WEB PERFORMANCE AND LOAD TEST IN VS 2015

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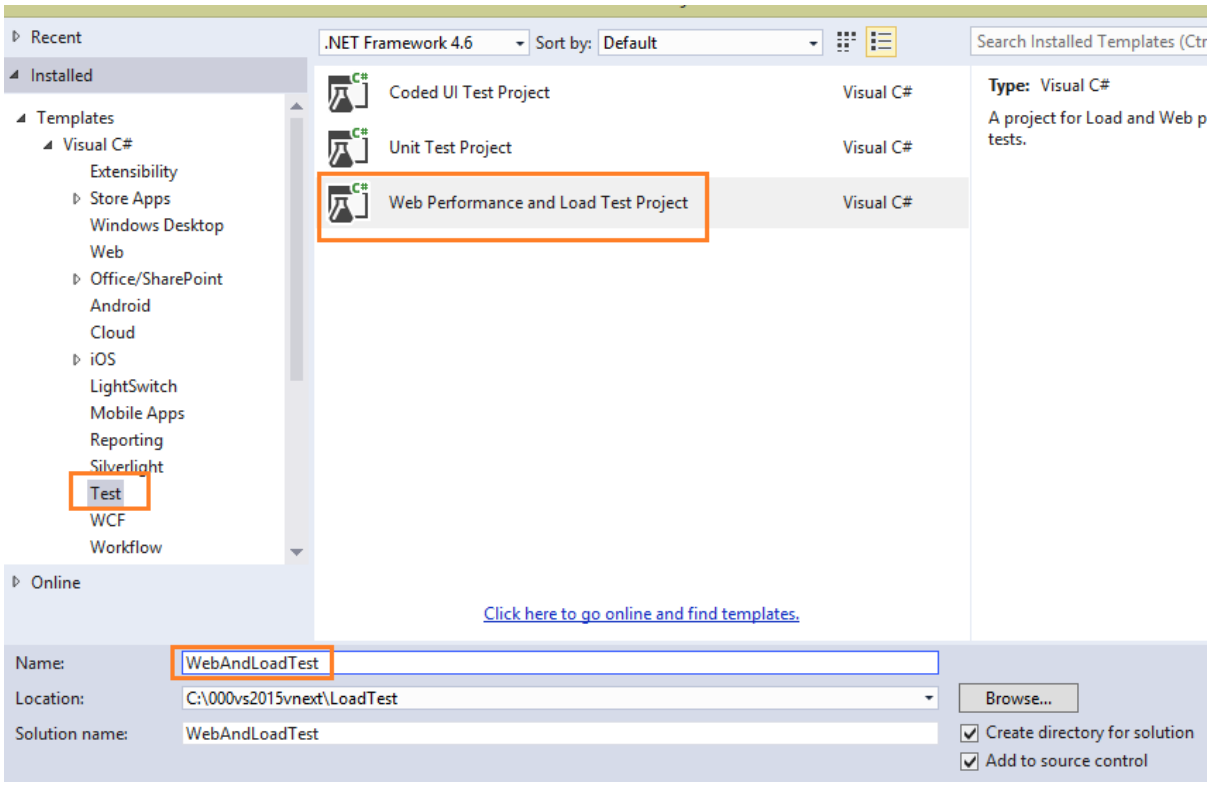
INTRODUCTION

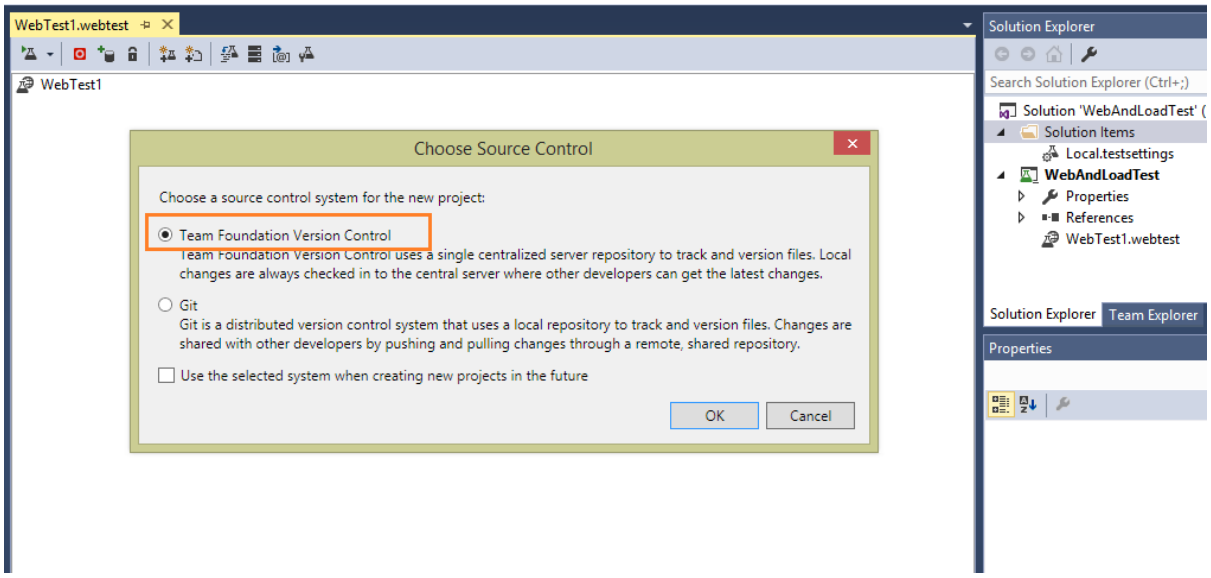
Web performance and load test is used to test the traffic for huge user's access to our web site. Test generates reports that contains key index of the performance we can use to analyse if our web site can endure the impact of huge users access without decreasing web performance. This test is becoming more and more important when we develop cloud based web site. This document will back up how I can run a web performance and load test in VS 2015 CTP.

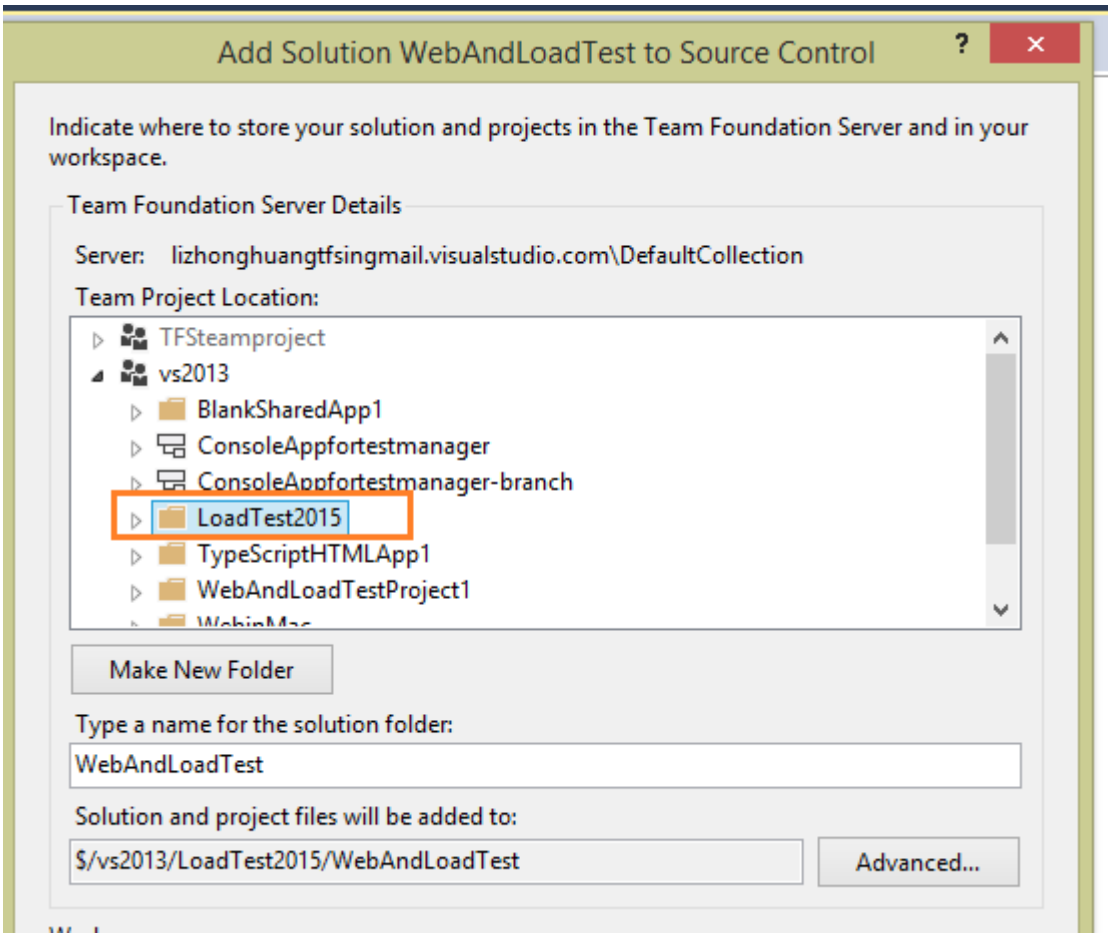
GET STARTED

Open visual studio 2015 and create a new project , select web performance test and load test project from test tag as below



We add project into team foundation server online as below





Now this test project has been added into TFS server VS2013/Loadtest2015 folder in my TFS server online in Microsoft Visual Studio web site.

