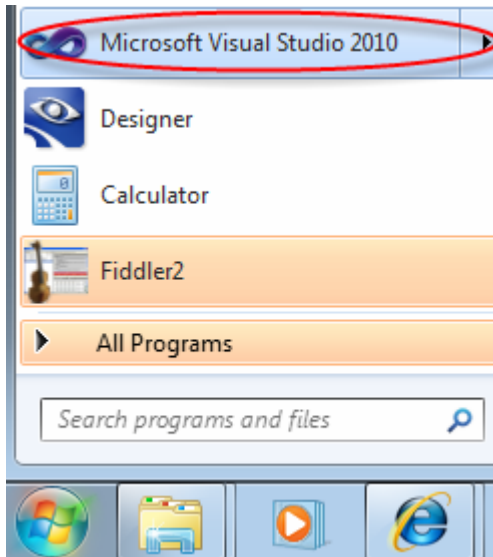


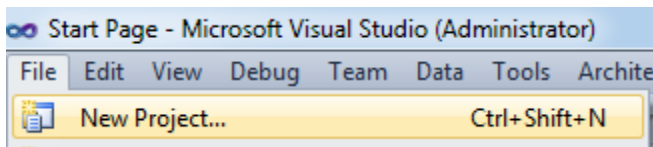
## Visual Studio 2010 Load Testing Overview

The following is a brief overview of performing a basic load test using Visual Studio 2010 Ultimate:

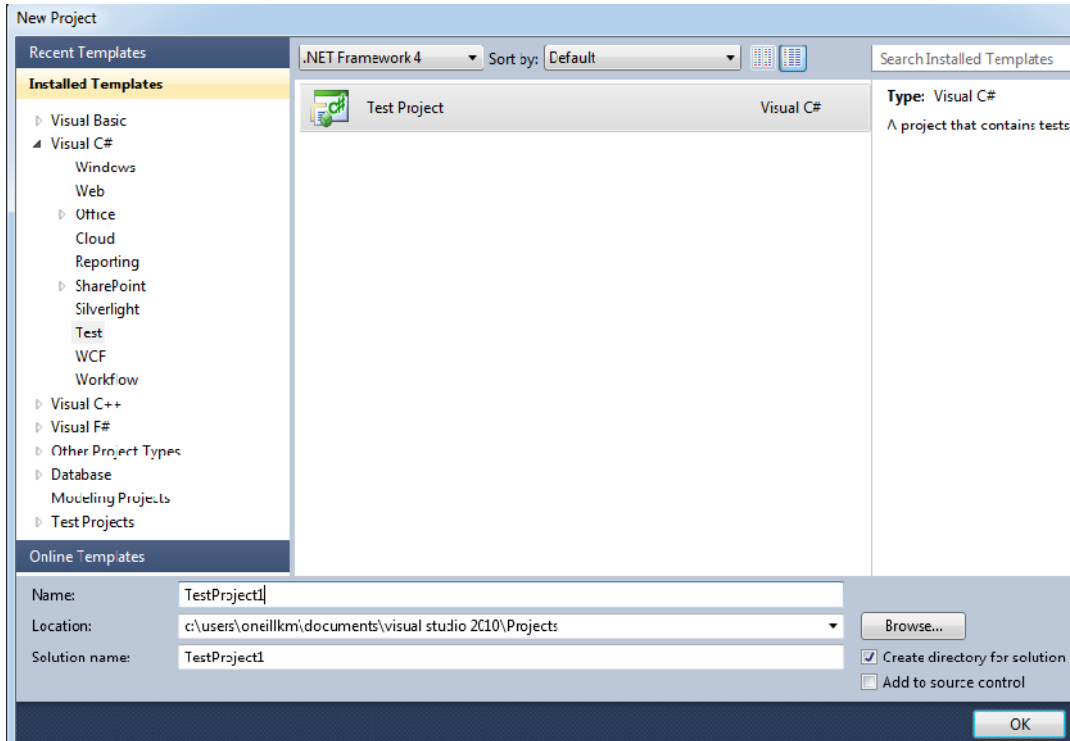
Launch Visual Studio 2010 Ultimate:



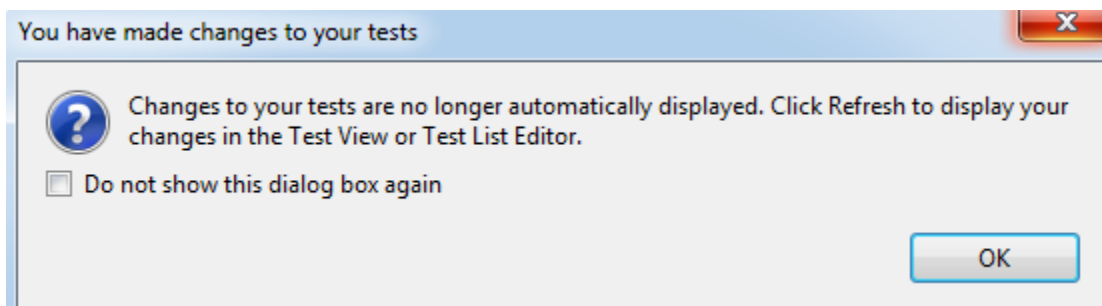
Select File -> New Project:



