

AST Unit Tester

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Overview

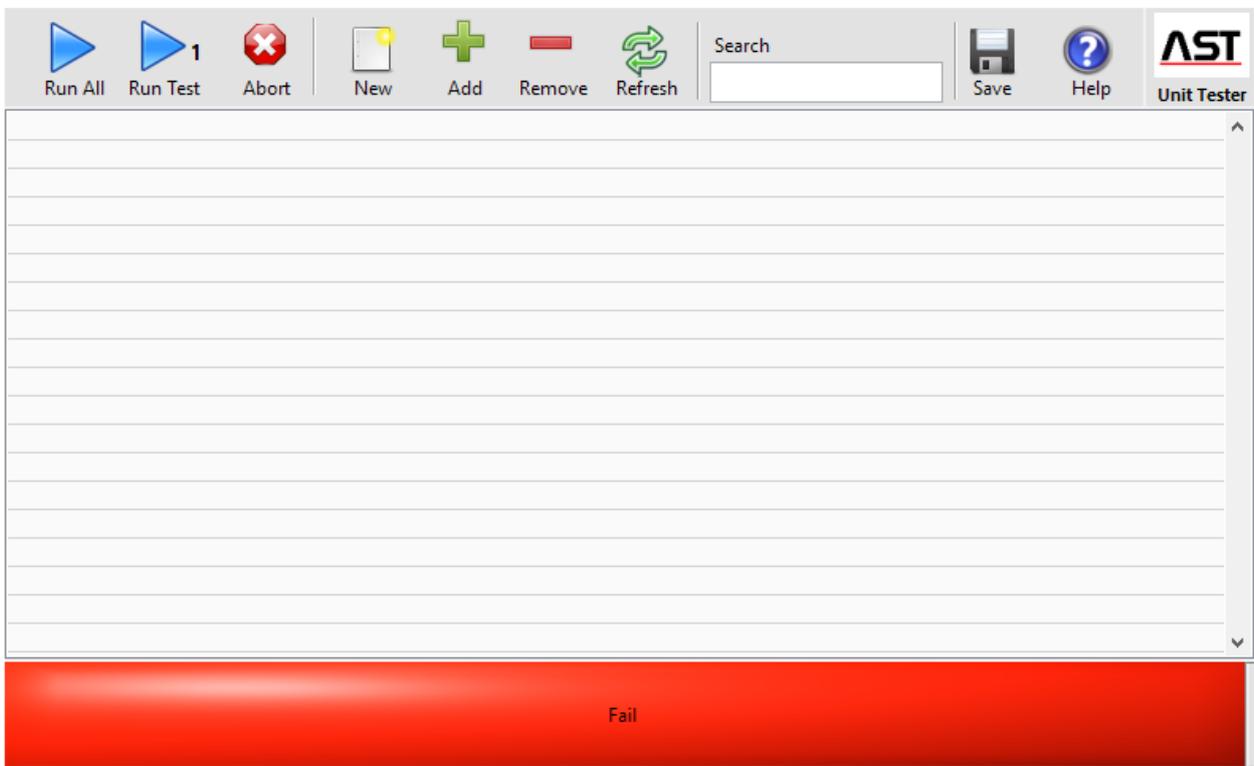
Overview

AST Unit tester is a tool to perform quick and easy Unit tests on LabVIEW code.

AST Unit Tester looks for VI's in the current project that begin with "Test" and a bookmark named "#AST_Unit_Test". The user can then run all tests or run just a selected test. AST unit tester displays the result of each test as green for pass, red for fail. User can also save results of Unit test to a simple text file

Examples can be found in

National Instruments\LabVIEW <Version>\examples\Automated Software Technology\AST Unit Tester\AST Unit Tester Examples