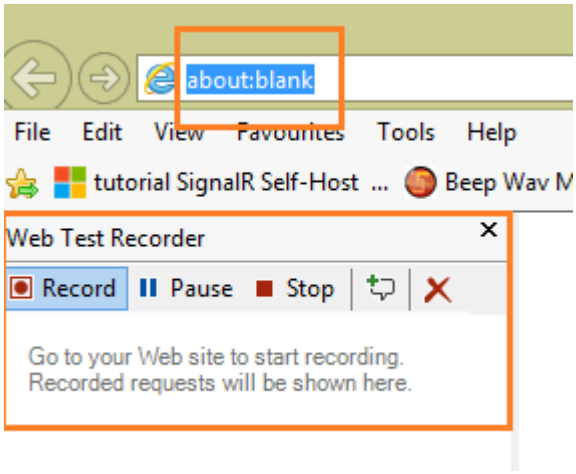
We can register and get a free TFS work place online from Microsoft web site. Therefore, we van develop and host our .net in our own TFS server for source controls.

RUN TEST

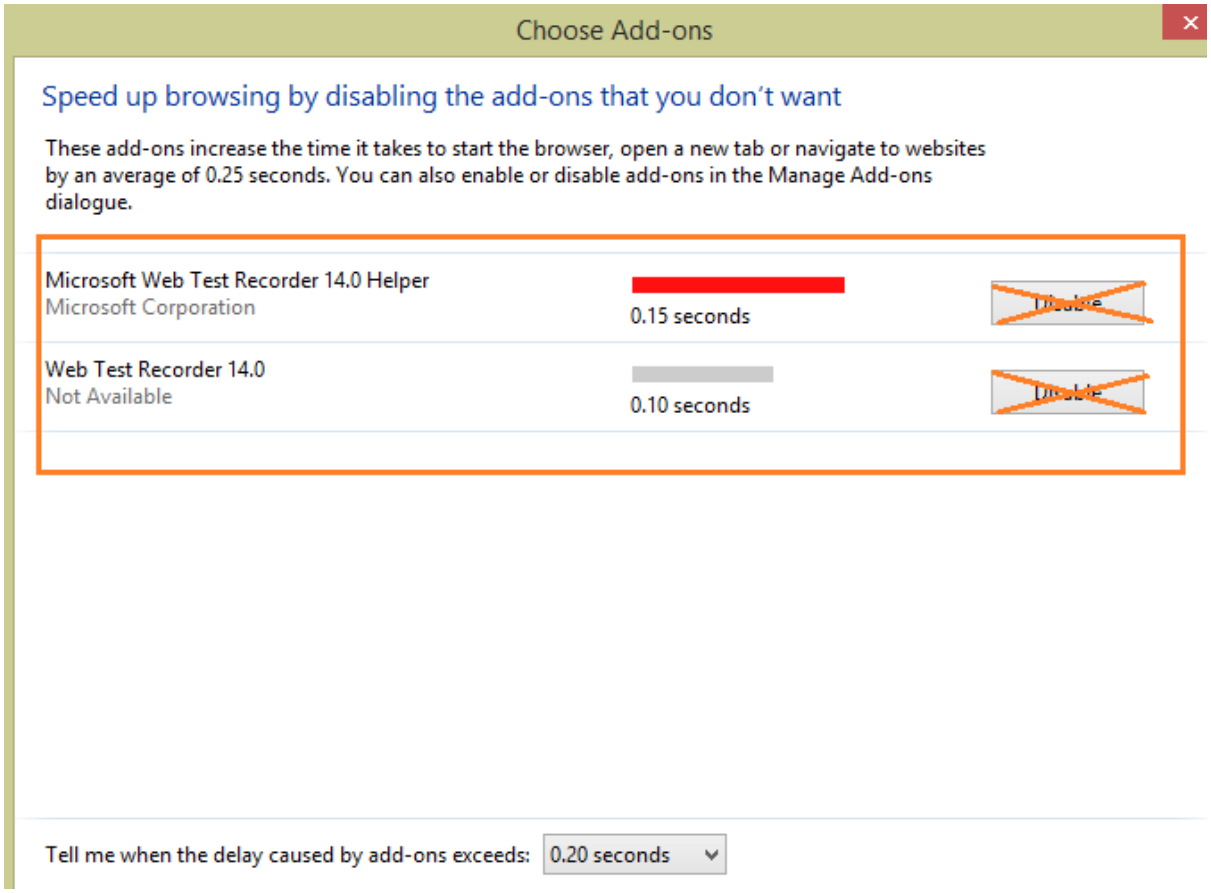
Now we need to bring something from internet to this test project for testing before we can run a test in this project. How can we do this? .Net provides a mechanism here to achieve this goal.

1, we click a record button in project below to start recording (recording what…..???)

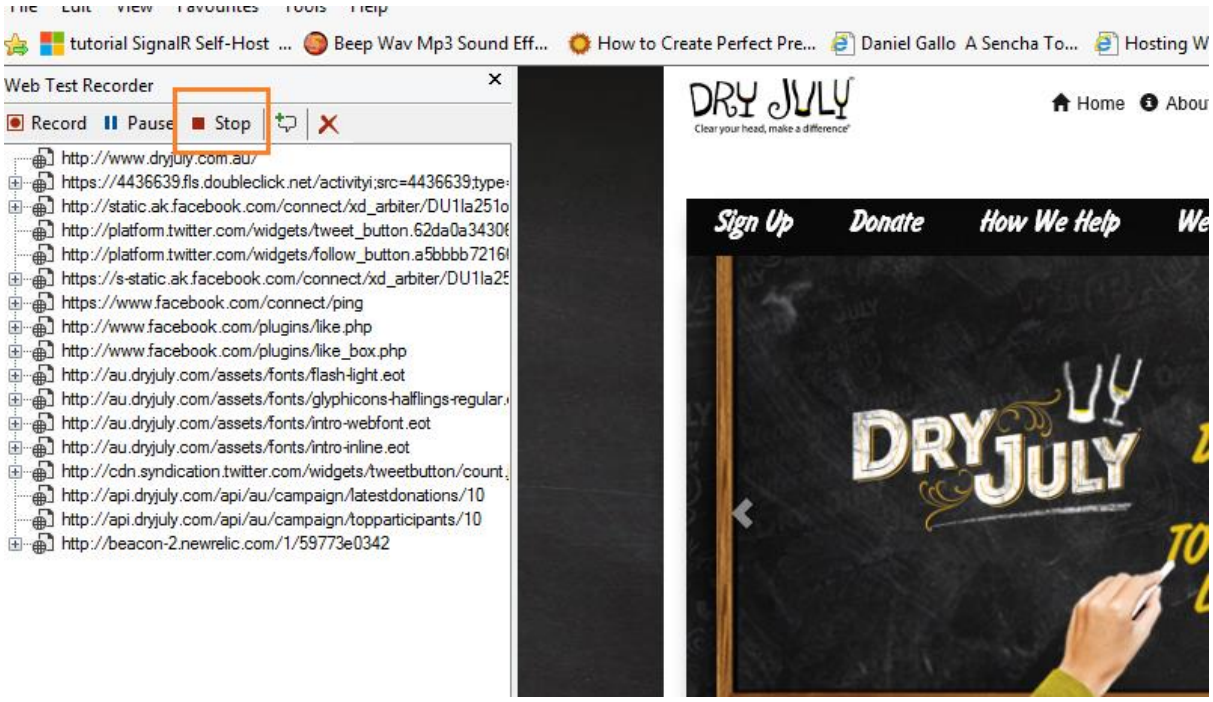
2, after clicking this button, project will open a web browser such as IE as below



