

# **JMETER REPORT**

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# 1. Not authenticated use cases

## 1.1 List the positions available

**Descripción del ordenador que ha realizado el caso de uso:**

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 150 clientes.

### Thread Group

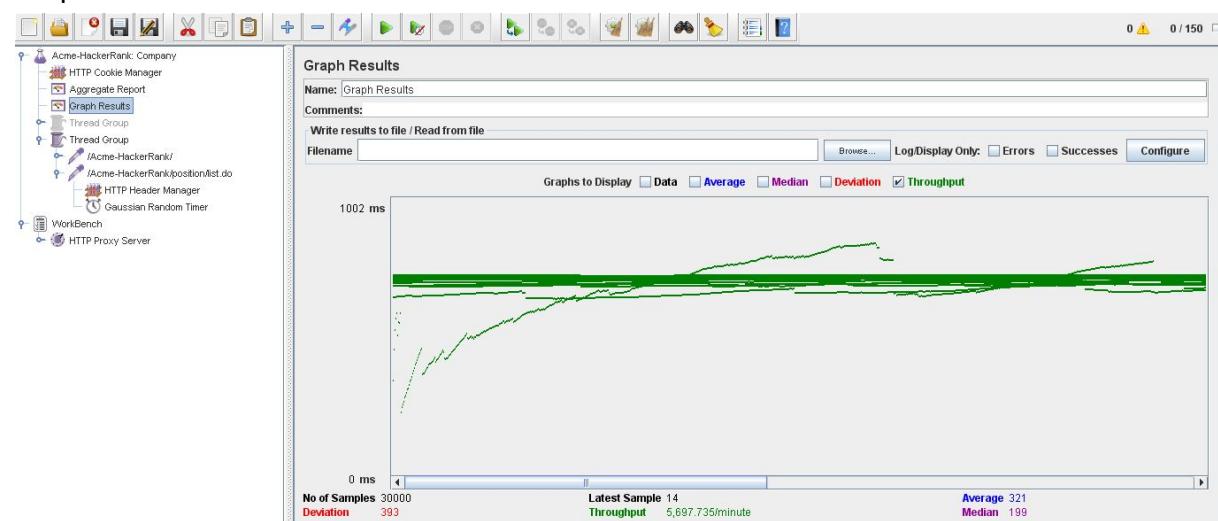
The screenshot shows the JMeter interface with the 'Thread Group' tab selected. On the left, there is a tree view of the test plan under 'Acme-HackerRank: Company'. The 'Thread Group' node is expanded, showing its properties: Name: 'Thread Group', Number of Threads (users): 150, Ramp-Up Period (in seconds): 1, Loop Count: Forever 100, and two unchecked options: 'Delay Thread creation until needed' and 'Scheduler'. The top status bar indicates 0 errors and 0/150 samples.

### Report

The screenshot shows the JMeter interface with the 'Aggregate Report' tab selected. On the left, the same test plan tree is visible. The 'Aggregate Report' panel displays performance metrics for 30,000 samples. The table includes columns for Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The data shows two entries for 'Acme-HackerR...' and a total row. The top status bar indicates 0 errors and 0/150 samples.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerR...	15000	153	25	419	3	3135	0.00%	47.7/sec	190.6
Acme-HackerR...	15000	490	363	1157	7	3227	0.00%	47.7/sec	241.5
TOTAL	30000	321	199	922	3	3227	0.00%	95.0/sec	430.1

### Graph



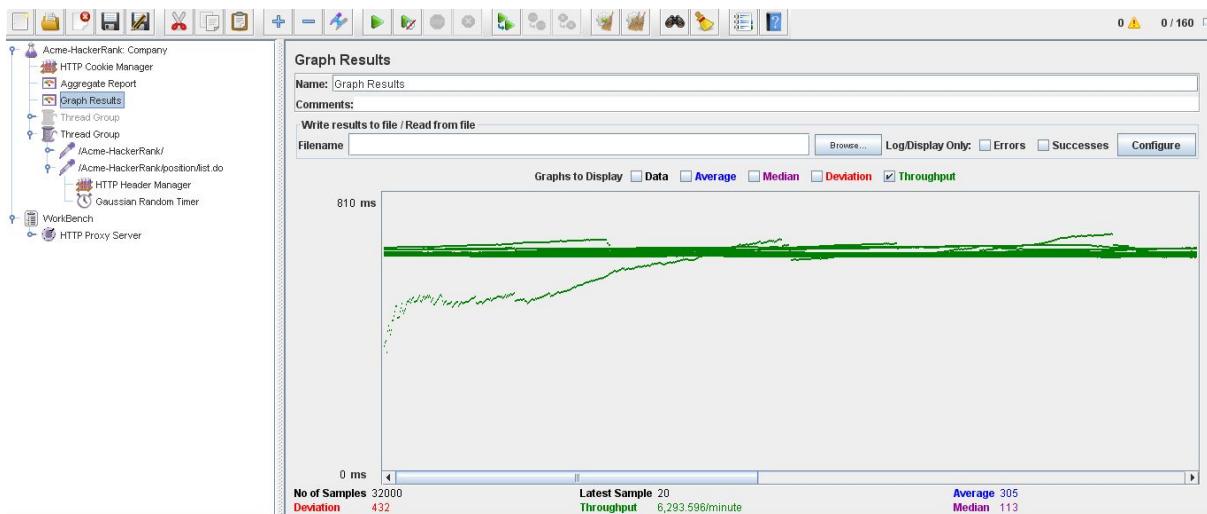
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 160 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
(Acme-HackerR...	16000	182	25	517	3	3722	0.24%	52.7/sec	210.3
(Acme-HackerR...	16000	428	256	1208	6	3738	0.07%	52.7/sec	266.8
TOTAL	32000	305	113	936	3	3738	0.15%	104.9/sec	474.9

### Graph



## 1.2 Navigate to the company corresponding to a position

Descripción del ordenador que ha realizado el caso de uso:

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 190 clientes.

### Thread Group

The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Number of Threads (users)' is set to 190, 'Ramp-Up Period (in seconds)' is 1, and 'Loop Count' is set to 100. Other options like 'Delay Thread creation until needed' and 'Scheduler' are also visible.

### Report

The screenshot shows the JMeter interface with the 'Aggregate Report' configuration open. It displays a table of results for 19000 samples. The table includes columns for Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The total throughput is listed as 482.0 KB/sec.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerR...	19000	214	37	705	3	1812	0.00%	24.9/sec	99.6
[Acme-HackerR...	19000	417	292	1003	7	2059	0.00%	24.9/sec	126.3
[Acme-HackerR...	19000	383	233	1014	8	1892	0.00%	24.9/sec	142.9
[Acme-HackerR...	19000	389	176	1104	5	2050	0.00%	24.9/sec	116.0
TOTAL	76000	351	175	987	3	2059	0.00%	99.1/sec	482.0

### Graph

The screenshot shows the JMeter interface with the 'Graph Results' configuration open. It displays a graph of response times (ms) over 76000 samples. The graph includes data, average, median, deviation, and throughput metrics. The throughput is shown as 5,946.908/min.

Graph Results Summary:

- No of Samples: 76000
- Deviation: 405
- Latest Sample: 14
- Throughput: 5,946.908/min
- Average: 351 ms
- Median: 175 ms

**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 200 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

**Thread Group**

Name: Thread Group

Comments:

Action to be taken after a Sampler error:

- Continue (radio button selected)
- Start Next Thread Loop
- Stop Thread
- Stop Test
- Stop Test Now

**Thread Properties**

Number of Threads (users): 200

Ramp-Up Period (in seconds): 1

Loop Count:  Forever 100

Delay Thread creation until needed

Scheduler

### Report

**Aggregate Report**

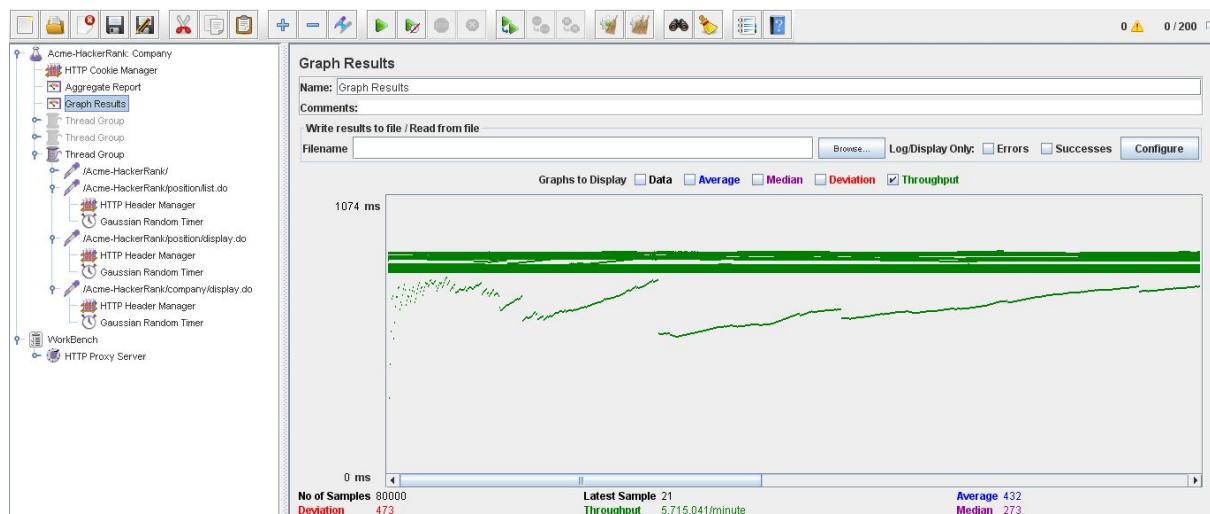
Name: Aggregate Report

Comments:

Write results to file / Read from file

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/	20000	252	18	833	1	3426	0.33%	24.0/sec	95.7
/Acme-HackerR...	20000	523	419	1176	7	4557	0.03%	23.9/sec	121.3
/Acme-HackerR...	20000	474	345	1149	8	4462	0.01%	24.0/sec	137.6
/Acme-HackerR...	20000	478	300	1246	5	4539	0.02%	24.0/sec	111.7
TOTAL	80000	432	273	1132	1	4557	0.10%	95.3/sec	463.2

### Graph



## 1.3 List the companies available

**Descripción del ordenador que ha realizado el caso de uso:**

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 195 clientes.

### Thread Group

The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The left sidebar lists test elements: Acme-HackerRank, HTTP Cookie Manager, Aggregate Report, Graph Results, Thread Group, /Acme-HackerRank/, /Acme-HackerRank/companylist.do, HTTP Header Manager, Gaussian Random Timer, WorkBench, and HTTP Proxy Server. The 'Thread Group' section is selected. It contains fields for 'Name: Thread Group', 'Comments:', 'Action to be taken after a Sampler error' (radio buttons for Continue, Start Next Thread Loop, Stop Thread, Stop Test, Stop Test Now), 'Thread Properties' (Number of Threads (users): 195, Ramp-Up Period (in seconds): 1, Loop Count: Forever 100, Delay Thread creation until needed, Scheduler), and a preview pane showing 195 threads.

### Report

The screenshot shows the JMeter interface with the 'Aggregate Report' configuration open. The left sidebar lists the same test elements as the Thread Group. The 'Aggregate Report' section is selected, showing an aggregate table with three rows: /Acme-HackerR..., /Acme-HackerR..., and TOTAL. The table includes columns for Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. Below the table is a 'Log/Display Only' section with checkboxes for Errors, Successes, and Configure.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerR...	19500	250	66	699	4	2293	0.00%	67.3/sec	267.3
/Acme-HackerR...	19500	342	131	1054	5	2313	0.00%	67.3/sec	304.7
<b>TOTAL</b>	<b>39000</b>	<b>296</b>	<b>94</b>	<b>968</b>	<b>4</b>	<b>2313</b>	<b>0.00%</b>	<b>133.9/sec</b>	<b>569.4</b>

### Graph

The screenshot shows the JMeter interface with the 'Graph Results' configuration open. The left sidebar lists the same test elements. The 'Graph Results' section is selected, showing a graph titled '991 ms'. The graph displays a green line representing response time over 39000 samples. Below the graph are summary statistics: No of Samples 39000, Deviation 408, Latest Sample 20, Throughput 8,035.742/min, Average 296, and Median 94. There are also buttons for 'Graphs to Display' (Data, Average, Median, Deviation, Throughput) and 'Log/Display Only' (Errors, Successes, Configure).

**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 200 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error:

- Continue
- Start Next Thread Loop
- Stop Thread
- Stop Test
- Stop Test Now

Thread Properties

Number of Threads (users): 200

Ramp-Up Period (in seconds): 1

Loop Count: Forever 100

Delay Thread creation until needed

Scheduler

### Report

Aggregate Report

Name: Aggregate Report

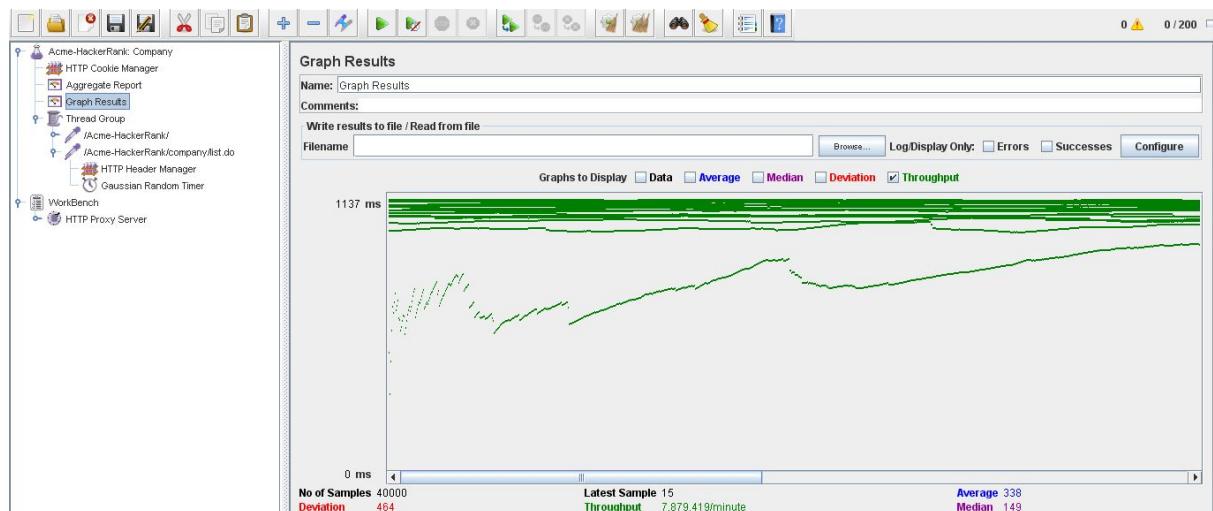
Comments:

Write results to file / Read from file

Filename [ ] Browse... LogDisplay Only: Errors Successes Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerR...]	20000	258	79	627	4	2852	0.62%	66.0/sec	263.1
[Acme-HackerR...]	20000	418	205	1161	5	5000	0.00%	66.0/sec	299.0
TOTAL	40000	338	149	1040	4	5000	0.31%	131.3/sec	559.2

### Graph



## 1.4 Navigate to the corresponding positions (of a company)

**Descripción del ordenador que ha realizado el caso de uso:**

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 175 clientes.

### Thread Group

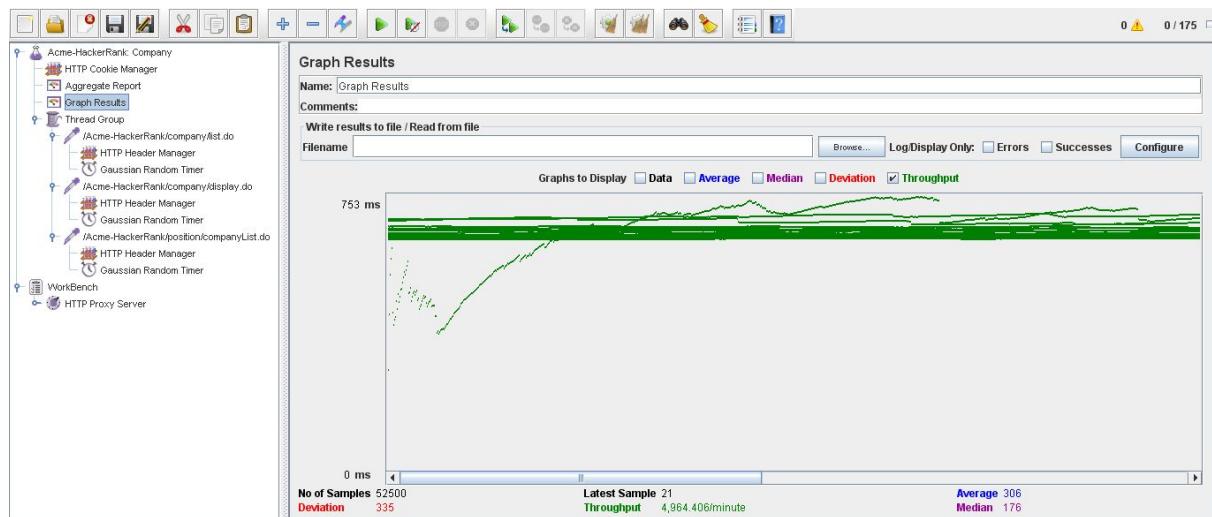
**Thread Group Configuration:**

- Name: Thread Group
- Comments: Action to be taken after a Sampler error: Continue
- Number of Threads (users): 175
- Ramp-Up Period (in seconds): 1
- Loop Count: Forever 100
- Delay Thread creation until needed
- Scheduler

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerR...	17500	311	179	860	6	1669	0.00%	27.7/sec	128.0
ng_security_check	17500	301	168	846	5	1667	0.00%	27.7/sec	133.1
/Acme-HackerR...	17500	305	179	844	7	1669	0.00%	27.7/sec	141.2
TOTAL	52500	306	176	850	5	1669	0.00%	82.7/sec	400.5

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 180 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

**Thread Group**

Name: Thread Group  
Comments:  
Action to be taken after a Sampler error: Continue

Thread Properties

Number of Threads (users):	180
Ramp-Up Period (in seconds):	1
Loop Count:	Forever 100
<input type="checkbox"/> Delay Thread creation until needed	
<input type="checkbox"/> Scheduler	

### Report

**Aggregate Report**

Name: Aggregate Report  
Comments:  
Write results to file / Read from file

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerR...	18000	379	245	934	5	4338	0.05%	27.0/sec	124.9
hg_security_check	18000	366	238	919	5	4380	0.00%	27.0/sec	129.9
/Acme-HackerR...	18000	370	247	917	7	4127	0.00%	27.0/sec	137.8
TOTAL	54000	372	244	924	5	4390	0.02%	80.7/sec	390.7

### Graph

**Graph Results**

Name: Graph Results  
Comments:  
Write results to file / Read from file

Graphs to Display: Data, Average, Median, Deviation, Throughput

1014 ms  
0 ms

No of Samples 54000  
Deviation 400  
Latest Sample 22  
Throughput 4,843.998/minute  
Average 372  
Median 244

## 1.5 Search for a position

Descripción del ordenador que ha realizado el caso de uso:

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 185 clientes.

### Thread Group

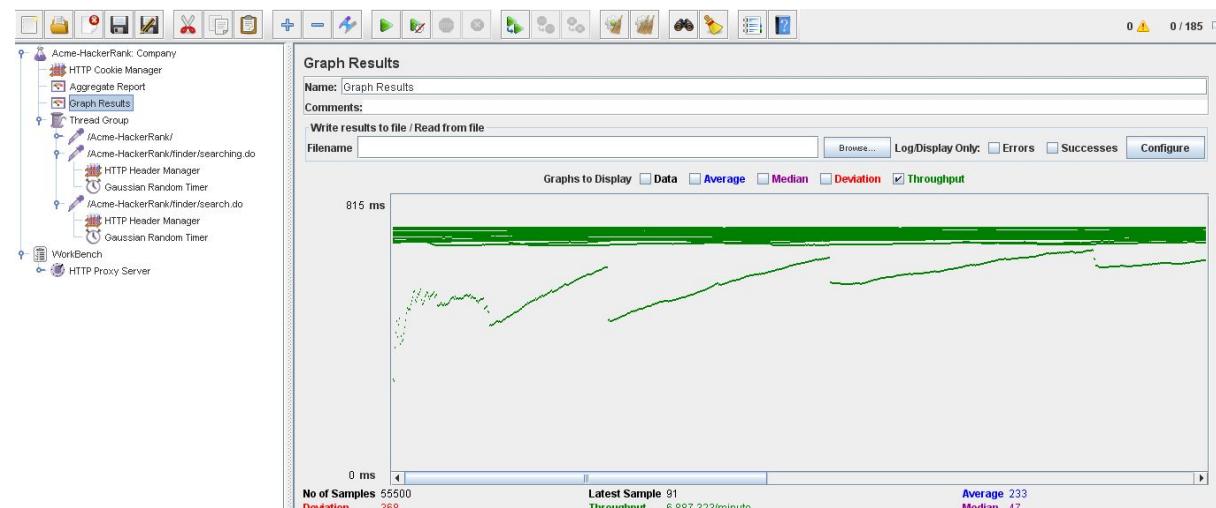
The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Name' field is set to 'Thread Group'. Under 'Thread Properties', 'Number of Threads (users)' is set to 185, 'Ramp-Up Period (in seconds)' is set to 1, and 'Loop Count' is set to Forever. Other options like 'Delay Thread creation until needed' and 'Scheduler' are also visible.

### Report

The screenshot shows the 'Aggregate Report' configuration. The 'Label' column lists 'Acme-HackerRank...', 'Acme-HackerRank...', and 'TOTAL'. The 'Average' column shows values of 171, 247, and 233 respectively. The 'Throughput' column shows values of 38.5/sec, 38.5/sec, and 114.8/sec. The 'KB/sec' column shows values of 153.9, 154.5, and 484.2. The 'Error %' column shows 0.00% for all samples.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank...	18500	171	21	607	4	2971	0.00%	38.5/sec	153.9
Acme-HackerRank...	18500	247	72	785	3	4080	0.00%	38.5/sec	154.5
Acme-HackerRank...	18500	280	61	885	6	4242	0.00%	38.5/sec	179.0
TOTAL	55500	233	47	771	3	4242	0.00%	114.8/sec	484.2

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 190 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/	10000	179	21	624	4	2959	0.00%	40.3/sec	161.1
/Acme-HackerRank/	19000	240	77	743	3	3044	0.05%	40.3/sec	161.5
/Acme-HackerRank/	19000	301	82	965	6	3234	0.00%	40.3/sec	187.2
TOTAL	57000	240	54	788	3	3234	0.02%	120.1/sec	506.5

### Graph

# 1.6 Register as a company

**Descripción del ordenador que ha realizado el caso de uso:**

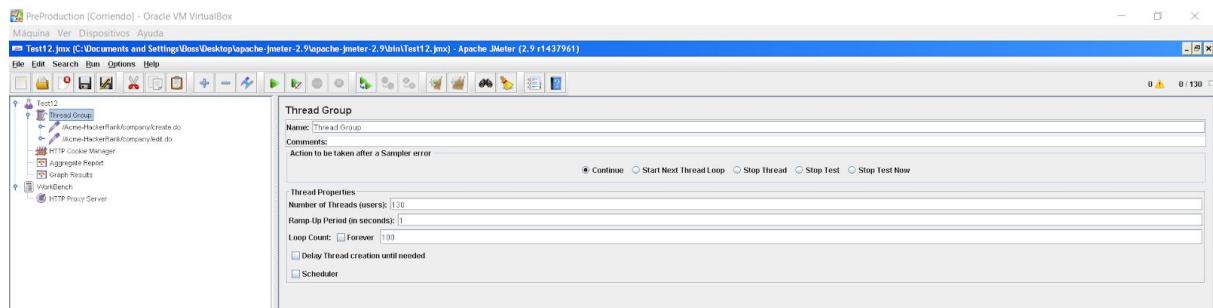
Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

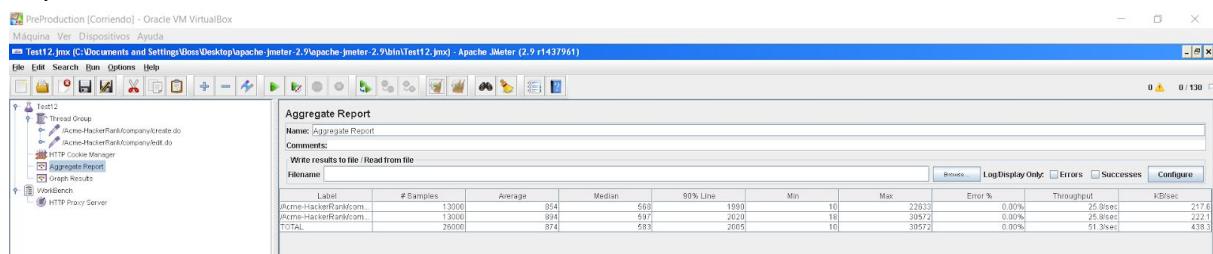
-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 130 clientes.

