



Building a FTP Test Plan

In this section, you will learn how to create a basic Test Plan to test an FTP site. You will create four users that send requests for two files on the O'Reilly FTP site. Also, you will tell the users to run their tests twice. So, the total number of requests is (4 users) x (2 requests) x (repeat 2 times) = 16 FTP requests.

1. Adding Users

The first step you want to do with every JMeter Test Plan is to add a Thread Group element. The Thread Group tells JMeter the number of users you want to simulate, how often the users should send requests, and the how many requests they should send.

Go ahead and add the ThreadGroup element by first selecting the Test Plan, clicking your right mouse button to get the Add menu, and then select Add → ThreadGroup.

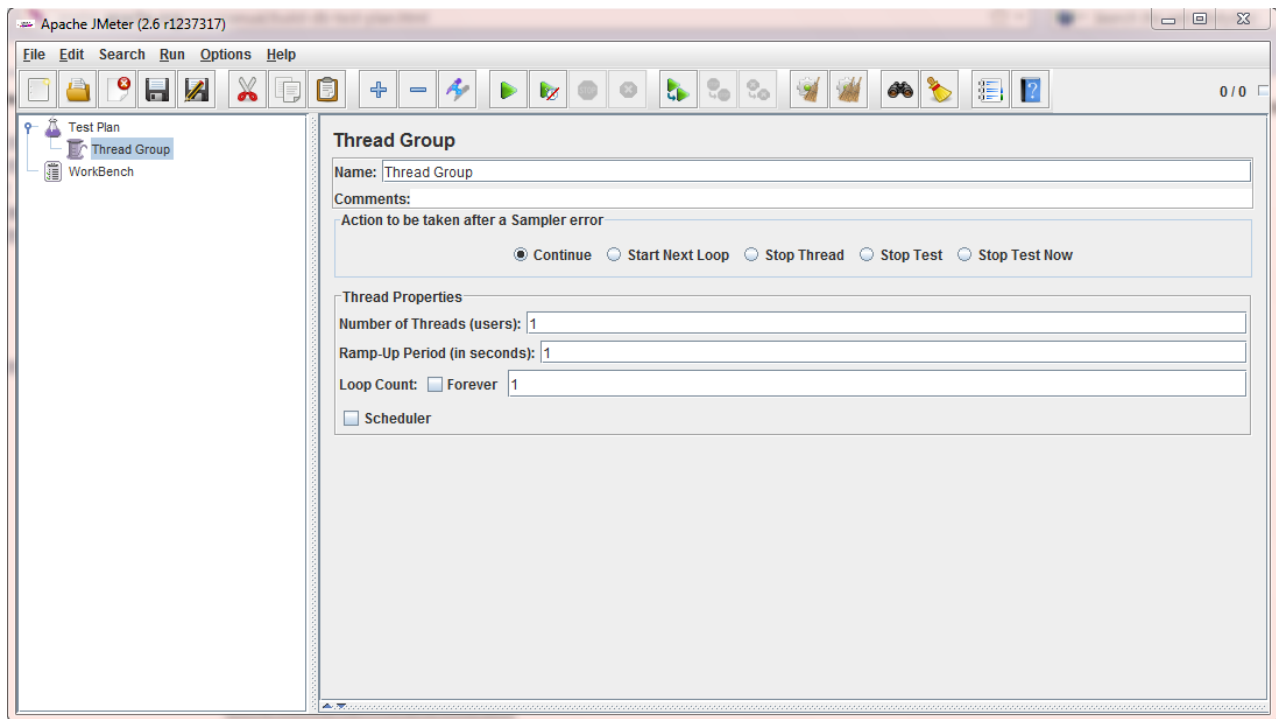


Figure 2.1. Thread Group with Default Value

Next, increase the number of users to 4.