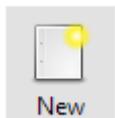


Creating a Unit Test

Creating Unit Test in AST Unit Tester

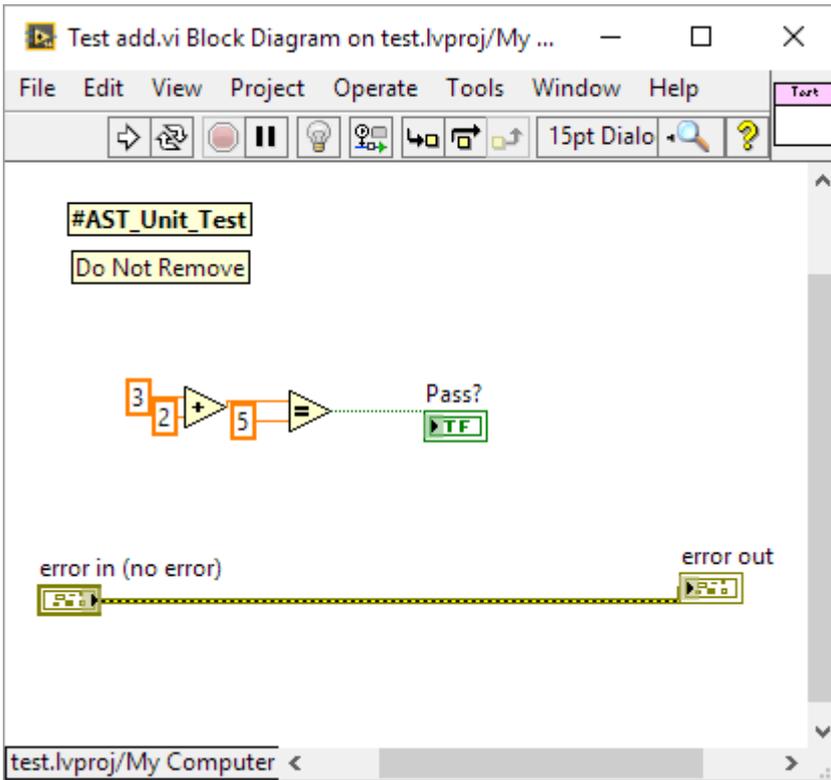
Creating unit tests is very simple.

Select where you would like the unit test vi to be in your project. Click on the New Test button.



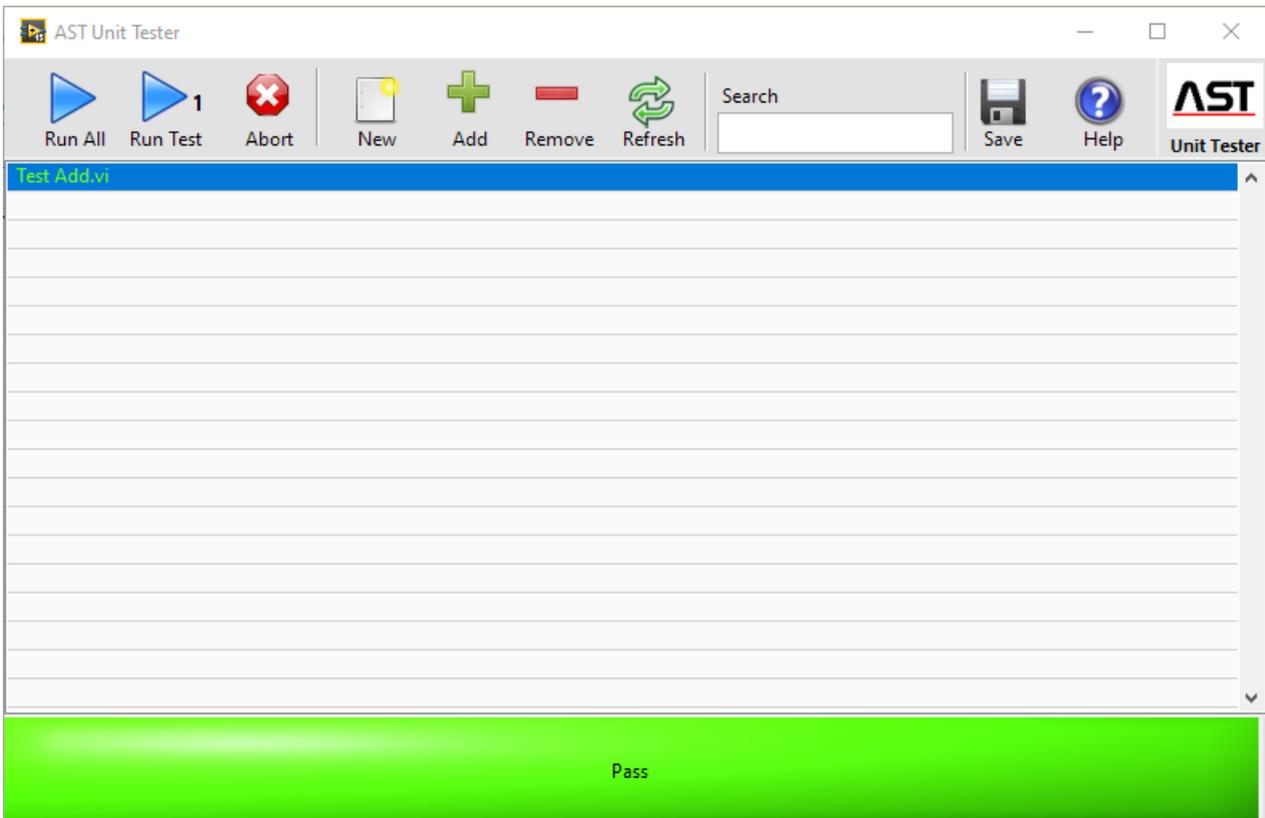
Save the Unit test as Test <Your Unit Test>.vi. The unit test will be automatically added to the project at the location specified. The AST unit tester looks for test in the name of the unit test and the #AST_Unit_Test bookmark.