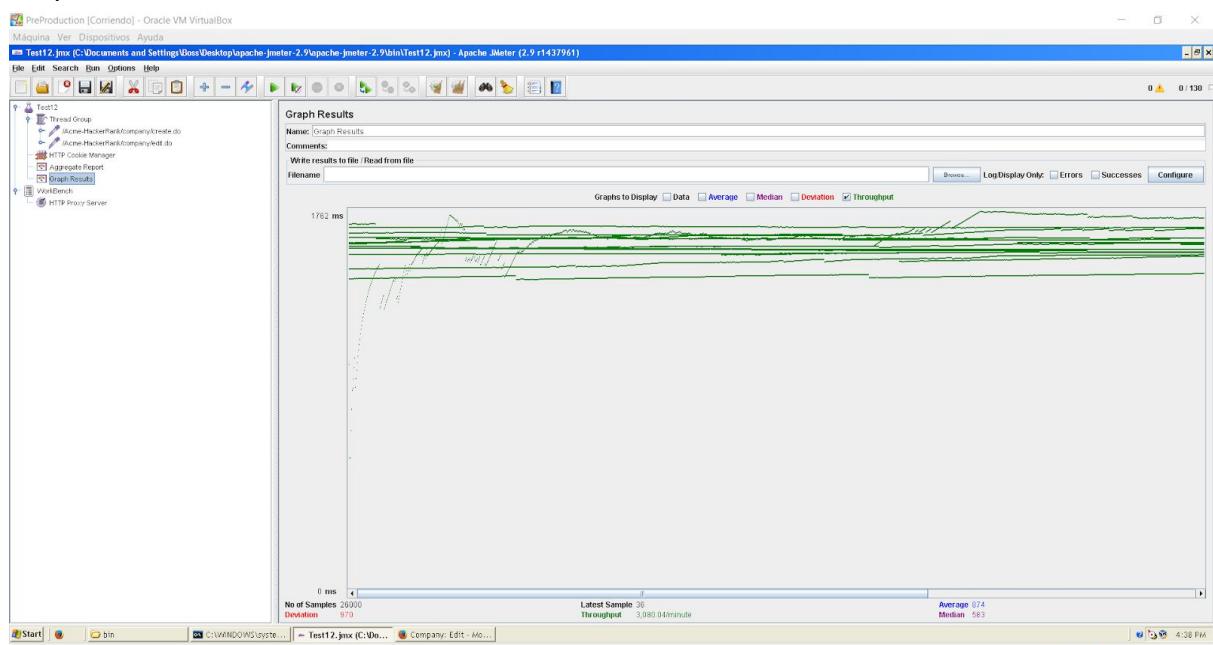
## Thread Group



## Report

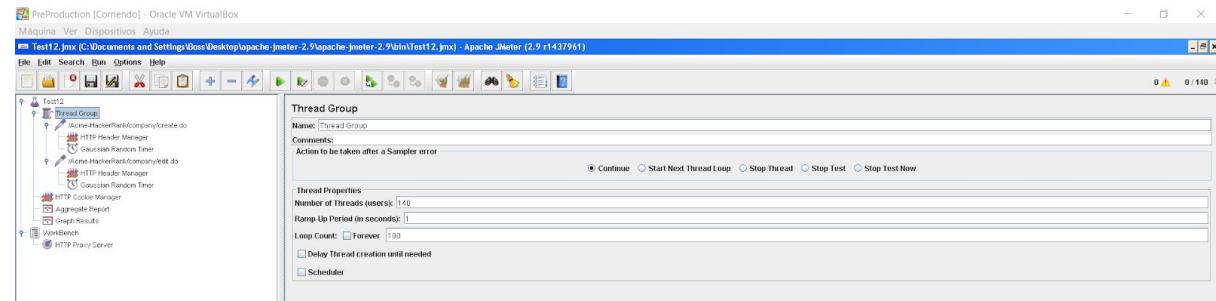


## Graph

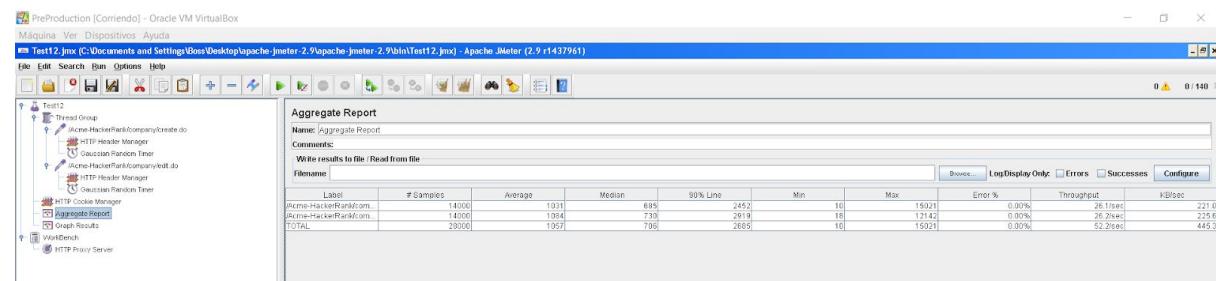


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 140 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

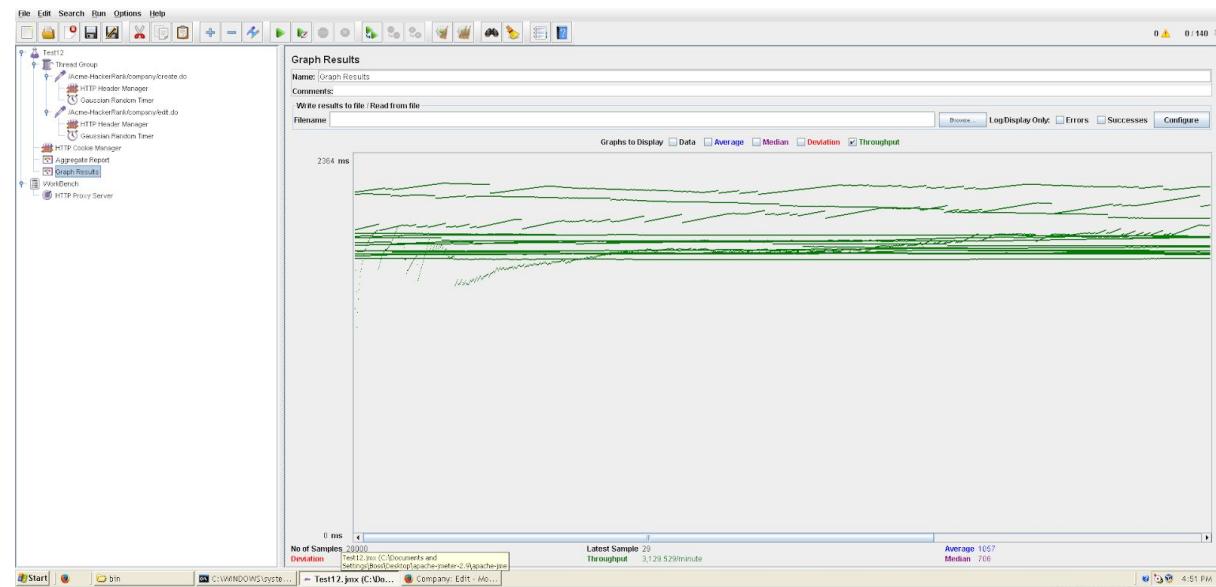
## Thread Group



## Report



## Graph



## 1.7 Register as a hacker

**Descripción del ordenador que ha realizado el caso de uso:**

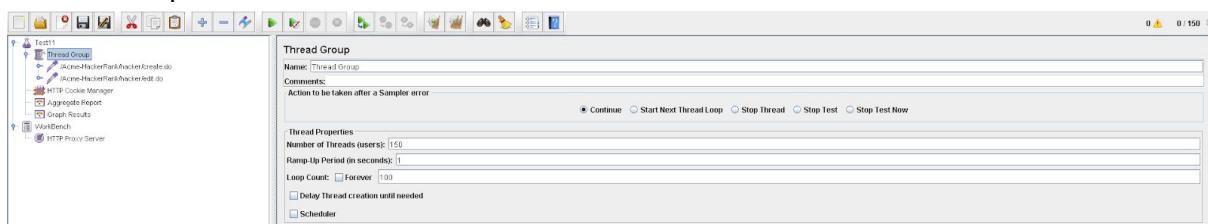
Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

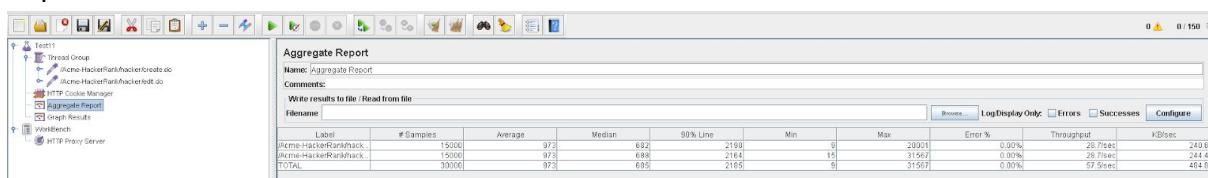
**Caso Positivo:** El sistema, en este caso, es capaz de soportar 150 clientes.

### Thread Group



The screenshot shows the JMeter interface with the 'Thread Group' configuration panel open. The 'Name' field is set to 'Thread Group'. Under 'Action to take after a Sampler error', the 'Continue' option is selected. In the 'Thread Properties' section, 'Number of Threads (users)' is set to 150, 'Ramp-Up Period (in seconds)' is 1, and 'Loop Count' is set to 'Forever' with 'Delay Thread creation until needed' checked. There is also a 'Scheduler' checkbox.

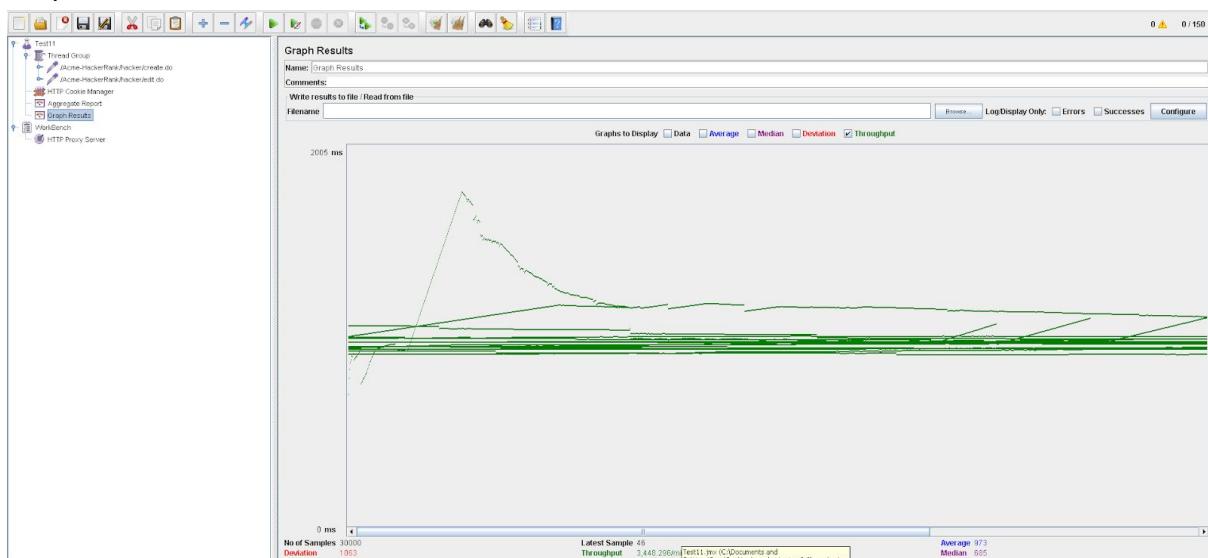
### Report



The screenshot shows the 'Aggregate Report' results for the test. The 'Label' column lists 'Almcn-HackerRandHack', 'Almcn-HackerRandHack', and 'TOTAL'. The 'Throughput' column shows values of 240.6, 244.4, and 244.4 respectively. The 'Kb/sec' column shows values of 240.6, 244.4, and 404.3 respectively.

Label	Throughput	Kb/sec
Almcn-HackerRandHack..	240.6	240.6
Almcn-HackerRandHack..	244.4	244.4
TOTAL	244.4	404.3

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 160 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

Test Plan Structure:

- Test11
  - Thread Group
    - HTTP Request
    - HTTP Request
    - HTTP Cookie Manager
    - Aggregate Report
    - Graph Results
- WorkBench
  - HTTP Proxy Server

Thread Group Properties:

Name:	Thread Group
Comments:	Action to be taken after a Sampler error
Thread Properties	
Number of Threads (users):	160
Ramp-Up Period (in seconds):	1
Loop Count:	Forever
Delay thread creation until needed	<input type="checkbox"/>
Scheduler	<input type="checkbox"/>

### Report

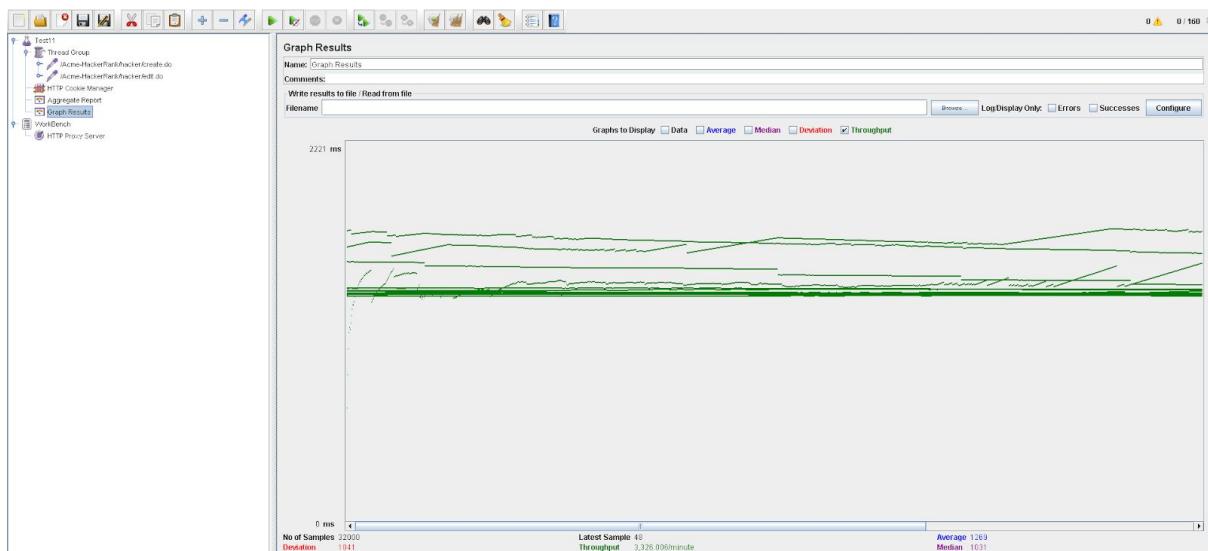
Test Plan Structure:

- Test11
  - Thread Group
    - HTTP Request
    - HTTP Request
    - HTTP Cookie Manager
    - Aggregate Report
    - Graph Results
- WorkBench
  - HTTP Proxy Server

Aggregate Report Results:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Alpine-HackerRandHack	19,000	1.268	1.031	2.522	8	10,941	0.80%	27.8/sec	2,324
Alpine-HackerRandHack	1,000	1.271	1.038	2.533	10	10,951	0.82%	37.2/sec	2,584
<b>TOTAL</b>	<b>22,000</b>	<b>1.268</b>	<b>1.031</b>	<b>2.520</b>	<b>8</b>	<b>10,997</b>	<b>0.80%</b>	<b>55.4/sec</b>	<b>467.0</b>

### Graph



## 2. Authenticated use cases

### 2.1 Delete account

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 140 clientes.

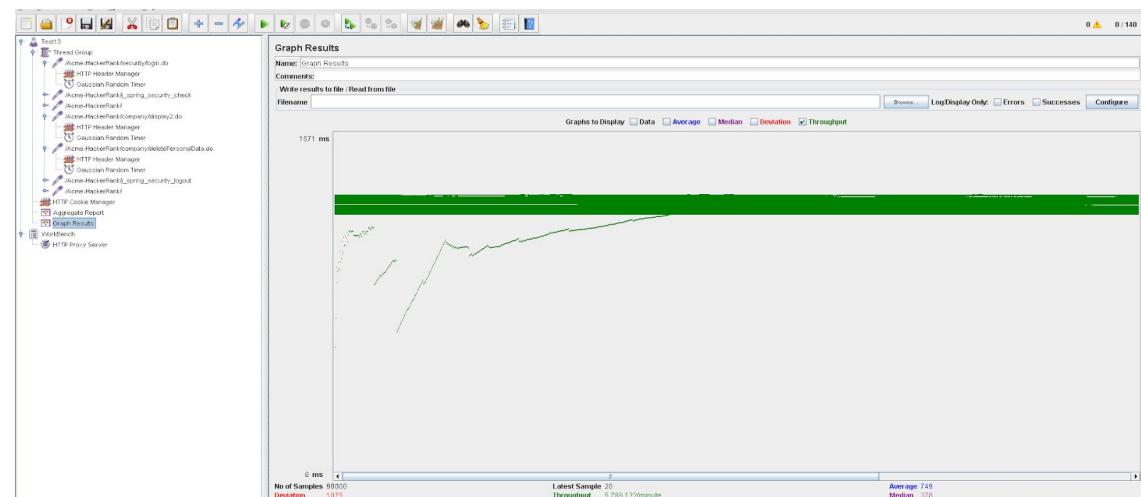
#### Thread Group

The screenshot shows the Apache JMeter interface with the test plan named 'Test13.jmx'. A 'Thread Group' is selected, which is configured to have 140 threads, a ramp-up period of 1 second, and a loop count of 100. The 'Action to be taken after a Sampler error' dropdown is set to 'Continue'. The 'Thread Properties' section includes fields for 'Number of Threads' (140), 'Ramp-Up Period in seconds' (1), 'Loop Count' (100), and checkboxes for 'Delay thread creation until needed' and 'Scheduler'.

#### Report

The screenshot shows the 'Aggregate Report' section of the JMeter interface. It displays a table of results for various samplers, including 'Acme-HackerRankLogin', 'Acme-HackerRankLogout', 'Acme-HackerRankDeletePersonData', and 'Acme-HackerRankModifyPersonData'. The table includes columns for 'Label', '# Samples', 'Average', 'Median', '95% Line', 'Min', 'Max', 'Error %', 'Throughput', and 'KB/sec'. Below the table is a graph showing 'Throughput' over time, with a green line representing the trend and a red shaded area representing the deviation. The graph has a Y-axis labeled 'Throughput' with values from 0 to 1000 KB/sec and an X-axis labeled 'Time' with values from 0 to 10 minutes.

#### Graph



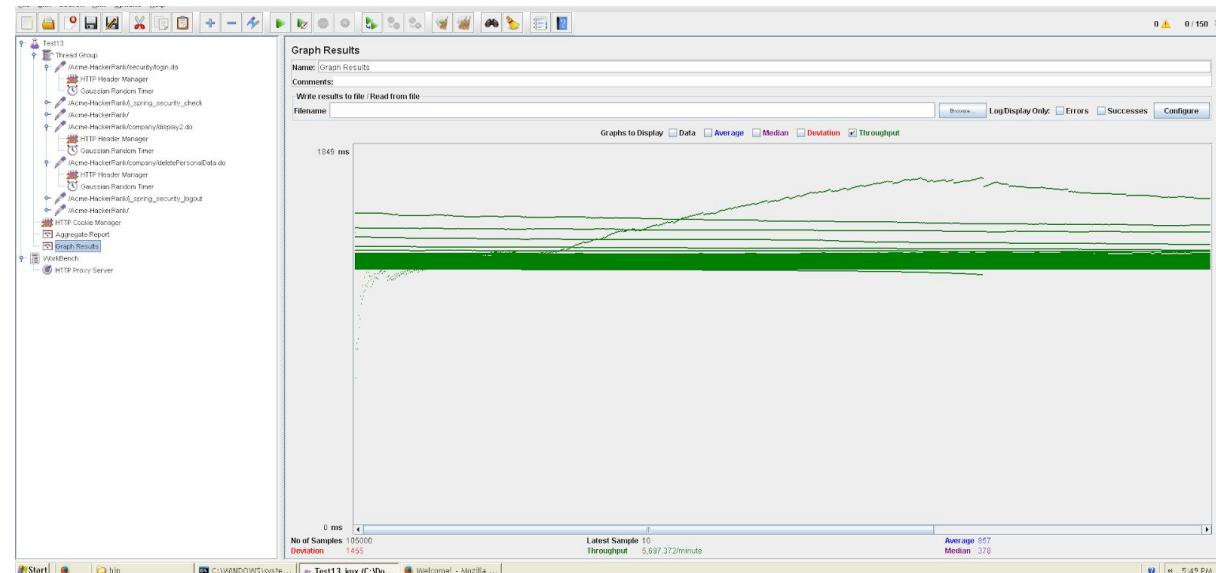
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 150 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

## Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerParl/secu...	15000	758	327	1884	5	18972	0.00%	15.6/sec	67.8
Acme-HackerParl/secu...	15000	448	688	3259	11	21732	0.00%	13.3/sec	63.7
Acme-HackerParl/secu...	30000	526	238	1403	4	17932	0.00%	22.7/sec	108.4
Acme-HackerParl/secu...	15000	805	595	1853	7	21479	0.00%	15.0/sec	69.0
Acme-HackerParl/secu...	15000	850	562	2063	7	19798	0.00%	13.6/sec	69.0
Acme-HackerParl/secu...	15000	932	391	1844	6	19895	0.00%	13.6/sec	59.3
Acme-HackerParl/secu...	105000	917	378	1969	4	21985	0.00%	29.0/sec	407.0

## Graph



## 2.2 Download his personal data

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 190 clientes.

### Thread Group

The screenshot shows the JMeter test plan interface. On the left, a tree view displays the test plan structure under 'Test14'. A selected 'Thread Group' node is expanded, showing its sub-elements: 'Acme-HackerRank/security/login.do', 'HTTP Header Manager', 'Gaussian Random Timer', 'Acme-HackerRank/\_spring\_security\_check', 'Acme-HackerRank/\_spring\_security\_logout', and 'HTTP Cookie Manager'. To the right, the 'Thread Group' configuration panel is open, showing the following settings:

- Name:** Thread Group
- Comments:** Action to be taken after a Sampler error:
  - Continue (radio button selected)
  - Start Next Thread Loop
  - Stop Thread
  - Stop Test
  - Stop Test Now
- Thread Properties:**
  - Number of Threads (users): 190
  - Ramp-Up Period (in seconds): 1
  - Loop Count: Forever (checkbox checked)
  - Delay Thread creation until needed (checkbox unchecked)
  - Scheduler (checkbox unchecked)

### Report

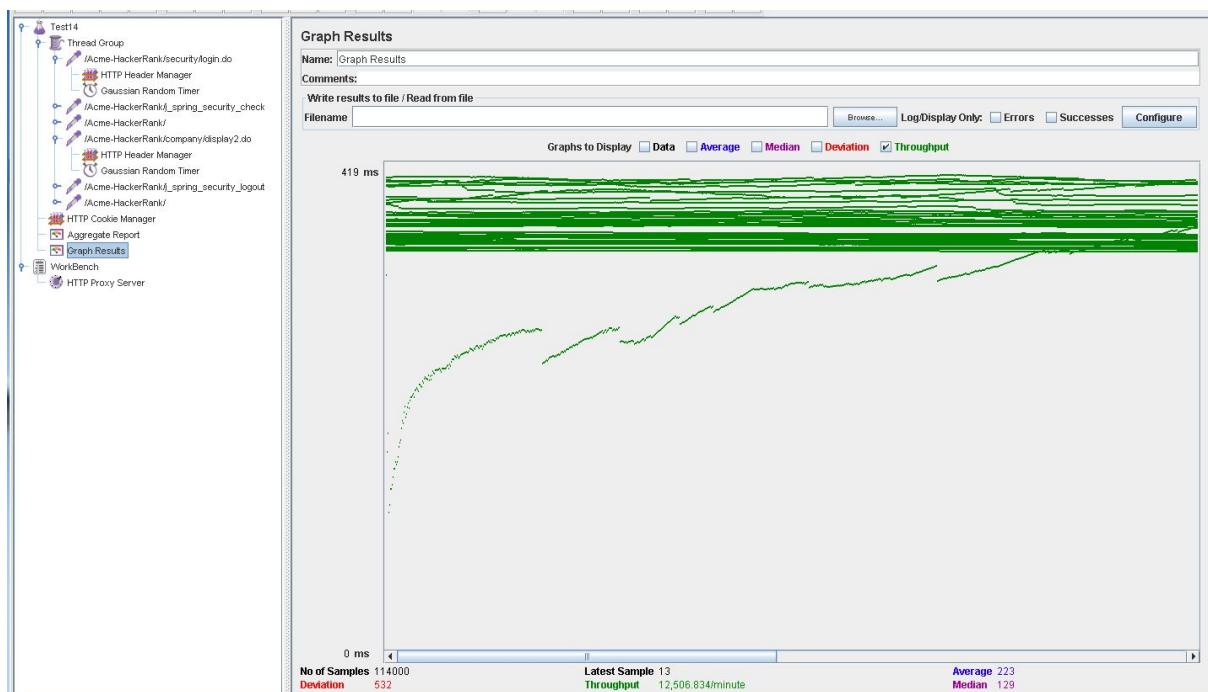
The screenshot shows the JMeter test plan interface. A selected 'Aggregate Report' node is expanded, showing its sub-elements: 'Acme-HackerRank/security/login.do', 'HTTP Header Manager', 'Gaussian Random Timer', 'Acme-HackerRank/\_spring\_security\_check', 'Acme-HackerRank/\_spring\_security\_logout', and 'HTTP Cookie Manager'. To the right, the 'Aggregate Report' configuration panel is open, showing the following settings:

- Name:** Aggregate Report
- Comments:** Write results to file / Read from file
- Filename:** [empty input field]
- Buttons:** Browse..., Log/Display Only, Errors, Successes, Configure

A table below lists performance metrics for various requests:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/security/login.do	19000	183	67	395	2	15966	0.00%	34.0/sec	140.3
Acme-HackerRank/_spring_security_check	19000	361	297	651	4	18667	0.00%	34.0/sec	177.8
Acme-HackerRank/_spring_security_logout	30000	189	126	417	2	16265	0.00%	69.5/sec	304.9
Acme-HackerRank/company/display2.do	19000	166	76	379	4	15332	0.00%	34.0/sec	260.9
Acme-HackerRank/_spring_security_logout	19000	270	206	527	2	14781	0.00%	34.0/sec	145.8
<b>TOTAL</b>	<b>114000</b>	<b>223</b>	<b>129</b>	<b>488</b>	<b>2</b>	<b>18667</b>	<b>0.00%</b>	<b>208.4/sec</b>	<b>1035.8</b>

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 200 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

The screenshot shows the JMeter Test Plan interface. On the left, the tree view shows a 'Test14' test plan with a 'Thread Group' node selected. The 'Thread Group' configuration panel on the right has the following settings:

- Name:** Thread Group
- Comments:** Action to be taken after a Sampler error: Continue
- Thread Properties:**
  - Number of Threads (users): 200
  - Ramp-Up Period (in seconds): 1
  - Loop Count: Forever
  - Delay Thread creation until needed
  - Scheduler

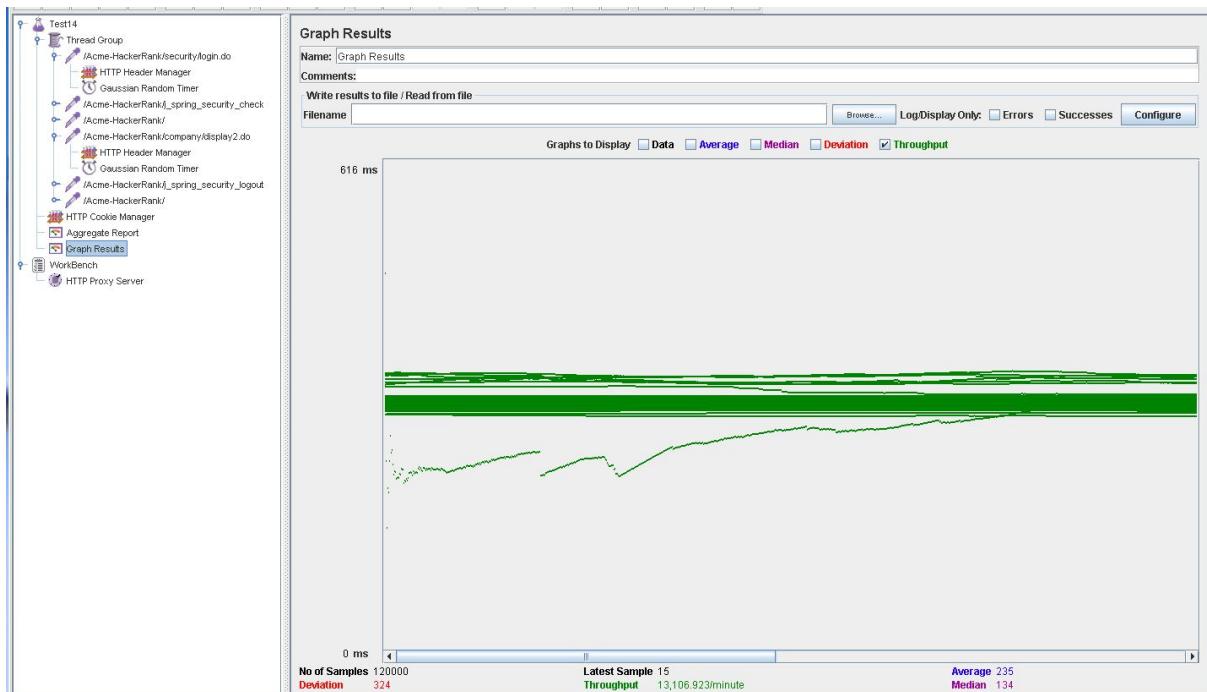
### Report

The screenshot shows the JMeter Test Plan interface. On the left, the tree view shows a 'Test14' test plan with an 'Aggregate Report' node selected. The 'Aggregate Report' configuration panel on the right has the following settings:

- Name:** Aggregate Report
- Comments:** Write results to file / Read from file
- Filename:** [empty field]
- Log/Display Only:** Log
- Configure:** Errors, Successes

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/security/login.do	20000	159	87	454	2	5126	0.00%	36.5/sec	155.4
/Acme-HackerRank/_spring_security_check	20000	389	314	817	3	5732	0.16%	36.5/sec	186.2
/Acme-HackerRank/_spring_security_logout	40000	199	127	437	2	3250	0.43%	72.8/sec	318.8
/Acme-HackerRank/company/display2.do	20000	160	74	442	4	5726	0.01%	36.5/sec	273.3
/Acme-HackerRank/_spring_security_logout	20000	307	225	654	2	5729	0.08%	36.5/sec	152.7
<b>TOTAL</b>	<b>120000</b>	<b>235</b>	<b>134</b>	<b>544</b>	<b>2</b>	<b>5732</b>	<b>0.18%</b>	<b>218.4/sec</b>	<b>1084.3</b>

### Graph



## 2.3 Edit personal data

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 150 clientes.