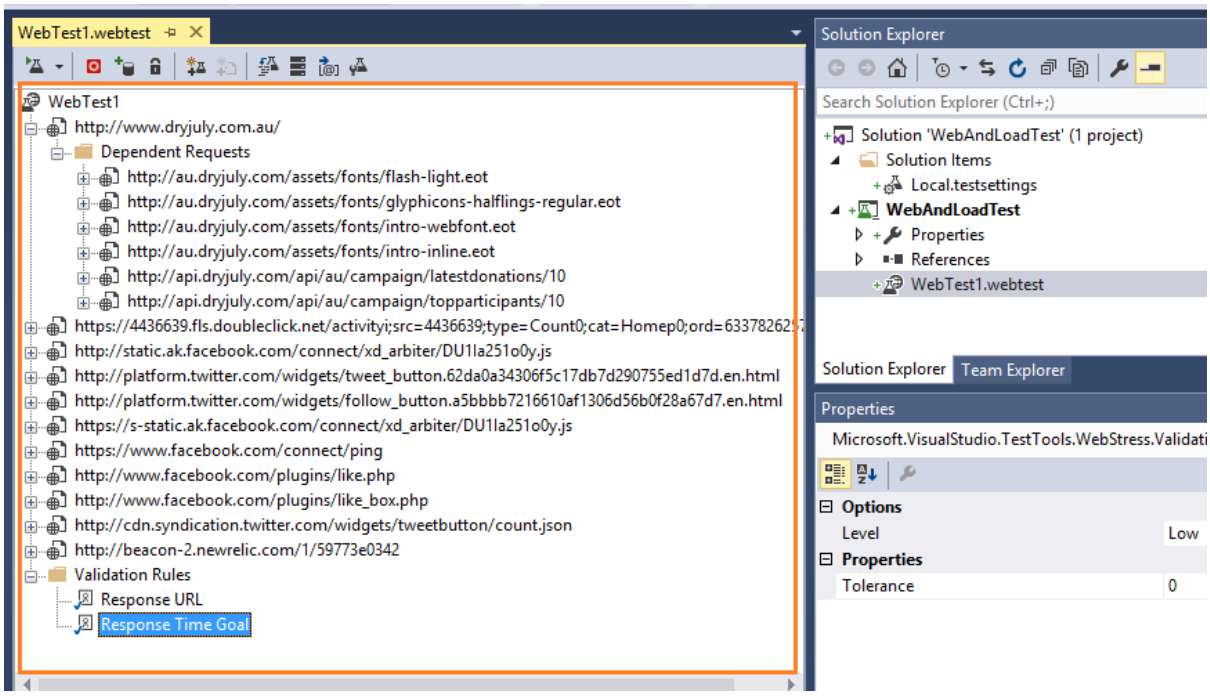
Add on in IE called Web Test Recorder added into IE for further action we will do. Before we can enable this recorder, we need to enable its helper first, or it will do not work see below



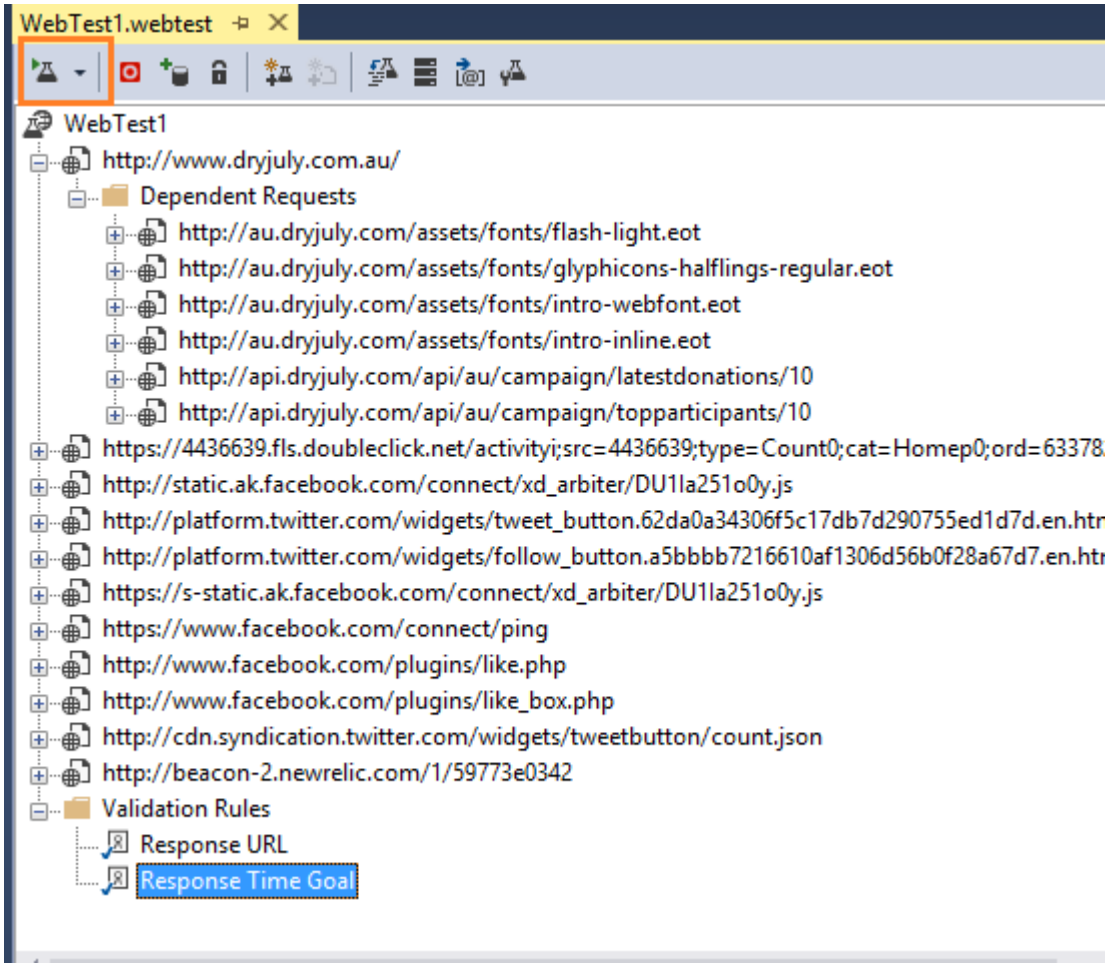
Now we need to enter a web site we will do test in URL and click return key, test will start recording necessary info from the web site we will test as below



Recording collects all data from web site page in IE, after you click stop button in Recorder, this IE will disappeared and the collected data will be passed into Test project in VS 2015 as below

