

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.

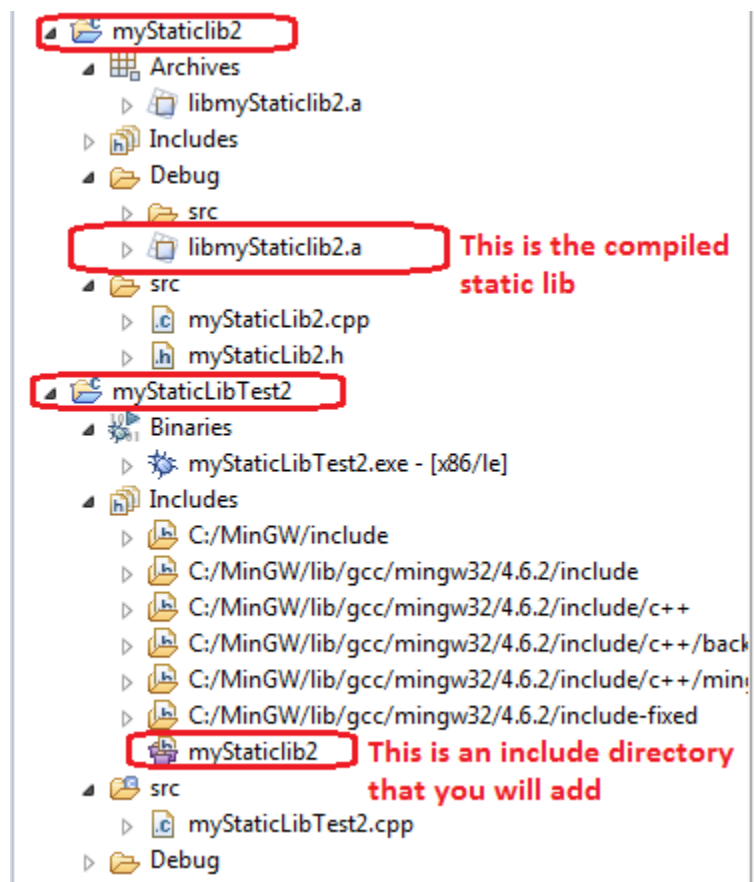
Projects Created:

myStaticlib2

myStaticLibTest2

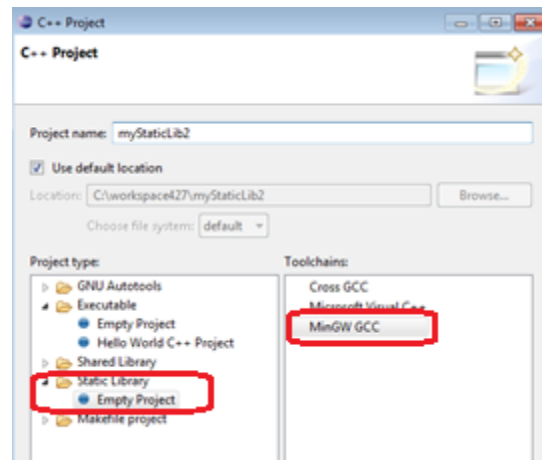
Completed Eclipse Directory Structure

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

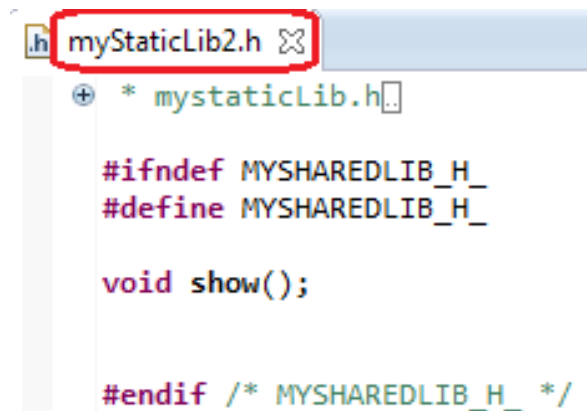
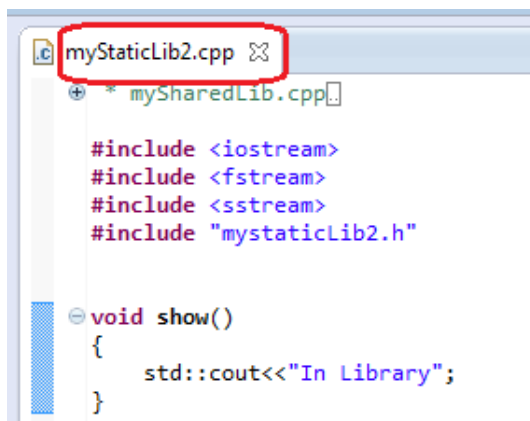


Create The Static library project (myStaticlib2)

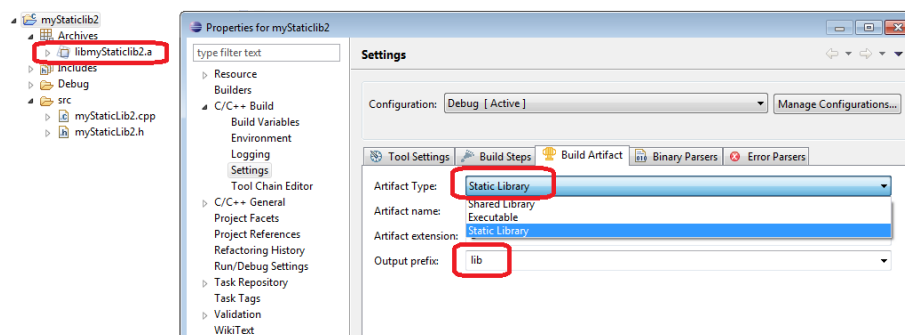
1. Create static library project.