Create your Unit test. Wire the "Pass?" Boolean to your function or groups of functions you want to test. The AST Unit tester looks for the "Pass?" Boolean and makes sure the error out cluster does not report an error



You are now ready to run some tests. The created test should appear in the test list. If not you can use the Add button to add the test.

Select Run all or Select a Unit test or tests to run and Select Run selected

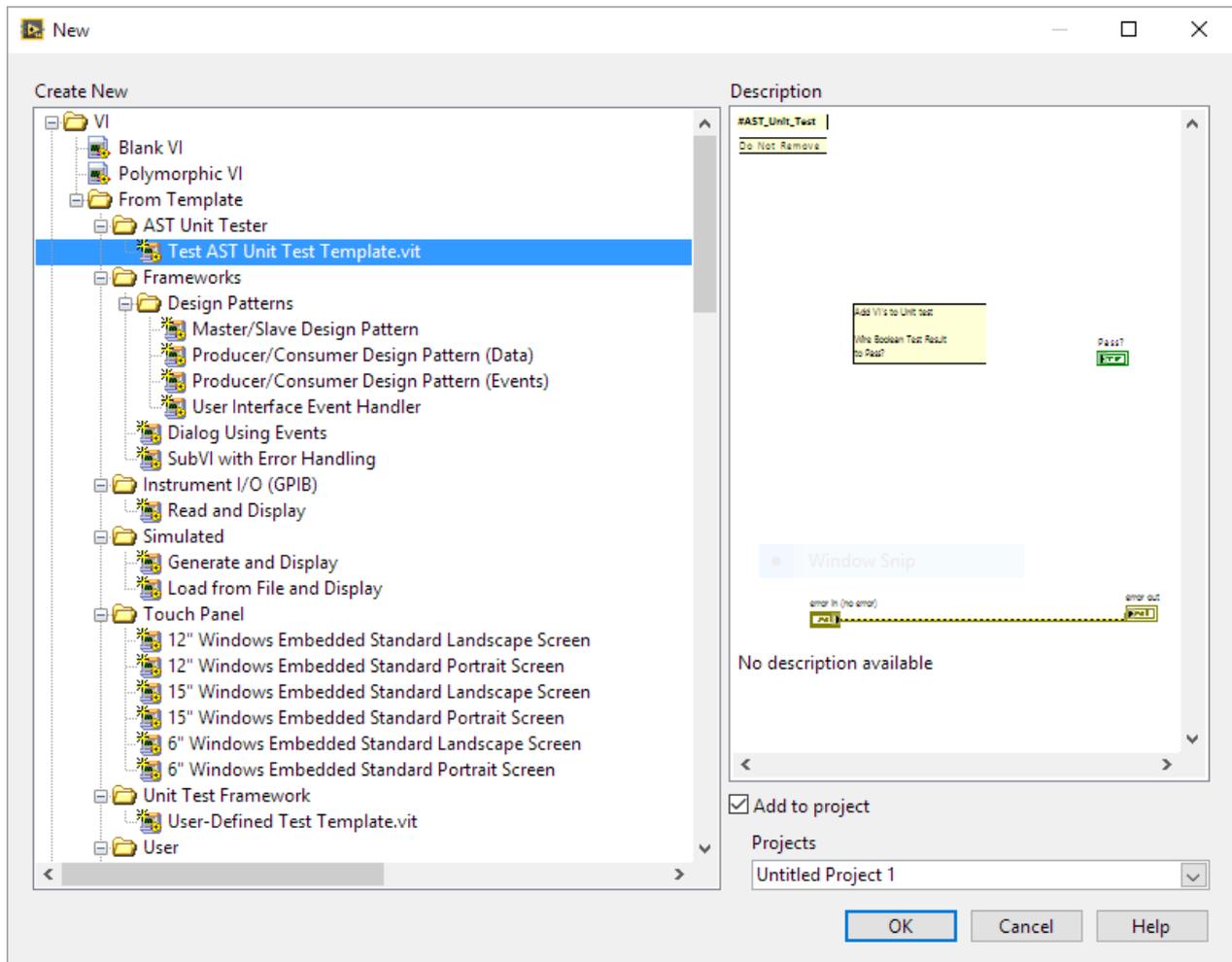


That's it! Happy Testing

Creating a Unit Test From Template

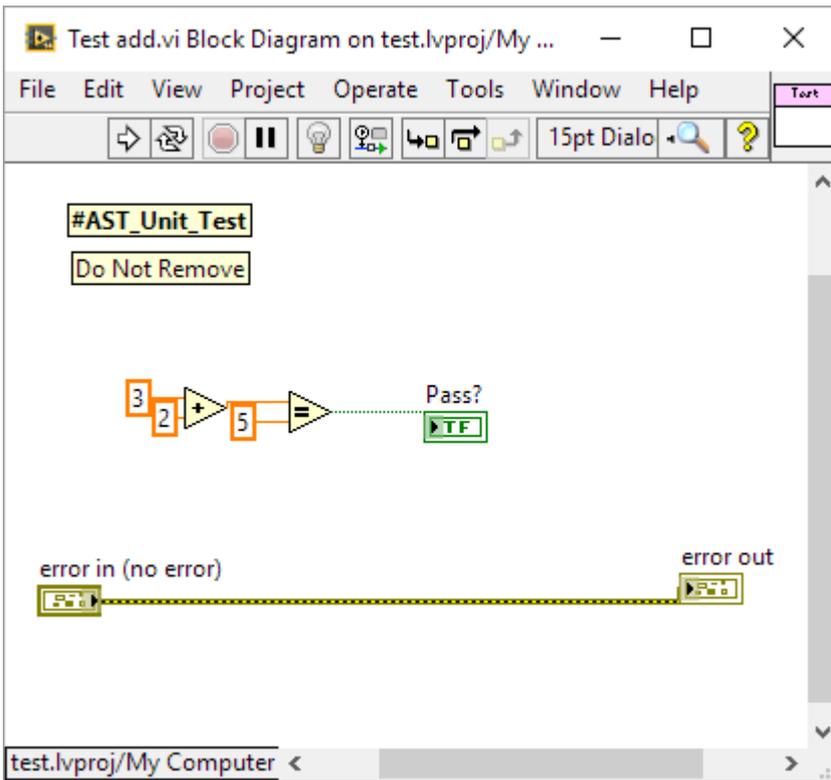
Creating Unit Test from AST Unit Test Template