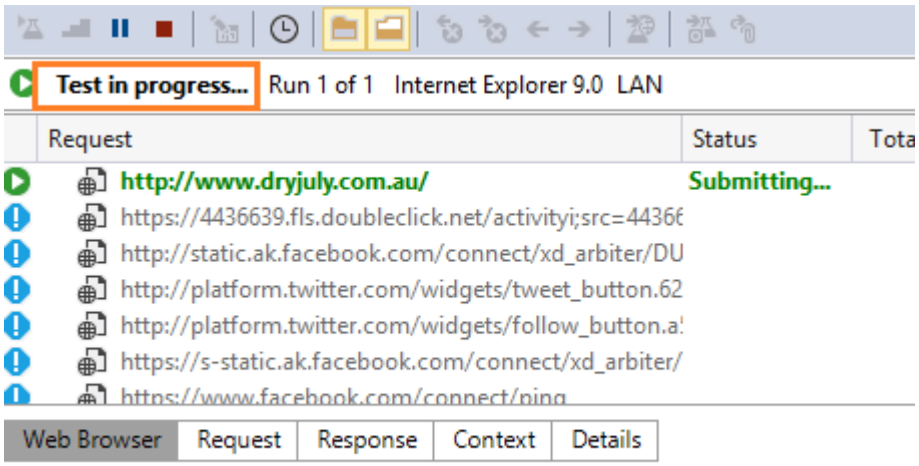


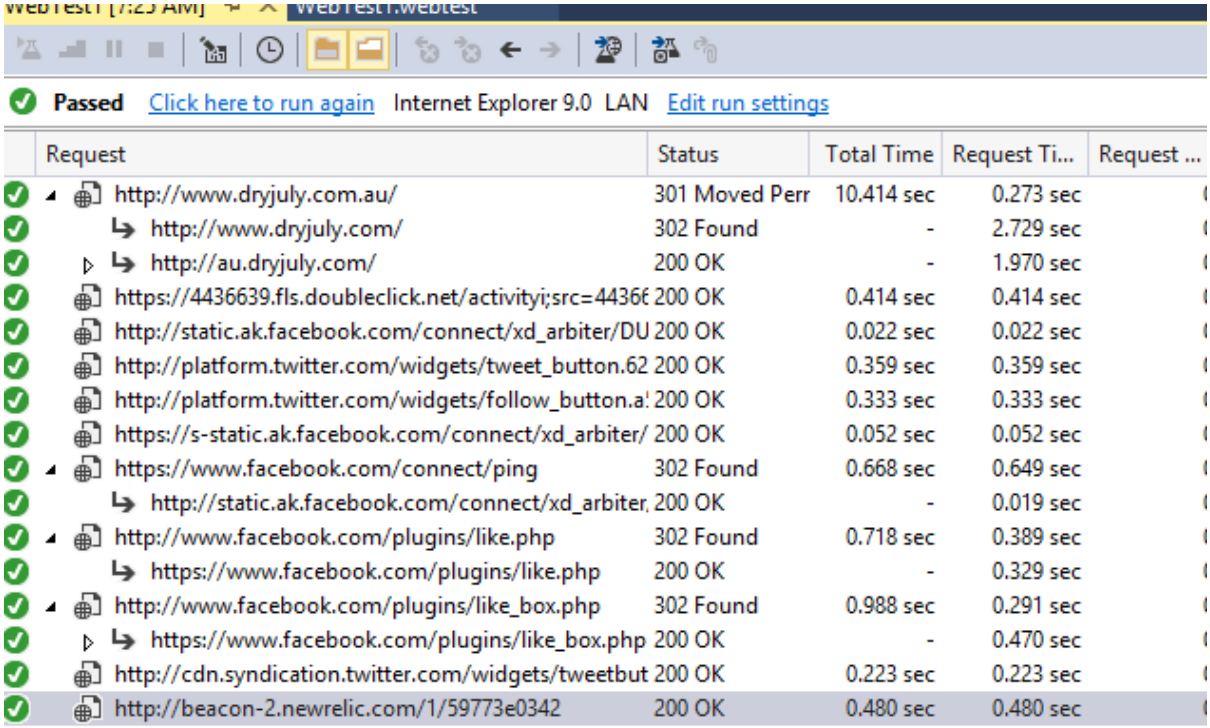
Now test project collects all info we need to test in project. Project now will se those data to do test as we normally do in our local unit test by click test button as below



LOAD TEST

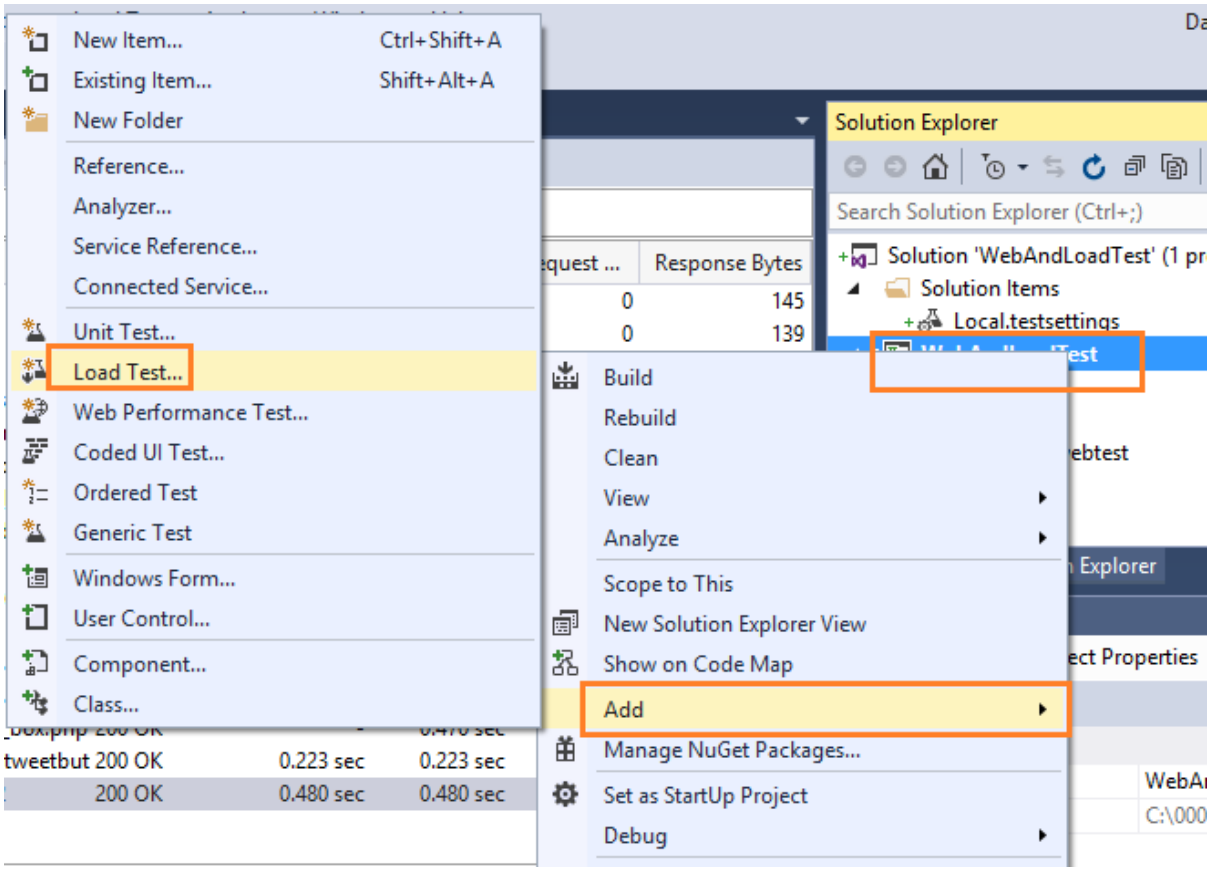
We now can see the testing is in progressing as below