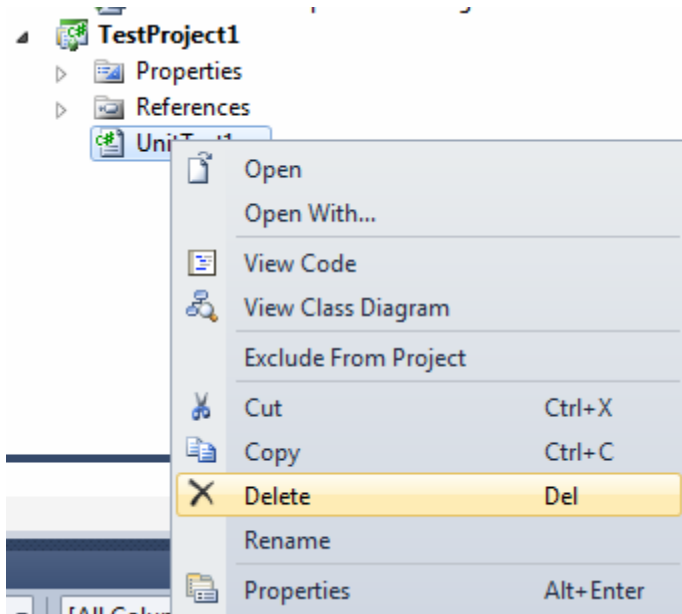
Select under Visual C# -> Test -> Test Project -> name the project and click OK:



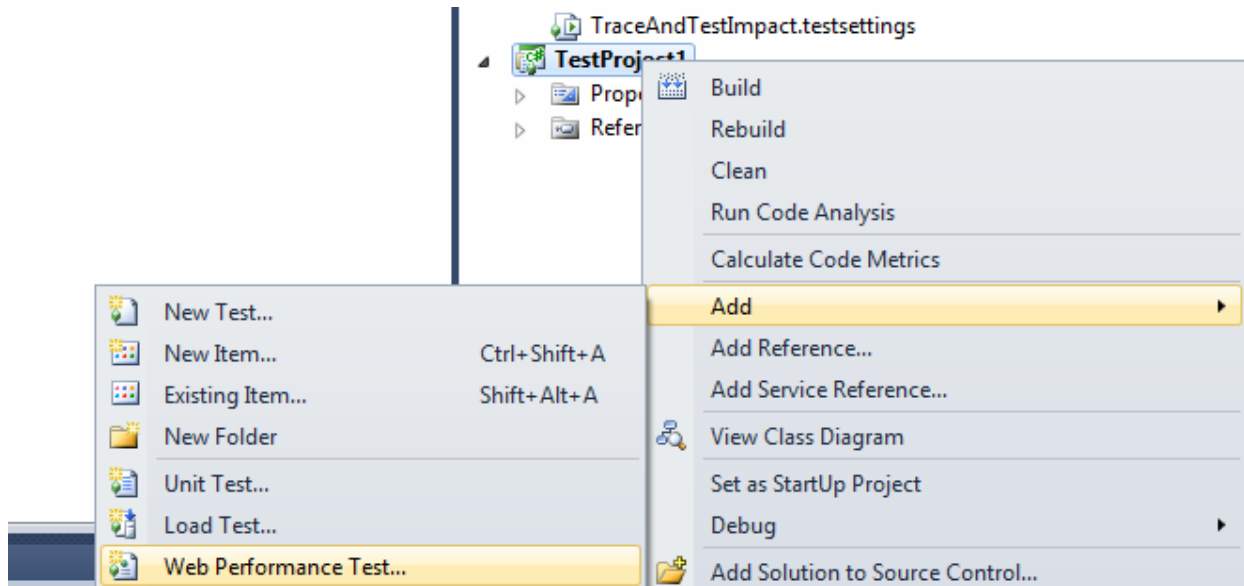
Click OK if this message displays – in this case I had already existing Tests cached:



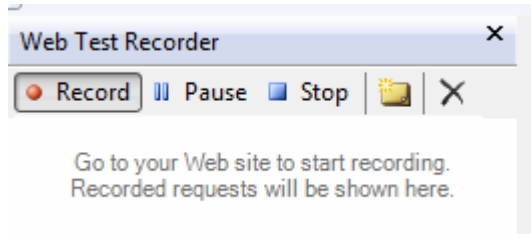
In this case we are going to perform a simple web performance test – so thus click the Unittest1.cs and delete it:



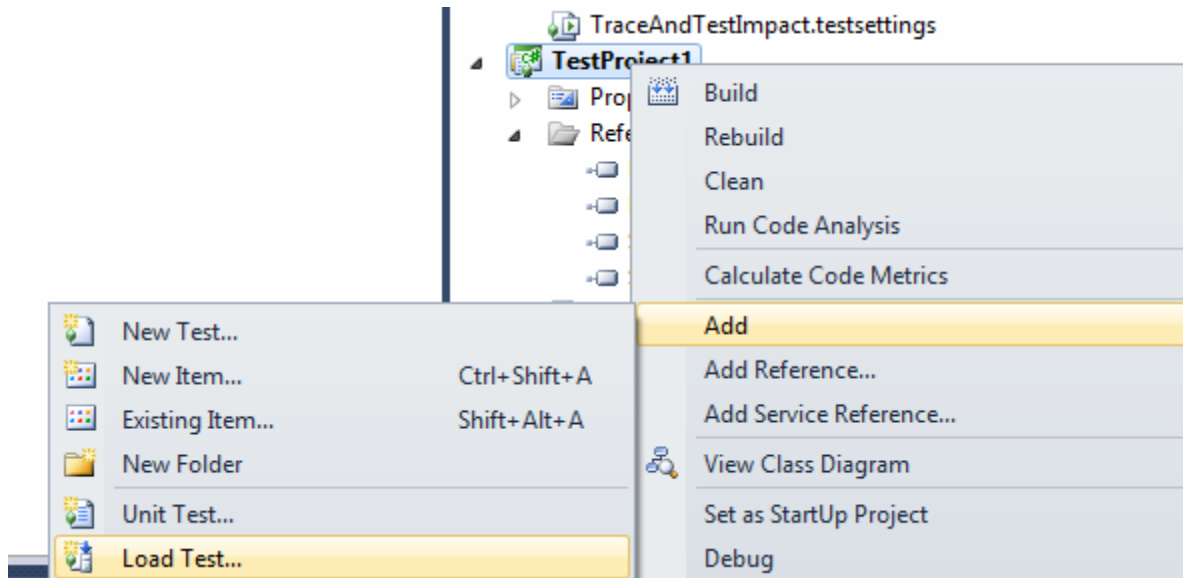
Right mouse click the Project and select Add -> Web Performance Test:



At the browser window that comes-up the Record will already be selected – therefore go to the web application and perform the desired functionality that is to be tested – when done – click Stop:

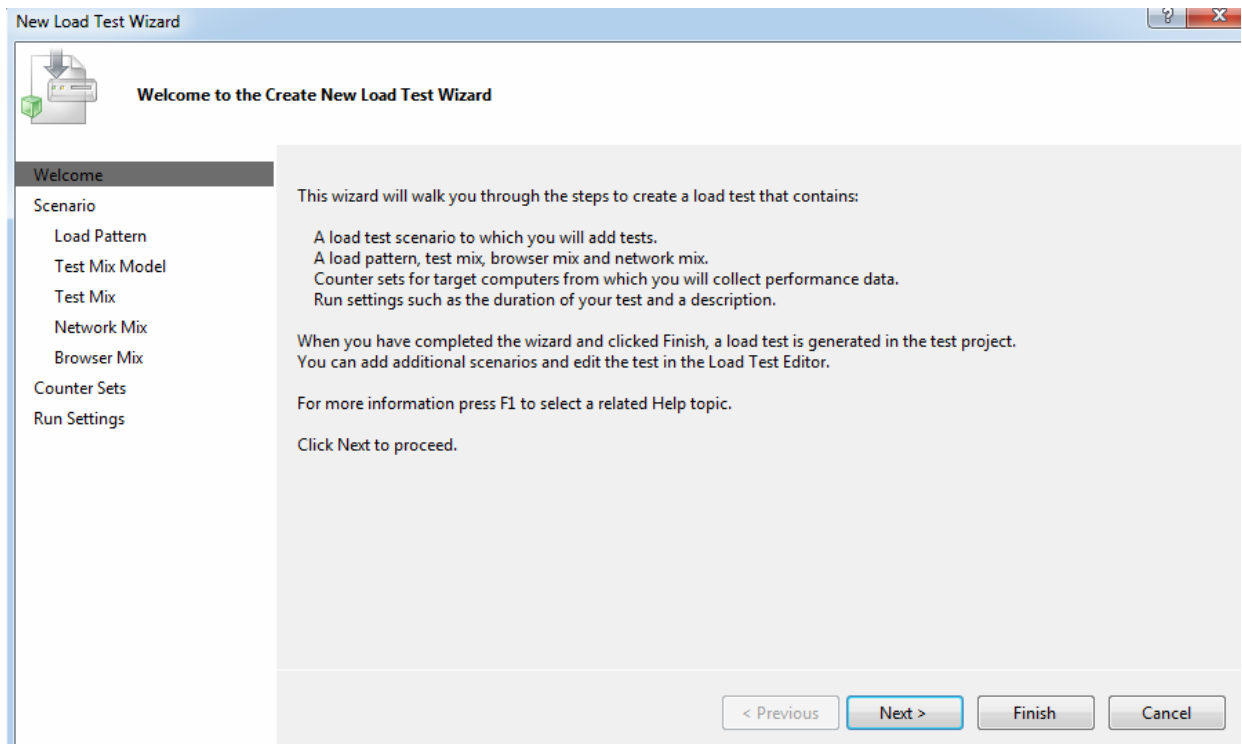


Now we will run a load test against the web performance test that was created. Therefore right mouse click the project and select Add -> Load Test:

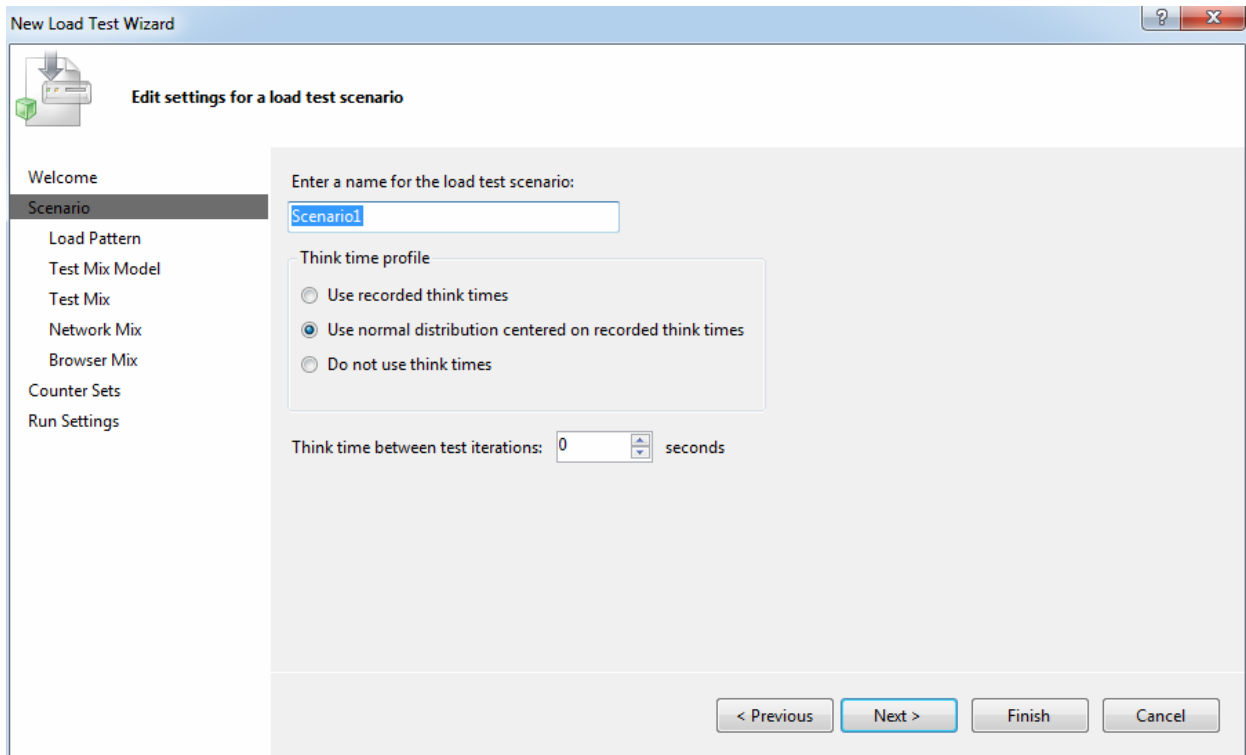


A wizard comes up – and therefore read each option carefully – at the first screen after reading the information click Next:

# KEVIN O'NEILL



One can name the load test scenario and select the desired think time profile – when done click Next:

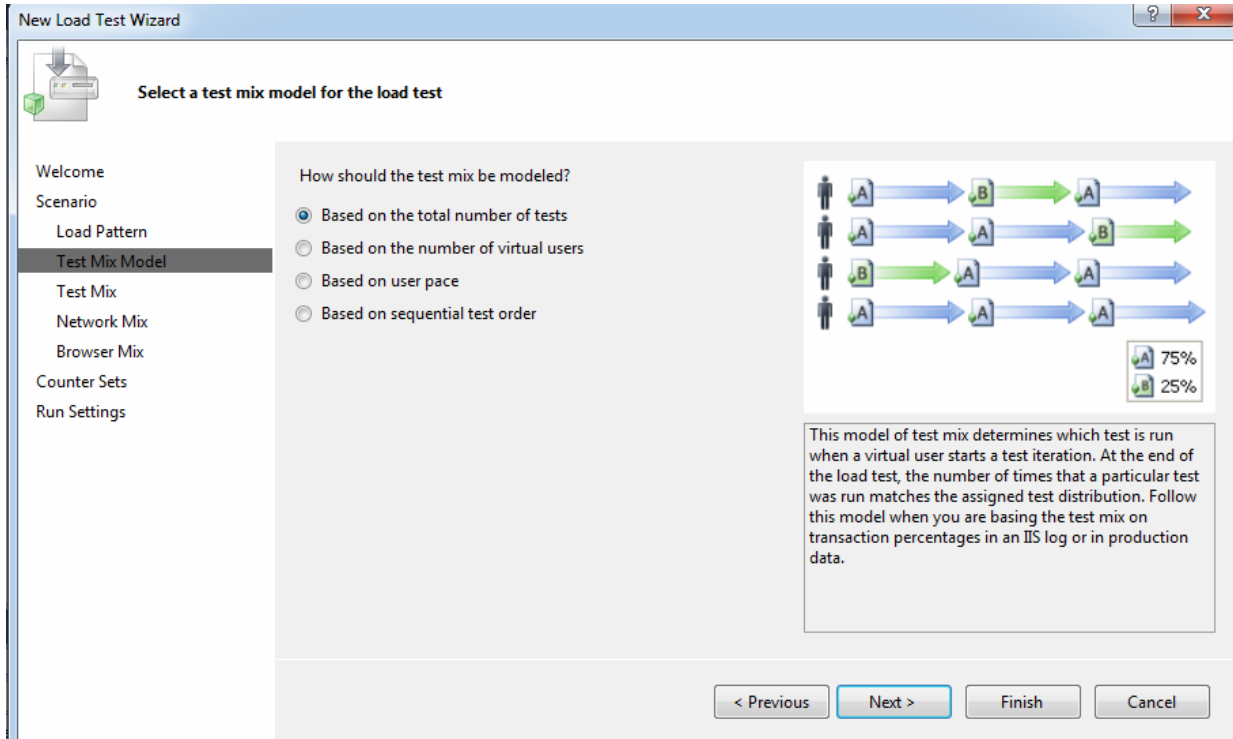


The user count can be entered and when done click Next:

The screenshot shows a Windows-style dialog box titled "New Load Test Wizard". The main area is titled "Edit load pattern settings for a load test scenario". On the left is a navigation pane with the following items: Welcome, Scenario, Load Pattern (highlighted), Test Mix Model, Test Mix, Network Mix, Browser Mix, Counter Sets, and Run Settings. The main content area is titled "Select a load pattern for your simulated load:" and contains two radio button options: "Constant Load:" (selected) and "Step load:". Under "Constant Load:", there is a "User Count:" label followed by a spinner box containing the number "25" and the text "users". Under "Step load:", there are four labels with corresponding spinner boxes: "Start user count:" (10 users), "Step duration:" (10 seconds), "Step user count:" (10 users/step), and "Maximum user count:" (200 users). At the bottom right of the dialog are four buttons: "< Previous", "Next >" (highlighted), "Finish", and "Cancel".