2. Add a src folder then a cpp and corresponding .h file. Add a function (no main()) to this library in both the cpp and main. For instance;

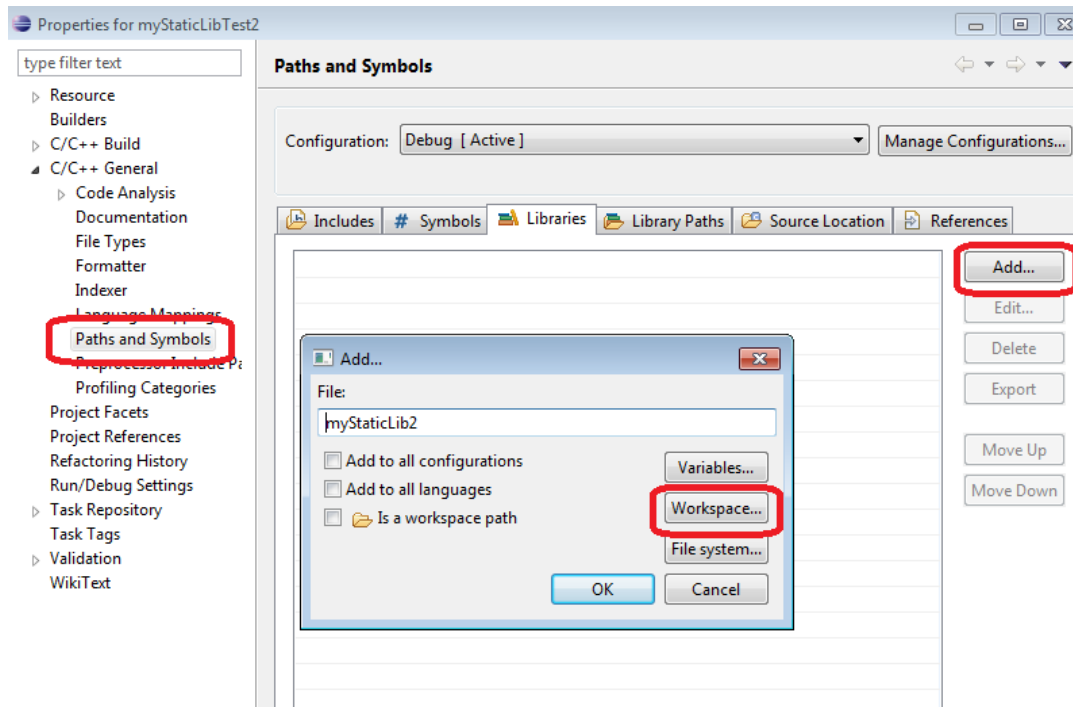


3. Compile it. The library will have the prefix 'lib' and suffix '.a'. You can look at its properties to verify that it's a static library.