### Thread Group

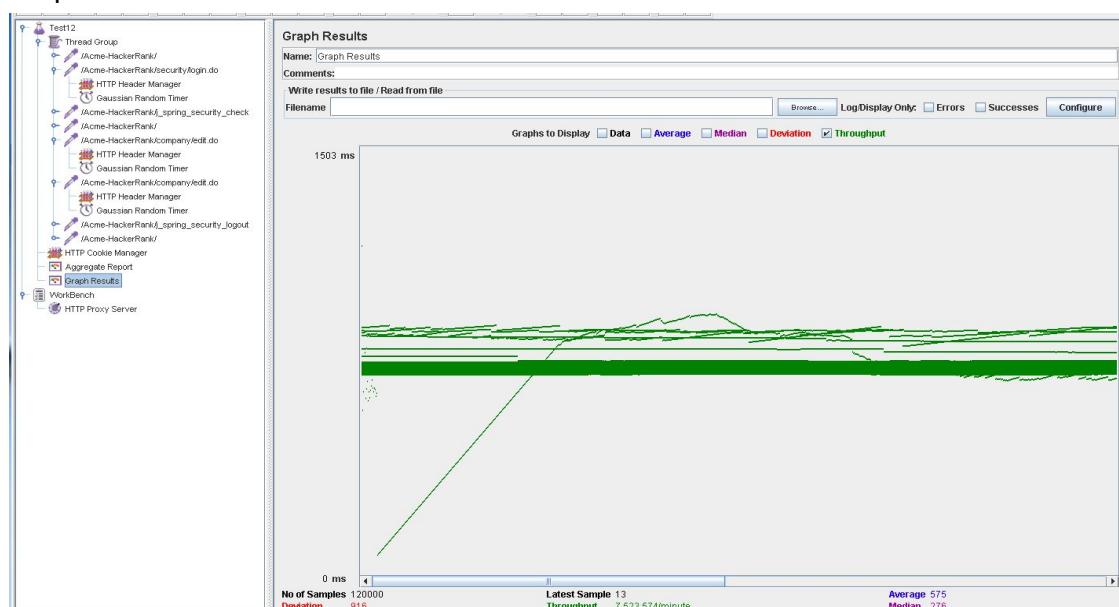
The screenshot shows the JMeter test plan for 'Test12'. On the left, there is a tree view of the test plan with nodes like 'Thread Group', 'HTTP Header Manager', 'Gaussian Random Timer', 'HTTP Cookie Manager', and 'Aggregate Report'. The right panel displays the 'Thread Group' configuration. It has a 'Name' field set to 'Thread Group', a 'Comments' field, and a 'Action to be taken after a Sampler error' dropdown with options: Continue (selected), Start Next Thread Loop, Stop Thread, Stop Test, and Stop Test Now. Under 'Thread Properties', the 'Number of Threads (users)' is set to 150, 'Ramp-Up Period (in seconds)' is 1, and 'Loop Count' is set to 'Forever'. There are also checkboxes for 'Delay Thread creation until needed' and 'Scheduler'.

### Report

The screenshot shows the JMeter test plan for 'Test12'. The left panel is identical to the previous one. The right panel displays the 'Aggregate Report' configuration. It has a 'Name' field set to 'Aggregate Report', a 'Comments' field, and a 'Write results to file / Read from file' section with a 'Filename' input field. Below it is a table of results:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/	45000	403	200	761	2	13815	0.00%	47.0/sec	186.4
/Acme-HackerRank/security/login.do	15000	573	260	1449	2	14811	0.00%	15.7/sec	65.6
/Acme-HackerRank/_spring_security_check	15000	1035	677	2171	9	15381	0.00%	15.7/sec	74.0
/Acme-HackerRank/company/edit.do	30000	623	291	1534	4	15924	0.00%	31.4/sec	320.1
/Acme-HackerRank/_spring_security_logout	15000	534	260	1266	5	12973	0.00%	15.7/sec	65.6
TOTAL	120000	575	276	1347	2	15924	0.00%	125.4/sec	709.9

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 160 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

The screenshot shows the JMeter test plan for 'Test12'. On the left, under 'Test12', there is a 'Thread Group' node which contains several requests: 'Acme-HackerRank/' (with a 'Gaussian Random Timer'), 'Acme-HackerRank/security/login.do' (with a 'HTTP Header Manager' and 'Gaussian Random Timer'), 'Acme-HackerRank/\_spring\_security\_check' (with a 'HTTP Header Manager' and 'Gaussian Random Timer'), 'Acme-HackerRank/' (with a 'Gaussian Random Timer'), 'Acme-HackerRank/company/edit.do' (with a 'HTTP Header Manager' and 'Gaussian Random Timer'), 'Acme-HackerRank/\_spring\_security\_logout' (with a 'HTTP Header Manager' and 'Gaussian Random Timer'), and 'HTTP Cookie Manager'. Below these are 'Aggregate Report' and 'Graph Results' nodes. On the right, the 'Thread Group' configuration panel is open, showing the following settings:

- Name:** Thread Group
- Comments:**
- Action to be taken after a Sampler error:** Continue
- Thread Properties:**
  - Number of Threads (users):** 160
  - Ramp-Up Period (in seconds):** 1
  - Loop Count:** Forever 100
  - Delay Thread creation until needed:** Unchecked
  - Scheduler:** Unchecked

## Report

The screenshot shows the JMeter test plan for 'Test12'. On the left, under 'Test12', there is a 'Thread Group' node which contains the same set of requests as the first screenshot. Below these are 'Aggregate Report' and 'Graph Results' nodes. On the right, the 'Aggregate Report' configuration panel is open, showing the following settings:

- Name:** Aggregate Report
- Comments:**
- Write results to file / Read from file:** Unchecked
- Filename:** [empty]
- Log/Display Only:** Checked
- Errors:** Unchecked
- Successes:** Unchecked
- Configure:** Unchecked

Below the configuration panel, a table displays performance metrics for each request and a total:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/	48000	556	243	1277	2	22055	0.00%	45.5/sec	180.1
Acme-HackerRank/security/login.do	16000	684	288	1741	3	16672	0.00%	15.2/sec	63.5
Acme-HackerRank/_spring_security_check	16000	1137	707	2618	9	16962	0.00%	15.2/sec	71.6
Acme-HackerRank/company/edit.do	32000	723	311	1833	3	21111	0.00%	30.4/sec	311.0
Acme-HackerRank/_spring_security_logout	16000	604	262	1399	2	21529	0.00%	15.2/sec	63.7
<b>TOTAL</b>	<b>128000</b>	<b>692</b>	<b>314</b>	<b>1647</b>	<b>2</b>	<b>22055</b>	<b>0.00%</b>	<b>121.4/sec</b>	<b>688.2</b>

## Graph

The screenshot shows the JMeter test plan for 'Test12'. On the left, under 'Test12', there is a 'Thread Group' node which contains the same set of requests as the previous screenshots. Below these are 'Aggregate Report' and 'Graph Results' nodes. On the right, the 'Graph Results' configuration panel is open, showing the following settings:

- Name:** Graph Results
- Comments:**
- Write results to file / Read from file:** Unchecked
- Filename:** [empty]
- Log/Display Only:** Checked
- Errors:** Unchecked
- Successes:** Unchecked
- Configure:** Unchecked

Below the configuration panel, a graph displays response times over time. The Y-axis represents time in milliseconds, ranging from 0 ms to 1433 ms. The X-axis represents the number of samples, with a value of 128000. The graph shows a green line representing the response time distribution, which starts at approximately 100 ms and rises to about 1433 ms by the end of the test. A horizontal red line is drawn across the chart at the 90% line level, which is labeled as 2550 ms. The chart also includes a legend for 'Graphs to Display' (Data, Average, Median, Deviation, Throughput) and a status bar at the bottom with the following information:

- No of Samples: 128000
- Latest Sample: 12
- Throughput: 7,286.133/min
- Average: 692
- Median: 314
- Deviation: 1165

# 3. Hacker use cases

## 3.1 List their applications, grouped by status

**Descripción del ordenador que ha realizado el caso de uso:**

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 160 clientes.

### Thread Group

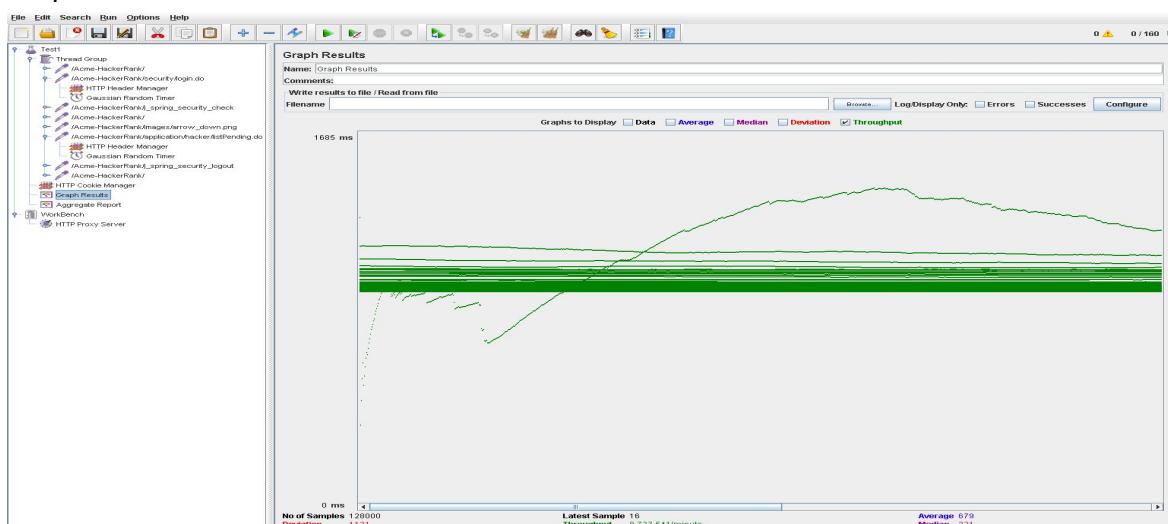
The screenshot shows the JMeter interface with a 'Test1' test plan selected. Under 'Test1', there is a 'Thread Group' element. The 'Thread Properties' section is configured with 'Number of Threads (users): 160', 'Ramp-Up Period (in seconds): 1', and 'Loop Count: Forever'. Other options like 'Delay Thread creation until needed' and 'Scheduler' are also visible. The left sidebar lists various JMeter components including 'HTTP Header Manager', 'Gaussian Random Timer', and 'HTTP Cookie Manager'.

### Report

The screenshot shows the JMeter interface with the 'Test1' test plan selected. Under 'Test1', there is an 'Aggregate Report' element. The report displays a table of results for 160 users. The table includes columns for 'Label', '# Samples', 'Average', 'Median', '90% Line', 'Min', 'Max', 'Error %', 'Throughput', and 'KB/sec'. Key data points include an average response time of 879 ms, a median of 321 ms, and a throughput of 145.5/sec. The left sidebar shows the same components as the Thread Group view.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank	16000	681	394	1780	2	20218	0.00%	54.5/sec	224.4
Acme-HackerRank/security/login.do	16000	691	416	2412	3	14276	0.00%	18.2/sec	76.3
HTTP Header Manager	16000	949	558	2158	6	15107	0.00%	18.2/sec	86.7
Gaussian Random Timer	16000	3	3	4	0	810	0.00%	18.2/sec	8.1
Acme-HackerRank/images/arrow_down.png	16000	915	434	2479	10	21014	0.00%	18.2/sec	111.2
Acme-HackerRank/application/hackerlistPending.do	16000	635	323	1556	5	12703	0.00%	18.2/sec	75.3
HTTP Header Manager	128000	879	321	1780	0	21014	0.00%	145.5/sec	580.7
<b>TOTAL</b>									

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 165 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

The screenshot shows the JMeter interface with a 'Test Plan' tree on the left containing a 'Thread Group' node. The 'Thread Group' configuration panel on the right has the following settings:

- Name:** Thread Group
- Comments:** Action to be taken after a Sampler error
- Action:** Continue (radio button selected)
- Thread Properties:**
  - Number of Threads (users): 165
  - Ramp-Up Period (in seconds): 1
  - Loop Count: Forever (checkbox checked)
  - Delay Thread creation until needed (checkbox unchecked)
  - Scheduler (checkbox unchecked)

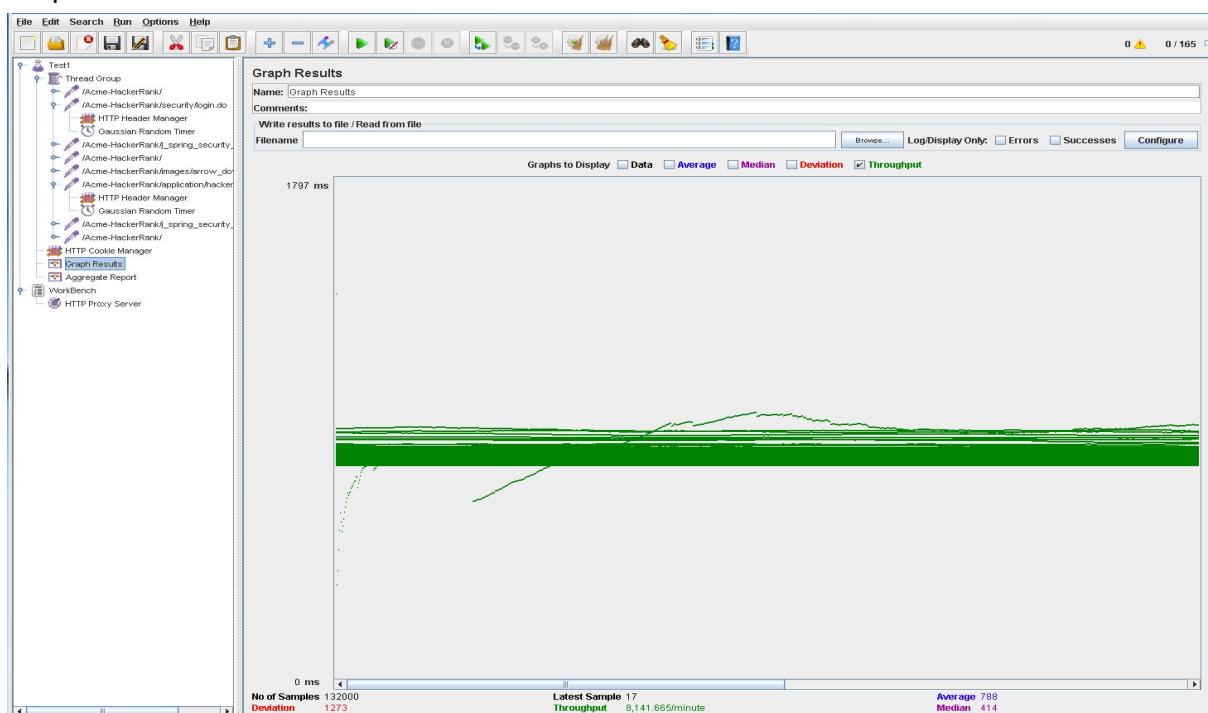
### Report

The screenshot shows the JMeter interface with a 'Test Plan' tree on the left containing an 'Aggregate Report' node. The 'Aggregate Report' configuration panel on the right has the following settings:

- Name:** Aggregate Report
- Comments:**
- Write results to file / Read from file:** Filename [ ]
- Log Display Only:** Log (checkbox checked), Display Only (checkbox checked), Errors (checkbox unchecked), Successes (checkbox unchecked), Configure (button)

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/	16500	795	504	1904	2	19329	0.00%	50.9/sec	209.4
/Acme-HackerRank/security/login.do	16500	999	441	2877	3	19998	0.00%	17.0/sec	71.2
/Acme-HackerRank/spring_security_check	16500	905	566	1883	5	21659	0.00%	17.0/sec	80.9
/Acme-HackerRank/images/arrow_down.png	16500	2	2	4	0	599	0.00%	17.0/sec	7.5
/Acme-HackerRank/application/hackerlistPending.do	16500	1012	462	2736	10	15339	0.00%	17.0/sec	103.7
/Acme-HackerRank/spring_security_logout	16500	1000	346	2982	2	17502	0.00%	17.0/sec	70.3
<b>TOTAL</b>	<b>132000</b>	<b>788</b>	<b>414</b>	<b>2066</b>	<b>0</b>	<b>21659</b>	<b>0.00%</b>	<b>135.7/sec</b>	<b>542.1</b>

### Graph



## 3.2 Display one of their applications

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 200 clientes.

### Thread Group

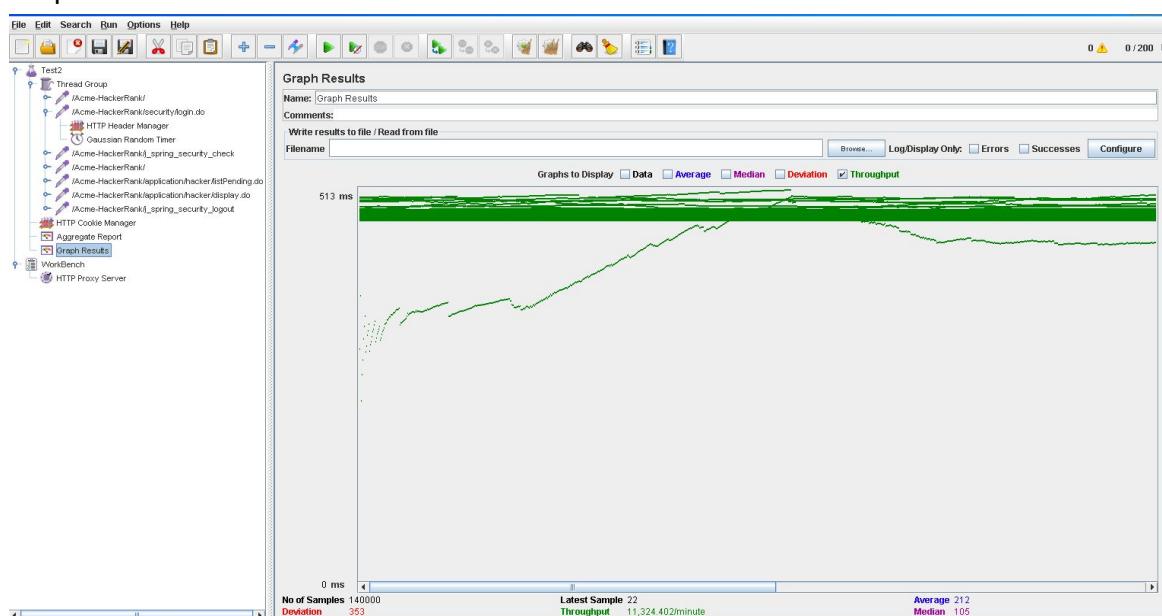
The screenshot shows the JMeter interface with a 'Test2' test plan selected. Under 'Test2', there is a 'Thread Group' element. The 'Thread Properties' section is configured with 'Number of Threads (users): 200' and 'Ramp-Up Period (in seconds): 1'. Other settings like 'Loop Count' (forever), 'Delay Thread creation until needed', and 'Scheduler' are also visible. The left sidebar lists other elements like 'HTTP Header Manager', 'Gaussian Random Timer', and 'HTTP Cookie Manager'.

### Report

The screenshot shows the JMeter interface with the 'Aggregate Report' tab selected. It displays a table of performance metrics for 140,000 samples. The columns include Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The data shows various requests like 'Acme-HackerRank/login.do' and 'Acme-HackerRank/logout'. The total throughput is listed as 188.7/sec.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank	40000	176	91	388	2	5571	0.00%	54.1/sec	228.3
Acme-HackerRank/login.do	20000	184	74	496	2	6871	0.00%	27.1/sec	113.4
Acme-HackerRank/_spring_security_check	20000	341	237	723	3	7894	0.00%	27.1/sec	128.1
Acme-HackerRank/application/hacker/listPending.do	20000	227	120	599	7	5841	0.00%	27.1/sec	165.4
Acme-HackerRank/application/hacker/display.do	20000	147	51	355	5	5704	0.00%	27.1/sec	134.8
Acme-HackerRank/_spring_security_logout	20000	234	113	597	3	7918	0.00%	27.1/sec	112.2
TOTAL	140000	212	105	529	2	7918	0.00%	188.7/sec	879.3

### Graph



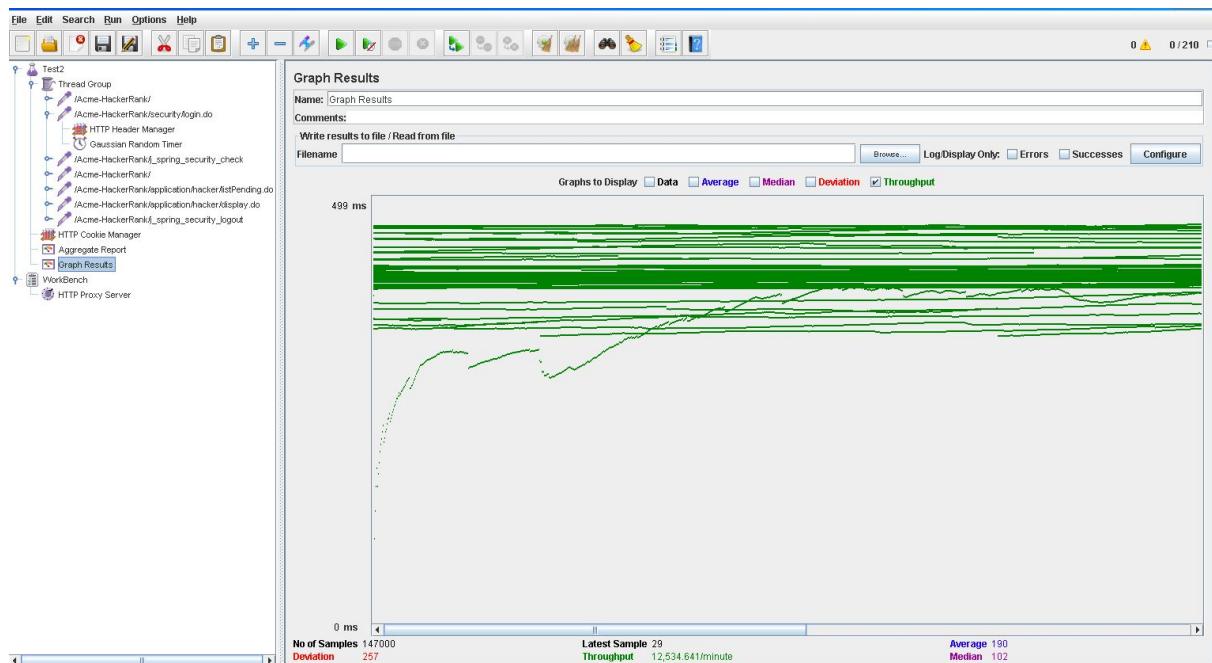
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 210 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
(Acme-HackerRank/)	42000	157	88	381	2	2778	0.01%	60.0/sec	253.9
(Acme-HackerRank/security/login.do	21000	155	68	448	2	1651	0.00%	30.0/sec	125.6
(Acme-HackerRank/_spring_security_check	21000	307	228	698	4	4430	0.02%	30.0/sec	143.0
(Acme-HackerRank/application/hacker/listPending...)	21000	211	105	590	6	1738	0.00%	30.0/sec	183.2
(Acme-HackerRank/application/hacker/display.do	21000	129	55	342	4	2550	0.00%	30.0/sec	149.2
(Acme-HackerRank/_spring_security_logout	21000	218	117	544	1	4501	0.00%	30.0/sec	124.3
<b>TOTAL</b>	<b>147000</b>	<b>190</b>	<b>102</b>	<b>495</b>	<b>1</b>	<b>4501</b>	<b>0.01%</b>	<b>208.9/sec</b>	<b>973.5</b>

### Graph



### 3.3 Create an application

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 200 clientes.

#### Thread Group

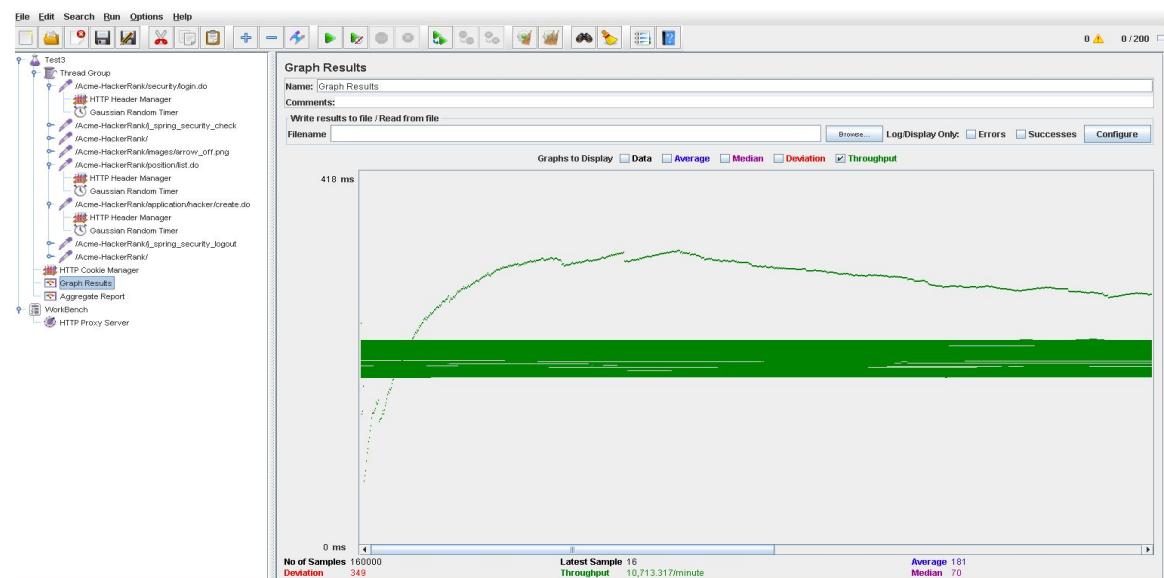
The screenshot shows the JMeter interface with a 'Test3' test plan selected. Under 'Test3', there is a 'Thread Group' element. The 'Thread Properties' section is configured with 'Number of Threads (users): 200', 'Ramp-Up Period (in seconds): 1', and 'Loop Count:Forever'. The 'Action to be taken after a Sampler error' dropdown has 'Continue' selected. The 'Thread Group' tree view shows various samplers including 'HTTP Header Manager', 'Gaussian Random Timer', and 'HTTP Cookie Manager'.

