**DELIVERABLE 10 ITEM 5: PERFORMANCE REPORT**

The aim of this report is to show the information related to our project performance attained through the performance tests that our group has carried out. These tests have been run in different machines, and therefore, we will indicate the properties of each machine used to run the tests. Our first tests have been made with 30 concurrent users and 100 loops. Afterwards, we have determined which are the use cases that stress our system the most and we tested them again in order to determine which is the maximum system workload.

**TESTS RAN IN MACHINE 1**

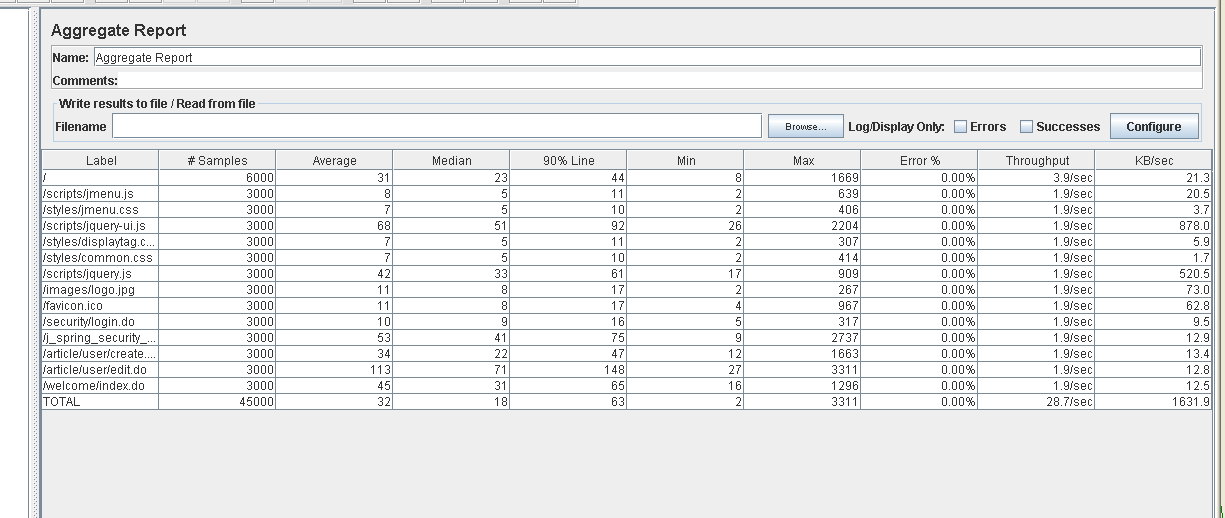
This computer has the following features:

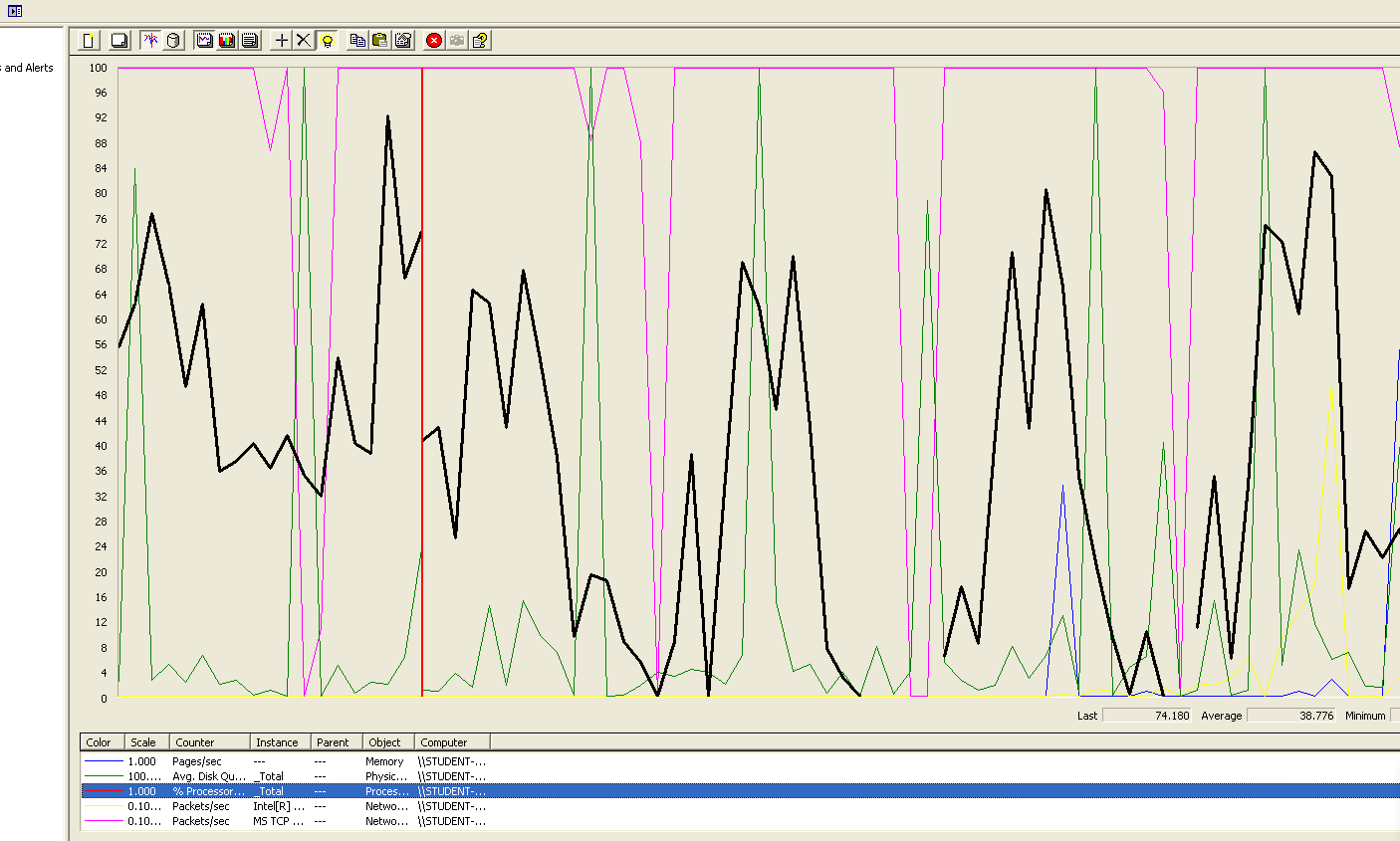
Processor: Intel(R) Core(TM) i7-7700HQ CPU @2.80GHz 2.81GHz