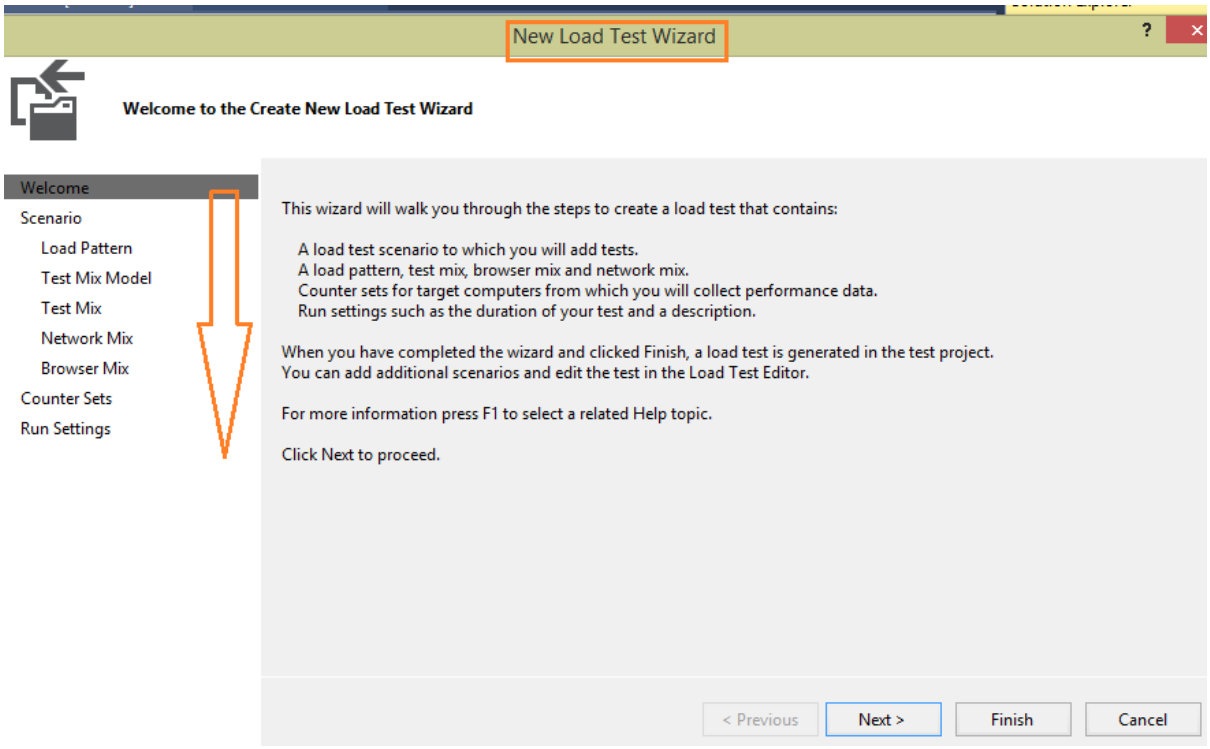


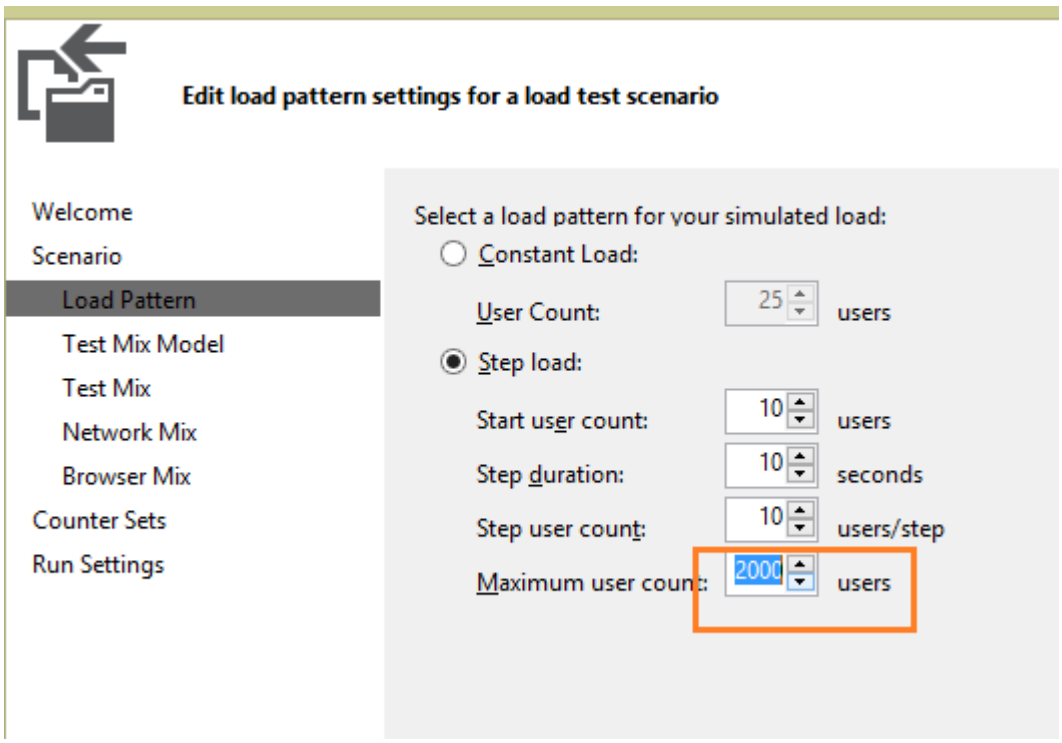
Now we use those collected data to do one more interesting thing as below

Add a Load Test

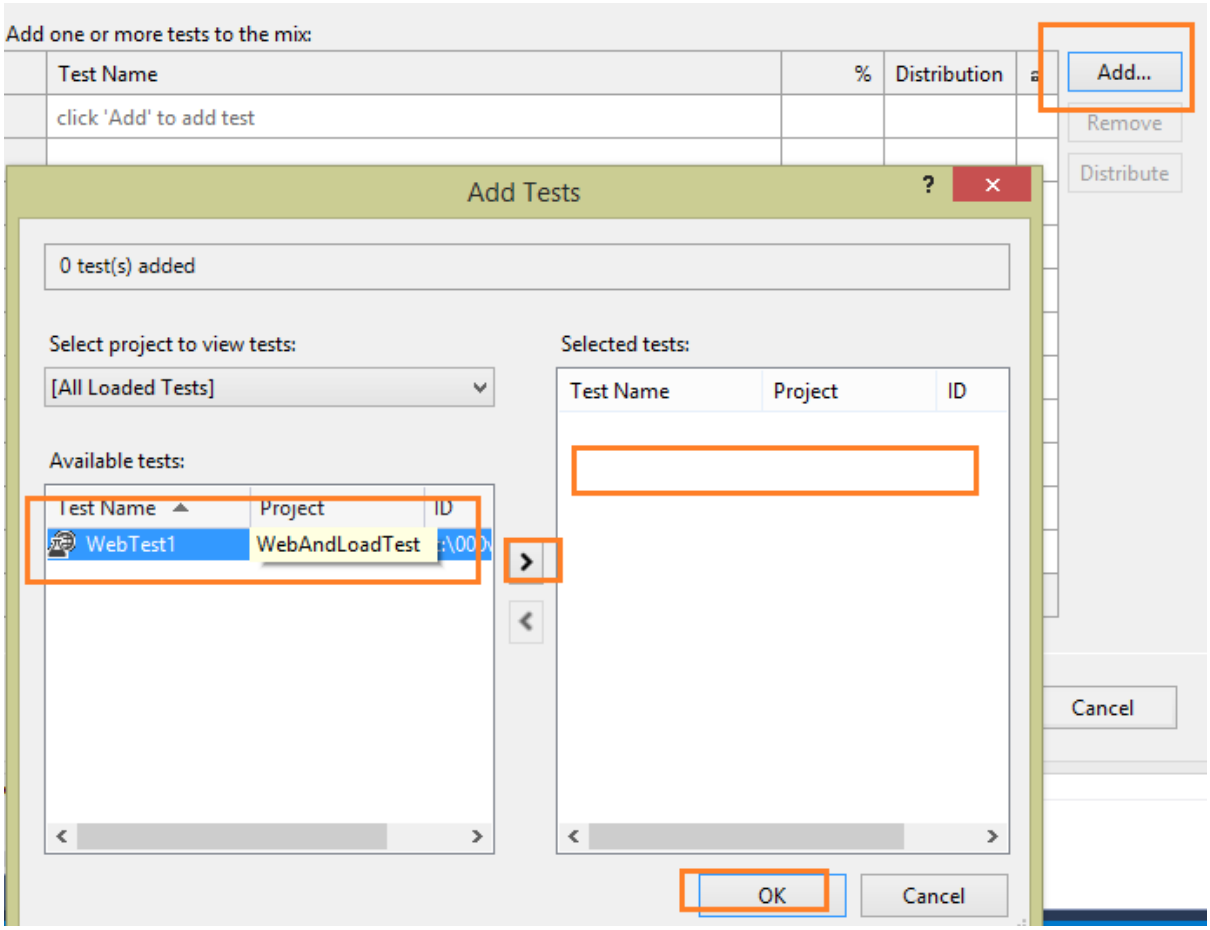


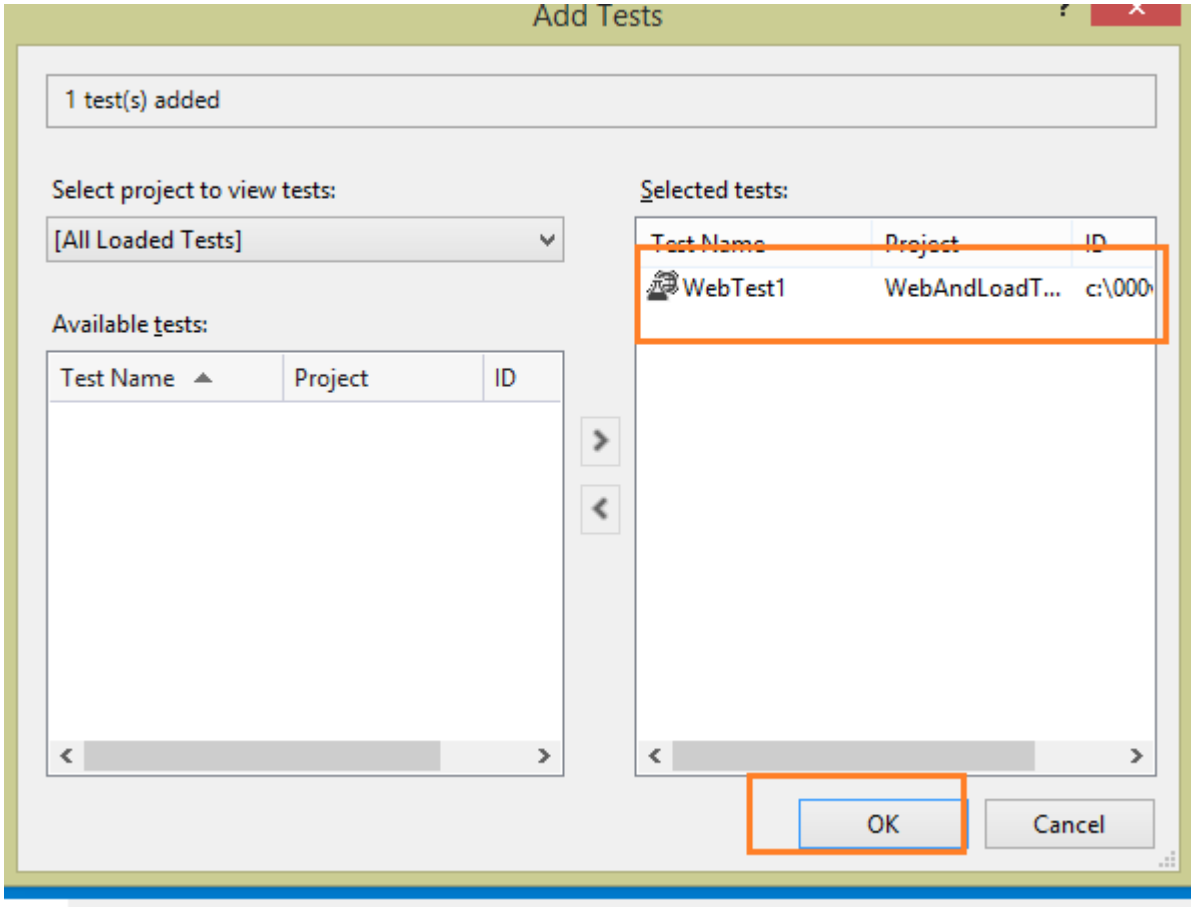
This will add a load test to TFS server via a wizard as below