Select File\New\From Template\AST Unit Tester\Test AST Unit Test Template.vit

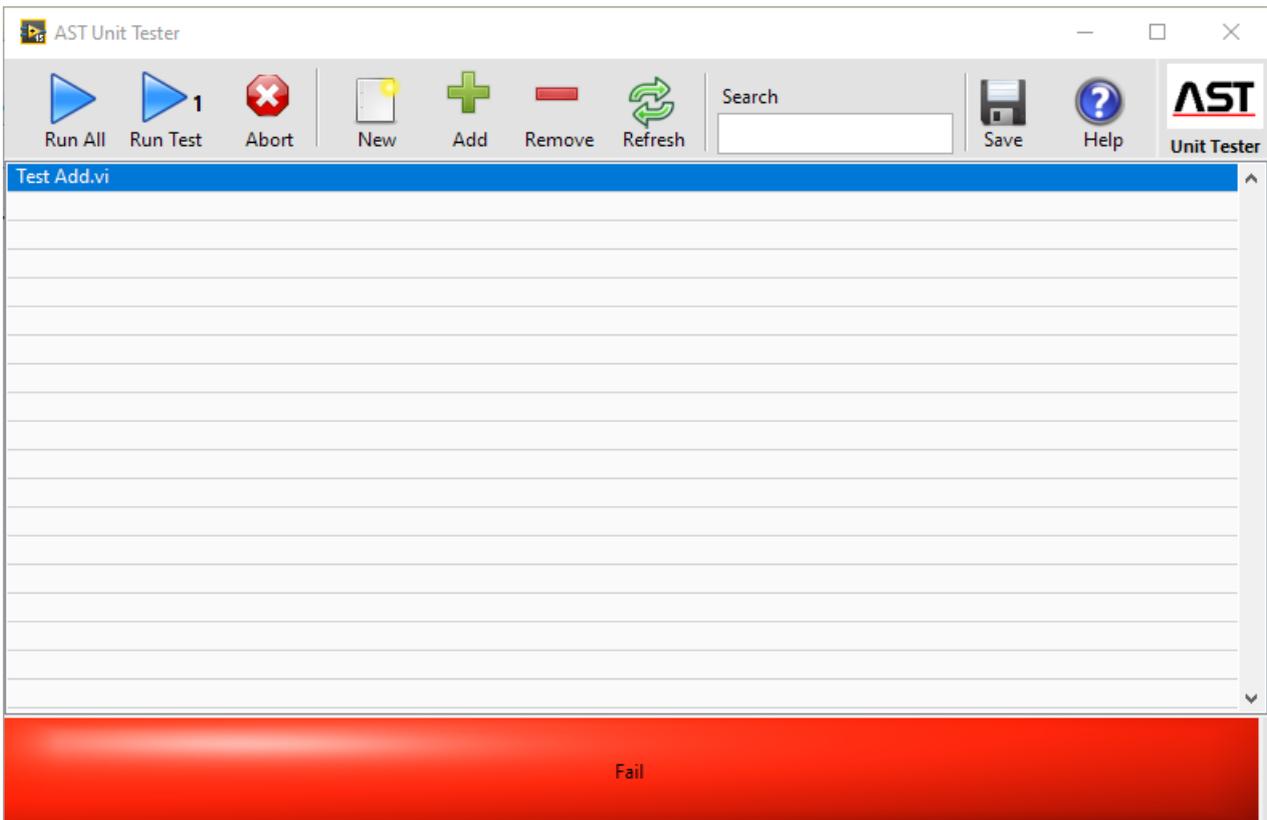


Save the Unit test as Test <Your Unit Test>.vi Make sure you add the unit test to your project. The AST unit tester looks for test in the name of the unit test and the #AST_Unit_Test bookmark.