#### Report

The screenshot shows the JMeter interface with the 'Test3' test plan selected. An 'Aggregate Report' is displayed. The 'Label' column lists various sampler names, and the 'Throughput' column shows values such as 22.4/sec, 44.6/sec, and 178.6/sec. The total throughput is listed as 730.1 KB/sec.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank...	20000	143	56	414	2	3670	0.00%	22.4/sec	95.8
Acme-HackerRank...	20000	338	215	693	4	13200	0.00%	22.4/sec	106.8
Acme-HackerRank...	40000	161	90	369	2	7474	0.00%	44.6/sec	187.0
Acme-HackerRank...	20000	32	3	32	0	3086	0.00%	22.4/sec	9.9
Acme-HackerRank...	20000	137	50	366	3	4027	0.00%	22.4/sec	132.2
Acme-HackerRank...	20000	197	44	544	7	6898	0.00%	22.4/sec	103.2
Acme-HackerRank...	20000	282	153	680	3	6884	0.00%	22.4/sec	92.6
TOTAL	160000	181	70	467	0	13200	0.00%	178.6/sec	730.1

#### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 210 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

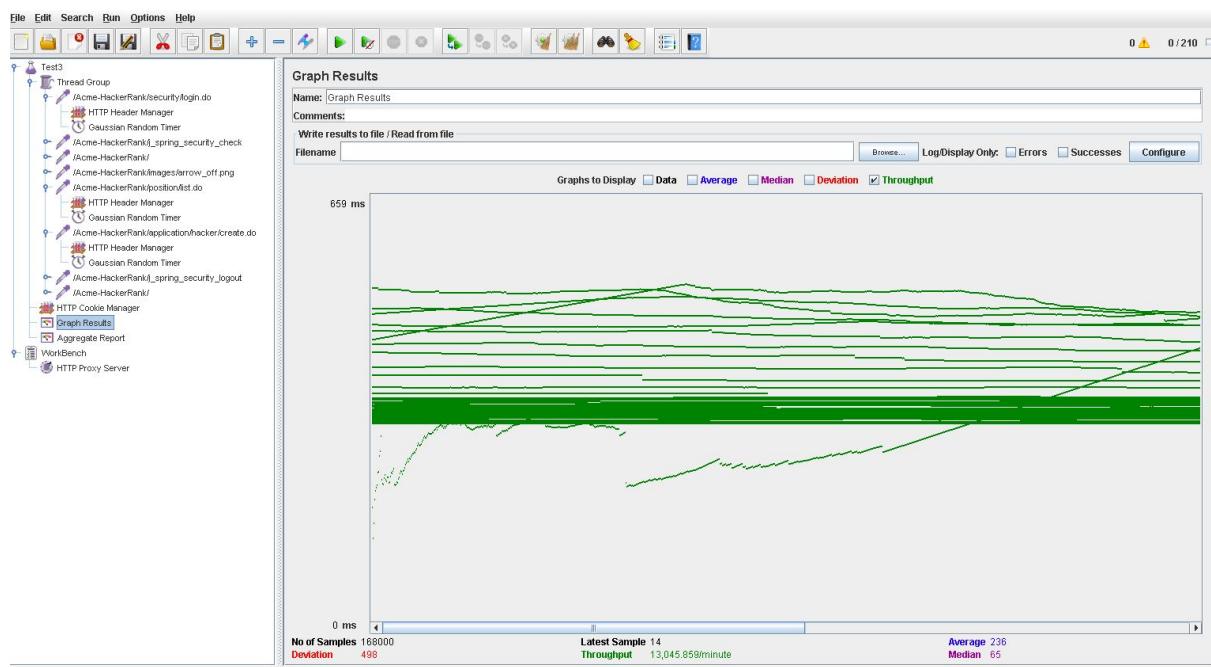
Screenshot of JMeter's Thread Group configuration for a test plan named 'Test3'. The 'Thread Group' section is set to run 210 users over 1 minute with a ramp-up period of 1 second. The 'Aggregate Report' option is selected.

### Report

Screenshot of JMeter's Aggregate Report results for the 'Test3' test plan. The report shows detailed statistics for various requests, including average response times and error percentages. The total throughput is 217.4/sec.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank...	21000	204	63	593	2	6206	0.01%	27.3/sec	116.4
Acme-HackerRank...	21000	493	202	903	4	8594	0.05%	27.3/sec	129.7
Acme-HackerRank...	42000	214	82	447	2	6377	0.11%	54.4/sec	227.8
Acme-HackerRank...	21000	89	4	68	0	5959	0.14%	27.3/sec	12.0
Acme-HackerRank...	21000	185	59	506	3	6895	0.02%	27.2/sec	166.5
Acme-HackerRank...	21000	230	41	683	7	6404	0.01%	27.2/sec	125.4
Acme-HackerRank...	21000	352	130	762	2	7514	0.08%	27.2/sec	112.4
TOTAL	168000	236	65	588	0	8594	0.07%	217.4/sec	888.4

### Graph



## 3.4 Update one of their applications

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 100 clientes.

### Thread Group

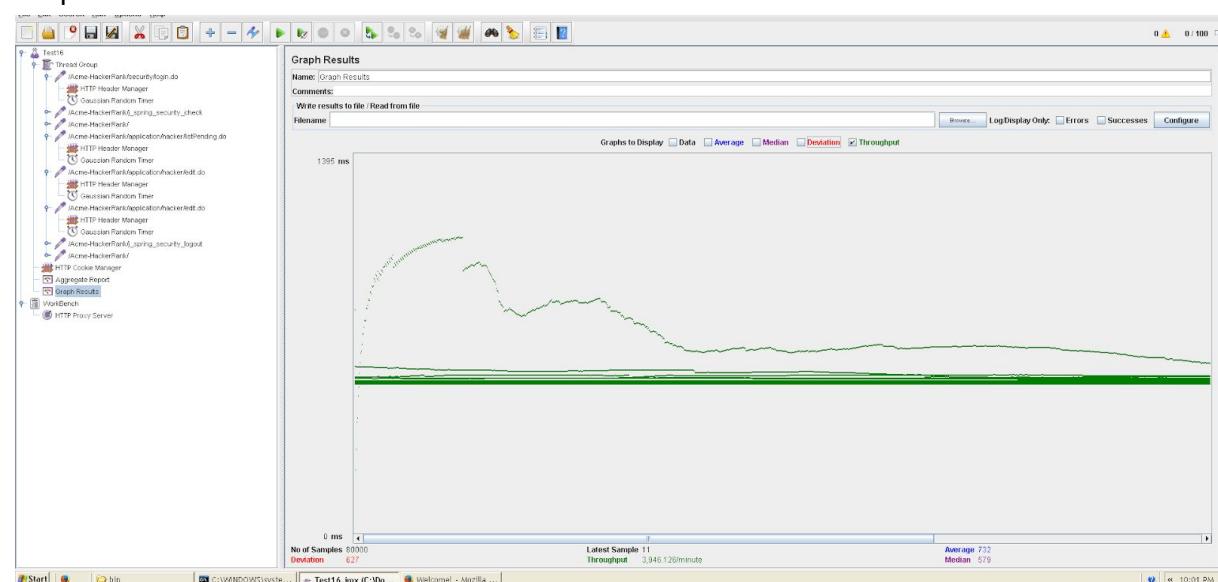
The screenshot shows the JMeter interface with a 'Thread Group' configuration. The 'Name' field is set to 'Thread Group'. The 'Number of Threads (users):' is 100, 'Ramp-Up Period in seconds:' is 1, and 'Loop Count:' is set to 'Forever' with a value of 100. Other settings like 'Delay thread creation until needed' and 'Scheduler' are disabled. The 'Thread Properties' section also shows these values.

### Report

The screenshot shows the 'Aggregate Report' section of the JMeter results. It displays various performance metrics for 100 threads. Key data includes:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	kB/sec
Acme-HackerRank/security/login.do	10000	614	492	1300	6	7569	0.09%	8.3/sec	35.1
Acme-HackerRank_M_spring_security_check	10000	1747	1135	2145	8	8271	0.14%	8.9/sec	40.3
Acme-HackerRank/application/hackeredit.do	20000	670	627	1377	4	1416	0.09%	16.0/sec	70.7
Acme-HackerRank/application/hackereditPending.do	10000	630	500	1374	17	11720	0.09%	8.3/sec	48.0
Acme-HackerRank/application/hackereditPending	20000	671	635	1395	12	16164	0.09%	16.0/sec	65.3
Acme-HackerRank_spring_security_logout	10000	754	529	1374	7	5014	0.09%	8.3/sec	34.4
Total	50000	722	572	1572	4	16164	0.09%	65.9/sec	262.6

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 110 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

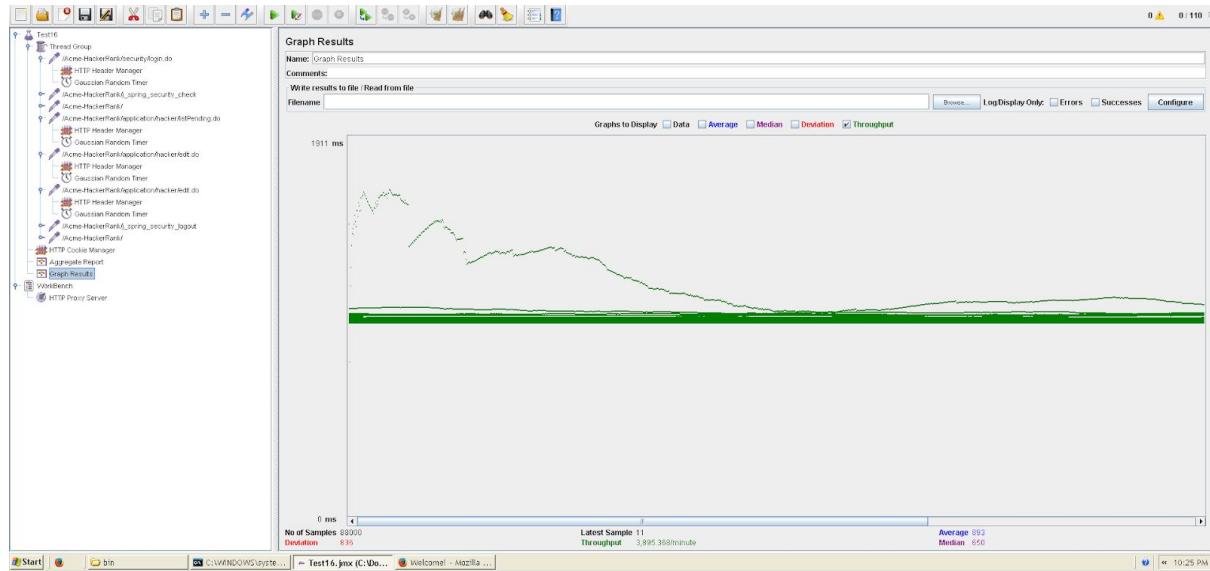
### Thread Group

Thread Group  
Name: Thread Group  
Comments:  
Action to be taken after a Sampler error  
Number of Threads (users): 110  
Ramp-Up Period in seconds: 1  
Loop Count:  Forever | 100  
 Delay thread creation until needed  
 Scheduler

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	kB/sec
Acme-HackerPark/security/login.do	11000	761	695	1713	4	6061	0.00%	6.1/sec	34.8
Acme-HackerPark/_spring_security_check	11000	141	1194	2469	6	16067	0.00%	8.1/sec	33.9
Acme-HackerPark/_	22000	898	927	1779	6	7496	0.00%	16.2/sec	69.3
Acme-HackerPark/application/hackerIdPending.do	11000	695	695	1755	16	27094	0.00%	8.1/sec	47.4
Acme-HackerPark/application/hackerId.do	22000	829	807	1799	11	16175	0.00%	16.2/sec	54.6
Acme-HackerPark/_spring_security_logout	11000	651	621	1893	6	1773	0.00%	8.1/sec	34.1
	55000	693	695	1695	4	27094	0.00%	16.2/sec	279.9

### Graph



## 3.5 List their curriculas

**Descripción del ordenador que ha realizado el caso de uso:**

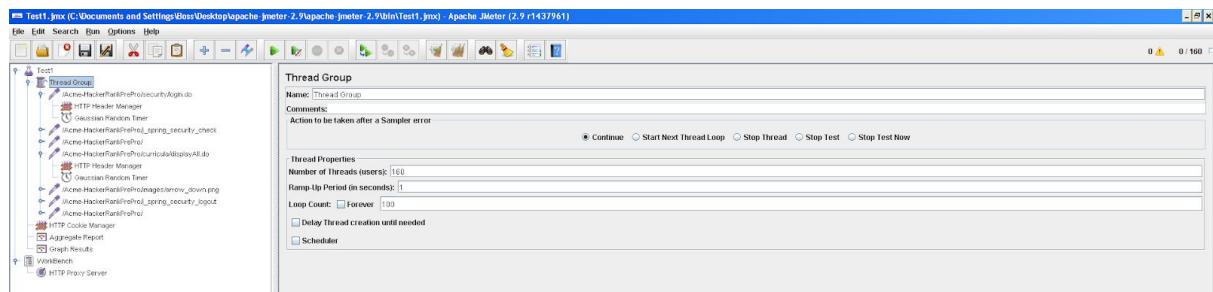
Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

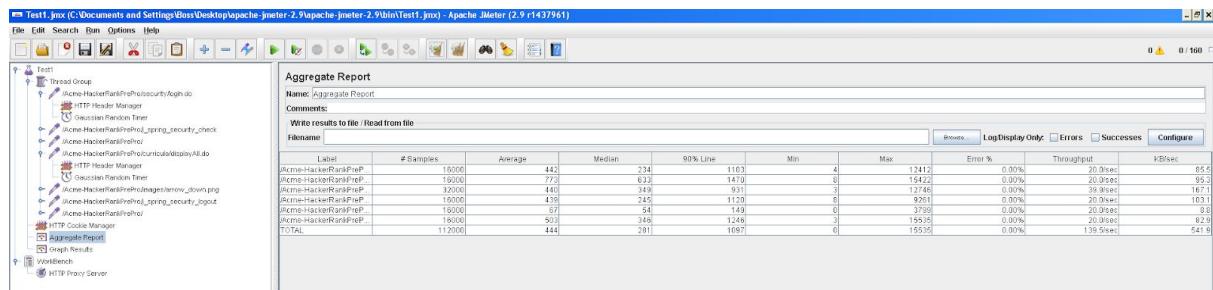
-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 160 clientes.

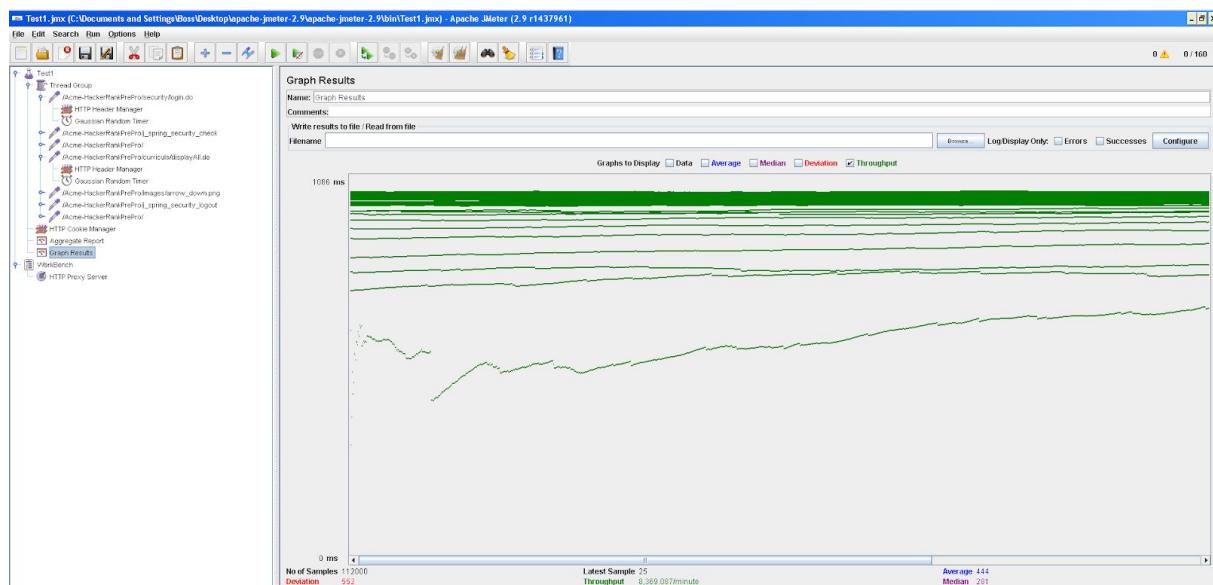
### Thread Group



### Report

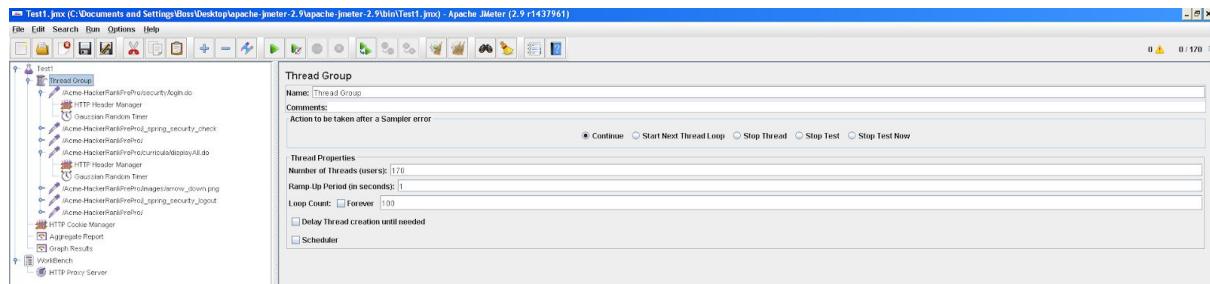


### Graph

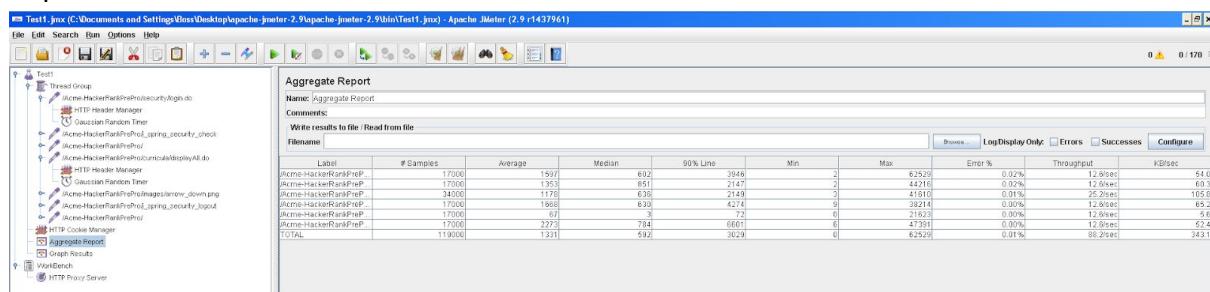


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 170 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

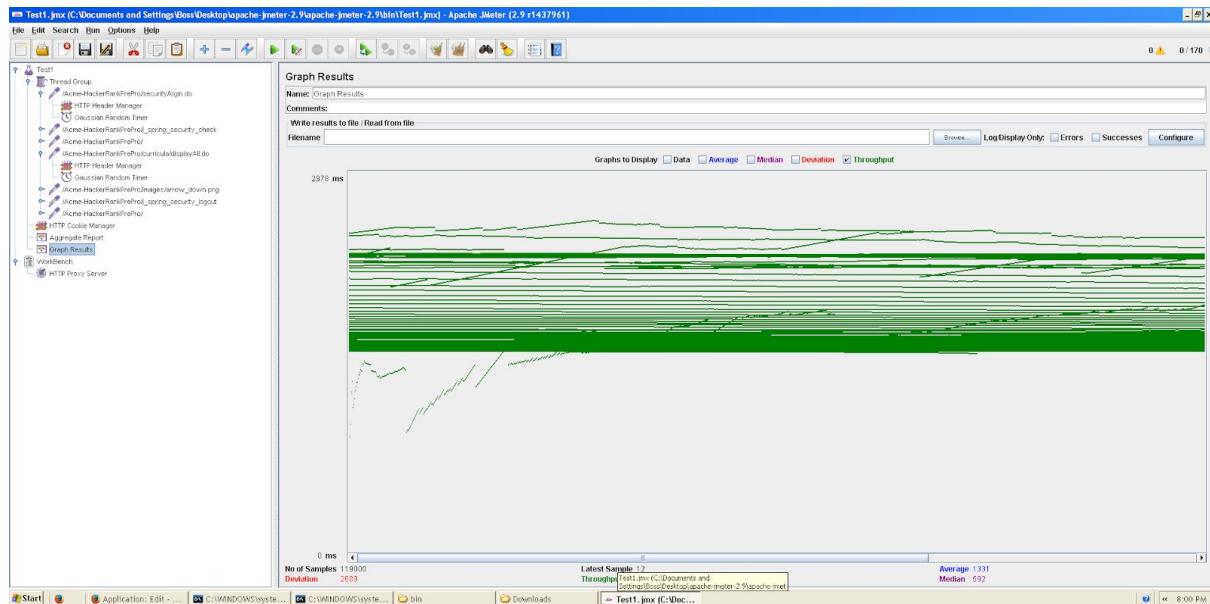
## Thread Group



## Report



## Graph



## 3.6 Display one of them

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 160 clientes.

### Thread Group

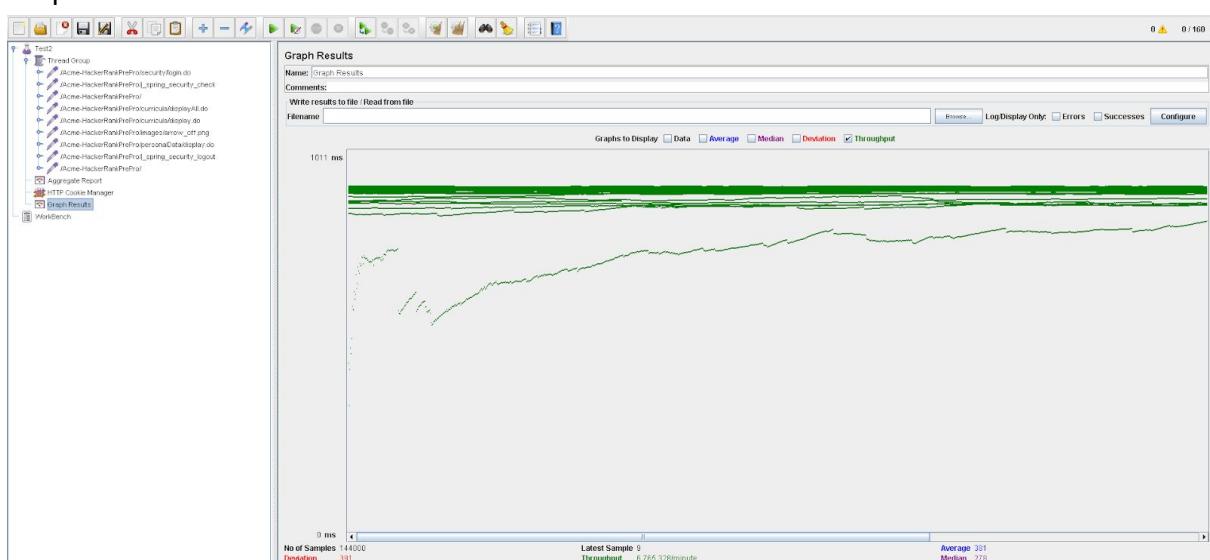
The screenshot shows the JMeter interface with the 'Test2' test plan selected. Under 'Thread Group', there is one group named 'Thread group'. The 'Thread Properties' section shows 'Number of Threads (users)' set to 160, 'Ramp Up Period in seconds' set to 1, and 'Loop Count' set to Forever (100). Other options like 'Delay thread creation until needed' and 'Scheduler' are unchecked.