In the next field, the Ramp-Up Period, leave the the default value of 0 seconds. This property tells JMeter how long to delay between starting each user. For example, if you enter a Ramp-Up Period of 5 seconds, JMeter will finish starting all of your users by the end of the 5 seconds. So, if we have 5 users and a 5 second Ramp-Up Period, then the delay between starting users would be 1 second ($5 \text{ users} / 5 \text{ seconds} = 1 \text{ user per second}$). If you set the value to 0, then JMeter will immediately start all of your users.

Finally, enter a value of 2 in the Loop Count field. This property tells JMeter how many times to repeat your test. To have JMeter repeatedly run your Test Plan, select the Forever checkbox.

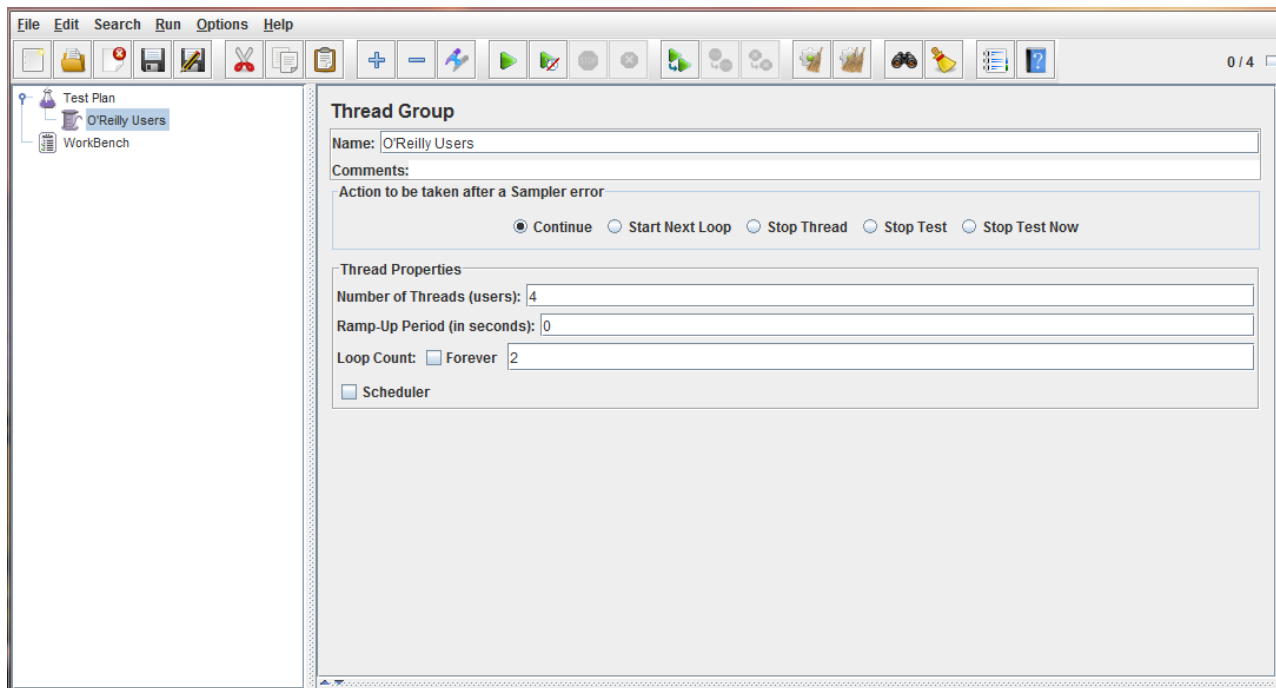


Figure 2.2 .O'Reilly Users Thread Group

2. Adding Default FTP Request Properties

Begin by selecting the O'Reilly Users element. Click your right mouse button to get the Add menu, and then select Add → Config Element → FTP Request Defaults