RAM memory: 12GB

Hard Disk: 765GB HDD

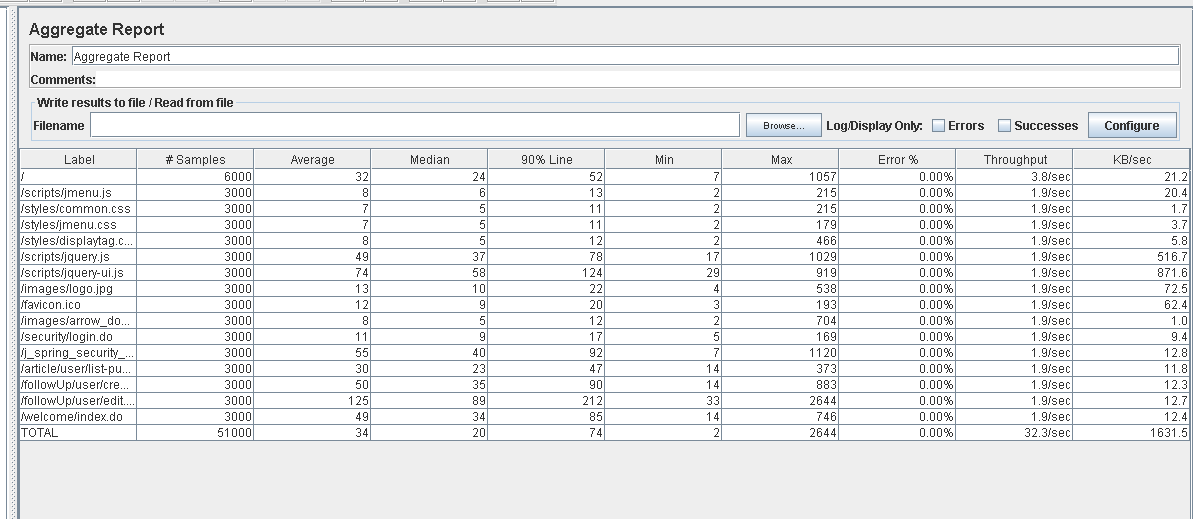
Wireless adapter: Intel (R) Dual Band Wireless-AC 7260.