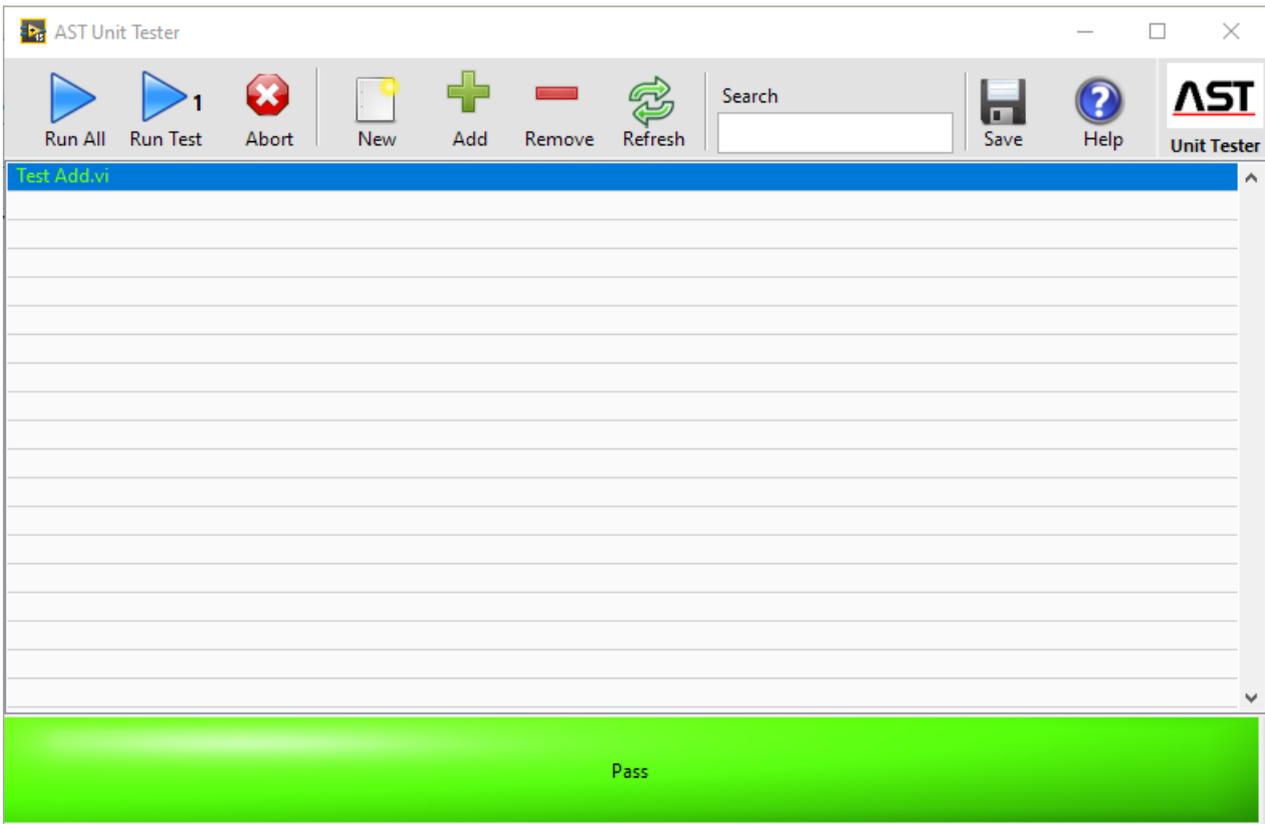
Create your Unit test. Wire the "Pass?" Boolean to your function or groups of functions you want to test. The AST Unit tester looks for the "Pass?" Boolean and makes sure the error out cluster does not report an error



You are now ready to run some tests. Select Tools\AST Unit tester to run the tool



Select Run all or Select a Unit test or tests to run and Select Run selected



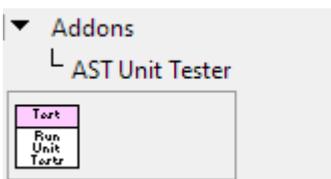
That's it! Happy Testing

Programmatically Run Tests

Programmatically Run Tests

Allows the user to run AST Unit tester Programmatically from the block diagram without the GUI

You can access the VI by going to the Functions palette Addons/AST Unit Tester/Run AST Unit Tester



You can specify a path to the project you want to run tests on. Leaving the path empty will run tests on the current project.