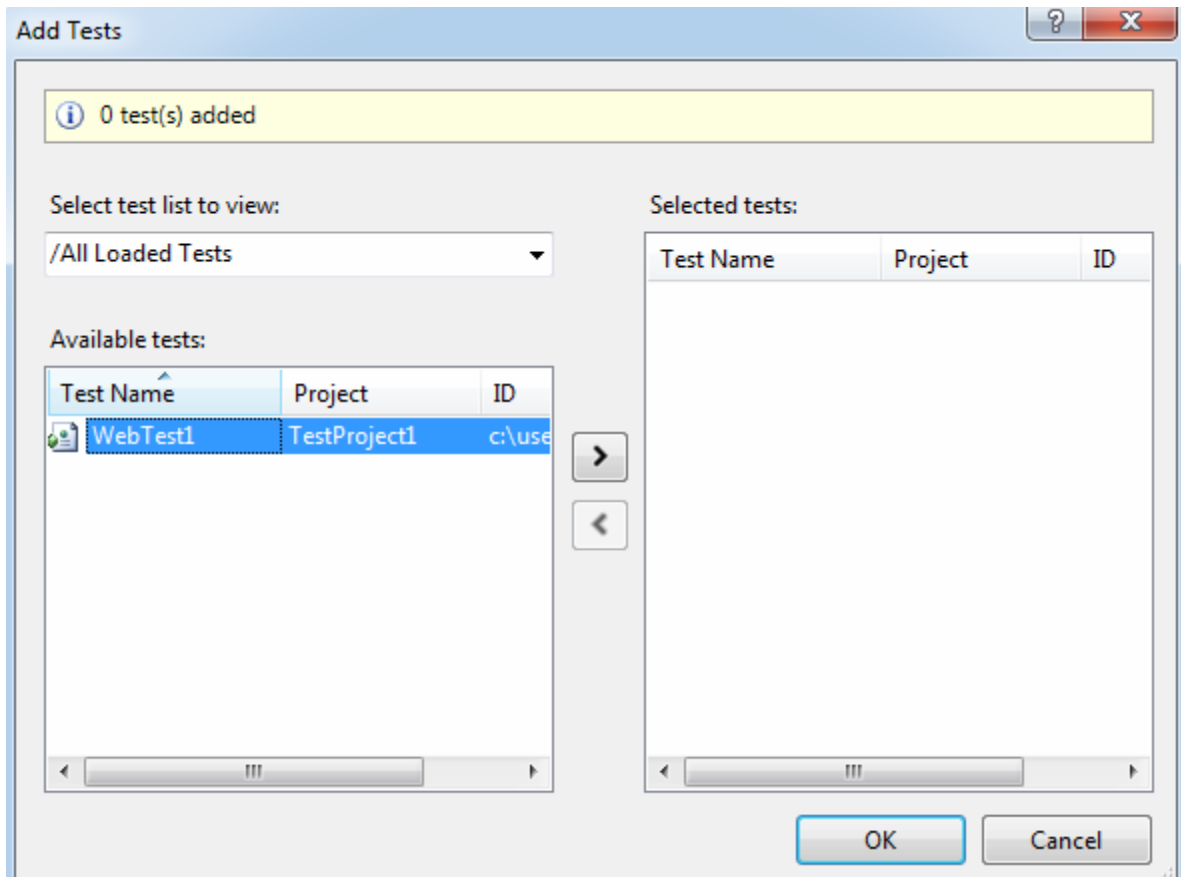


A test mix can then be selected if desired – in this case the default settings were selected:

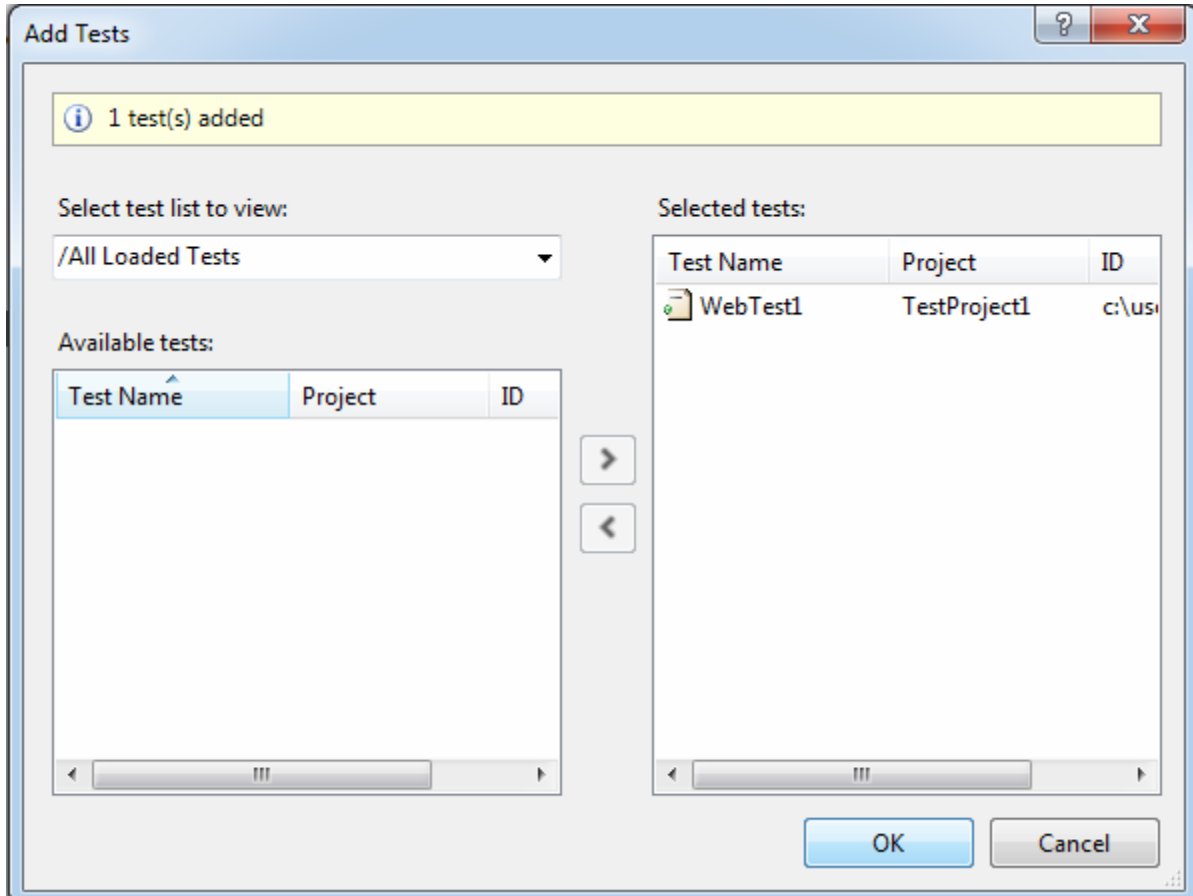




Select the desired test that is desired and select the arrow to move it to be a selected test – then click OK:

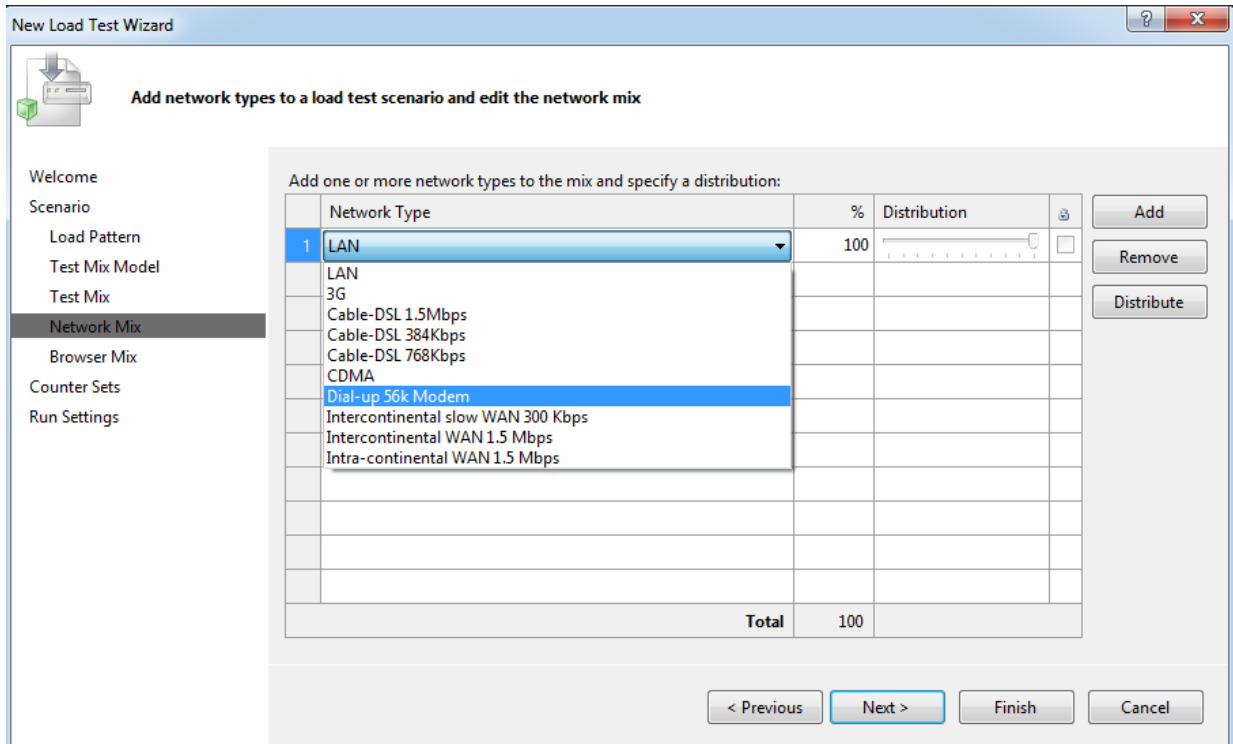


Notice that once added with success the 0 test(s) added is now 1 test(s) added – click OK:



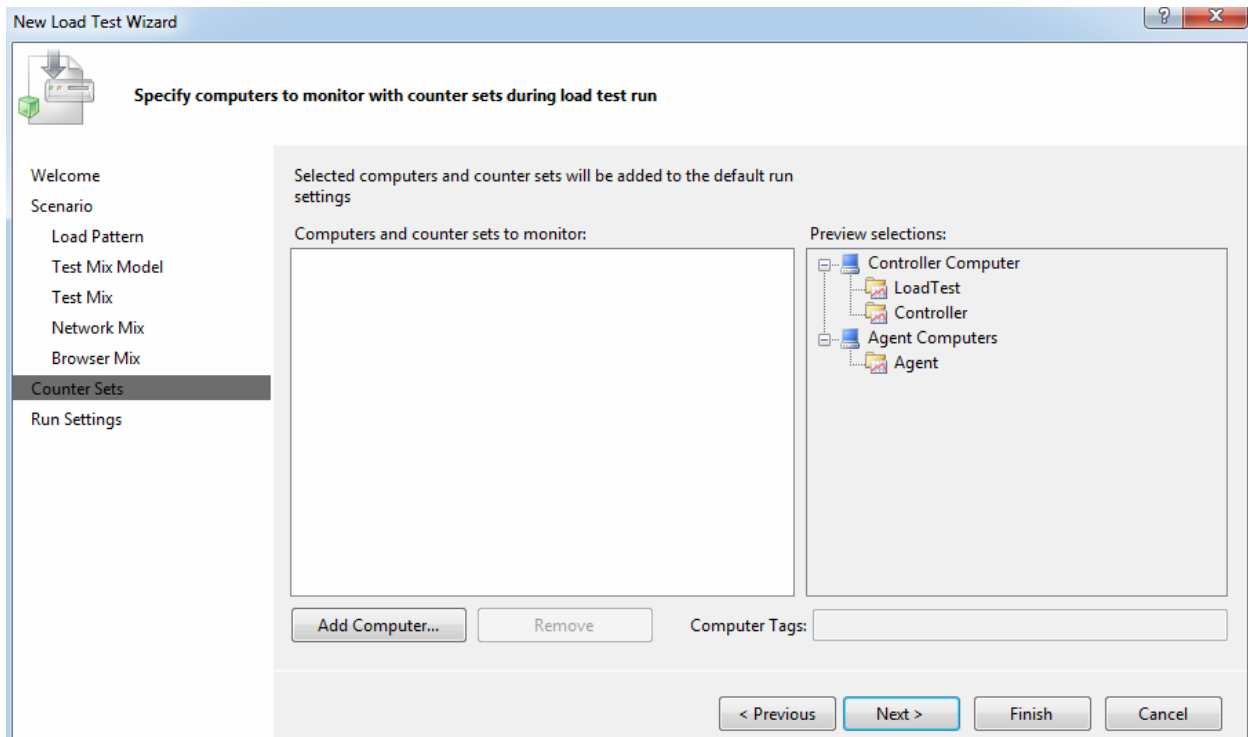


At the 'Add network types to a load test scenario and edit the network mix' – select your desired choice – in this case Dial-up 56K Modem was selected – then select Next:





At the 'Specify computers to monitor with counter sets during load test run' – in this case Next was selected – however if so desired counter sets could be set-up and run:

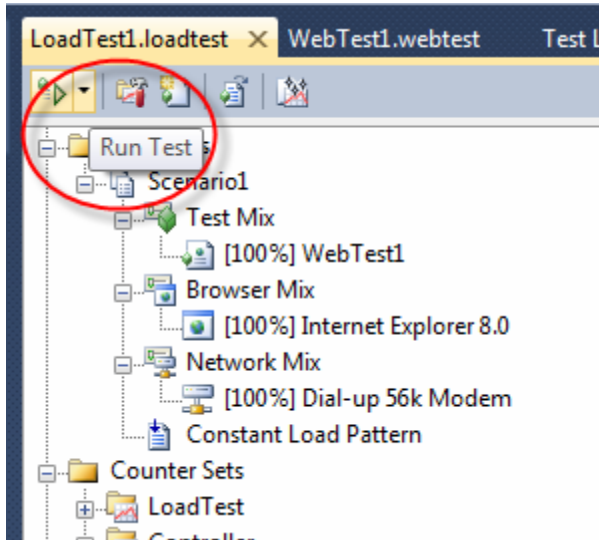




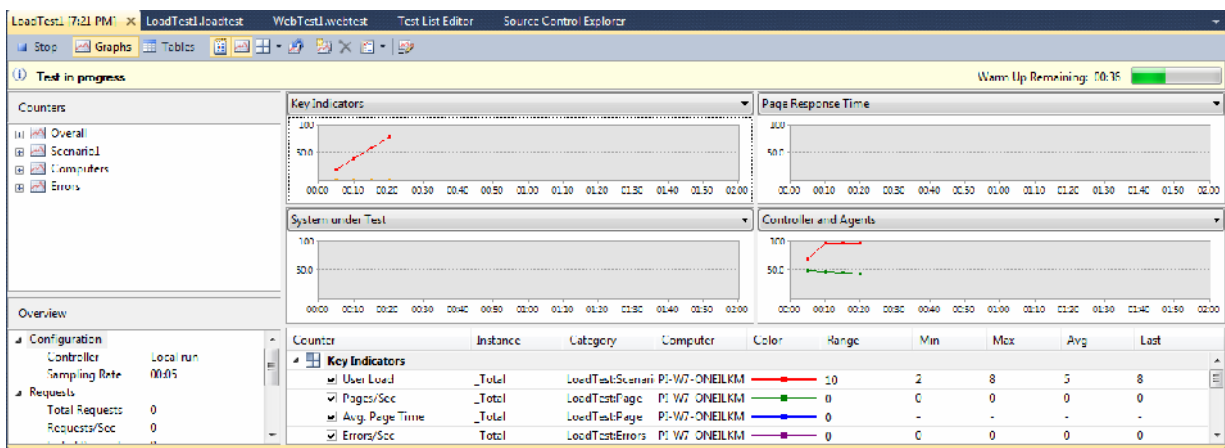
At the 'review and edit run settings for a load test' under Load test duration 1:00 was entered then Finish selected:

The screenshot shows the 'New Load Test Wizard' dialog box, specifically the 'Review and edit run settings for a load test' step. The left sidebar contains a tree view with the following items: Welcome, Scenario, Load Pattern, Test Mix Model, Test Mix, Network Mix, Browser Mix, Counter Sets, and Run Settings (which is currently selected). The main area is titled 'Specify the length of the load test by:' and contains two radio button options: 'Load test duration' (selected) and 'Test iterations'. Under 'Load test duration', there are two rows of spinners: 'Warm-up duration (hh mm ss)' with values 0, 1, and 0; and 'Run duration (hh mm ss)' with values 0, 10, and 0. Under 'Test iterations', there is a spinner for 'Test iterations' with the value 100. Below these options is a 'Details' section with a 'Sampling rate' spinner set to 5 seconds, a 'Description' text box, a 'Save Log on Test Failure' dropdown set to 'True', and a 'Validation level' dropdown set to 'High - invoke all validation rules'. At the bottom right, there are four buttons: '< Previous', 'Next >', 'Finish' (highlighted in blue), and 'Cancel'.