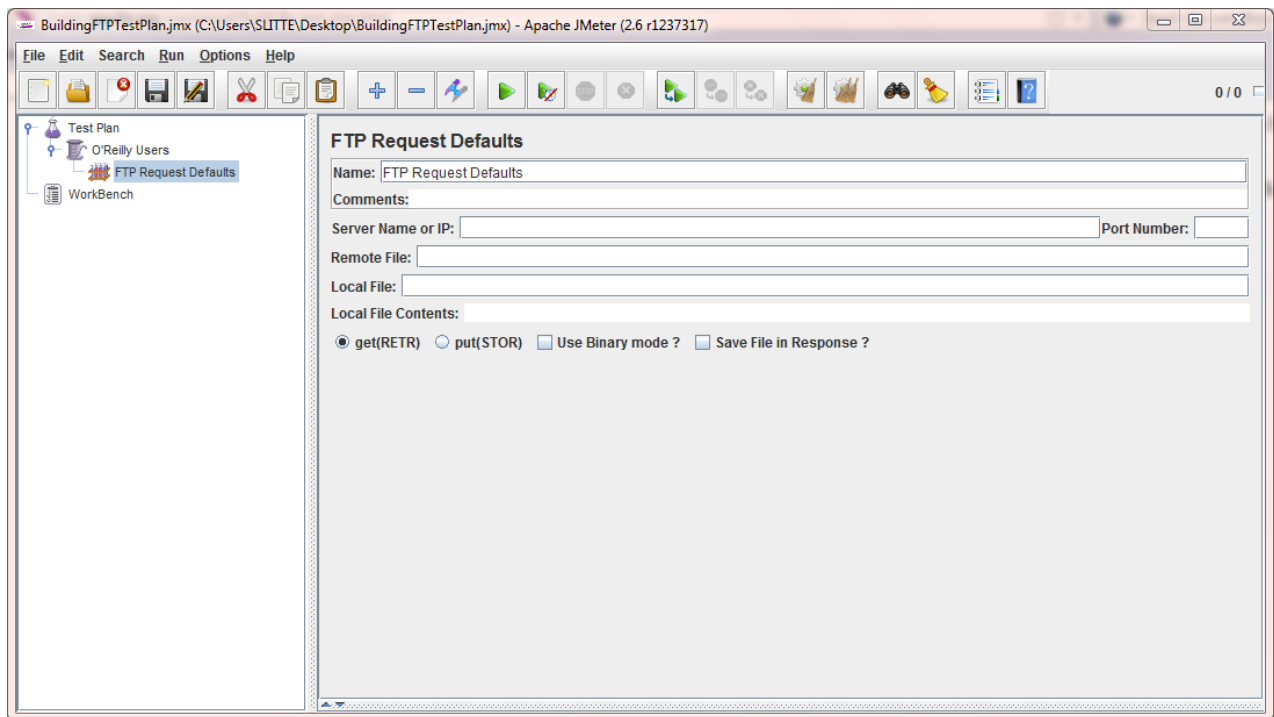


Figure 2.3.FTP Request Defaults

First of all you need to create a FTP Server and an account.

Test plan that you are building, all FTP requests will be sent to the same FTP server, 'ftp.pragmatictestlabs.com' Enter this domain name into the field. This is the only field that we will specify a default, so leave the remaining fields with their default values.

The FTP request Defaults element does not tell JMeter to send an FTP request. It simply defines the default values that the FTP Request elements use.