System requirements

System Requirements

LabVIEW 2015
 Open G
 WF Progress bar

Getting help

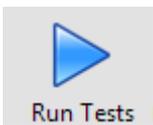
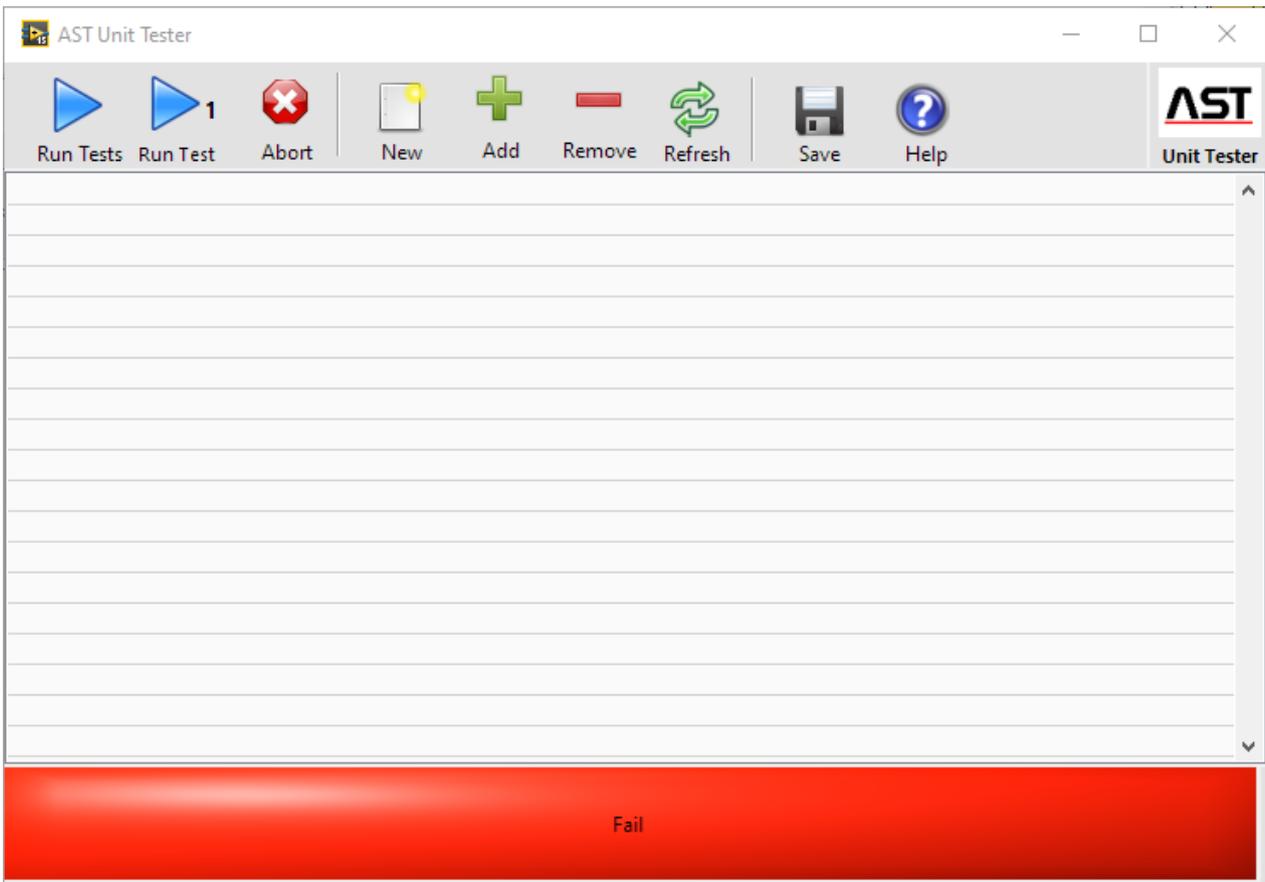
Contact Automated Software Technology

AUTOMATED SOFTWARE TECHNOLOGY

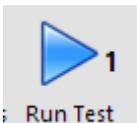
www.autosofttech.net

UI

UI



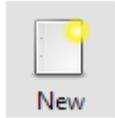
Run all Tests.



Run Selected Tests. User can run 1 or multiple tests selected in the selection list box.



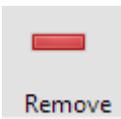
Aborts all tests. This is useful if the test hangs up



Creates a new test from the AST Unit Test Template and adds to the project



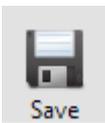
Add Test from file.



Remove selected tests.