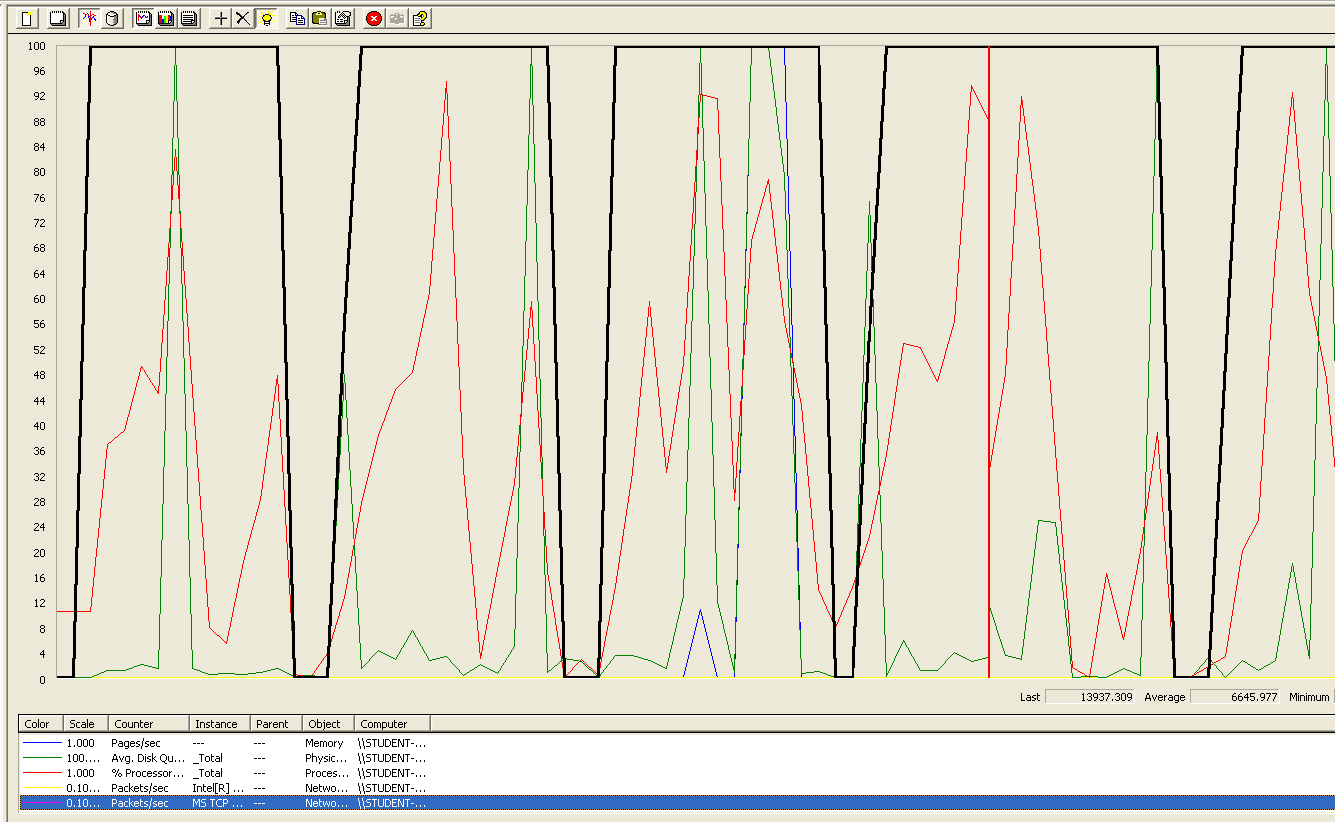
Test 1: Create a new article



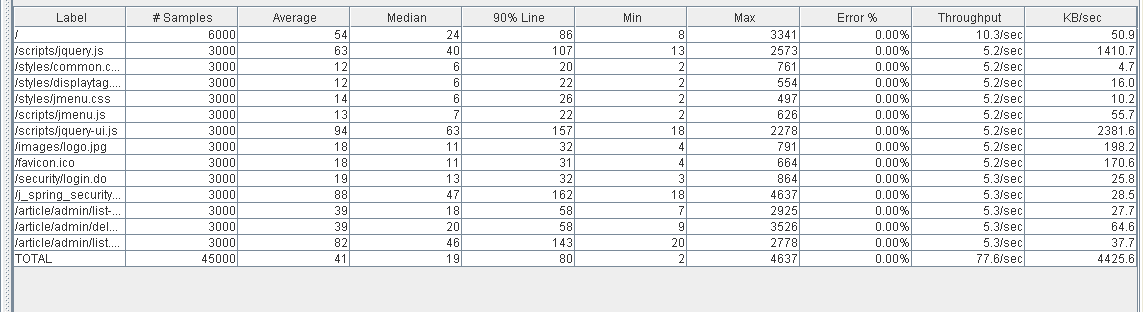
We can observe that in this case, the network card is the one most stressed. This happens in every test ran in this machine.