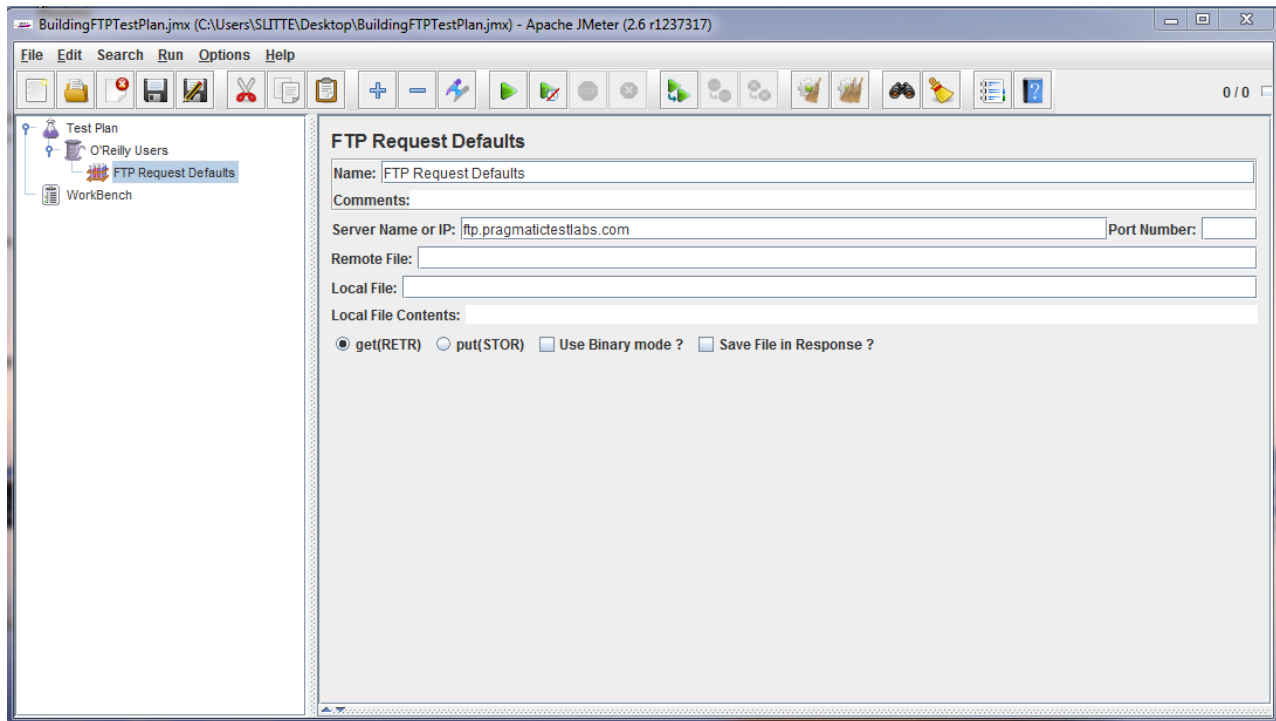


Figure 2.4.FTP Defaults for our Test Plan

3. Adding FTP Requests

In our Test Plan, we need to make two FTP requests. The first one is for the O'Reilly README file (file that insert to the server), and the second is for the TUTORIAL file (file that retrieve from the server)

JMeter sends requests in the order that they appear in the tree.

Start by adding the first FTP Request to the O'Reilly Users element (Add → Sampler → FTP Request). Then, select the FTP Request element in the tree and edit the following properties:

1. Change the Name to "README".
2. Change the Server name or IP → ex: (ftp.pragmatictestlabs.com)
3. Enter the Remote file name → ex: (Mynew.docx)
4. Enter the Local file name or path → ex: (D:\My.docx)
5. Tick radio button – put(STOR)
6. Change the Username field → (your FTP account user name)
7. Change the Password field → (your FTP account password)