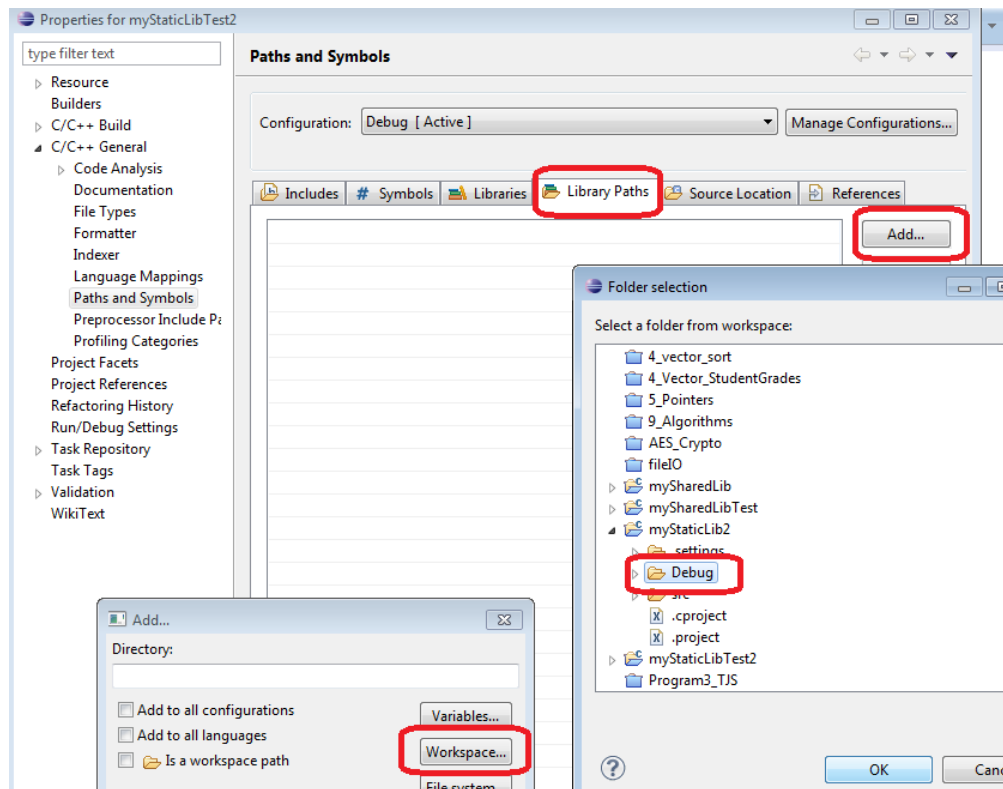


Create a **test project** that uses the static library (**myStaticLibTest2**)

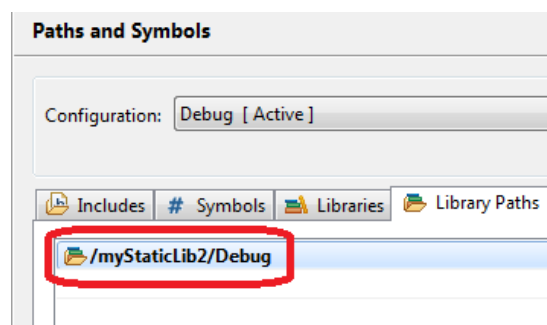
4. Create a regular project.
5. Add your library to this project. Click on your project, then properties, then C/C++ General, Paths and Settings, then the Libraries tab(see the illustration below). Click the 'Add' button and type your library name without any extensions (CASE MATTERS). In this case 'myStaticLib2' with no 's'. myStaticLib2 will appear in the Libraries text window



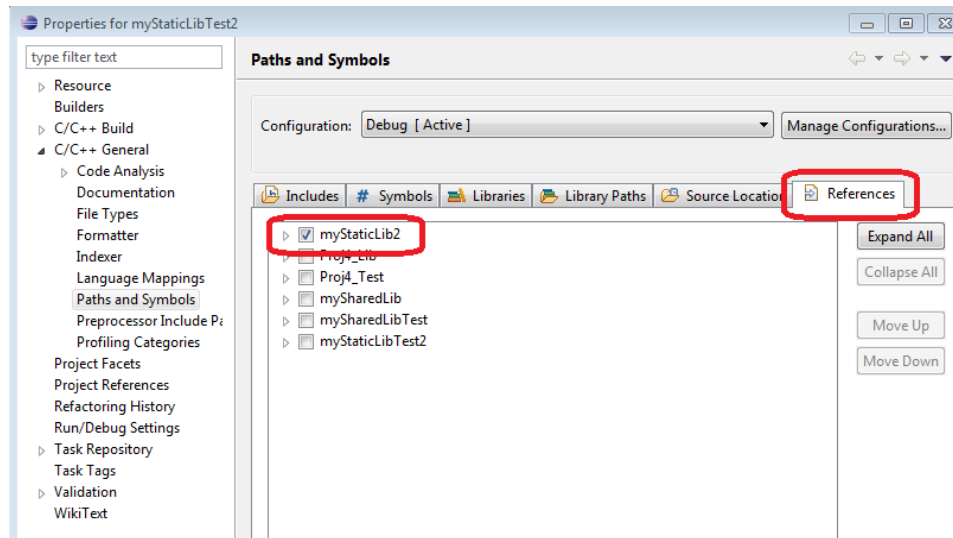
6. Tell the compiler where to find this library by clicking the Library Paths tab and then add the directory where the .o compiled library is (typically the debug dir).



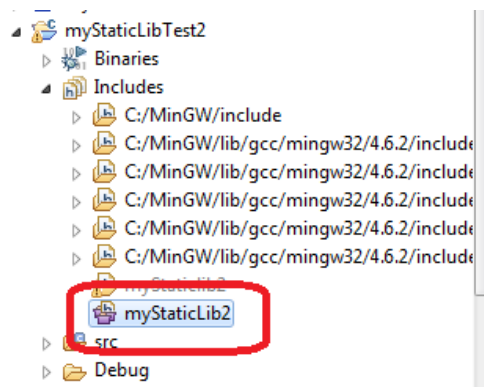
When done your library path should appear in the text window like so;



7. 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



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



9. 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.

```

myStaticLibTest2.cpp
// Name : mySharedLibTest2.cpp

#include <iostream>
#include "../myStaticlib2/src/myStaticLib2.h"
using namespace std;

using namespace std;

int main() {
    show(); Call into the library here
}

```

HOW TO CHANGE THE NAME OF THE COMPILED LIBRARY .o FILE

Project , Properties,Settings,Build Artifacts change the name of Artifact name to whatever you want your library named. (see Below)