### Report

The screenshot shows the 'Aggregate Report' section of the JMeter interface. It displays a table of results for 160 clients. The columns include Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The data shows various response times and error percentages across different requests.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
urnme-HackerRandPingP	162000	361	249	818	4	8791	0.00%	12.6/sec	62.6
urnme-HackerRandPingP	160000	600	493	1283	6	3906	0.00%	12.6/sec	60.1
urnme-HackerRandPingP	32000	116	114	451	4	9393	0.00%	2.0/sec	165.1
urnme-HackerRandPingP	162000	356	259	867	6	3993	0.00%	12.6/sec	65.0
urnme-HackerRandPingP	162000	349	268	771	6	3440	0.00%	12.6/sec	122.1
urnme-HackerRandPingP	160000	57	56	159	0	1300	0.00%	12.6/sec	5.5
urnme-HackerRandPingP	162000	348	295	746	7	11911	0.00%	12.6/sec	61.7
urnme-HackerRandPingP	160000	452	338	939	6	3738	0.00%	12.6/sec	62.1
<b>TOTAL</b>	<b>144000</b>	<b>301</b>	<b>278</b>	<b>861</b>	<b>0</b>	<b>11911</b>	<b>0.00%</b>	<b>112.0/sec</b>	<b>522.7</b>

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 170 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

Thread Group

Name: Thread group

Comments: Action to be taken after a Sampler error

Thread Properties

Number of Threads (users): 170

Ramp Up Period (in seconds): 1

Loop Count: Forever | 100

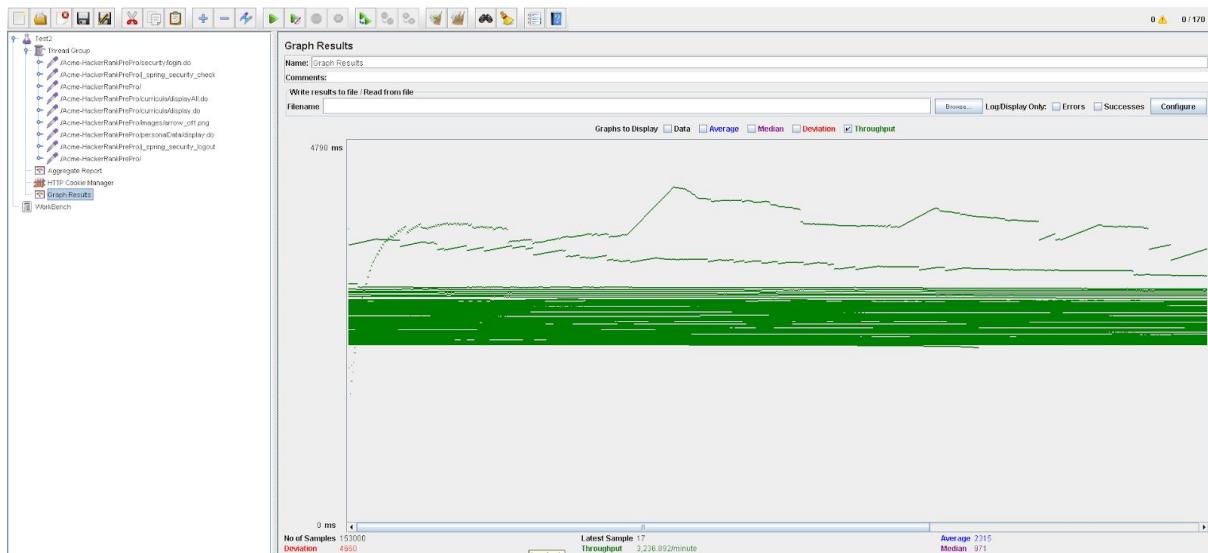
Delay Thread creation until needed

Scheduler

## Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Arms-HackerRankPingP	17000	3014	1139	7740	5	65301	0.00%	6.0/sec	25.2
Arms-HackerRankPingP	17000	2421	1247	4425	0	69557	0.00%	6.0/sec	20.7
Arms-HackerRankPingP	17000	2006	1023	3720	4	69392	0.00%	11.0/sec	53.0
Arms-HackerRankPingP	17000	2996	1128	7614	0	64881	0.00%	6.0/sec	31.1
Arms-HackerRankPingP	17000	2977	1143	7630	10	73458	0.00%	6.0/sec	63.2
Arms-HackerRankPingP	17000	24	21	71	0	4299	0.00%	6.0/sec	2.7
Arms-HackerRankPingP	17000	2877	1128	7486	7	75526	0.00%	6.0/sec	29.5
Arms-HackerRankPingP	17000	2500	849	6552	0	67398	0.00%	6.0/sec	24.6
TOTAL	153000	2315	971	5430	0	79450	0.00%	53.0/sec	255.1

## Graph



## 3.7 Create a curricula

**Descripción del ordenador que ha realizado el caso de uso:**

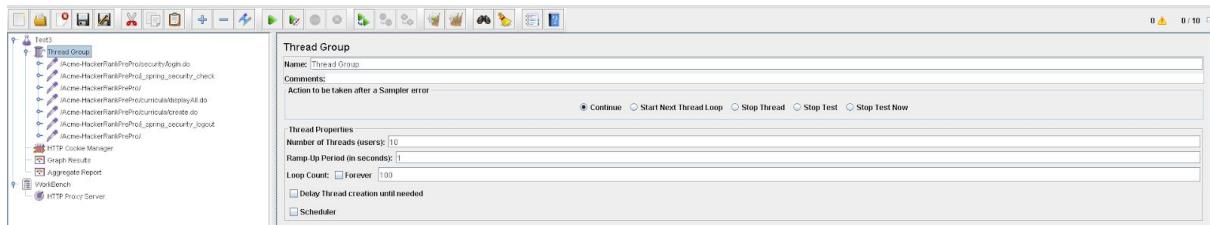
Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 10 clientes.

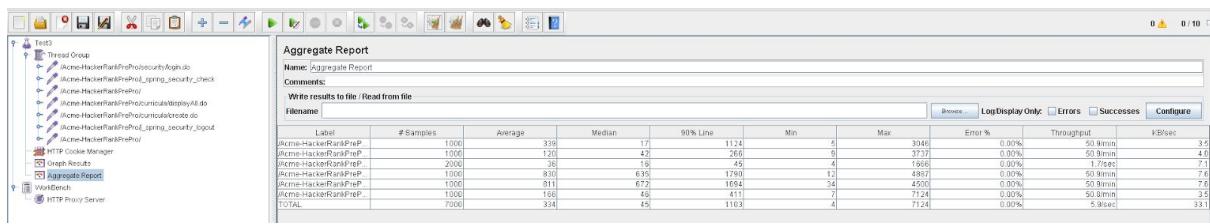
### Thread Group



The screenshot shows the JMeter interface with the 'Test Plan' tree on the left. Under 'Test Plan', there is a 'Thread Group' node which is expanded to show its sub-elements: 'Acme-HackerRandPreP/ghs/do', 'Acme-HackerRandPreP/spring\_security\_check', 'Acme-HackerRandPreP/do', 'Acme-HackerRandPreP/doAll', 'Acme-HackerRandPreP/doAll/do', 'Acme-HackerRandPreP/spring\_security\_logout', and 'Acme-HackerRandPreP/do'. Below the 'Thread Group' node, there are icons for 'HTTP Cookie Manager', 'Graph Results', 'Aggregate Report', and 'WorkBench'. On the right, the 'Thread Properties' panel is open, showing the following settings:

- Name: Thread Group
- Comments: Action to be taken after a Sampler error:
  - Continue
  - Start Next Thread Loop
  - Stop Thread
  - Stop Test
  - Stop Test Now
- Action: Continue
- Number of Threads (users): 10
- Ramp-Up Period (in seconds): 1
- Loop Count: Forever (100)
- Delay Thread creation until needed
- Scheduler

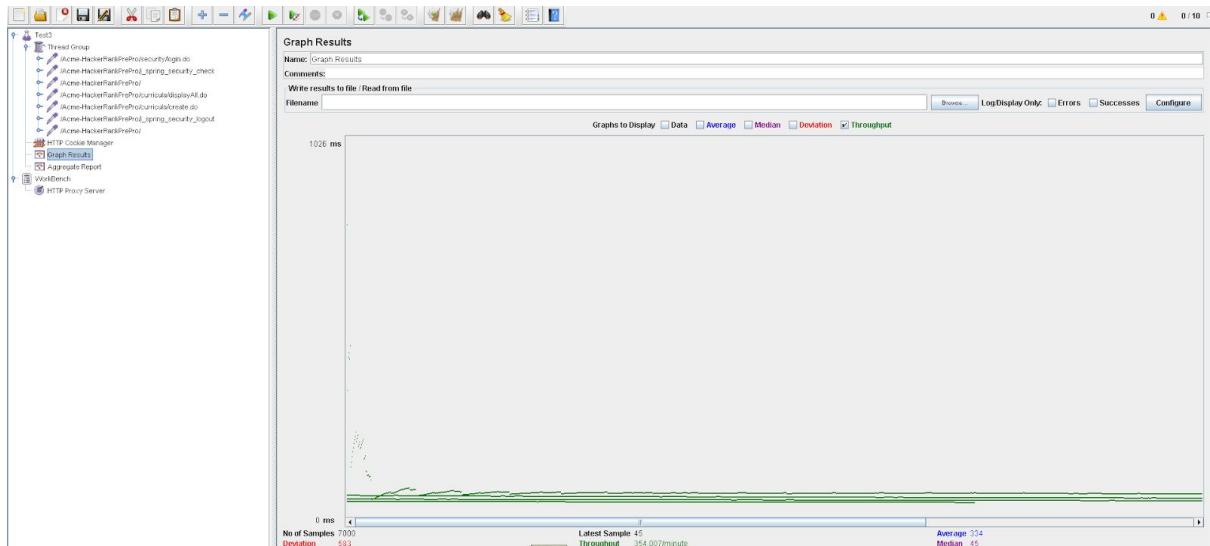
### Report



The screenshot shows the JMeter interface with the 'Test Plan' tree on the left. Under 'Test Plan', there is an 'Aggregate Report' node which is expanded to show its sub-elements: 'HTTP Cookie Manager', 'Graph Results', 'Graph Results Report', and 'WorkBench'. Below the 'Aggregate Report' node, there are icons for 'HTTP Proxy Server' and 'HTTP Cookie Manager'. On the right, the 'Aggregate Report' panel is open, showing the following data:

Label	# Samples	Average	Median	99% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRandPreP	1000	339	17	1124	6	3046	0.00%	50.0/min	3.5
Acme-HackerRandPreP	1000	120	42	266	6	3737	0.00%	50.0/min	4.0
Acme-HackerRandPreP	2000	36	18	45	4	1966	0.00%	1.7/min	7.1
Acme-HackerRandPreP	1000	830	636	1250	12	3930	0.00%	50.0/min	7.7
Acme-HackerRandPreP	1000	911	672	1694	34	4500	0.00%	50.0/min	7.6
Acme-HackerRandPreP	1000	166	46	411	7	7124	0.00%	50.0/min	3.5
TOTAL	7000	334	45	1103	4	7124	0.00%	5.0/min	3.1

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 20 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

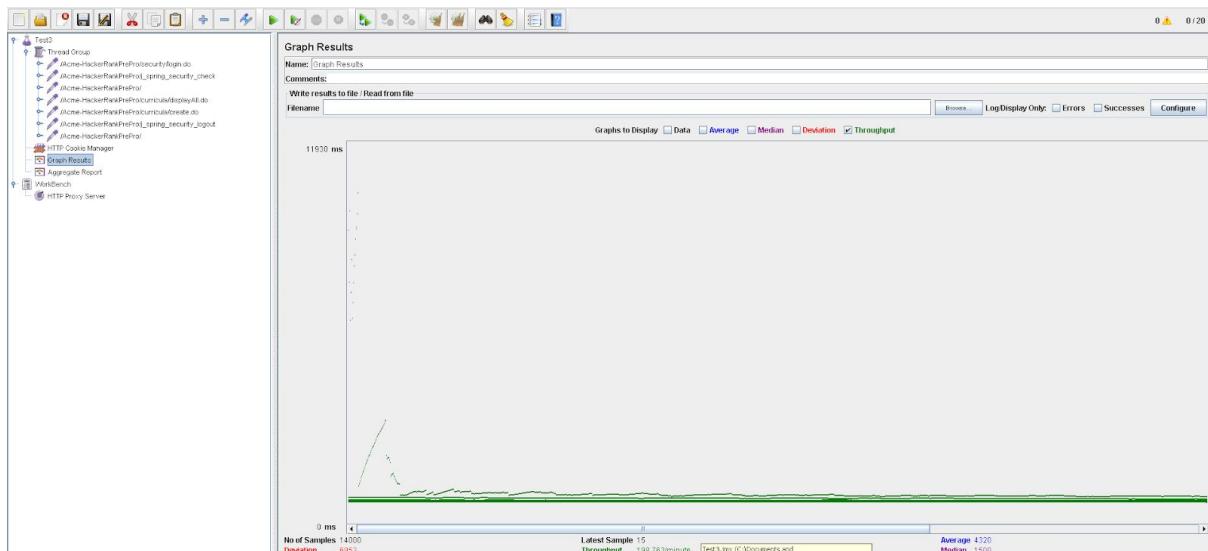
### Thread Group

Thread Group  
Name: Thread Group  
Comments:  
Action to be taken after a Sampler error:  
Number of Threads (users): 20  
Ramp-Up Period in seconds: 1  
Loop Count: Forever 100  
Delay thread creation until needed  
Scheduler

### Report

Aggregate Report  
Name: Aggregate Report  
Comments:  
Write results to file / Read from file  
Filename  
Label # Samples Average Median 90% Line Min Max Err% Throughput kB/sec  
jmeter-HackerRandPreP 2000 4744 1748 14121 5 64233 0.00% 29.4min 2.0  
jmeter-HackerRandPreP 2000 4840 1593 13804 9 62315 0.00% 29.4min 2.3  
jmeter-HackerRandPreP 4900 1736 204 4897 4 49530 0.00% 56.9min 4.0  
jmeter-HackerRandPreP 2000 7221 4533 18920 453 65930 0.00% 29.4min 4.1  
jmeter-HackerRandPreP 2000 7861 4291 17150 562 82140 0.00% 29.4min 4.3  
jmeter-HackerRandPreP 2000 2350 825 5669 2 66506 0.00% 29.5min 2.0  
TOTAL 14000 4320 1503 12506 2 82140 0.90% 3.9sec 19.6

### Graph



## 3.8 Update a curricula

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 50 clientes.

### Thread Group

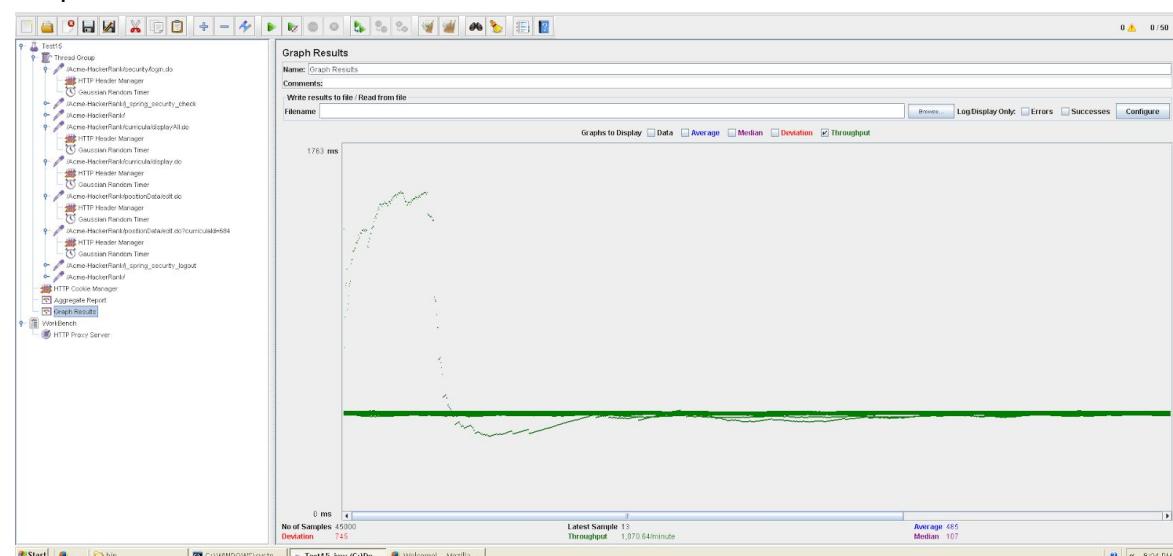
The screenshot shows the JMeter interface with a test plan named 'Test15'. A 'Thread Group' is selected in the left tree view. The main panel displays the 'Thread Group' configuration: 'Name: Thread Group', 'Comments: Action to be taken after a Sampler error: Continue', 'Number of Threads (users): 50', 'Ramp-Up Period in seconds: 1', 'Loop Count:Forever', and 'Scheduler' checked. Below the configuration, there is a list of samplers: 'Acme-HackerPerl\_spring\_security\_login.do', 'HTTP Header Manager', 'Gaussian Random Timer', 'Acme-HackerPerl\_spring\_security\_check', 'Acme-HackerPerl', 'Acme-HackerPerl\_spring\_security\_logout', 'HTTP Cookie Manager', 'Aggregate Report', and 'Graph Results'. At the bottom, 'ViewResultsToCSVListener' and 'HTTP Proxy Server' are listed.

### Report

The screenshot shows the JMeter interface with the same 'Test15' test plan. The 'Aggregate Report' tab is selected in the left tree view. The main panel displays the 'Aggregate Report' configuration: 'Name: Aggregate Report', 'Comments: Write results to file / Read from file', and 'Filename:'. Below the configuration, a table of results is shown:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerPerl_spring_security_login.do	5000	795	442	2152	6	4845	0.00%	3.5/sec	14.8
Acme-HackerPerl_spring_security_check	5000	879	793	1472	6	4108	0.00%	3.5/sec	16.8
Acme-HackerPerl_spring_security_logout	10000	1072	332	1561	4	3010	0.00%	4.5/sec	23.3
Acme-HackerRanktperl_springdisplayAll.do	5000	1260	1060	2516	143	6099	0.00%	3.5/sec	31.7
Acme-HackerRanktperl_randomiser.do	5000	303	48	986	12	6758	0.00%	3.5/sec	37.2
Acme-HackerRanktperl_randomiser.do	5000	321	139	1029	16	4552	0.00%	3.5/sec	37.3
Acme-HackerRanktperl_randomiser.do	5000	392	57	1472	9	4240	0.00%	3.5/sec	1.0
Acme-HackerRanktperl_spring_security_logout	5000	197	65	613	2	3329	0.00%	3.5/sec	14.0
<b>TOTAL</b>	<b>45000</b>	<b>495</b>	<b>107</b>	<b>1661</b>	<b>2</b>	<b>6099</b>	<b>0.00%</b>	<b>31.25/sec</b>	<b>169.6</b>

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 55 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

Test Plan

Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error:

- Continue
- Start Next Thread Loop
- Stop Thread
- Stop Test
- Stop Test Now

Thread Properties

Number of Threads (users): 55

Ramp-Up Period (in seconds): 1

Loop Count: Forever [100]

Delay Thread creation until needed

Scheduler

## Report

Test Plan

Aggregate Report

Name: Aggregate Report

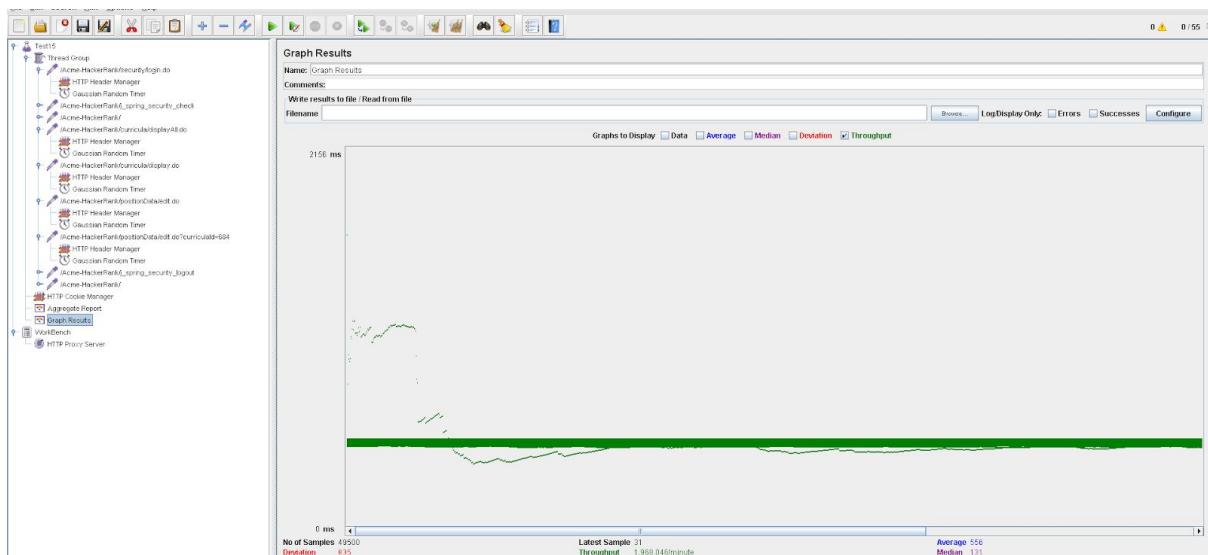
Comments:

Write results to file / Read from file

Filename: [ ]

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/login.do	5500	950	698	2434	4	7414	0.00%	3.74ms	15.6
Acme-HackerRank/_spring_security_check	5500	721	477	1809	8	7259	0.00%	3.79ms	17.8
Acme-HackerRank/_	11000	125	12	227	4	4259	0.00%	7.39ms	31.1
Acme-HackerRank/_randomDisplay/do	5500	153	115	2756	17	2613	0.00%	3.75ms	32.4
Acme-HackerRank/randomDisplay/do	5500	328	68	1036	12	5449	0.00%	3.75ms	39.1
Acme-HackerRank/loginDataedit.do	5500	708	218	2126	10	5157	0.00%	3.79ms	21.8
Acme-HackerRank/loginDataedit.do?num=	5500	98	98	1704	10	4867	0.00%	3.75ms	15
Acme-HackerRank/_spring_security_logout	5500	214	91	638	3	3861	0.00%	3.75ms	15.3
TOTAL	49500	556	131	1890	3	8128	0.00%	32.89ms	175.3

## Graph



## 3.9 Delete a curricula

**Descripción del ordenador que ha realizado el caso de uso:**

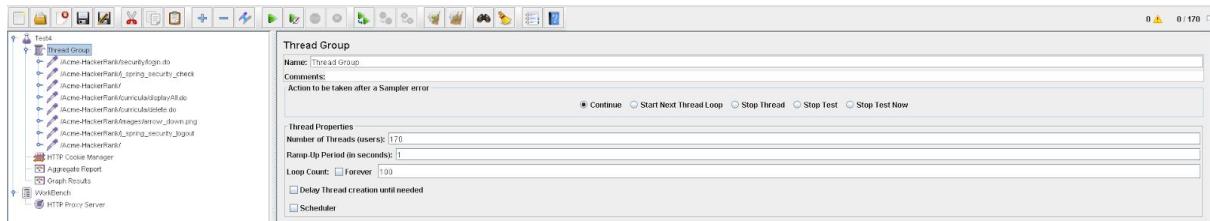
Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

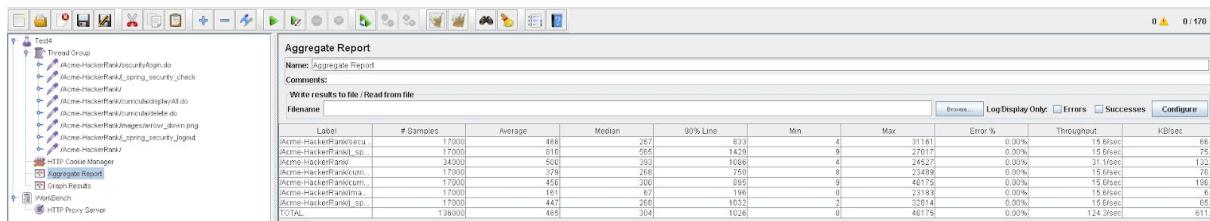
**Caso Positivo:** El sistema, en este caso, es capaz de soportar 170 clientes.

### Thread Group



The screenshot shows the JMeter Test Plan editor. A 'Thread Group' is selected under the 'Test4' test plan. The 'Thread Properties' section shows 'Number of Threads (users)' set to 170 and 'Ramp-Up Period (in seconds)' set to 1. The 'Loop Count' is set to 'Forever'. There are several checkboxes at the bottom: 'Delay thread creation until needed' and 'Scheduler'. The 'Comments' field contains the note: 'Action to be taken after a Sampler error'.

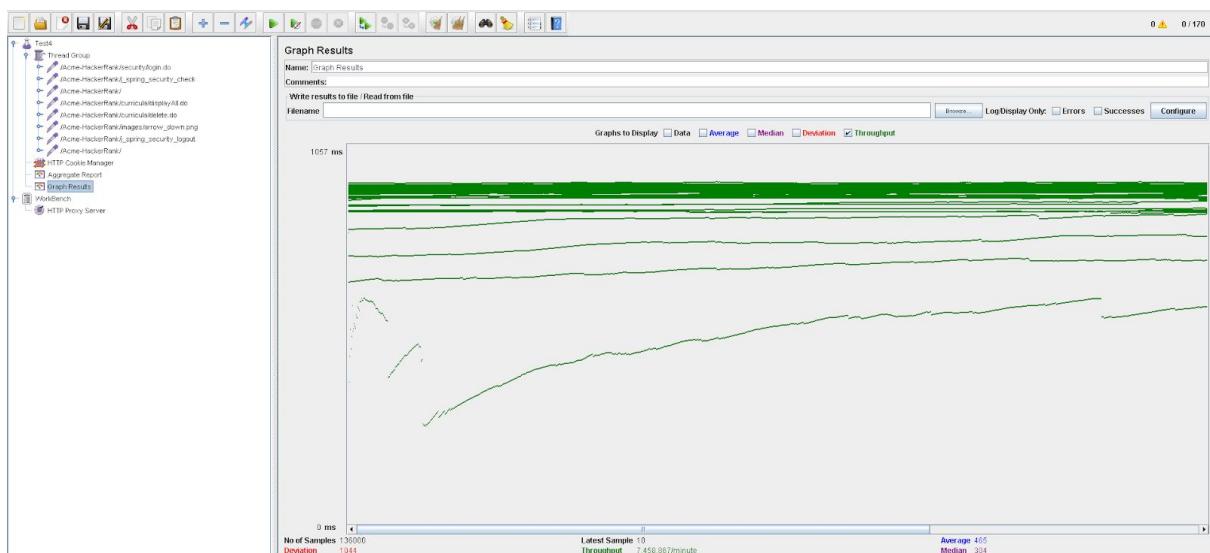
### Report



The screenshot shows the 'Aggregate Report' results for the 'Test4' test plan. The report includes a table of statistics for each sampler and a summary table. The summary table shows the following data:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Arme-HackerRank/sec_login.do	17000	468	267	833	4	31161	0.00%	15.6/sec	66.1
Arme-HackerRank/_spring_security_check	17000	810	665	1429	9	77077	0.00%	15.6/sec	75.5
Arme-HackerRank/_j_spring_security_check	17000	3400	550	39	1660	4	252.27	0.00%	11.6/sec
Arme-HackerRank/_j_spring_security_logout	17000	376	268	760	8	23498	0.00%	15.6/sec	70.1
Arme-HackerRank/displayAll.do	17000	456	306	695	9	40175	0.00%	15.6/sec	196.1
Arme-HackerRank/j_spring_security_logout	17000	151	67	169	0	23155	0.00%	15.6/sec	8.5
Arme-HackerRank/sec_logout.do	17000	447	266	1032	2	52814	0.00%	15.6/sec	65.2
TOTAL	138000	465	304	1026	0	40175	0.00%	124.3/sec	611.3

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 180 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada, además de tener % de error en algunas de ellas.

## Thread Group

The screenshot shows the JMeter Test Plan interface. A 'Thread Group' is selected in the tree view. The configuration includes:

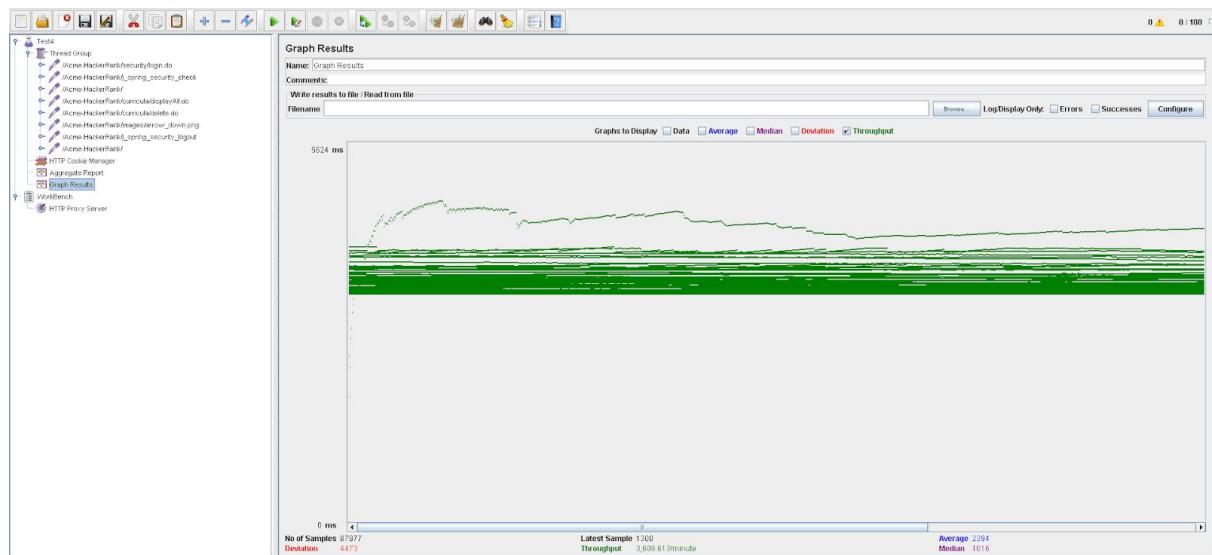
- Name: Thread Group
- Comments: Action to be taken after a Sampler error
- Action to be taken after a Sampler error: Continue
- Number of Threads (users): 180
- Ramp Up Period (in seconds): 1
- Loop Count: Forever
- Delay thread creation until needed
- Scheduler

## Report

The screenshot shows the 'Aggregate Report' results for the test. The summary table indicates:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank\$sscu...	11079	2910	1801	7795	1	57731	0.15%	7.9/sec	22.3
Acme-HackerRank\$sp...	11441	3334	1298	4453	2	79391	0.24%	7.4/sec	38.9
Acme-HackerRank\$...	21926	1978	1095	3683	1	63521	0.31%	15.0/sec	64.3
Acme-HackerRank\$cam...	11000	2713	1057	7165	2	79222	0.19%	7.9/sec	33.9
Acme-HackerRank\$cam...	10998	2661	1031	6823	1	61199	0.21%	7.9/sec	64.7
Acme-HackerRank\$cam...	10935	171	5	2	0	45526	0.17%	7.5/sec	2.4
Acme-HackerRank\$sp...	10934	4455	1927	11682	1	559310	0.23%	7.9/sec	21.4
TOTAL	87977	2394	1016	6142	0	75992	0.24%	60.1/sec	269.1

## Graph



## 3.10 Updating finder search criteria

Descripción del ordenador que ha realizado el caso de uso:

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 30 clientes.