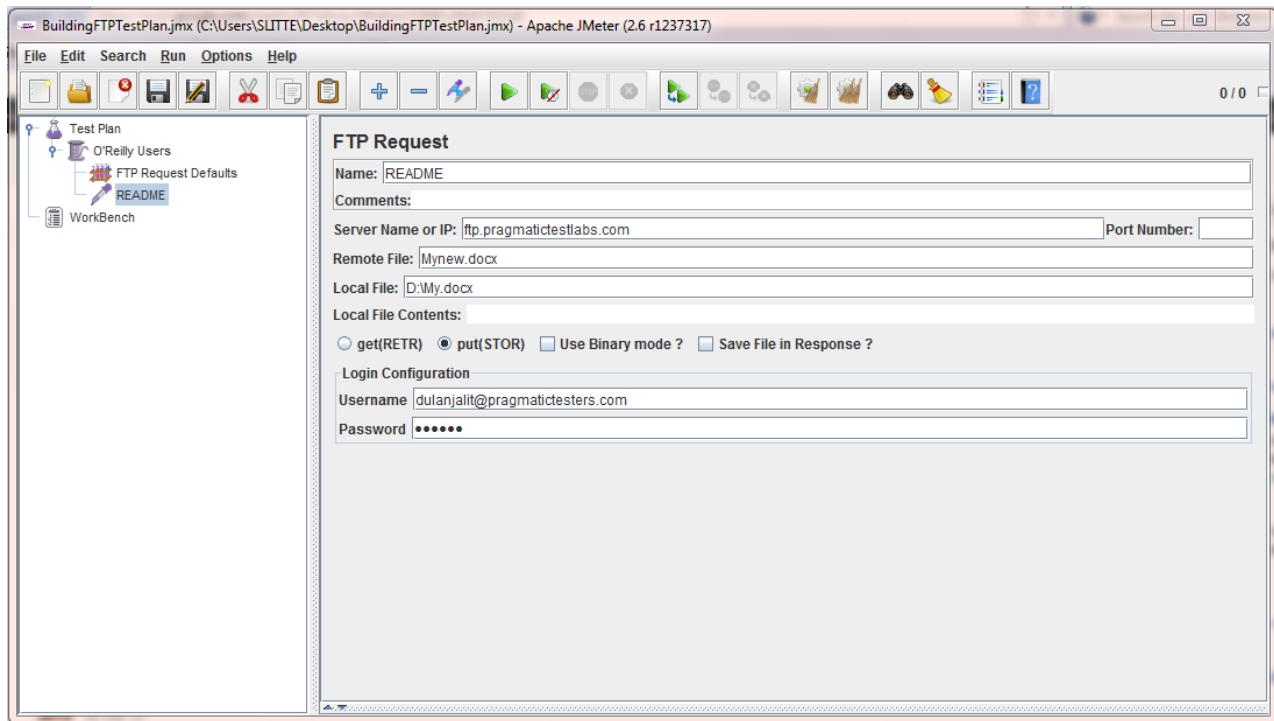


Figure 2.5.FTP Request for README file

Next, add the second FTP Request and edit the following properties:

1. Change the Name to "TUTORIAL".
2. Change the Server name or IP → ex: (ftp.pragmatictestlabs.com)
3. Enter the Remote file name → ex: (IQ.txt)
4. Enter the Local file name or path → ex: (my.txt)
5. Tick radio button – get(RETR)
6. Change the Username field → (your FTP account user name)
7. Change the Password field → (your FTP account password)