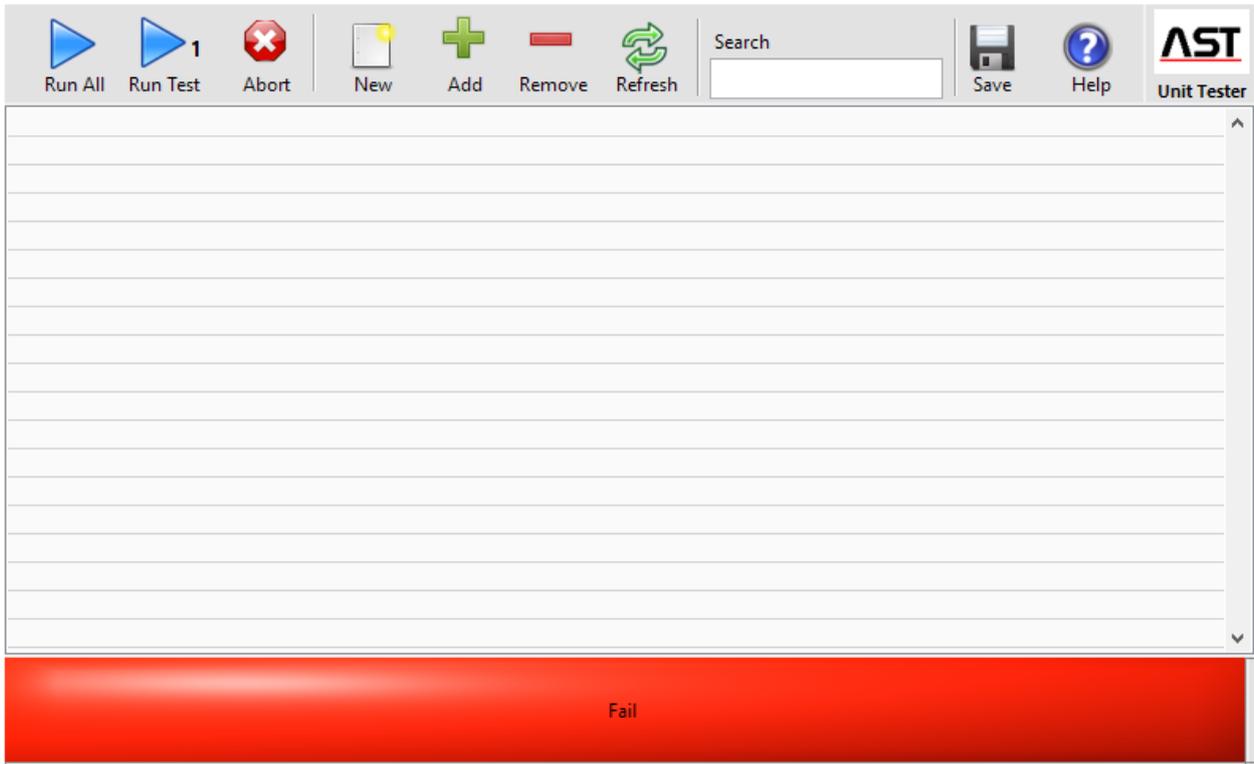
Refresh Tests from project. Use this after adding tests to project



Save Test Results to a text file. User will be promoted for Results file path

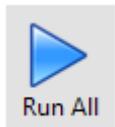


Brings up Help Dialog



Run All

Run All



Run all Tests.

Run Selected Tests

Run Selected Tests



Run Selected Tests. User can run 1 or multiple tests selected in the selection list box. User can hold down the Ctr Key to select multiple tests to run.

Abort

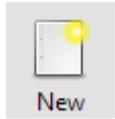
Abort



Aborts all tests. This is useful if the test hangs up

New

New



Creates a new test from the AST Unit Test Template and adds to the project

Add

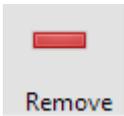
Add



Add Unit Test from file. This is useful if for some reason the GUI doesn't load a test

Remove

Remove



Remove selected tests. User can select multiple test to remove from list box by holding the Ctr key and clicking on the desired tests to remove

Refresh

Refresh



Refresh Tests from the project that are not in the test list. Use this after adding tests to project using the AST Unit Test Template

Search

Search

Searches the test name for the text entered.

Test Results



Test Results display. Will be red for fail and green for pass