### Thread Group

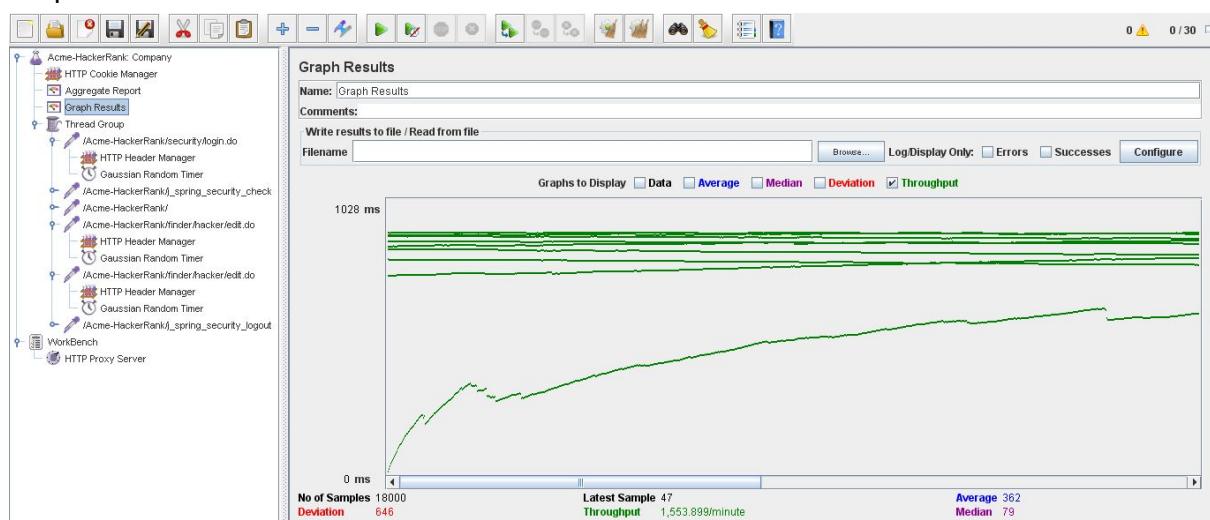
The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Number of Threads (users)' is set to 30, 'Ramp-Up Period (in seconds)' is 1, and 'Loop Count' is set to 'Forever' with a value of 100. Other options like 'Delay Thread creation until needed' and 'Scheduler' are also visible.

### Report

The screenshot shows the 'Aggregate Report' results. It displays various performance metrics for 18,000 samples, including Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The total throughput is listed as 133.3 KB/sec.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerRank]	3000	593	294	1488	6	7912	0.00%	4.3/sec	18.4
[Acme-HackerRank]	3000	235	49	653	9	4955	0.00%	4.4/sec	21.1
[Acme-HackerRank]	3000	100	18	219	5	5036	0.00%	4.4/sec	20.0
[Acme-HackerRank]	6000	538	197	1442	12	8316	0.00%	8.7/sec	56.7
[Acme-HackerRank]	3000	168	45	389	8	4357	0.00%	4.4/sec	18.2
TOTAL	18000	362	79	1126	5	8316	0.00%	25.9/sec	133.3

### Graph



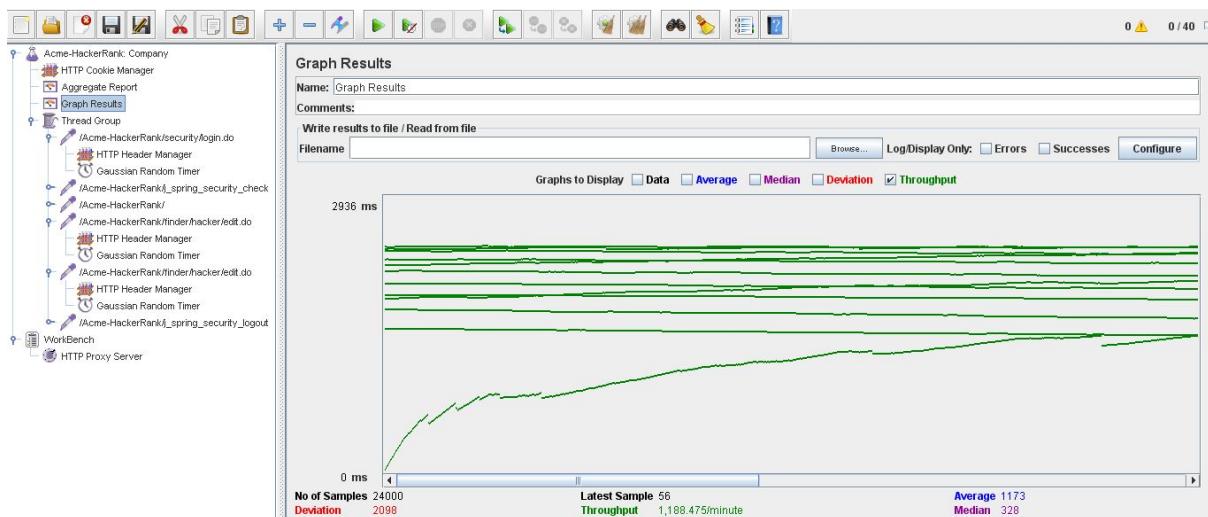
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 40 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerR...]	4000	1341	753	3037	6	19540	0.00%	3.3/sec	14.1
[Acme-HackerR...]	4000	1467	365	4456	9	27284	0.00%	3.3/sec	16.1
[Acme-HackerR...]	4000	659	65	1901	6	17222	0.00%	3.3/sec	15.3
[Acme-HackerR...]	8000	1422	586	3687	13	21529	0.00%	6.6/sec	44.8
[Acme-HackerR...]	4000	726	128	2092	8	17665	0.00%	3.3/sec	13.8
TOTAL	24000	1173	328	3159	6	27284	0.00%	19.8/sec	103.5

### Graph



## 3.11 Listing finder contents

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 70 clientes.

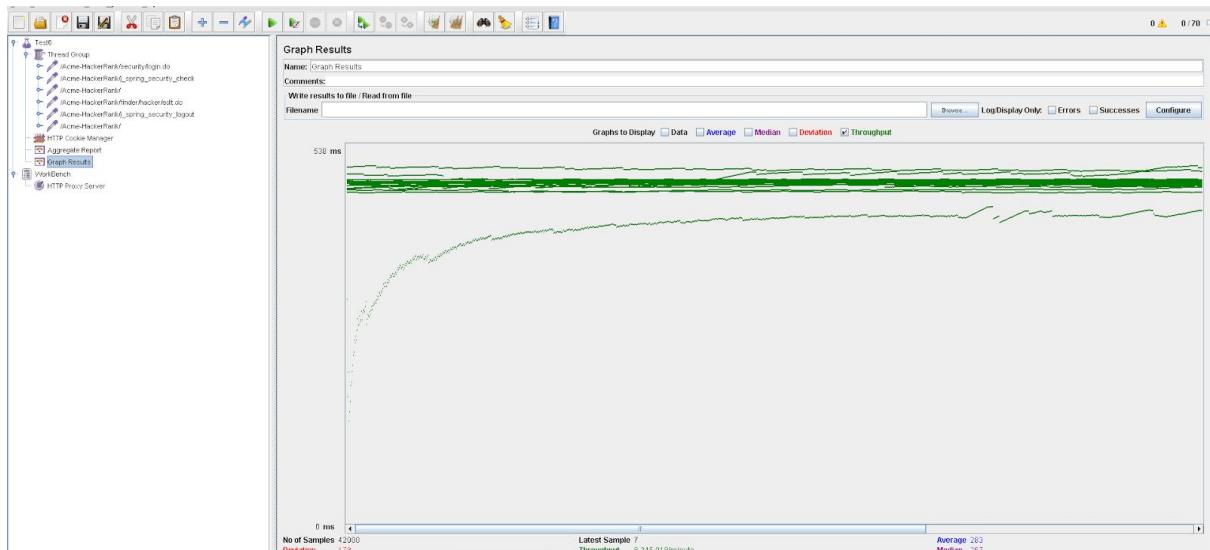
### Thread Group

Thread Group  
Name: Thread group  
Comments:  
Action to be taken after a Sampler error:  
Number of Threads (users): 70  
Ramp-up Period (in seconds): 1  
Loop Count: Forever [100]  
Delay thread creation until needed  
Scheduler

### Report

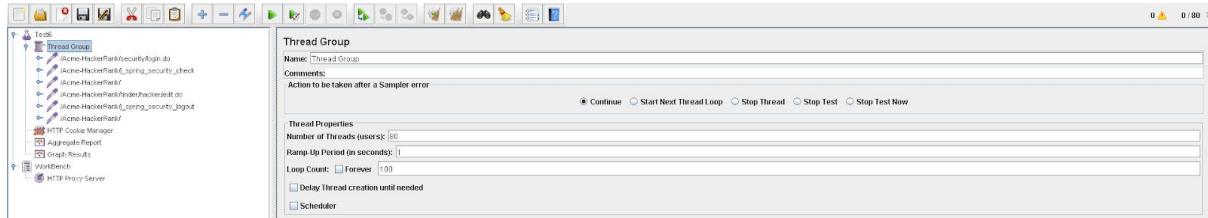
Aggregate Report  
Name: Aggregate Report  
Comments:  
Write results to file / Read from file  
Filename:  
Label # Samples Average Median 90% Line Min Max Error % Throughput KB/sec  
jmeter-HackerRand[docu] 7000 259 239 469 5 2056 0.00% 23.29/sec 99.6  
jmeter-HackerRand[ap] 7000 306 316 614 6 1952 0.00% 23.21/sec 13.2  
jmeter-HackerRand[db] 14000 205 245 745 492 5 1155 0.00% 40.4/sec 159.1  
jmeter-HackerRand[http] 7000 270 291 492 11 1151 0.00% 23.29/sec 141.8  
jmeter-HackerRand[sql] 7000 262 242 482 6 1118 0.00% 23.29/sec 99.8  
TOTAL: 42000 263 267 517 5 2096 0.00% 139.1/sec 647.5

### Graph

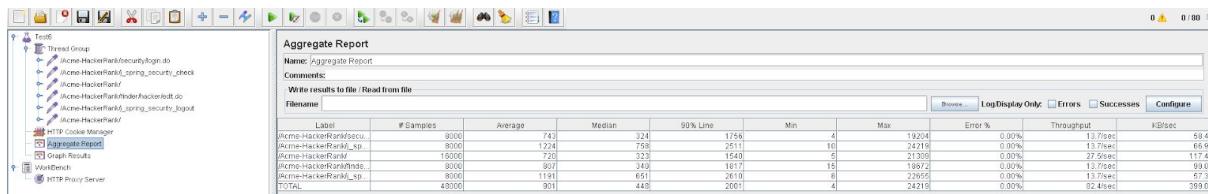


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 80 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

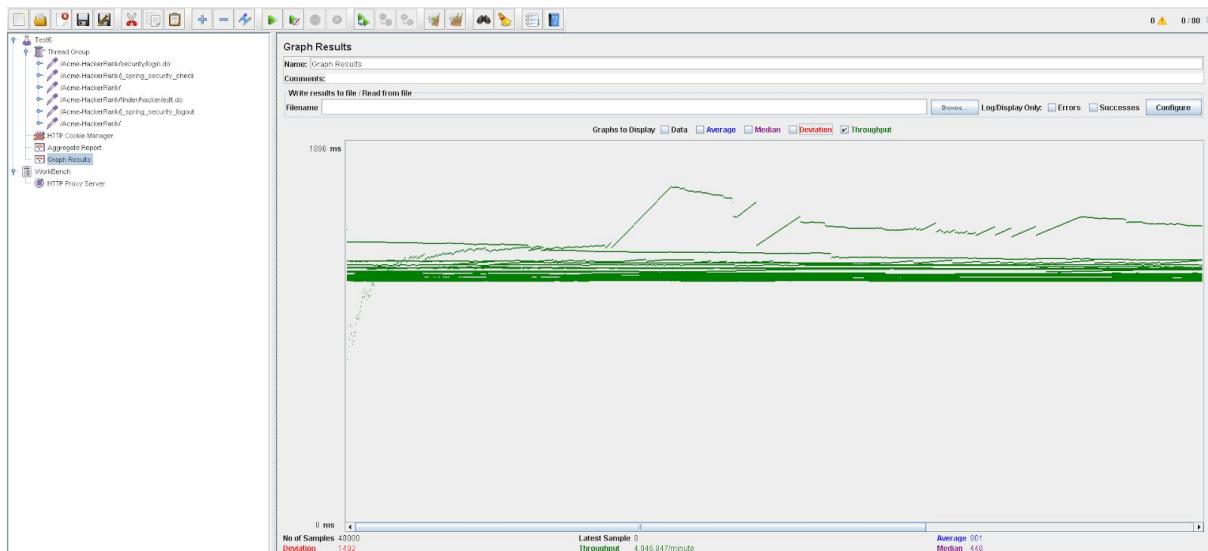
### Thread Group



### Report



### Graph



## 3.12 Clear finder

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 130 clientes.

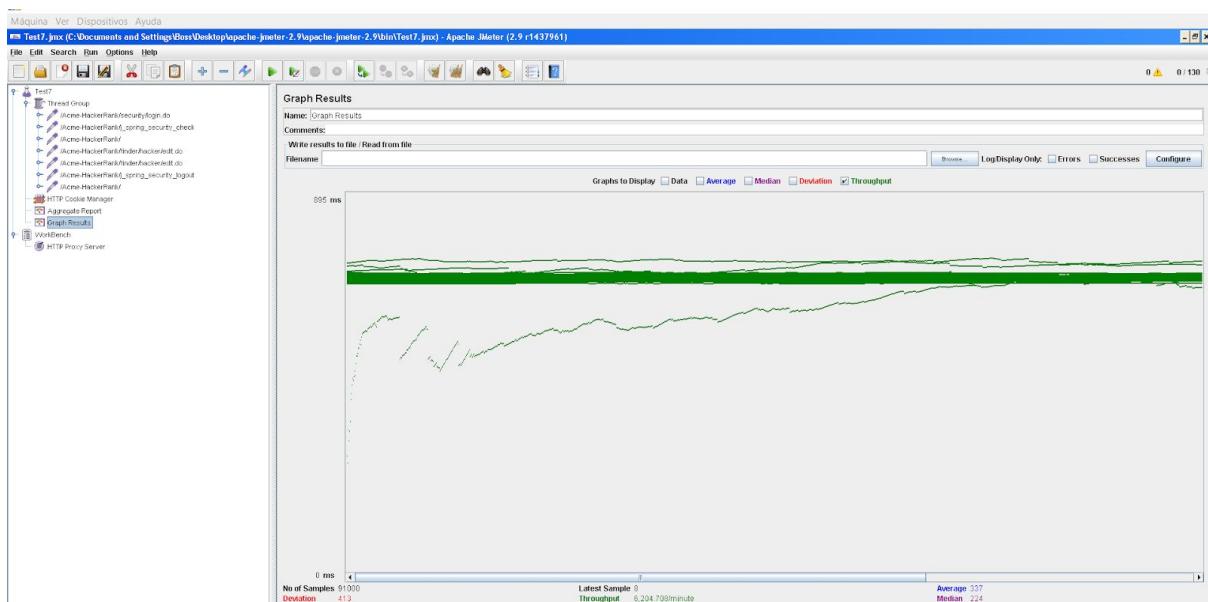
### Thread Group

Thread Group  
Name: Thread Group  
Comments:  
Action to be taken after a Sampler error  
• Continue   ◊ Start Next Thread Loop   ◊ Stop Thread   ◊ Stop Test   ◊ Stop Test Now  
Thread Properties  
Number of Threads (users): 130  
Ramp-Up Period (in seconds): 1  
Loop Count: ◊ Forever [100]  
☐ Delay thread creation until needed  
☐ Scheduler

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	tPS/sec
Arme-HackerPanel_login.do	130000	260	152	679	4	10496	0.00%	14.879sec	63.3
Arme-HackerPanel_spring_security_check	130000	507	433	1040	7	4293	0.00%	1.579sec	72.7
Arme-HackerPanel	260000	264	184	569	4	9345	0.00%	29.59sec	126.3
Arme-HackerPanel_underhackeredit.do	260000	326	193	786	11	9548	0.00%	29.69sec	181.1
Arme-HackerPanel_underhackeredit.do	130000	401	265	1008	2	9735	0.00%	14.95sec	61.1
Arme-HackerPanel_spring_security_logout	130000	377	224	793	2	10496	0.00%	163.49sec	503.7
Total	91000	327	224	793	2	10496	0.00%	163.49sec	503.7

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 140 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

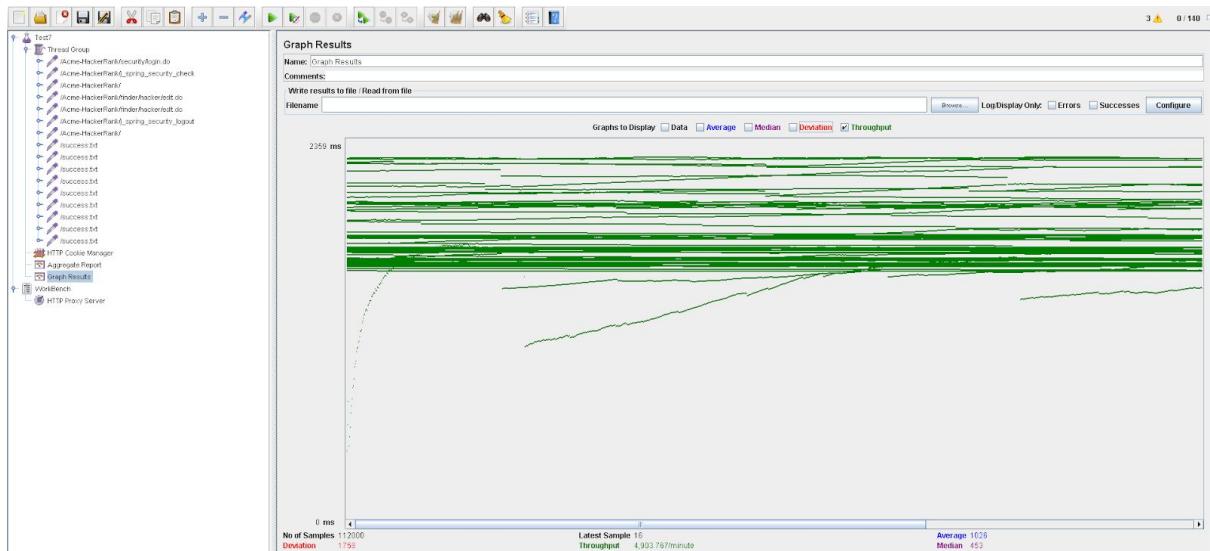
Thread Group  
Name: Thread Group  
Comments:  
Action to be taken after Sampler error: Continue

Thread Properties  
Number of Threads (users): 140  
Ramp Up Period (in seconds): 1  
Loop Count: Forever 100  
Delay thread creation until needed  
Scheduler

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/security/login.do	14000	1242	565	3146	4	24923	0.00%	10.2/sec	49.8
/Acme-HackerRank/_spring_security_check	14000	819	310	3100	7	33472	0.00%	10.2/sec	49.8
/Acme-HackerRank/_spring_security_logout	2000	546	325	1630	5	22739	0.00%	20.4/sec	127.5
/Acme-HackerRank/host/hashtest/do	20000	1287	598	3229	12	20582	0.00%	20.5/sec	125.1
/Acme-HackerRank/_spring_security_logout	14000	1229	767	2783	3	30783	0.00%	10.2/sec	42.7
/success/ft	14000	28	19	26	11	6618	0.00%	10.3/sec	33
/success/ft	112560	1028	453	2694	3	2572	0.00%	0.177/sec	241.9

### Graph



# 4. Company use cases

## 4.1 List their positions

**Descripción del ordenador que ha realizado el caso de uso:**

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 35 clientes.

### Thread Group

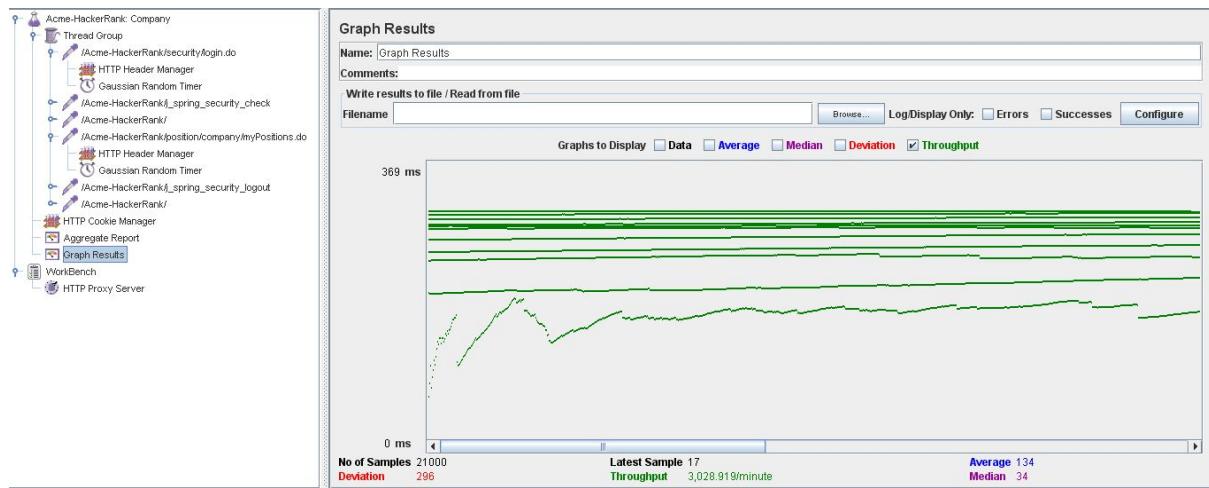
The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Name' field is set to 'Thread Group'. The 'Number of Threads (users)' is set to 35, and the 'Ramp-Up Period (in seconds)' is set to 1. Other settings like 'Loop Count' (set to 'Forever'), 'Delay Thread creation until needed', and 'Scheduler' are also visible.

### Report

The screenshot shows the 'Aggregate Report' section of the JMeter results. It displays various performance metrics for 35 users over 21000 samples. Key values include Average response time of 134 ms, Median of 34 ms, and Throughput of 50.5/sec. A detailed table of results is shown below:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerRank]	3500	304	163	739	6	5726	0.00%	8.4/sec	34.7
[Acme-HackerRank]	3500	132	38	333	10	3915	0.00%	8.5/sec	40.8
[Acme-HackerRank]	7000	62	17	143	5	4018	0.00%	16.8/sec	70.7
[Acme-HackerRank]	3500	138	37	313	17	4378	0.00%	8.5/sec	71.6
[Acme-HackerRank]	3500	106	47	262	7	3185	0.00%	8.5/sec	34.3
TOTAL	21000	134	34	344	5	5726	0.00%	50.5/sec	251.2

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 40 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/_spring_security_login.do	4000	2430	2246	4870	7	11347	0.00%	4.0/sec	16.5
/Acme-HackerRank/_spring_security_check	4000	1183	597	3511	6	7741	0.00%	4.0/sec	19.3
/Acme-HackerRank/_position/company/myPositions.do	8000	377	78	932	5	7816	0.00%	8.0/sec	33.6
/Acme-HackerRank/_spring_security_logout	4000	1470	1351	2954	17	7989	0.00%	4.0/sec	33.9
/Acme-HackerRank/_spring_security_login.do	4000	556	259	1411	8	6297	0.00%	4.0/sec	16.3
<b>TOTAL</b>	<b>24000</b>	<b>1064</b>	<b>394</b>	<b>3047</b>	<b>5</b>	<b>11347</b>	<b>0.00%</b>	<b>24.0/sec</b>	<b>119.5</b>

### Graph



## 4.2 Display one of their positions

Descripción del ordenador que ha realizado el caso de uso:

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 75 clientes.

### Thread Group

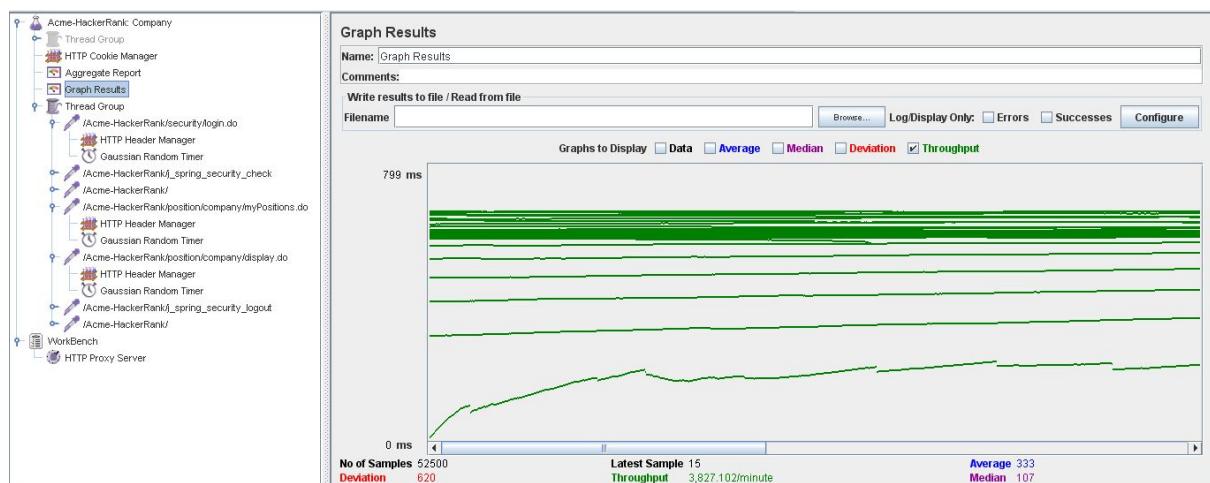
The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Number of Threads (users)' is set to 75, 'Ramp-Up Period (in seconds)' is 1, and 'Loop Count' is set to 'Forever' with a value of 100. Other options like 'Delay Thread creation until needed' and 'Scheduler' are also visible.