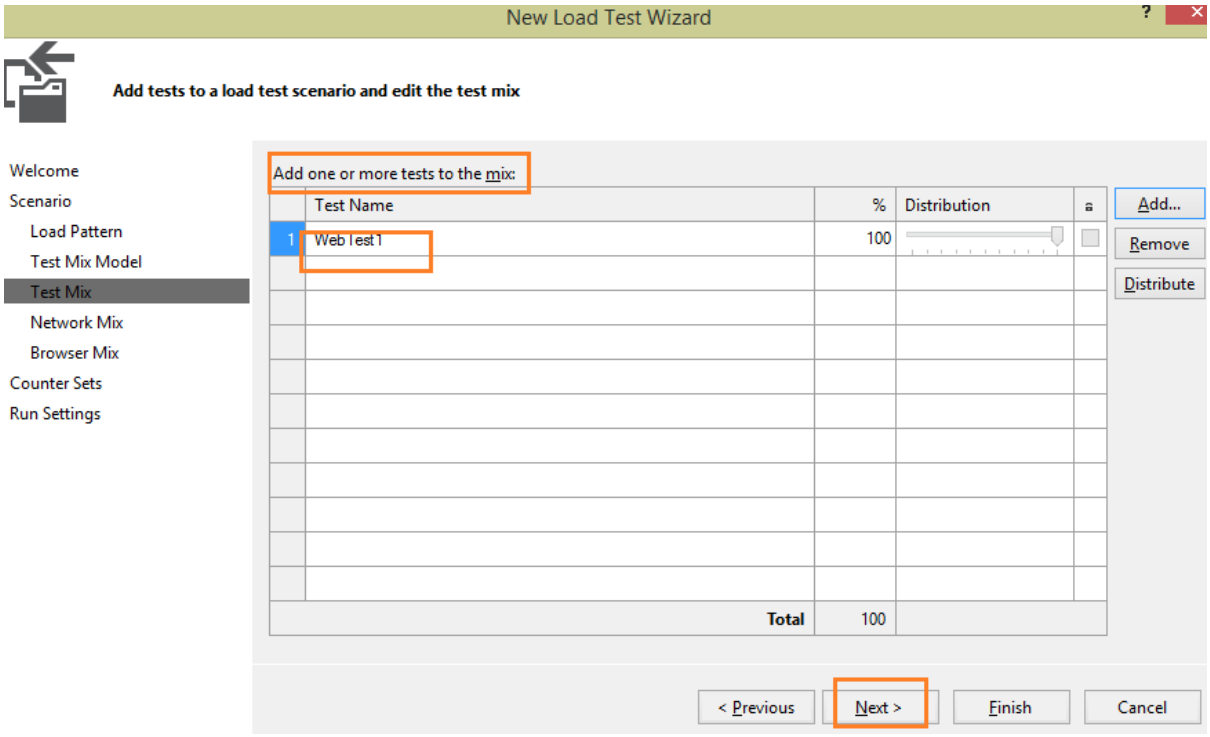




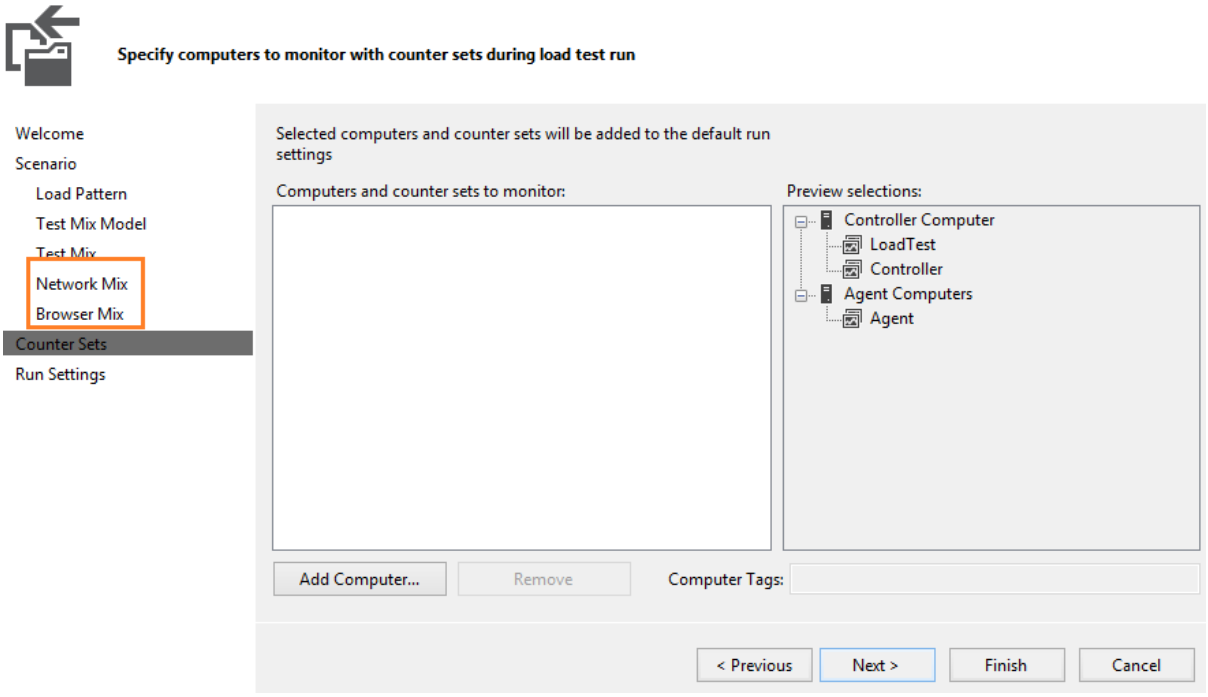
We put maximum users to test and then go through each step as default and select the test to panel as below