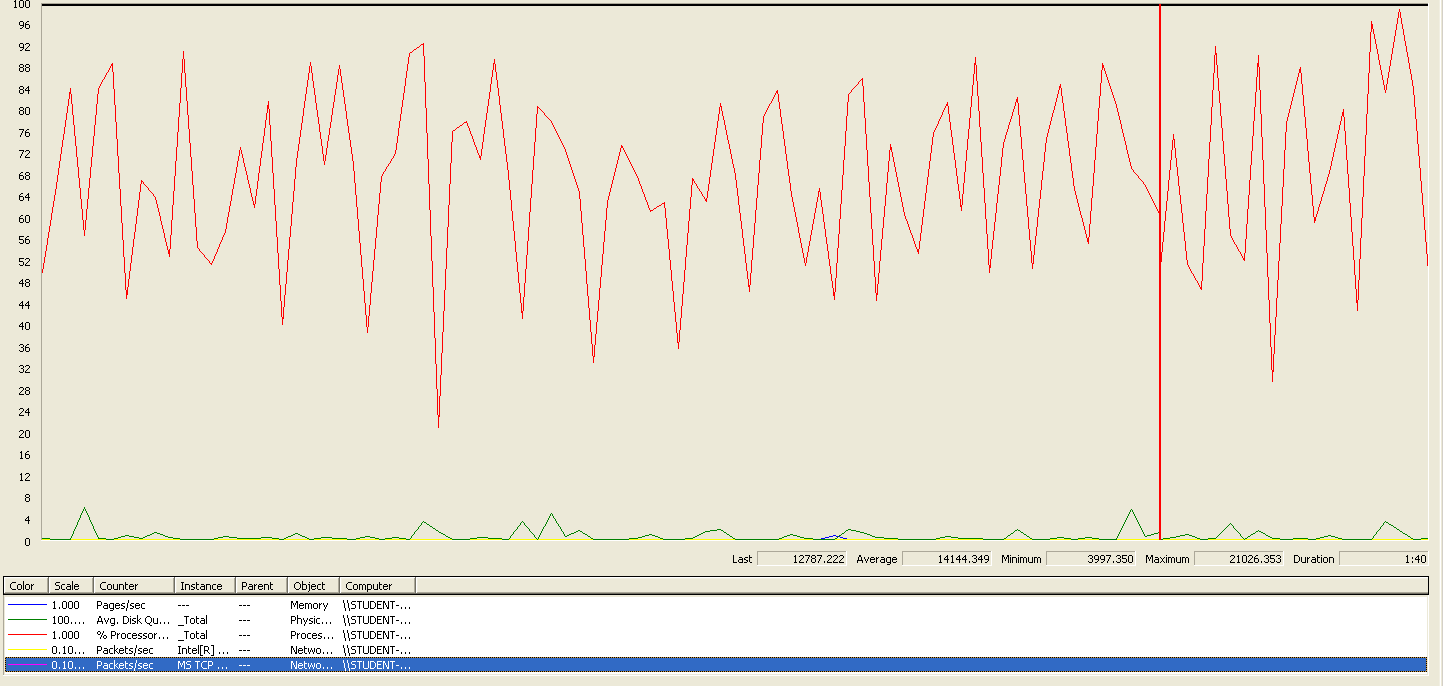
Test 2: Create a new followup





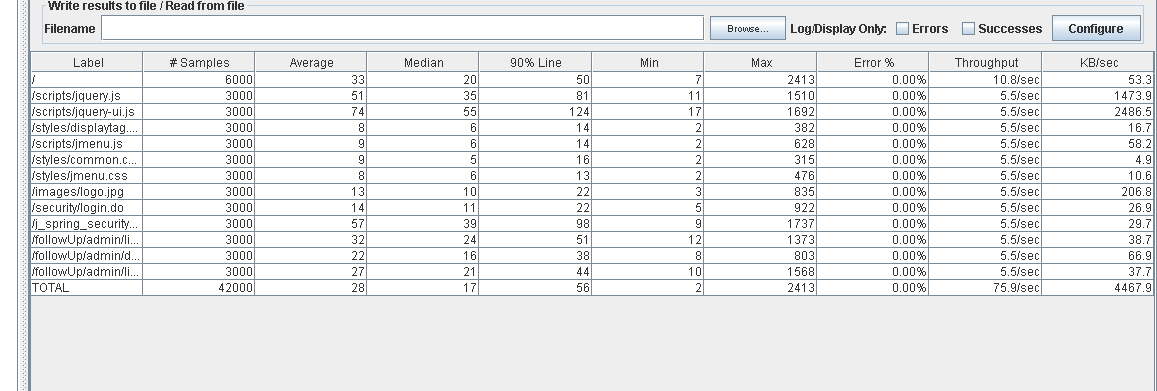
Test 3: Delete an article



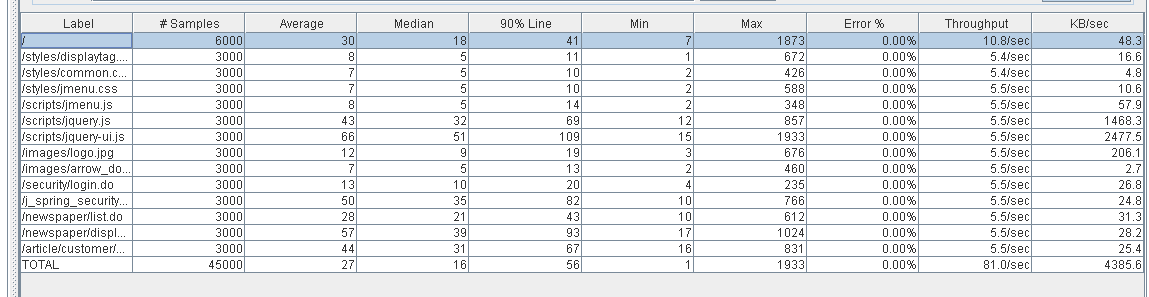


Again, the network card is the most stressed one. Because all the screenshots related to the tests ran in this machine are very similar, we will not provide more images related to the performance of this machine.

