

## Unity test assertions

macro	function
TEST_ASSERT_TRUE(condition)	Evaluates whatever code is in condition and fails if it evaluates to false
TEST_ASSERT_FALSE(condition)	Evaluates whatever code is in condition and fails if it evaluates to true
TEST_FAIL_MESSAGE(message)	This test is automatically marked as a failure. The message is output stating why.
TEST_ASSERT_EQUAL(expected, actual)	Compare two integers for equality and display errors as signed integers. If the ints passed are smaller, they will be cast to full size. You can use this most of the time when comparing numbers.
TEST_ASSERT_EQUAL_UINT(expected, actual)	Compare two integers for equality and display errors as unsigned integers.
TEST_ASSERT_EQUAL_HEX(expected, actual)	Compare two integers for equality and display errors as an 32-bit hex value
TEST_ASSERT_FLOAT_WITHIN(delta, expected, actual)	Asserts that the actual value is within plus or minus delta of the expected value.
TEST_ASSERT_EQUAL_STRING(expected, actual)	Compare two null-terminate strings. Fail if any character is different or if the lengths are different.
TEST_ASSERT_EQUAL_MEMORY(expected, actual, len)	Compare two blocks of memory. This is useful for packed structs, buffers, etc... just keep in mind that it's checking everything in that range... so if your struct is unpacked, you might get false failures.

## CMock instrumentation

source function	mock function
void func(void)	void func_Expect(void)
void func(params)	void func_Expect(expected_params)
retval func(void)	void func_ExpectAndReturn(retval_to_return)
retval func(params)	void func_ExpectAndReturn(expected_params, retval_to_return)

## useful commands

command	action
rake test:all	Run all tests
rake release	Build the release artifact
rake	test:all and release
rake test:<test_name>  example: rake test:ClientRunner	Run a specific test file
rake module:create[<module_name>]  example: rake module:create[ClientRunner]	Generate new files for a module  ClientRunner.h, ClientRunner.c, and test_ClientRunner.c
rake cuke:client	Run all client cucumber specs
rake cuke:server	Run all server cucumber specs
cucumber <feature>  example: cucumber features/client/ping.feature	Run a specific cucumber file
build/release/<executable>  example: build/release/client	Run a release target
alias go='rake release && cucumber'  go <feature>  example: go features/client/ping.feature	Alias 'go' to build and run a cucumber. Append a feature file to run that feature  Build and run the client ping feature