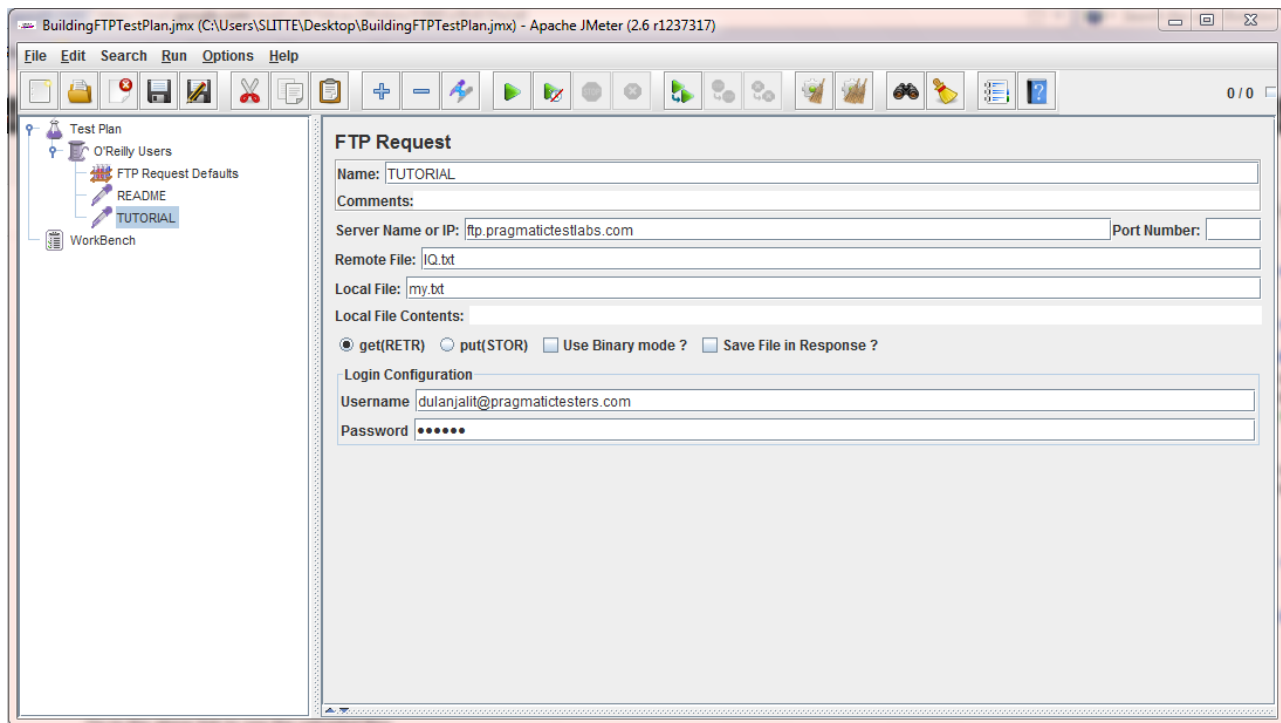


Figure 2.6.FTP Request for TUTORIAL file

3. Adding a Listener to View/Store the test Results

The final element you need to add to your Test Plan is a Listener. This element is responsible for storing all of the results of your FTP requests in a file and presenting a visual model of the data.

Select the O'Reilly Users element and add a View Results Tree (Add → Listener → View Results Tree).

Select the O'Reilly Users element and add a Spline Visualizer listener (Add → Listener → Spline Visualizer).

