

SFML and Eclipse

This tutorial assumes, you have already Setup Eclipse succesfully. Further this tutorial uses the GCC MinGw compiler if you are using another Compiler you may have to modify it slightly.

Step 1: Download & Install SFML

Download

Go to <http://www.sfm1-dev.org/> and Download the GCC MinGw Version.

Download Button

The Website says, the Compiler versions have to match 100%. I was also able to use it with a newer compiler version. However if you run into troubles later you should consider downloading the matching compiler version, linked below the downloads.

Installation

Extract the downloaded zip-file anywhere you want. In this Tutorial we will use the path `C:\sfml`

Step 2: Creating an Eclipse Project

Open *Eclipse Cpp* and create a new project by clicking: `File > New > C++ Project`. Name the project whatever you want. Below select `Empty Project` as project type and the `MinGW GCC` toolchain. Click on the `Finish` button to create your Project.

Creating a new project.

Step 3: Setup the Project-Properties

After you created your projet right-click on it in the Project Explorer and select `Properties`.

Setup the include path.

Go to `C/C++ Build > Settings > Tool Settings > GCC C++ Compiler > Includes` and add the path to the include folder of the sfml library by clicking on the green plus-icon. Adding the library-path.

Setup the library path.

Go to `C/C++ Build > Settings > Tool Settings > MinGW C++ Linker > Libraries`. Under `Library search path (-L)` add the path to the lib folder of the sfml library by clicking on the green plus-icon.

Under `Libraries (-l)` add the following: `sfml-graphics` `sfml-window` `sfml-system`. Click *Apply* and *OK* to save the changes. `Adding the library-path.`

Step 4: Creating a "Hello World" file

Right-click on your project folder and select `New > Folder` and then right-click the new folder and select `New > File`. Name it `sfml.cpp`.

`New folder and file.`

Copy the following code inside your file:

```
#include <SFML/Graphics.hpp>

int main()
{
    sf::RenderWindow window(sf::VideoMode(200,200), "Hello World");
    sf::CircleShape shape(100.f);
    shape.setPointCount(128);
    shape.setFillColor(sf::Color::Green);

    while (window.isOpen())
    {
        sf::Event event;
        while (window.pollEvent(event))
        {
            if (event.type == sf::Event::Closed)
                window.close();
        }

        window.clear();
        window.draw(shape);
        window.display();
    }

    return 0;
}
```

Step 5: Building and running


Click on `Project > Build All`. You should get an output similar to this:

```
14:06:36 **** Incremental Build of configuration Debug for project sfml_test ****  
Info: Internal Builder is used for build  
g++ "-IC:\\sfml\\include" -O0 -g3 -Wall -c -fmessage-length=0 -o "src\\sfml.o" "..\\sr  
g++ "-LC:\\sfml\\lib" -o sfml_test.exe "src\\sfml.o" -lsfml-graphics -lsfml-window -ls
```

14:06:37 Build Finished (took 837ms)

Now go to your sfml-library folder and copy the .dll-files of the bin folder. Paste them into the Debug folder of your sfml-project next to the generated .exe file.

The .dll-files.

Now go back to eclipse and press the green run button . If everything worked correctly you should see the following window:

The final window.