### Report

The screenshot shows the 'Aggregate Report' results for the test. The table provides detailed statistics for each thread group across 52,500 samples. The 'Throughput' column indicates the rate of requests per second, with values ranging from 38.5 to 336.2 KB/sec.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank...	7500	657	346	1736	6	12287	0.00%	9.2/sec	38.5
Acme-HackerRank...	7500	504	245	1246	8	7676	0.00%	9.2/sec	44.4
Acme-HackerRank...	15000	183	48	436	4	13285	0.00%	18.3/sec	76.7
Acme-HackerRank...	7500	317	65	948	12	5196	0.00%	9.2/sec	77.7
Acme-HackerRank...	7500	288	67	853	9	4855	0.00%	9.2/sec	63.8
Acme-HackerRank...	7500	199	93	433	6	5442	0.00%	9.2/sec	37.4
TOTAL	52500	333	107	890	4	13285	0.00%	63.8/sec	336.2

### Graph



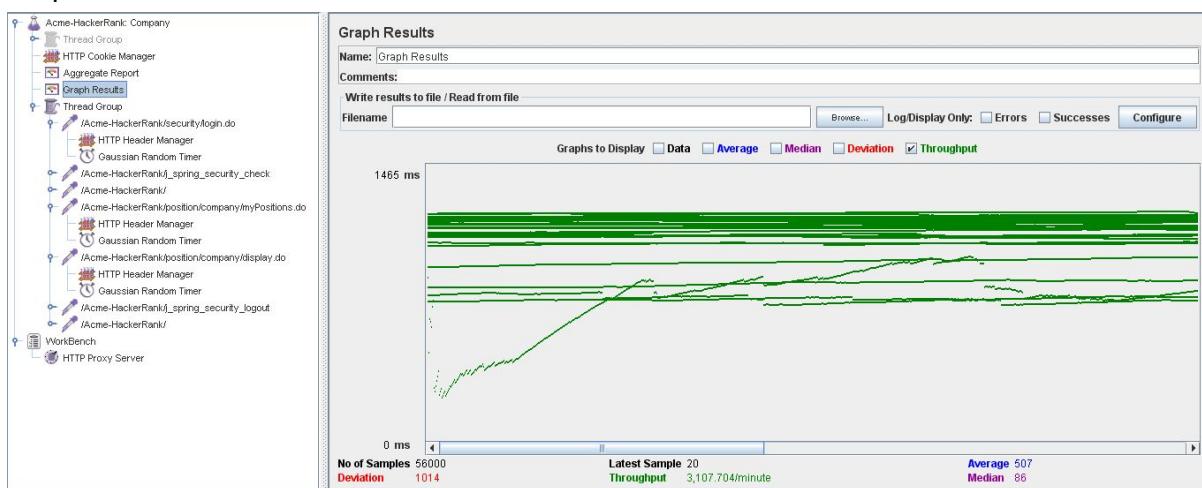
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 80 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

## Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerR...]	8000	1044	510	2645	5	12245	0.00%	7.4/sec	31.2
[Acme-HackerR...]	8000	643	83	2137	8	18721	0.00%	7.4/sec	35.8
[Acme-HackerR...]	16000	212	21	502	4	11308	0.00%	14.8/sec	62.1
[Acme-HackerR...]	8000	704	238	2153	11	13096	0.00%	7.4/sec	62.8
[Acme-HackerR...]	8000	442	58	1376	10	10676	0.00%	7.4/sec	51.7
[Acme-HackerR...]	8000	288	59	677	6	9374	0.00%	7.4/sec	30.2
<b>TOTAL</b>	<b>56000</b>	<b>507</b>	<b>86</b>	<b>1593</b>	<b>4</b>	<b>18721</b>	<b>0.00%</b>	<b>51.8/sec</b>	<b>273.0</b>

## Graph



## 4.3 Create a position

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 10 clientes.

### Thread Group

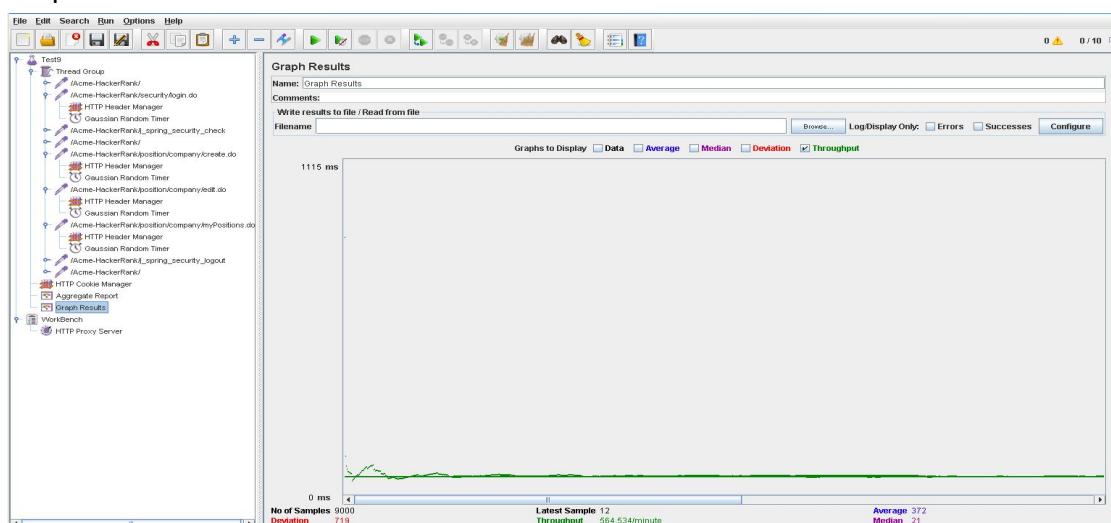
The screenshot shows the JMeter interface with a 'Test Plan' tree on the left. Under 'Test Plan', there is a 'Thread Group'. Inside the 'Thread Group', there are several requests: 'Acme-HackerRank/login.do', 'Acme-HackerRank/security/login.do', 'Acme-HackerRank/\_spring\_security\_check', 'Acme-HackerRank/position/company/create.do', 'Acme-HackerRank/position/company/edit.do', and 'Acme-HackerRank/position/company/myPositions.do'. There are also 'HTTP Header Manager' and 'Gaussian Random Timer' elements. The 'Thread Properties' panel on the right specifies 10 threads, a ramp-up period of 1 second, and a loop count of 'Forever'. Other options like 'Delay Thread creation until needed' and 'Schedule' are also present.

### Report

The screenshot shows the 'Aggregate Report' section of JMeter. It displays a table of performance metrics for each request. The table has columns for 'Label', '# Samples', 'Average', 'Median', '90% Line', 'Min', 'Max', 'Error %', 'Throughput', and 'KB/sec'. The data shows results for various requests like 'Acme-HackerRank/login.do', 'Acme-HackerRank/\_spring\_security\_check', etc. The 'TOTAL' row indicates an average response time of 372 ms.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
(Acme-HackerRank)/login.do	3000	94	12	279	4	3801	0.00%	3.1/sec	13.4
(Acme-HackerRank)/_spring_security_check	1000	110	9	275	5	4178	0.00%	1.1/sec	4.4
(Acme-HackerRank)/position/company/create.do	1000	167	19	431	5	4260	0.00%	1.1/sec	5.4
(Acme-HackerRank)/position/company/edit.do	1000	72	10	215	5	2890	0.00%	1.1/sec	6.8
(Acme-HackerRank)/position/company/myPositions.do	819	463	220	1495	16	4495	0.00%	1.1/sec	9.0
(Acme-HackerRank)/_spring_security_logout	1000	1412	1150	2111	344	5740	0.00%	1.1/sec	13.4
TOTAL	9000	372	21	1280	2	5740	0.00%	9.4/sec	56.5

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 15 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error:

Thread Properties

Number of Threads (users): 15

Ramp-Up Period (in seconds): 1

Loop Count:  Forever 100

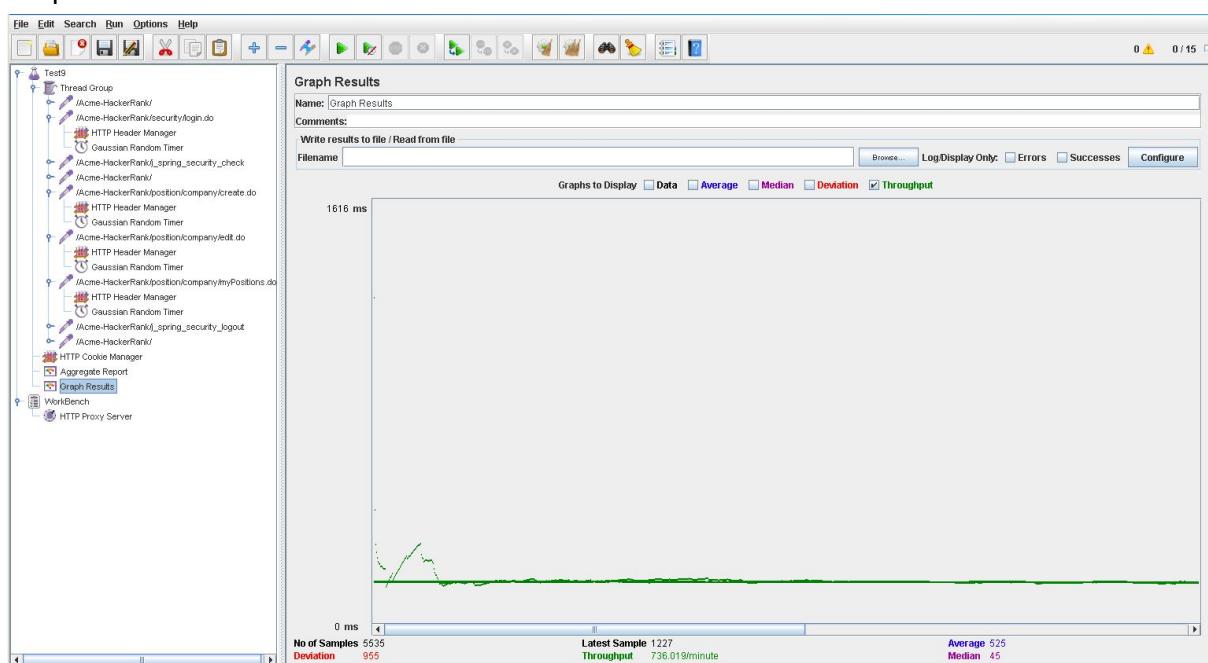
Delay Thread creation until needed

Scheduler

## Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/	1844	189	17	497	5	6294	0.00%	4.1/sec	17.5
Acme-HackerRank...	620	219	14	593	5	5068	0.00%	1.4/sec	5.8
Acme-HackerRan...	619	276	31	752	10	5018	0.00%	1.4/sec	7.1
Acme-HackerRan...	619	218	20	561	6	4536	0.00%	1.4/sec	9.1
Acme-HackerRan...	615	1220	738	3200	18	7642	0.16%	1.4/sec	12.1
Acme-HackerRan...	613	1616	1191	3434	317	7725	0.00%	1.4/sec	17.5
Acme-HackerRan...	605	624	169	1705	3	7311	0.00%	1.4/sec	5.7
TOTAL	5535	525	45	1663	3	7725	0.02%	12.3/sec	74.0

## Graph



## 4.4 Update one of their positions

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 100 clientes.

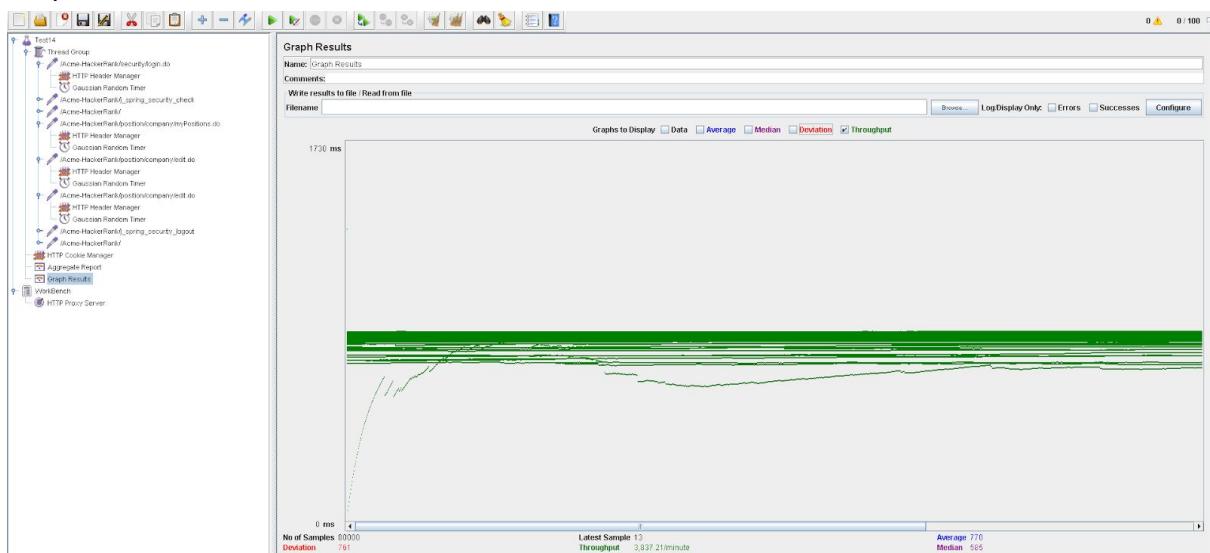
### Thread Group

The screenshot shows the JMeter Test Plan tree on the left and the Thread Group configuration on the right. The Thread Group has 100 threads, a ramp-up period of 1 second, and runs forever. It contains two HTTP Request samplers: 'Acme-HackerPark/secu\_login.do' and 'Acme-HackerPark/secu\_logout'. There are also two HTTP Header Managers and two Session Random Timers. The 'Action to be taken after a Sampler error' dropdown is set to 'Continue'.

### Report

The screenshot shows the JMeter Test Plan tree on the left and the Aggregate Report on the right. The report shows statistics for 10000 samples. The 'Throughput' section indicates a throughput of 0.04s per request, with 74.1 requests per second. The 'Errors' section shows 0 errors and 0 failures. The 'Successes' section shows 100% success rate. The 'Configure' button is highlighted.

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 110 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

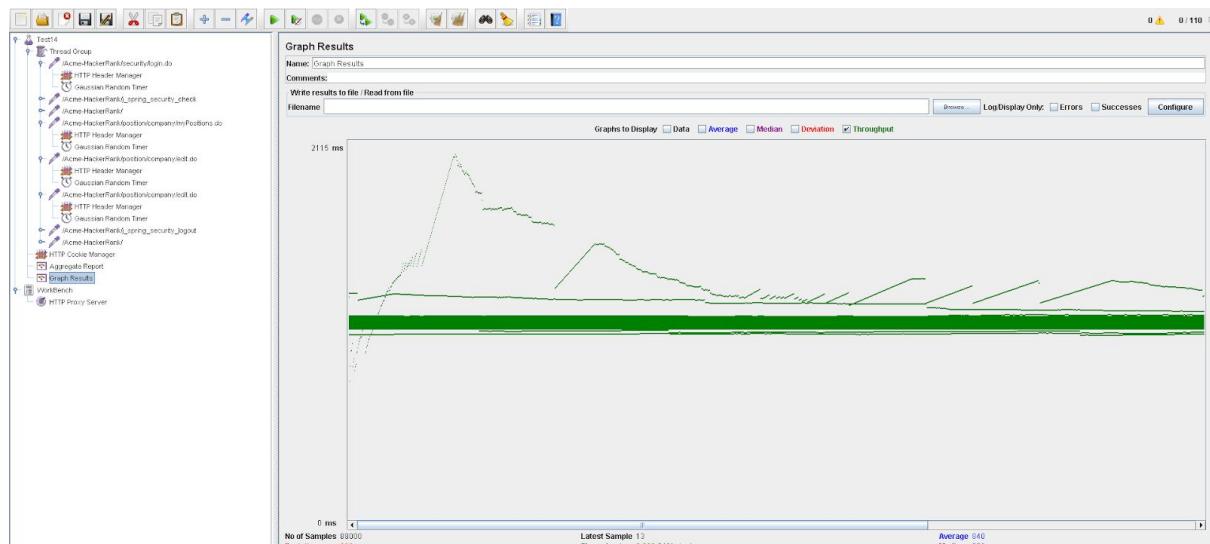
Thread Group  
 Name: Thread Group  
 Comments:  
 Action to be taken after a Sampler error:  
 Continue    Start Next Thread Loop    Stop Thread    Stop Test    Stop Test Now  
 Thread Properties  
 Number of Threads (users): 110  
 Ramp Up Period in seconds: 1  
 Loop Count:  Forever (0)  
 Delay thread creation until needed  
 Scheduler

### Report

Aggregate Report  
 Name: Aggregate Report  
 Comments:  
 Write results to file / Read from file  
 Filename:   
 Buttons: Browse, Log Display Only, Errors, Successes, Configure  
 Throughput: 24.4 KB/sec

Label	# Samples	Average	Median	99% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/login	11000	829	444	1869	4	19199	0.80%	0.1/sec	24.4
Acme-HackerRank_01	11000	1217	603	2855	4	31278	0.30%	0.1/sec	41.5
Acme-HackerRank/_string_security_check	22000	677	424	1552	4	11908	0.00%	16.1/sec	70.2
Acme-HackerRank/logout	11000	837	595	1889	13	16318	0.00%	0.1/sec	70.2
Acme-HackerRank/login	22000	807	565	1914	12	33111	0.00%	16.1/sec	152.5
Acme-HackerRank_01_01	11000	753	517	1865	2	12917	0.00%	0.1/sec	32.7
TOTAL	88000	840	559	1884	2	33941	0.00%	0.1/sec	374.6

### Graph



## 4.5 Delete one of their positions

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 10 clientes.

### Thread Group

The screenshot shows the JMeter interface with a 'Test Plan' tree on the left. Under 'Test Plan', there is a 'Thread Group' node. The 'Thread Properties' section is expanded, showing the following settings:

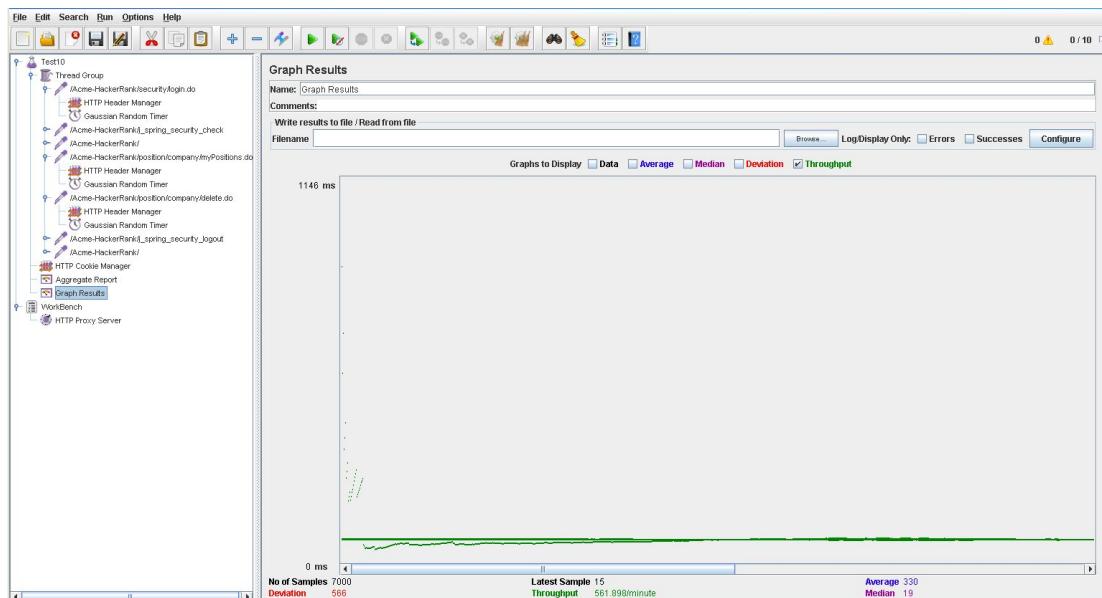
- Name: Thread Group
- Comments: Action to be taken after a Sampler error
- Number of Threads (users): 10
- Ramp-Up Period (in seconds): 1
- Loop Count: 100
- Delay Thread creation until needed
- Scheduler

### Report

The screenshot shows the JMeter interface with a 'Test Plan' tree on the left. Under 'Test Plan', there is an 'Aggregate Report' node. The 'Aggregate Report' panel displays the following table of results:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/security/login.do	1000	193	13	680	5	2761	0.00%	1.3/sec	5.7
Acme-HackerRank/_spring_security_check	1000	308	67	945	6	2728	0.00%	1.3/sec	6.0
Acme-HackerRank/_spring_security_logout	2000	91	61	240	3	2557	0.00%	2.7/sec	11.7
Acme-HackerRank/position/company/myPositions.do	1000	1300	1214	2203	394	3940	0.00%	1.3/sec	12.6
Acme-HackerRank/position/company/delete.do	1000	157	10	512	5	2281	0.00%	1.3/sec	17.3
Acme-HackerRank/_spring_security_logout	1000	190	15	641	3	2380	0.00%	1.3/sec	5.6
TOTAL	7000	330	19	1150	3	3940	0.00%	9.4/sec	59.5

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 15 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Name' field is set to 'Thread Group'. The 'Number of Threads (users)' is 15, and the 'Ramp-Up Period (in seconds)' is 1. The 'Loop Count' is set to 'Forever'. The 'Action to be taken after a Sampler error' dropdown is set to 'Continue'. The 'Thread Properties' section shows the following settings:

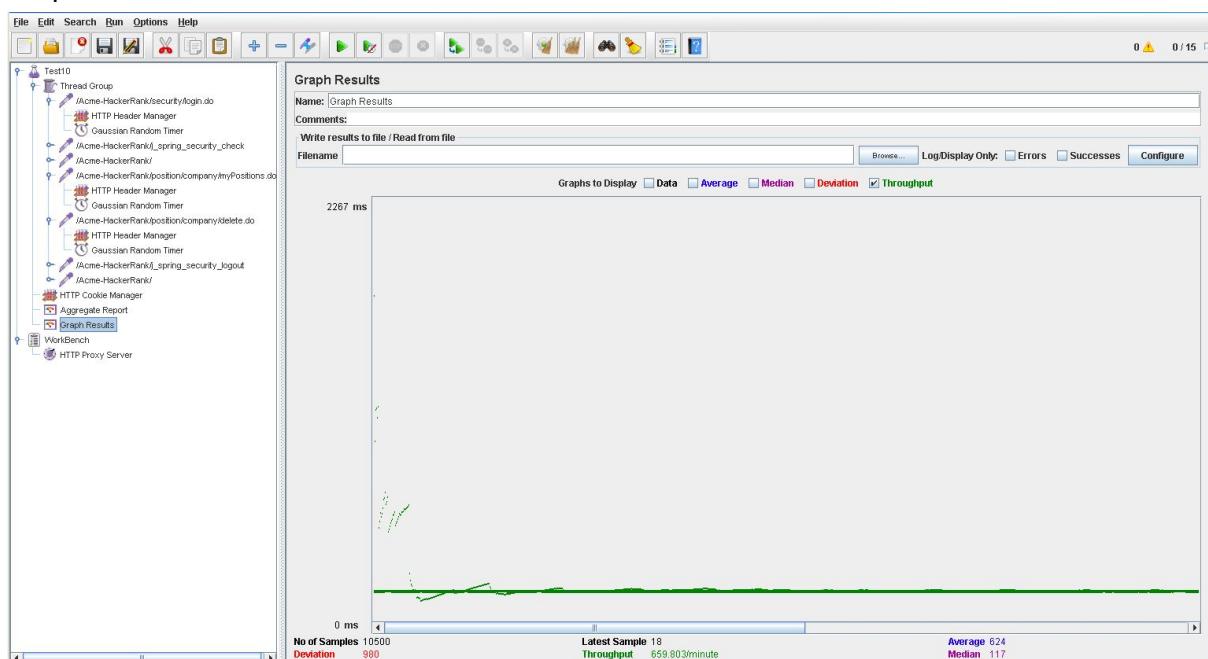
Setting	Value
Number of Threads (users)	15
Ramp-Up Period (in seconds)	1
Loop Count	Forever
Delay Thread creation until needed	<input type="checkbox"/>
Schedule	<input type="checkbox"/>

### Report

The screenshot shows the 'Aggregate Report' results for the 'Test10' plan. The 'Name' is 'Aggregate Report'. The 'Filename' is left empty. The 'Log/Display Only' checkbox is checked. The 'Configure' button is visible. The table below shows the results for each sampler and the total test run.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/security/login.do	1500	581	230	1741	5	7268	0.00%	1.6/sec	6.7
/Acme-HackerRank/_spring_security_check	1500	632	276	1781	7	7379	0.00%	1.6/sec	8.0
/Acme-HackerRank/_spring_logout	1500	624	117	2019	3	7698	0.00%	1.6/sec	6.6
TOTAL	10500	624	117	2019	3	7698	0.00%	11.0/sec	69.9

### Graph



## 4.6 List their problems

Es igual que el Display de una position

## 4.7 Display one of their problems

**Descripción del ordenador que ha realizado el caso de uso:**

HP Envy 15:

-Procesador: 2,2GHz Intel Core i7-4702MQ

-Memoria RAM: 16GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 40 clientes.

### Thread Group

The screenshot shows the JMeter interface with the 'Thread Group' configuration panel open. The left sidebar lists test elements: Acme-HackerRank: Company, HTTP Cookie Manager, Aggregate Report, Graph Results, Thread Group, and WorkBench. The right panel shows the 'Thread Group' settings: Name is 'Thread Group', Number of Threads (users) is 40, Ramp-Up Period (in seconds) is 1, Loop Count is set to 'Forever' (value 100), and there are options for 'Delay Thread creation until needed' and 'Scheduler'. Below the panel is a preview of the test plan structure.

### Report

The screenshot shows the JMeter interface with the 'Aggregate Report' results panel open. The left sidebar lists test elements: Acme-HackerRank: Company, HTTP Cookie Manager, Aggregate Report, Graph Results, Thread Group, and WorkBench. The right panel displays a table of performance metrics for 32,000 samples. The columns include Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The data shows various requests like security/login.do, position/company/myPost, etc., with values ranging from 4000 to 8000 samples and 26.8 to 53.9 KB/sec throughput.