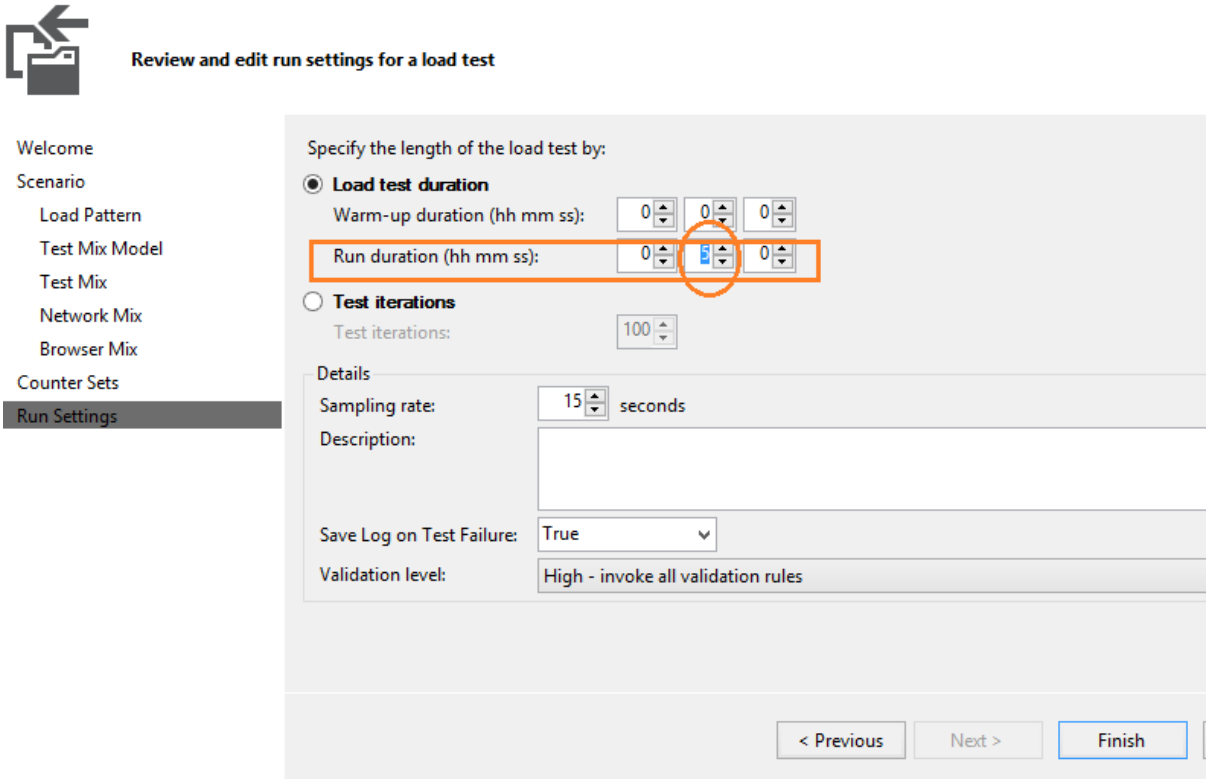




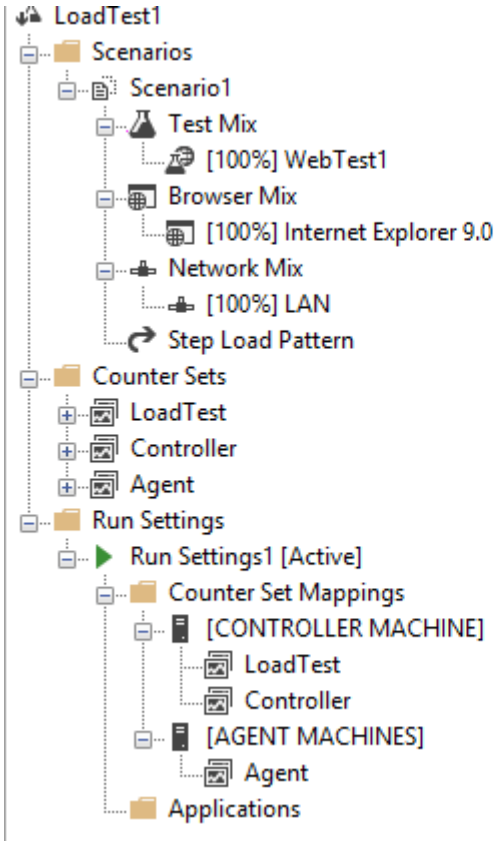
Go through some default steps and finally we arrive at here.



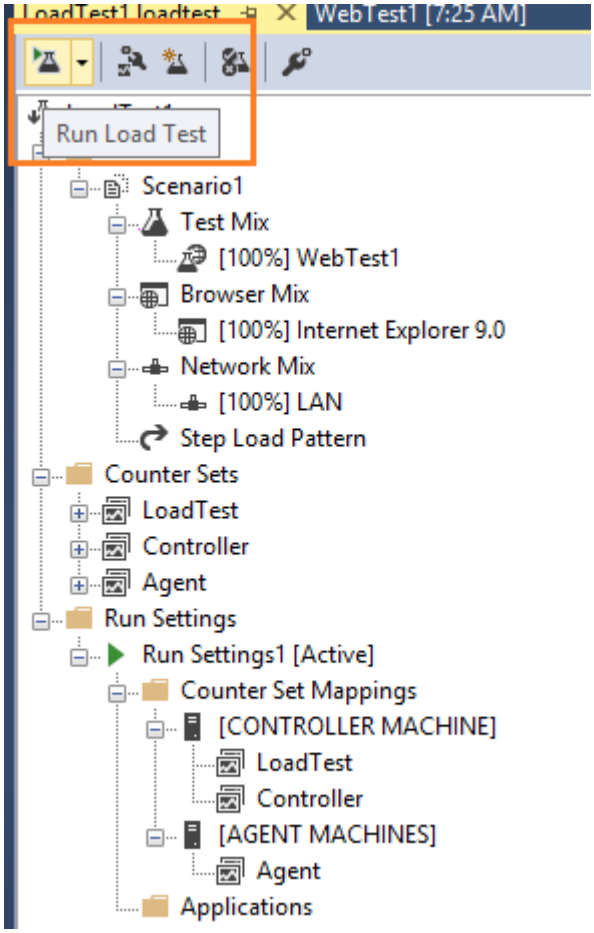
And here



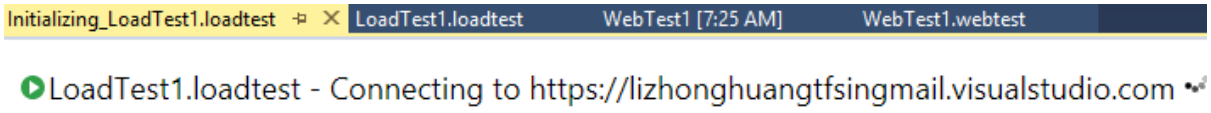
We define the test time such as 5 mins in this case and then click finish button , the load test starts load data into project for testing as below.



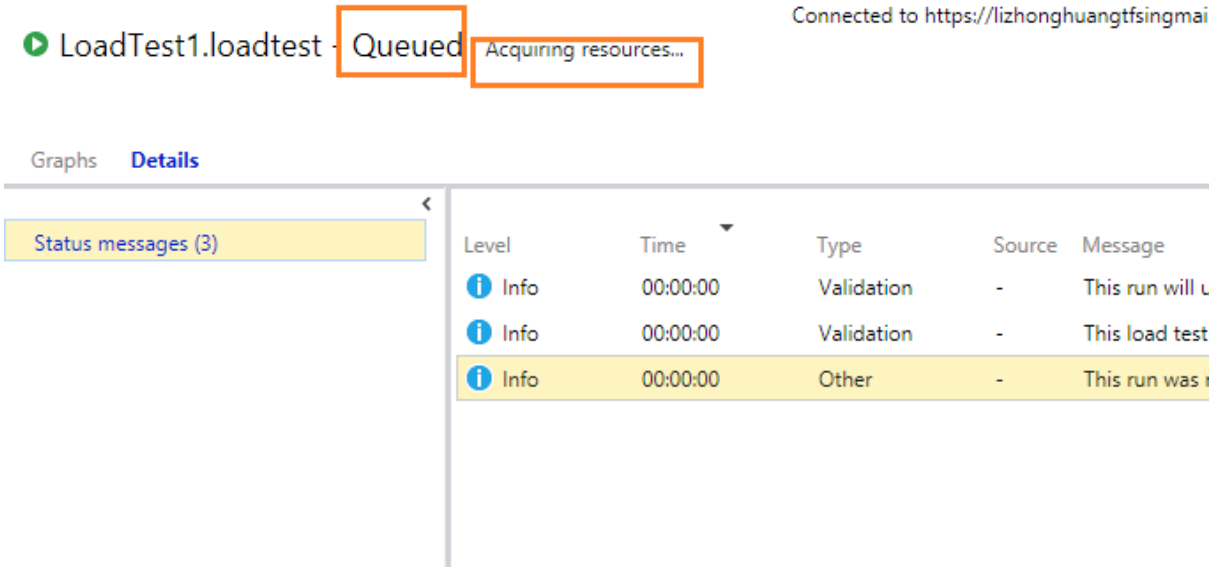
Now we click Run Test button in Project below to start test in TFS server online as below



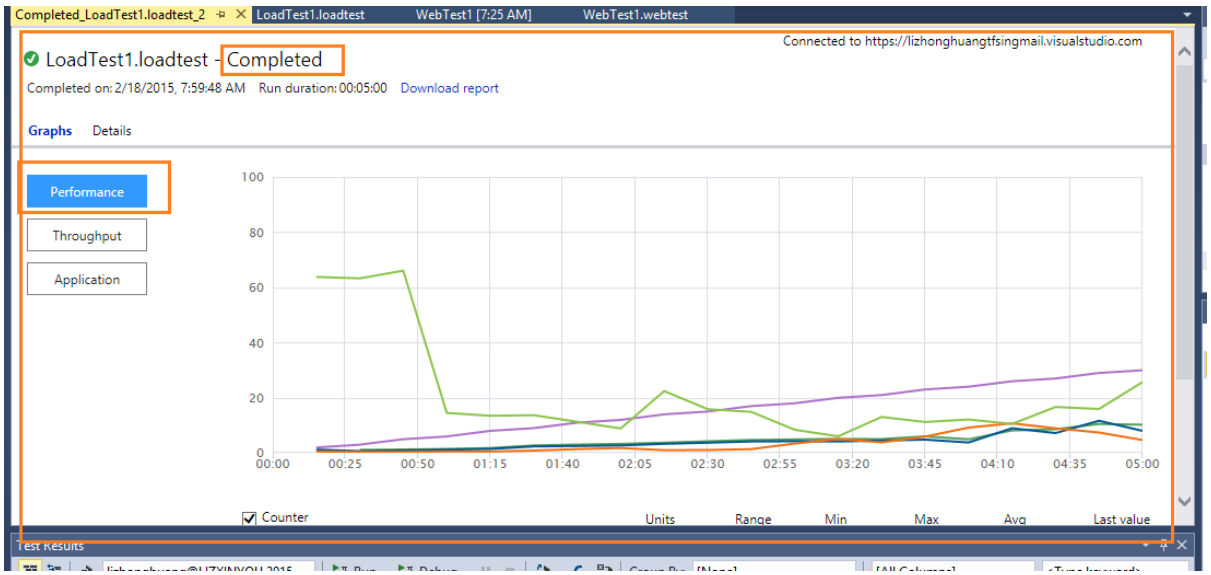
Test is trying to connect to TFS server.



