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Unity is a unit test framework. Our goal has been to keep it small and functional. The core Unity test framework is a single C and header file pair, which provide functions and macros to make testing easier. Most of it is a variety of assertions which are meant to be placed in tests to verify that variables and return values contain the information that you believe they should. There are some additional methods for general test flow control.

We've developed Unity to be fairly cross-platform. It uses ANSI C for the library itself, and beautiful cross-platform Ruby for all the optional add-on scripts. We've personally used Unity with GCC, IAR's Embedded C Compiler, and MS Visual Studio. It shouldn't be too much work to get it to work with something else.

When you download Unity, you're going to get some other goodies as well. Let's look at the root directory for a hint as to what those goodies are:

- test – These are tests using Unity which actually test unity itself. How cool is that?
- src – This is where Unity, and some example helpers to expand Unity, live
- examples – This has examples of how to use Unity and its scripts.
- docs – This has our wonderfully entertaining documentation (like this file)
- build – Just ignore this. Temporary build files get thrown here.
- auto – This contains a collection of Ruby scripts which are going to make using Unity less painful

You're also going to see a makefile and a rakefile (plus a rakefile_helper... which strangely enough just helps the rakefile).

The makefile is a simple makefile which can be used to get the Unity tests going... it's also a good example of a simple way of assembling your tests. It's currently written assuming you are using GNU Make, but is simple enough that you could tweak it to use with something else.

The rakefile does the same thing, but using Rake. If you have Ruby and Rake installed you can use Rake instead of Make. It's going to provide you with extra goodies like test summaries and the ability to automatically discover your test functions (so you don't have to remember to call each one by hand).