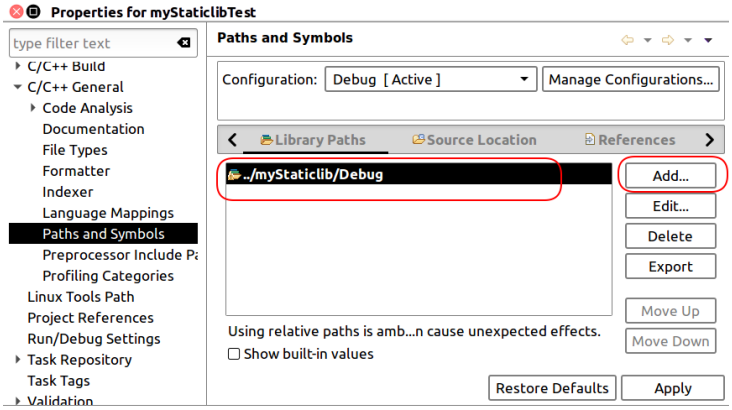
5. Create a regular project.
6. Add your library to this project. Click on your regular project, then properties, then C/C++ General, Paths and Symbols, then the Libraries tab(see the illustration below). Click the ‘Add’ button and follow the image below .



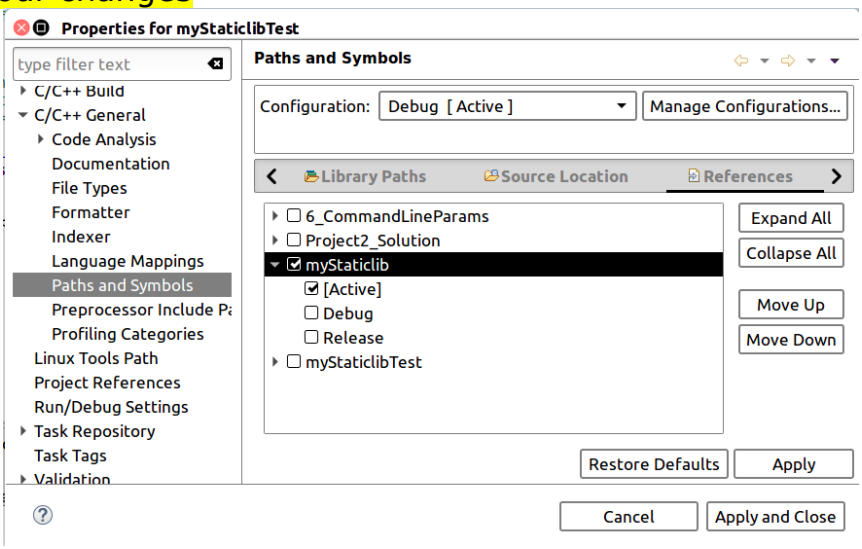
When done your library path should appear in the text window like so;



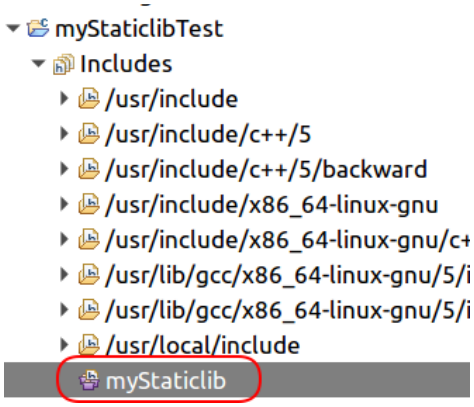
7. Add a path to look for this library



8. Finally select the reference tab and add a reference to the library you want to link to this application. Be sure to click the Apply button to save your changes



9. At this point your lib should appear in the includes directory of your project.



10. Include the libraries header in the test file. If you did not do step 7 correctly, this will not work. And add a call to the library function.