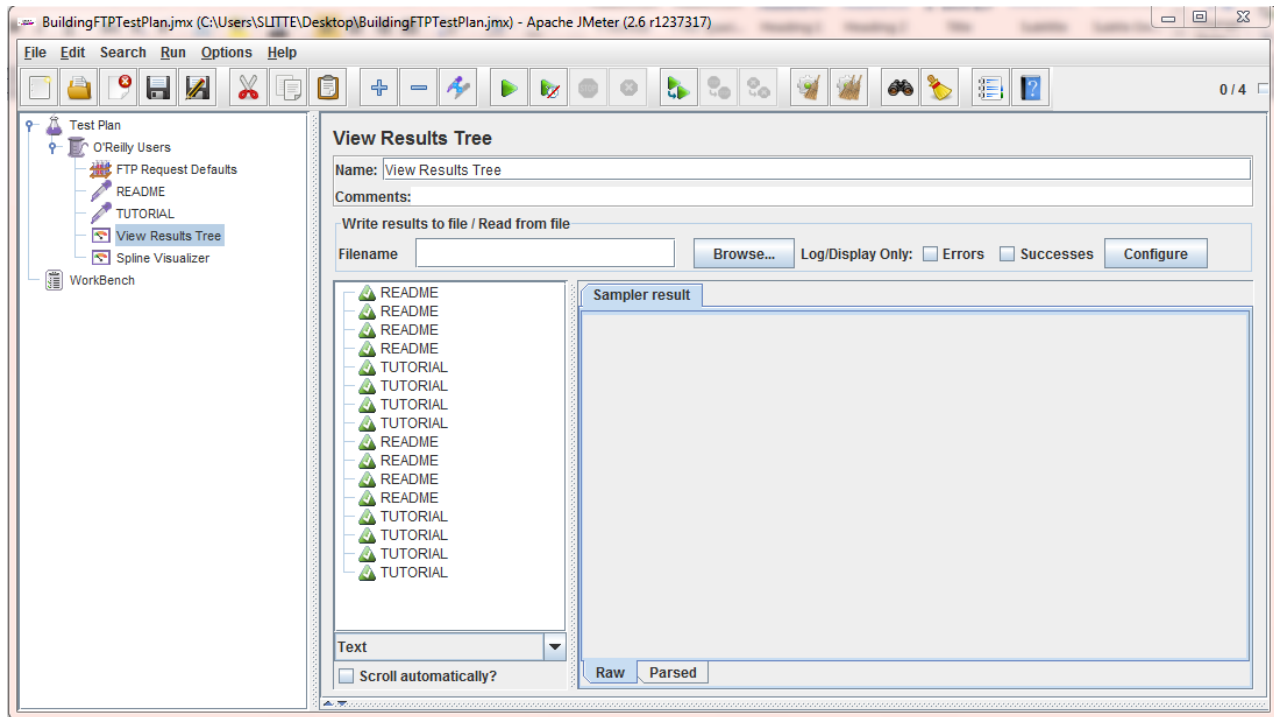


Figure 2.7.FTP View Results Tree Listener

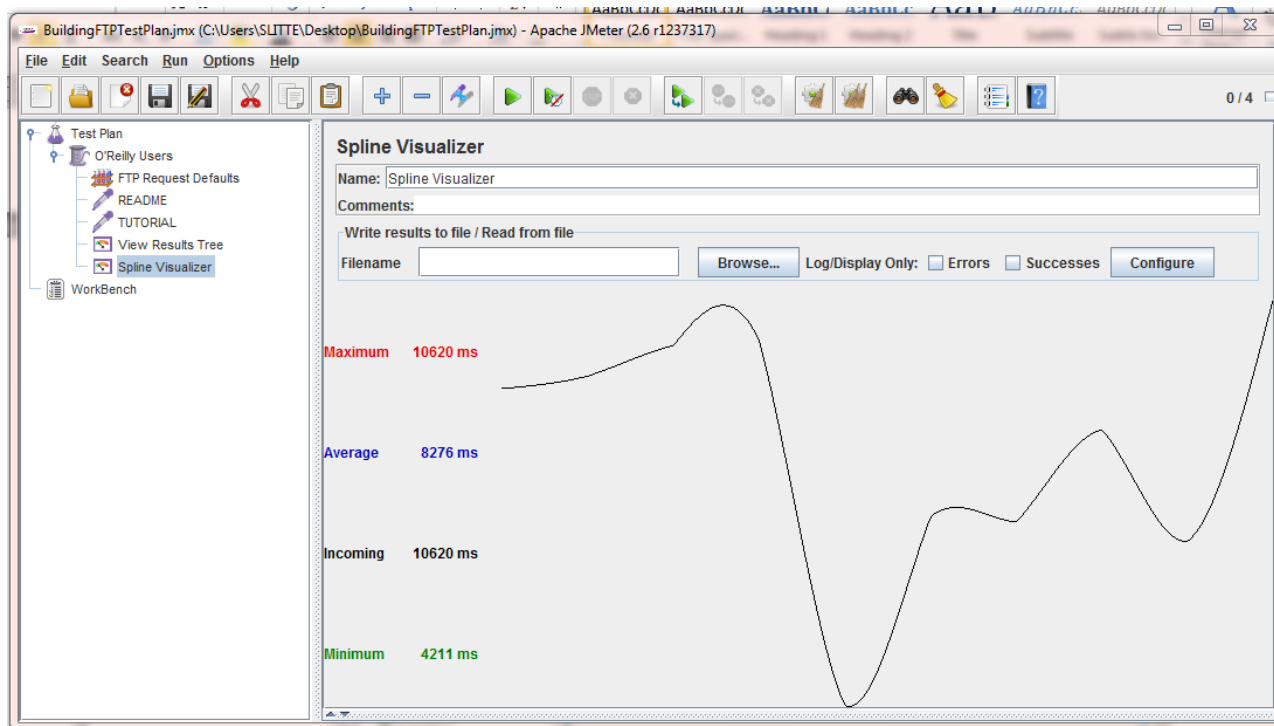


Figure 2.8.FTP Spline Visualizer Listener