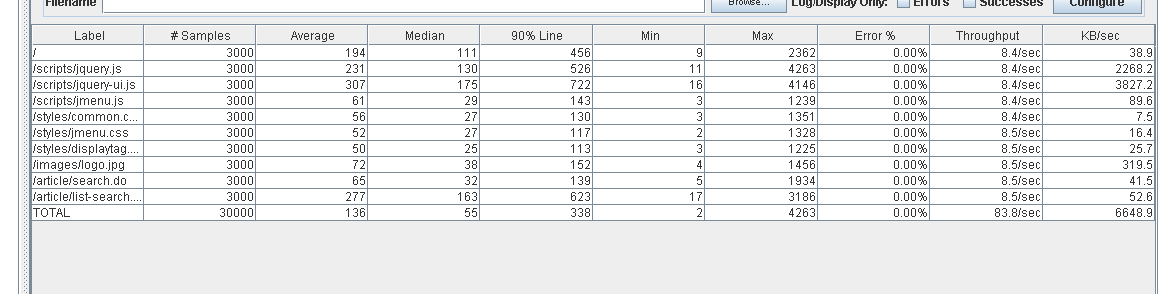
Test 4: Delete a followup



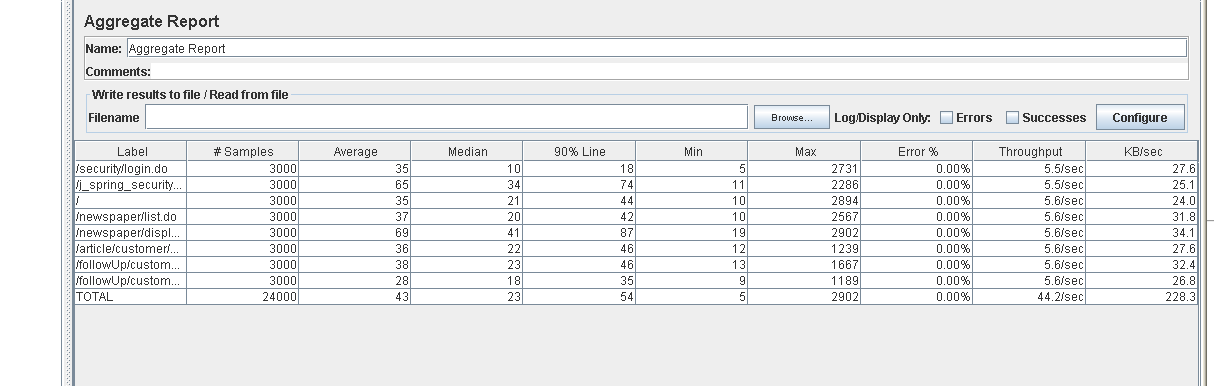
Test 5: Access to articles belonging to a private newspaper as a customer.



Test 6: Search an article by keyword.



Test 7: Display a followup.



Out of all the tests ran in this machine, searching an article by keyword is the one that takes more time. This will be one of the tests we will analyze more in-depth afterwards.

**TESTS RAN IN MACHINE 2**

This computer has the following features:

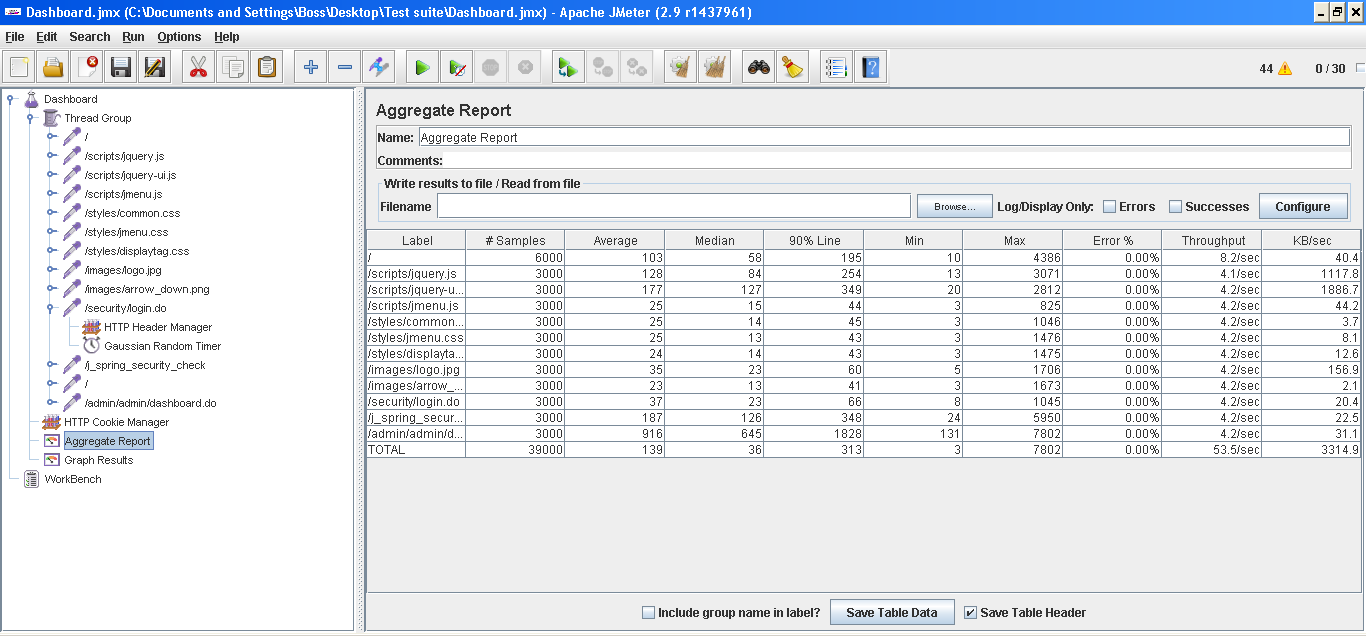
Processor: Intel(R)Core(TM) i5-7200U 2.5GHz with Turbo Boost up to 3.1GHz