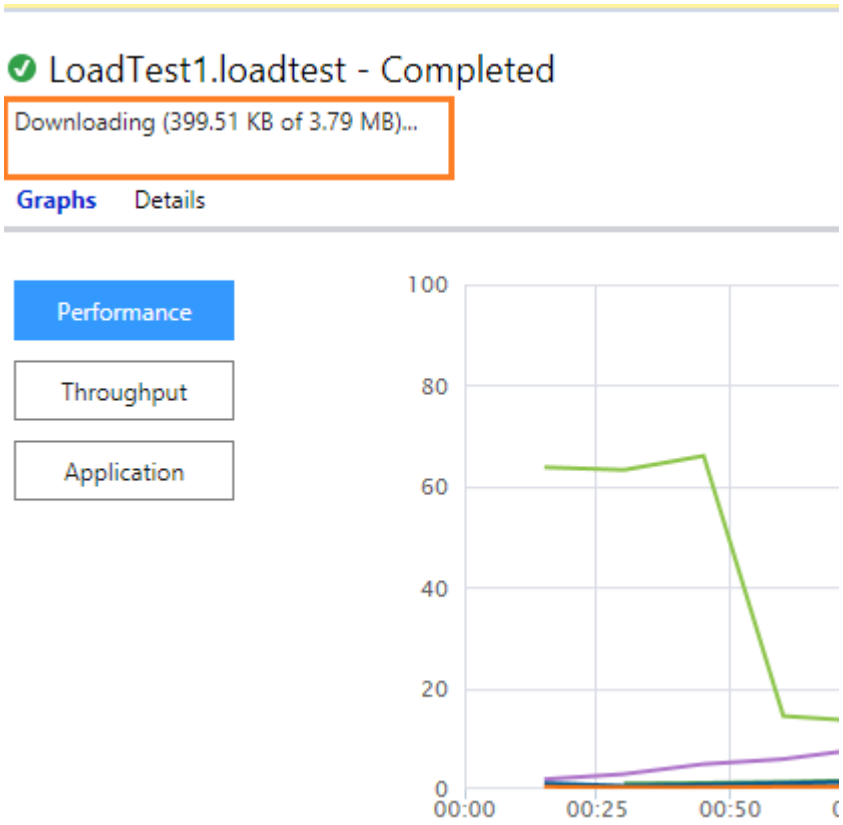
Now Test is queued in TFS server as below



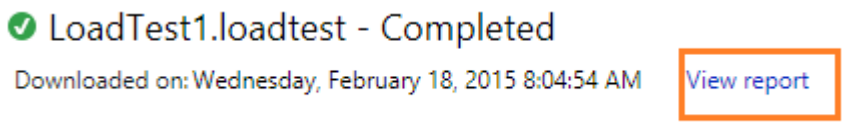
This will take a while to complete. The complete graph is as below

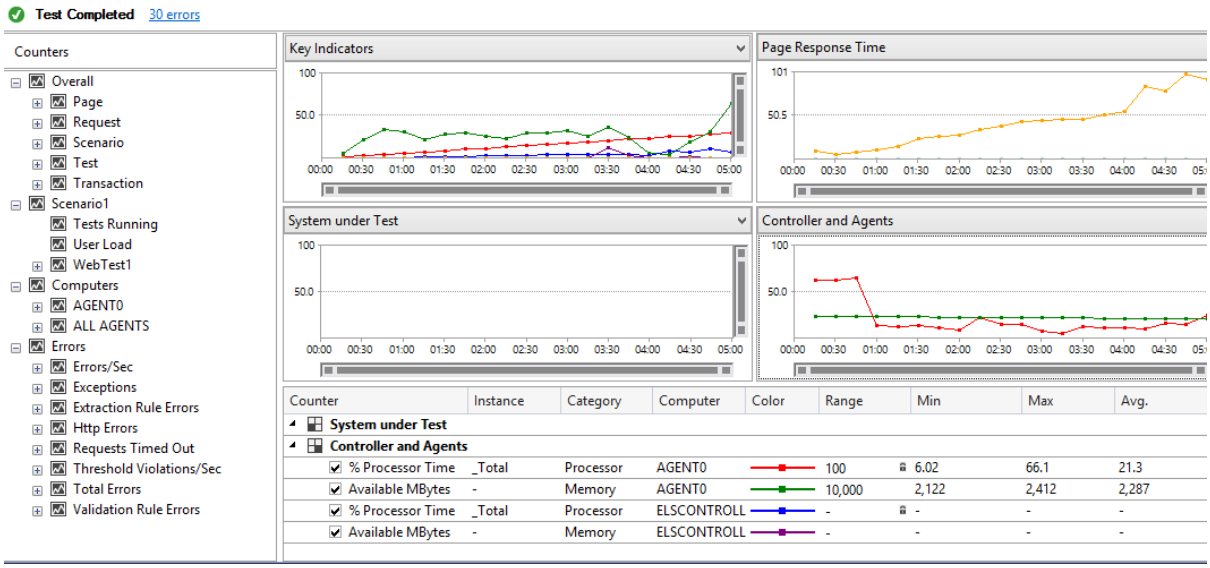


Now We can download the report TFS server generated to us by click Download Report link above

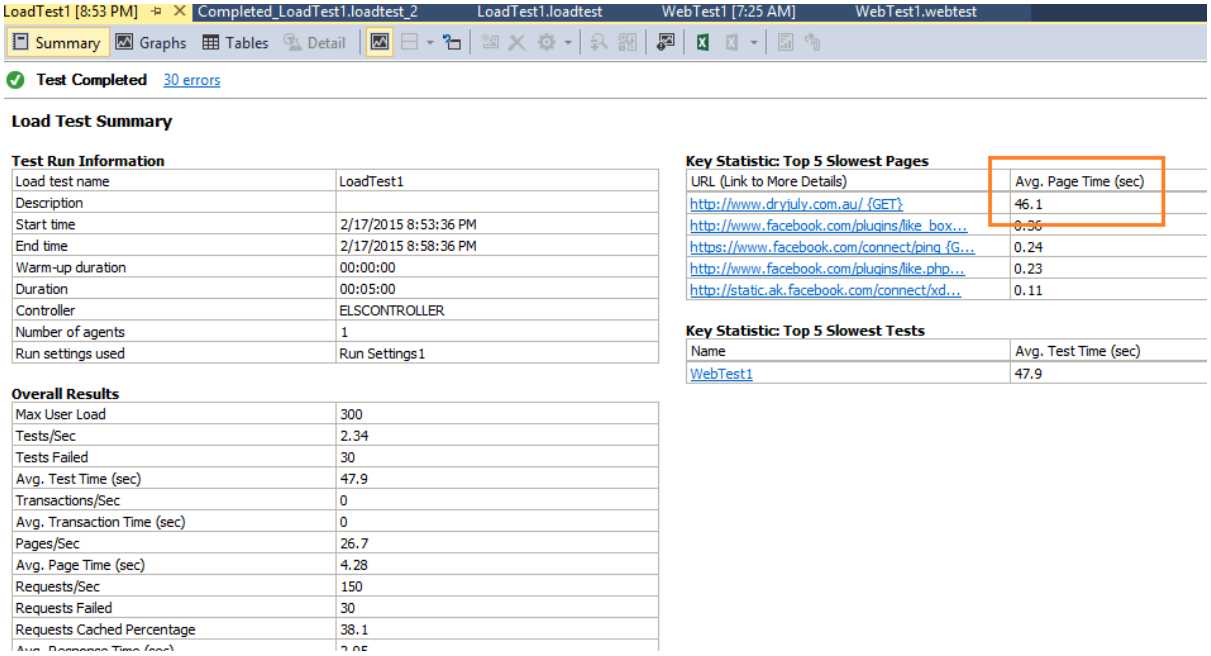


Click view report after report is completed as below





The most important report is the summary report we can see an example below



Therefore, with the help of Team Foundation Server Online , VS 2015 web performance and Load test project can go to web site you want to test and collect necessary test info from that web site and bring all info back to project as test data. Project then can add load test tool in to start load test in TFS server online, TFS online then can return test report for you as example explained here.

SUMMARY

Web performance and load test in VS 2015 can bring the test data from any web sites in internet and add load test and other tests based on those data. Then TFS server online can help to generate test report we can download from to check the result. It is easy to run but needs some extra resources to do so.