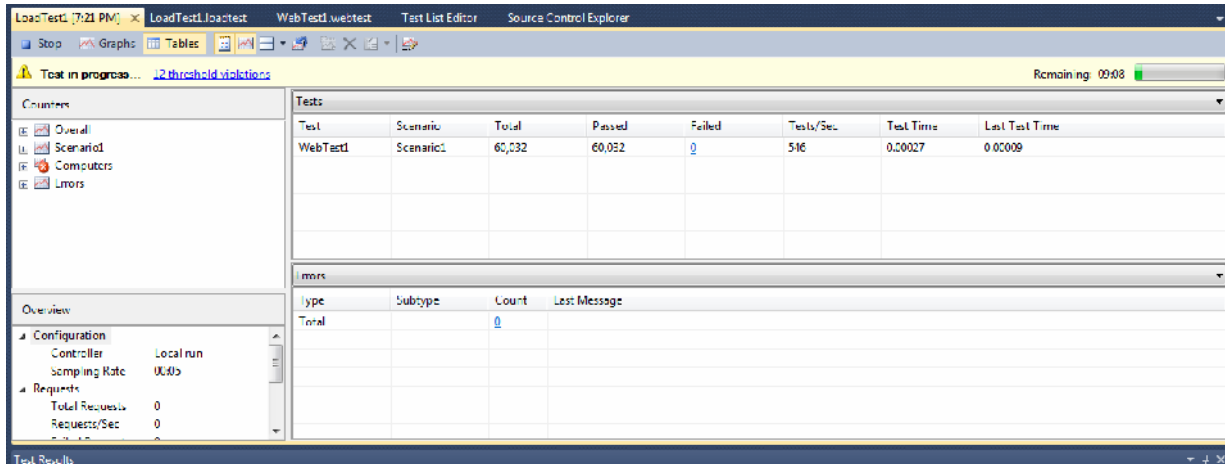
Select the Run Test found under the .loadtest that was created:



Eventually a Graph view of the test is displayed and one can view the desired format – by selecting the Tables tab if so desired :



This shows the table view:



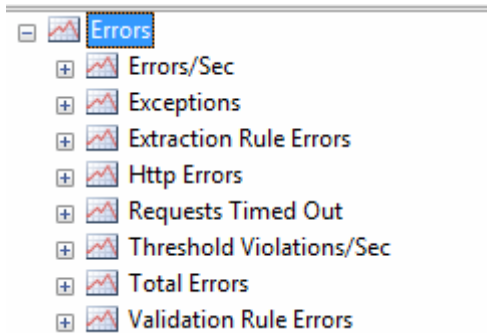
The screenshot shows the LoadRunner Test Results window. The main area displays a table with the following data:

Test	Scenario	Total	Passed	Failed	Tests/Sec	Test Time	Last Test Time
WebTest1	Scenario1	60,032	60,032	0	516	0:0027	0:0009

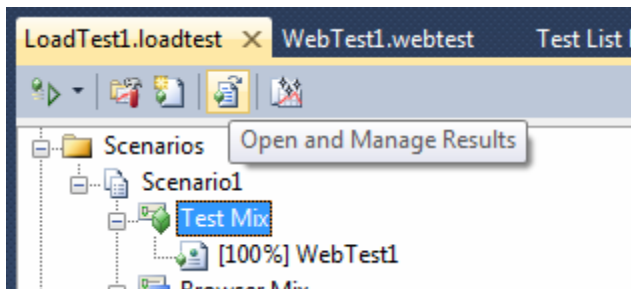
Below the table, there is an 'Errors' section with a table showing error details:

Type	Subtype	Count	Last Message
Total		0	

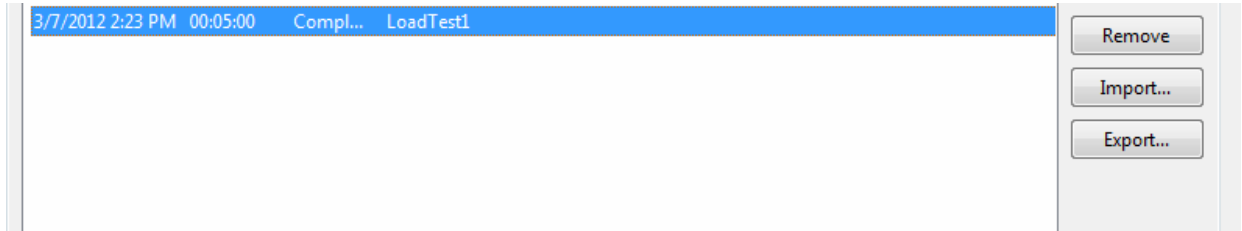
In either view the Errors tree can be selected and the desired items can be viewed:



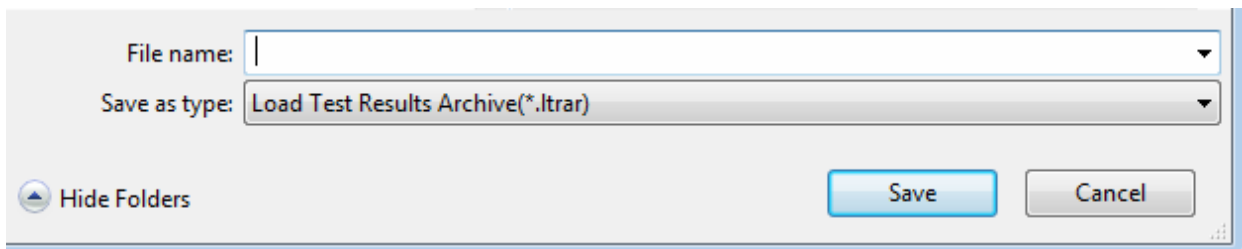
Additionally – from the .loadtest tab – the Open and Manage results can be selected:



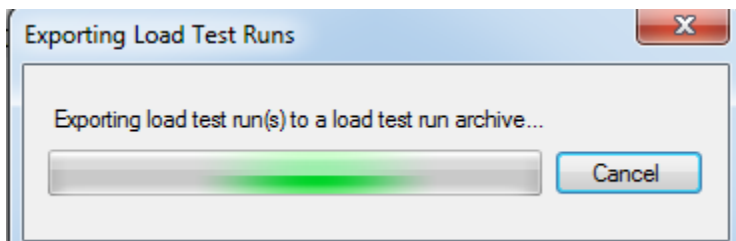
One would then select the desired loadtest and click Export:



The results can be saved as a .ltrar file:



After naming the file and clicking Save – the following is displayed:



The results can then be viewed later if needed.