RAM memory: 8GB DDR4

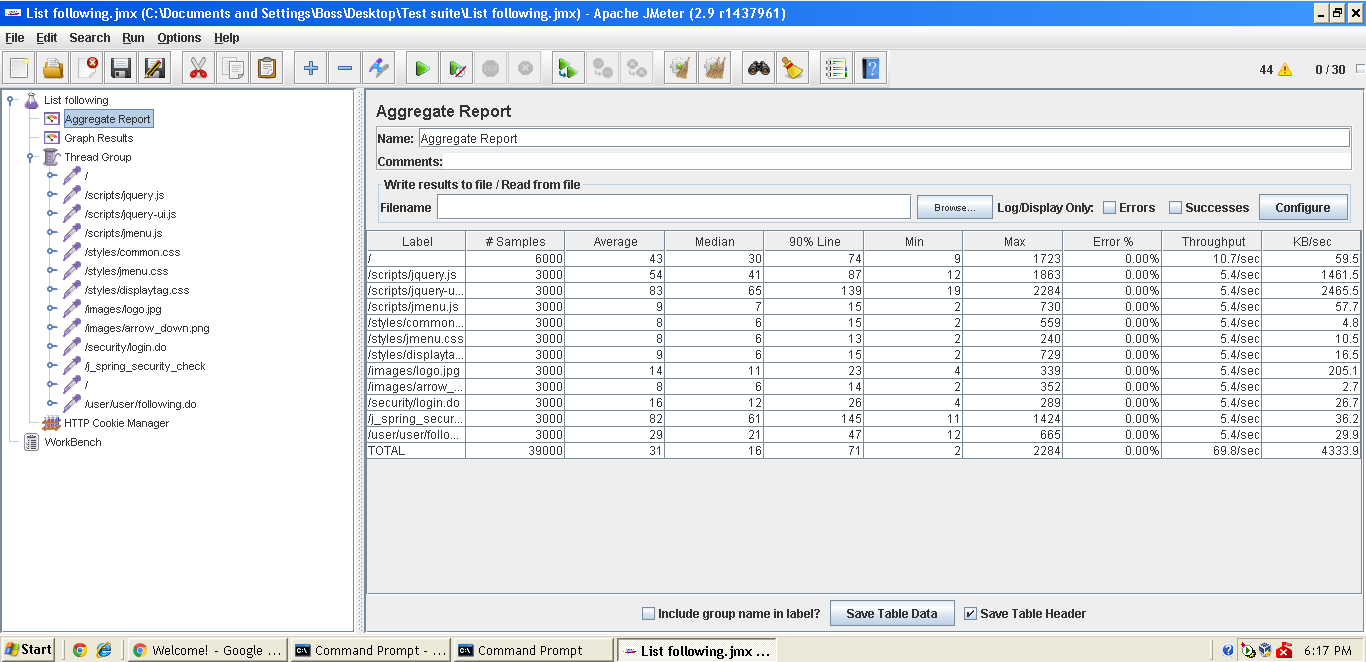
Hard Disk: 1000 GB HDD

Wireless adapter: Intel(R) Dual Band Wireless-AC 3168.

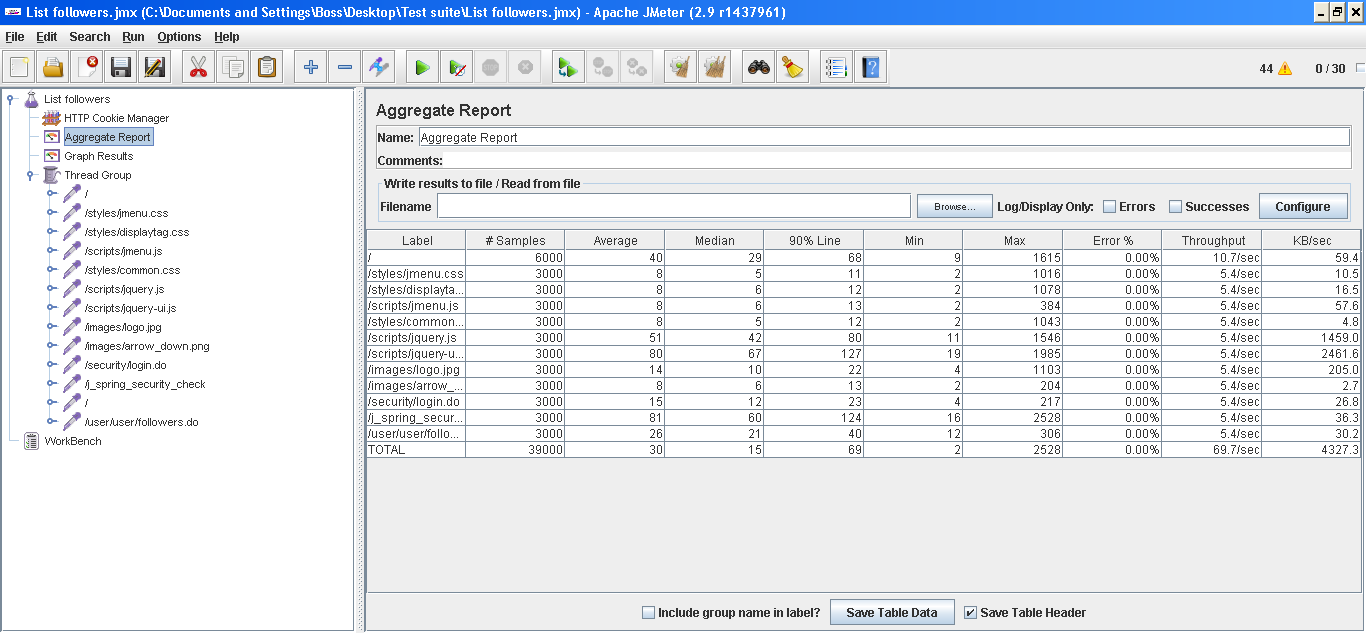
Test 8: Admin Dashboard



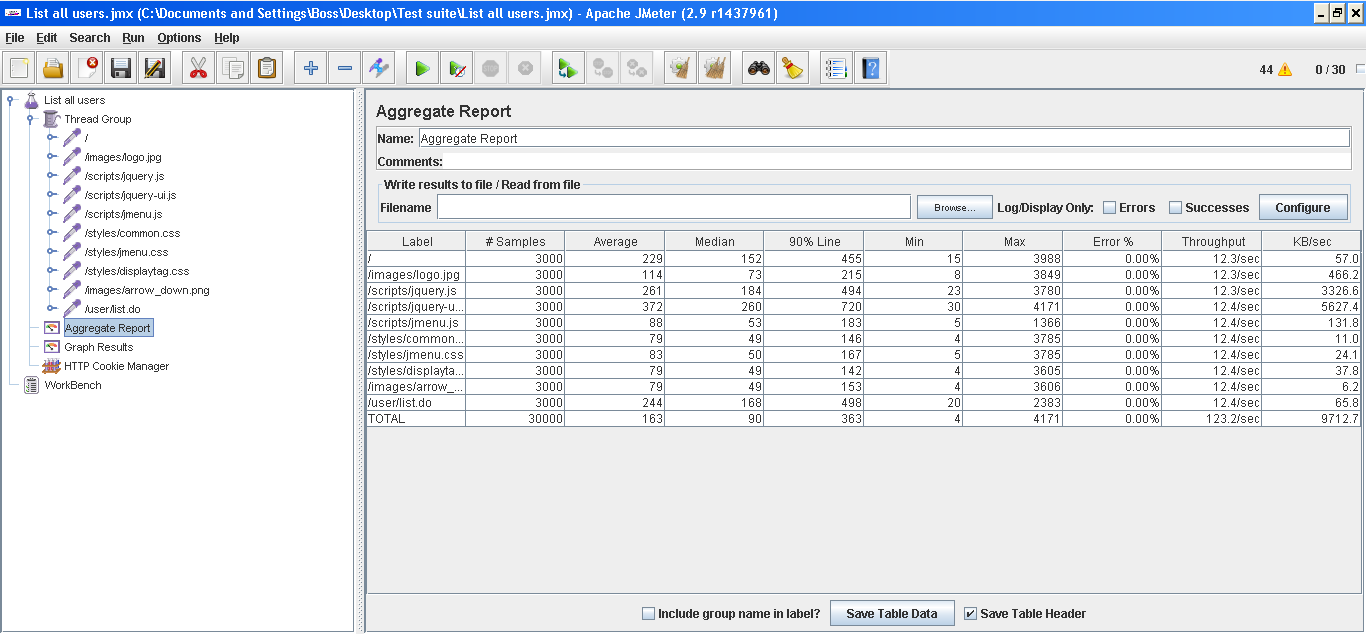
Test 9: List followed users



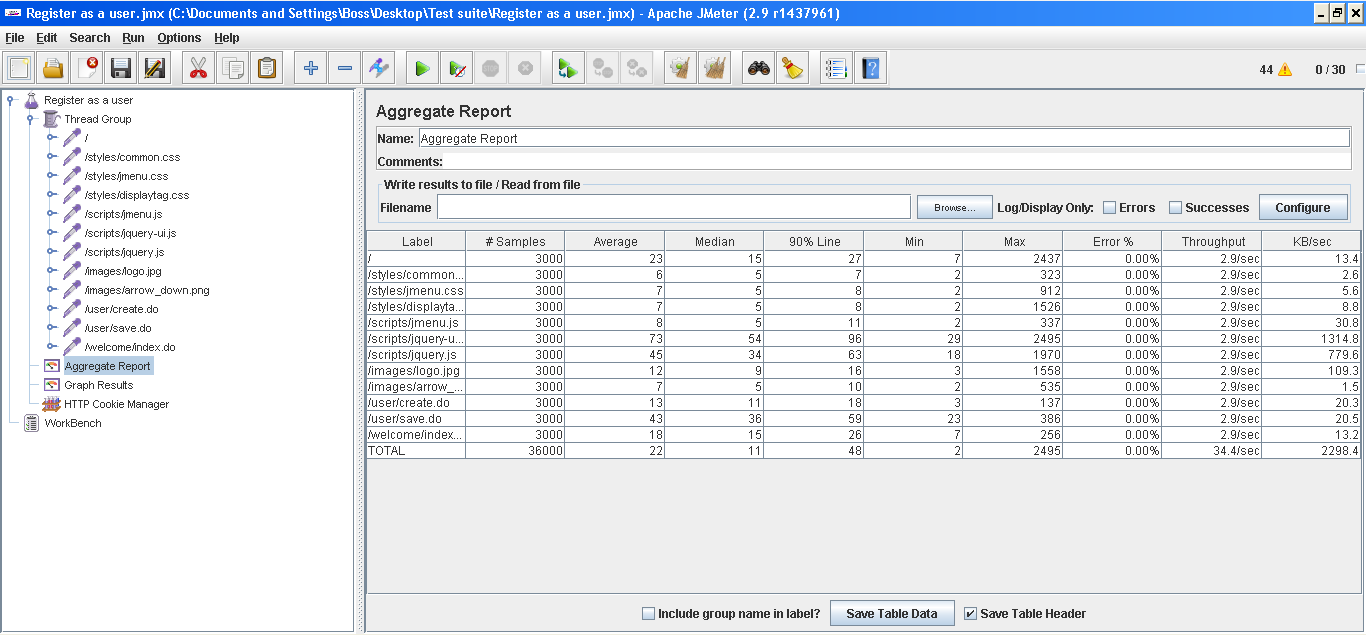
Test 10: List followers.



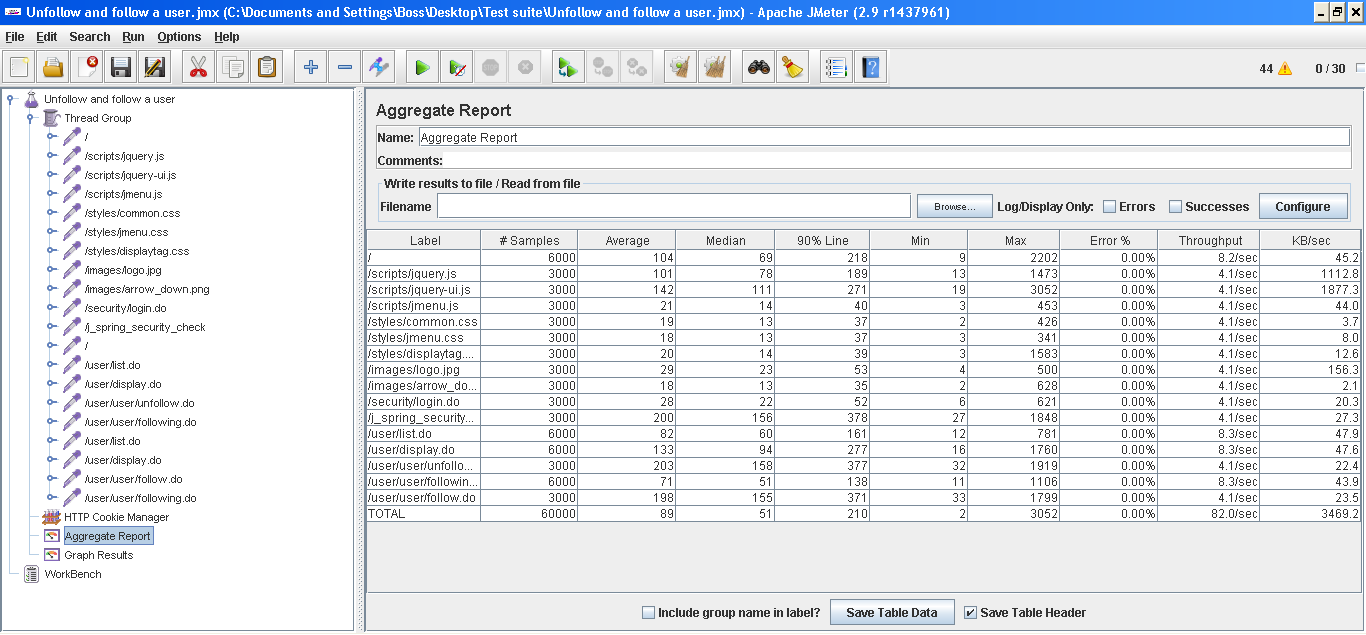
Test 11: List all users.



Test 12: Register to the system.



Test 13: Unfollow and follow a user.



We can see that the administrator dashboard and the listing of all users are the ones that stress our system the most. However, because the administrator dashboard use case is only admin related, it does not make much sense to take it into account when trying to analyze the maximum workload of our system, because there will never that many concurrent administrators. We will further analyze the listing of all users.

Test 14: List published newspaper and display their articles.

**TESTS RAN IN MACHINE 3**

This computer has the following features:

Processor: Intel Core i7-6500U (2-core,2.50-3.10 GHz, 4MB cache)

RAM memory: 8GB DDR3.

Hard Disk: 1000 GB HDD.

Wireless adapter: Qualcomm Atheros QCA61x4A Wireless Network Adapter.