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
[Acme-HackerR...]	4000	1272	1159	2239	7	12235	0.00%	6.3/sec	26.8
[Acme-HackerR...]	4000	957	768	2014	13	6127	0.00%	6.3/sec	30.9
[Acme-HackerR...]	8000	547	338	1318	6	5510	0.00%	12.6/sec	53.7
[Acme-HackerR...]	4000	585	385	1376	17	4518	0.00%	6.3/sec	53.9
[Acme-HackerR...]	4000	577	379	1338	13	5377	0.00%	6.3/sec	44.4
[Acme-HackerR...]	4000	571	363	1359	12	5033	0.00%	6.3/sec	33.5
[Acme-HackerR...]	4000	454	237	1103	13	5032	0.00%	6.3/sec	25.9
TOTAL	32000	689	459	1587	6	12235	0.00%	50.4/sec	268.9

### Graph

The screenshot shows the JMeter interface with the 'Graph Results' visualization panel open. The left sidebar lists test elements: Acme-HackerRank: Company, HTTP Cookie Manager, Aggregate Report, Graph Results, Thread Group, and WorkBench. The right panel displays a line graph showing response time over time. The Y-axis is labeled '1555 ms' and '0 ms'. The X-axis shows 'No of Samples' (32000) and 'Latest Sample' (19). The graph shows a sharp initial increase in response time followed by a plateau. The legend at the bottom indicates graphs for Data, Average, Median, Deviation, and Throughput.

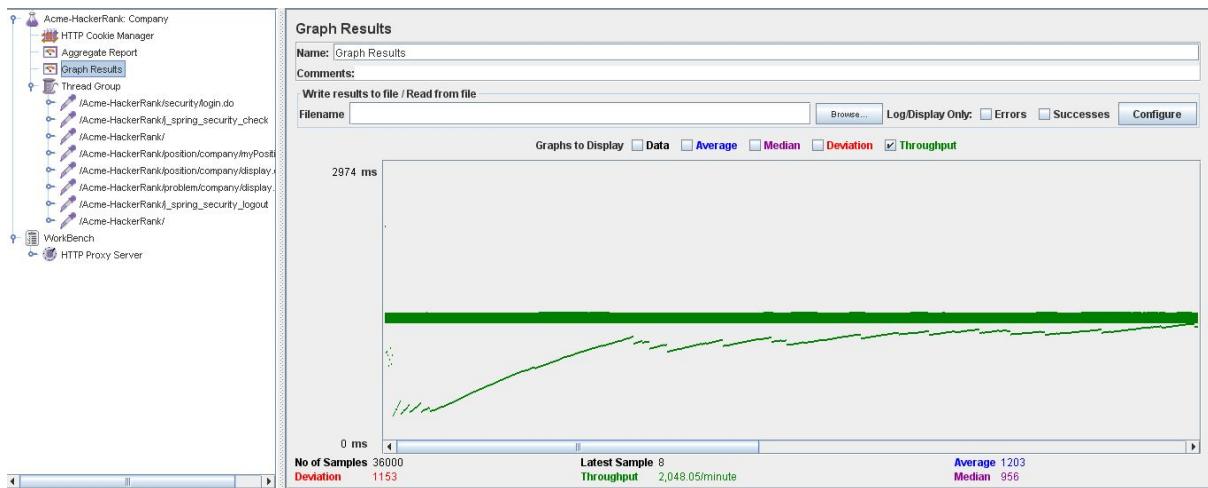
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 45 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerR...	4500	2129	1800	3600	16	11444	0.00%	4.3/sec	18.2
Acme-HackerR...	4500	1731	1483	3534	23	8740	0.00%	4.3/sec	20.9
Acme-HackerR...	9000	1023	810	2328	5	8244	0.00%	8.5/sec	36.4
Acme-HackerR...	4500	999	781	2198	14	8308	0.00%	4.3/sec	36.5
Acme-HackerR...	4500	995	790	2221	12	7107	0.00%	4.3/sec	30.0
Acme-HackerR...	4500	1013	794	2320	13	7161	0.00%	4.3/sec	22.6
Acme-HackerR...	4500	715	338	1708	19	7245	0.00%	4.3/sec	17.6
TOTAL	36000	1203	956	2763	5	11444	0.00%	34.1/sec	182.1

### Graph



## 4.8 Create a problem

Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 10 clientes.

### Thread Group

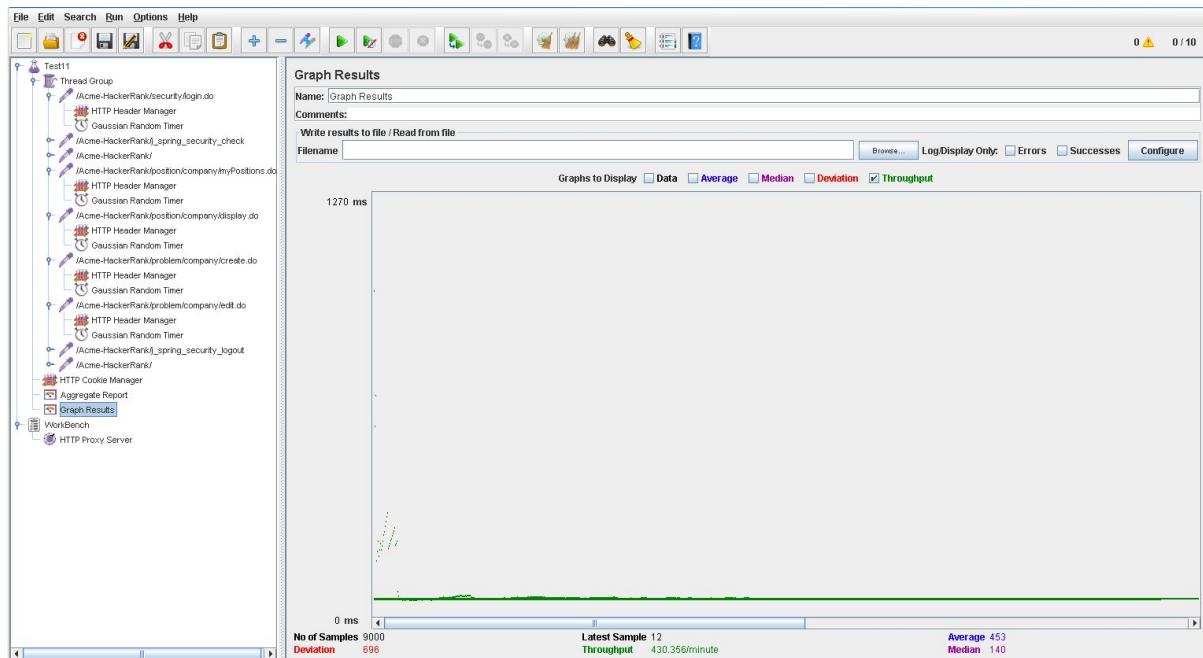
The screenshot shows the JMeter interface with the 'Test11' test plan selected. On the left, a tree view displays the structure of the thread group, including various HTTP requests, timers, and header managers. On the right, the 'Thread Group' properties panel is open, showing settings for 10 threads, a ramp-up period of 1 second, and a loop count of 100. Other options like 'Delay Thread creation until needed' and 'Scheduler' are also visible.

### Report

The screenshot shows the 'Aggregate Report' section of the JMeter interface. It displays a table of performance metrics for each request. The table includes columns for Label, # Samples, Average, Median, 90% Line, Min, Max, Error %, Throughput, and KB/sec. The data shows results for various requests like login, security check, and problem creation, with a total of 9000 samples and an average response time of 453 ms.

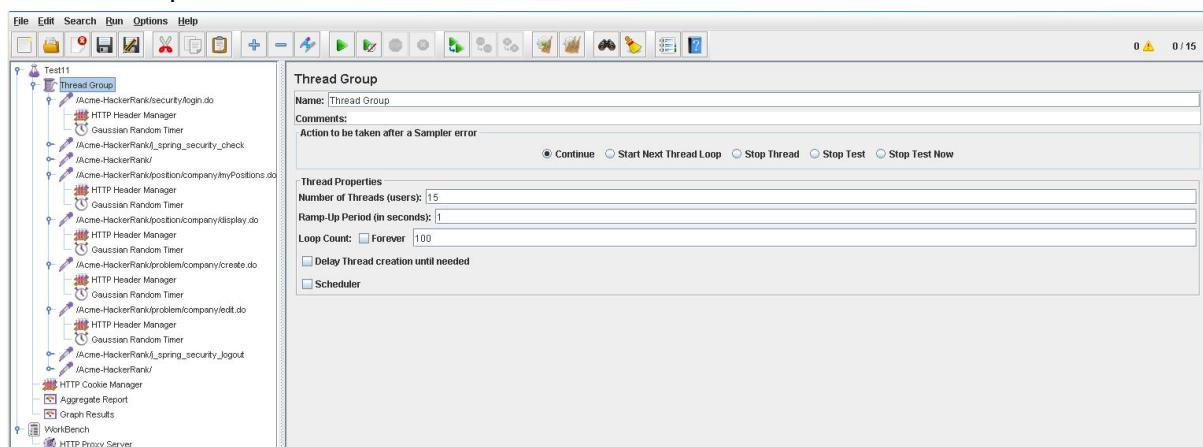
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/security/login.do	1000	194	13	700	4	2605	0.00%	48.0/min	3.4
/Acme-HackerRank/_spring_security_check	1000	283	33	988	10	3352	0.00%	48.0/min	4.1
/Acme-HackerRank/position/company/myPositions.do	2000	102	15	306	4	2232	0.00%	48.0/min	7.0
/Acme-HackerRank/position/company/display.do	1000	140	1419	2535	393	6010	0.00%	48.0/min	7.5
/Acme-HackerRank/position/company/positions.do	1000	425	183	2124	81	3780	0.00%	48.0/min	8.8
/Acme-HackerRank/problem/company/create.do	1000	166	16	655	6	2536	0.00%	48.0/min	5.1
/Acme-HackerRank/problem/company/edit.do	1000	1037	788	2167	207	11349	0.00%	48.0/min	10.4
/Acme-HackerRank/_spring_security_logout	1000	226	47	692	2	2607	0.00%	48.0/min	3.3
TOTAL	9000	453	140	1427	2	11348	0.00%	7.2/sec	49.4

## Graph

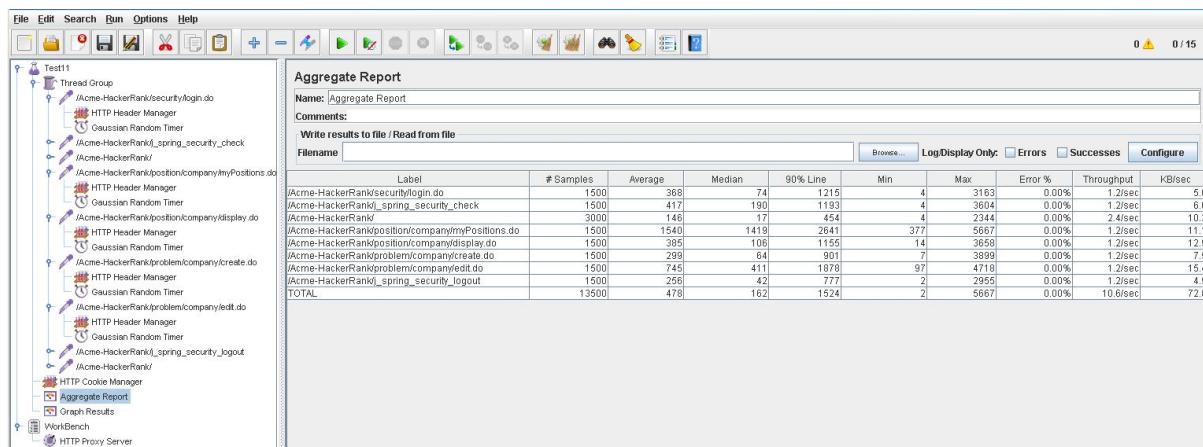


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 15 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

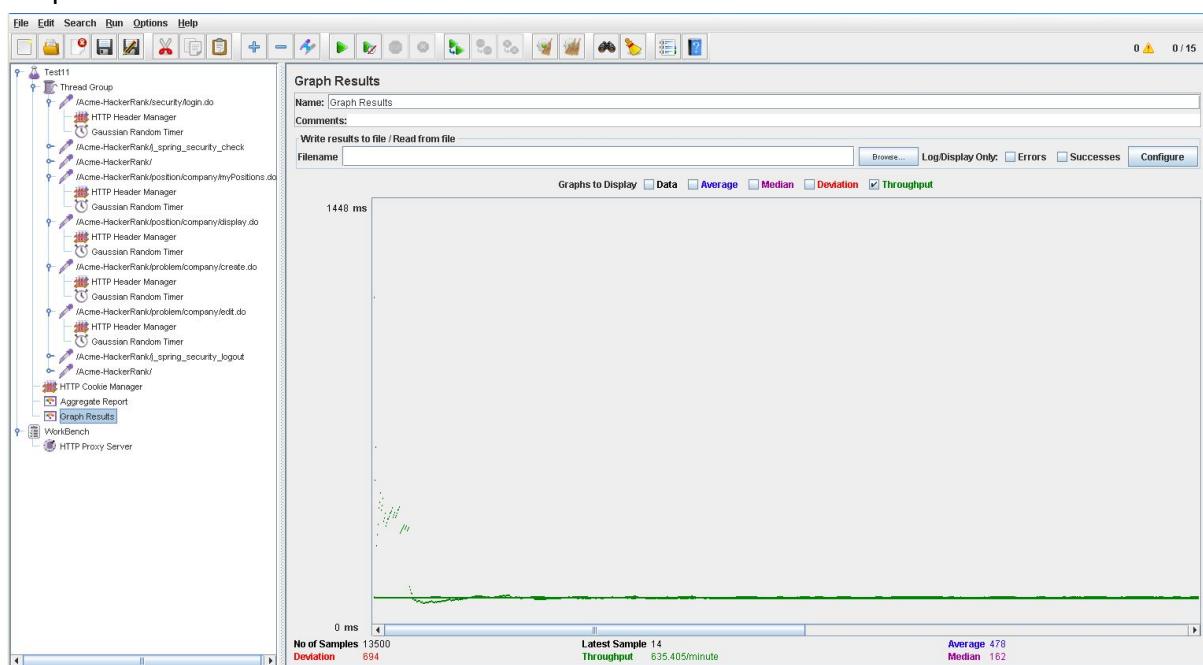
## Thread Group



## Report



## Graph



## 4.9 Update one of their problems

**Descripción del ordenador que ha realizado el caso de uso:**

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 200 clientes.

### Thread Group

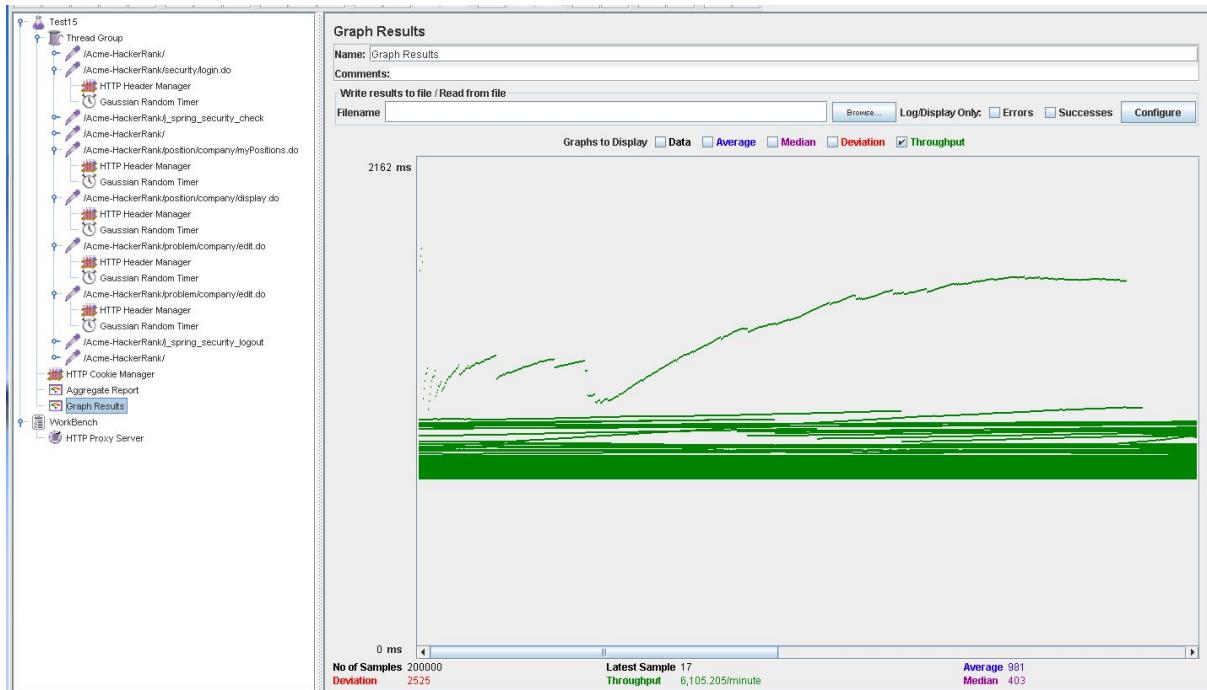
The screenshot shows the JMeter Test Plan interface. On the left, there is a tree view of the test plan structure under 'Test15'. On the right, a detailed configuration window for a 'Thread Group' is open. The 'Name' field is set to 'Thread Group'. In the 'Comments' section, it says 'Action to be taken after a Sampler error'. Under 'Thread Properties', the 'Number of Threads (users)' is set to 200, 'Ramp-Up Period (in seconds)' is 1, and 'Loop Count' is set to 'Forever' with a value of 100. There are also two unchecked options: 'Delay Thread creation until needed' and 'Scheduler'.

### Report

The screenshot shows the JMeter Test Plan interface again, with the same tree view on the left. On the right, an 'Aggregate Report' window is open. The 'Name' field is 'Aggregate Report'. The 'Comments' section contains the instruction 'Write results to file / Read from file'. A 'Browse...' button is available for the 'Filename' field. Below the table, there are buttons for 'Log/Display Only', 'Errors', 'Successes', and 'Configure'. The table itself displays performance metrics for various requests, with a total summary at the bottom.

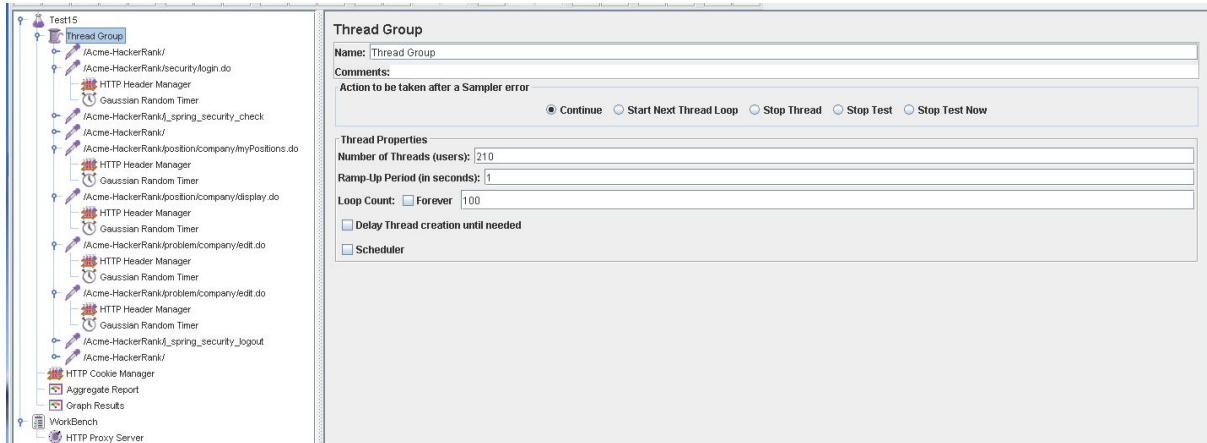
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/	60000	646	365	1065	2	67980	0.00%	39.5/sec	130.3
/Acme-HackerRank/security/login.do	20000	1078	384	2450	2	67708	0.00%	10.2/sec	42.6
/Acme-HackerRank/_spring_security_check	20000	959	562	1449	4	118498	0.00%	10.2/sec	52.2
/Acme-HackerRank/position/company/myPositions.do	20000	1022	361	2227	5	67742	0.00%	10.2/sec	61.7
/Acme-HackerRank/position/company/display.do	20000	1039	380	2523	1	66638	0.00%	10.2/sec	75.3
/Acme-HackerRank/problem/company/edit.do	40000	1127	397	2458	5	67823	0.00%	20.4/sec	131.8
/Acme-HackerRank/_spring_security_logout	20000	1516	416	2508	3	85501	0.00%	10.2/sec	42.9
<b>TOTAL</b>	<b>200000</b>	<b>981</b>	<b>403</b>	<b>2096</b>	<b>1</b>	<b>118498</b>	<b>0.00%</b>	<b>101.8/sec</b>	<b>534.8</b>

## Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 210 clientes, ya que hay % de error en una request cuando hace su acción indicada.

## Thread Group



## Report

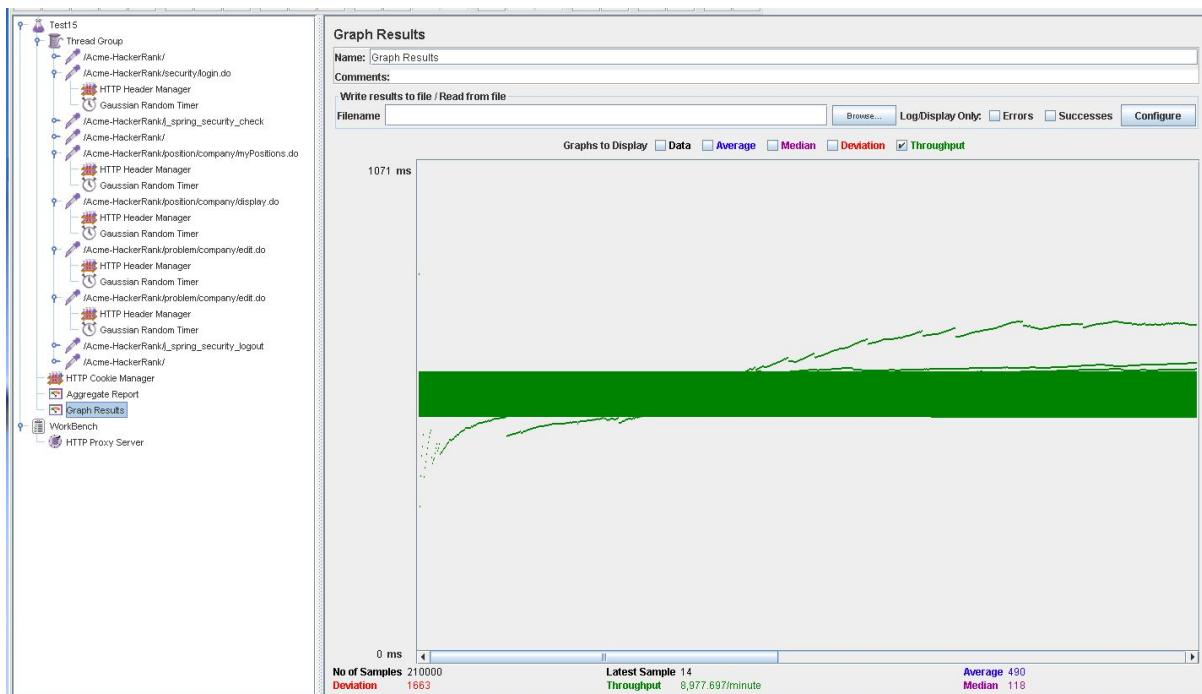
Test Plan:

- Thread Group
  - /Acme-HackerRank/
  - /Acme-HackerRank/security/login.do
    - HTTP Header Manager
    - Gaussian Random Timer
  - /Acme-HackerRank/\_spring\_security\_check
  - /Acme-HackerRank/position/company/myPositions.do
    - HTTP Header Manager
    - Gaussian Random Timer
  - /Acme-HackerRank/position/company/display.do
    - HTTP Header Manager
    - Gaussian Random Timer
  - /Acme-HackerRank/problem/company/edit.do
    - HTTP Header Manager
    - Gaussian Random Timer
  - /Acme-HackerRank/problem/company/edit.do
    - HTTP Header Manager
    - Gaussian Random Timer
  - /Acme-HackerRank/\_spring\_security\_logout
  - /Acme-HackerRank/
- HTTP Cookie Manager
- Aggregate Report
- Graph Results
- WorkBench
- HTTP Proxy Server

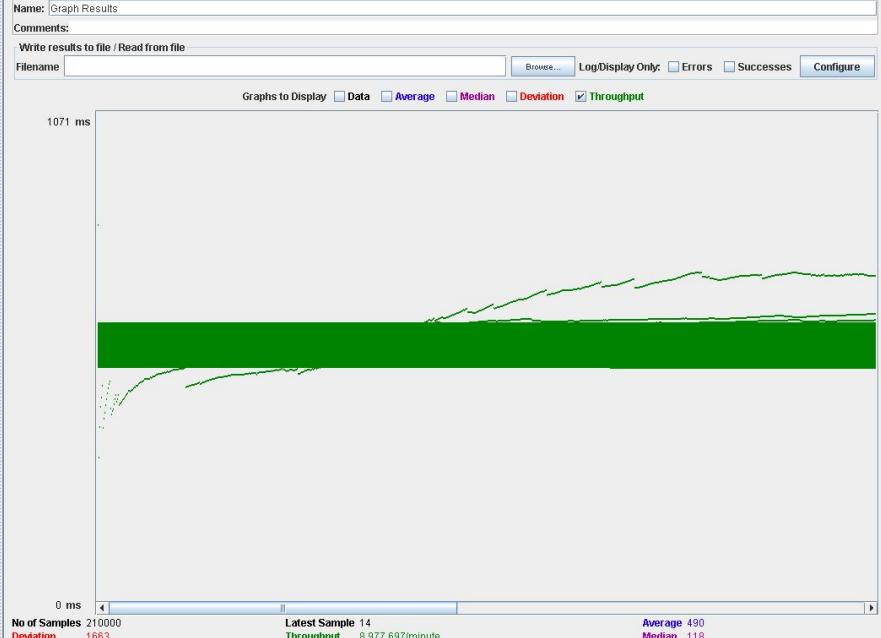
### Aggregate Report

Aggregate Report														
Name:	Aggregate Report	Comments:												
Write results to file / Read from file		Log/Display Only: <input type="checkbox"/> Errors <input type="checkbox"/> Successes <input checked="" type="checkbox"/> Configure												
Filename:	<input type="button" value="Browse..."/> Log/Display Only: <input type="checkbox"/> Errors <input type="checkbox"/> Successes <input checked="" type="checkbox"/> Configure													
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput KB/sec						
/Acme-HackerRank/	63000	382	117	840	1	49657	0.09%	44.9/sec 191.3						
/Acme-HackerRank/security/login.do	21000	498	89	1263	2	66620	0.04%	15.0/sec 62.7						
/Acme-HackerRank/_spring_security_check	21000	613	275	1294	3	71481	0.06%	15.0/sec 76.7						
/Acme-HackerRank/position/company/myPositions.do	21000	482	80	1179	5	49737	0.03%	15.0/sec 90.7						
/Acme-HackerRank/position/company/display.do	21000	462	52	1164	5	63038	0.04%	15.0/sec 110.6						
/Acme-HackerRank/problem/company/edit.do	42000	489	85	1126	5	67970	0.05%	30.1/sec 193.6						
/Acme-HackerRank/_spring_security_logout	21000	722	159	2140	1	72811	0.08%	15.0/sec 62.9						
TOTAL	210000	490	118	1140	1	72811	0.06%	149.6/sec 785.5						

## Graph



### Graph Results



## 4.10 Delete one of their problems

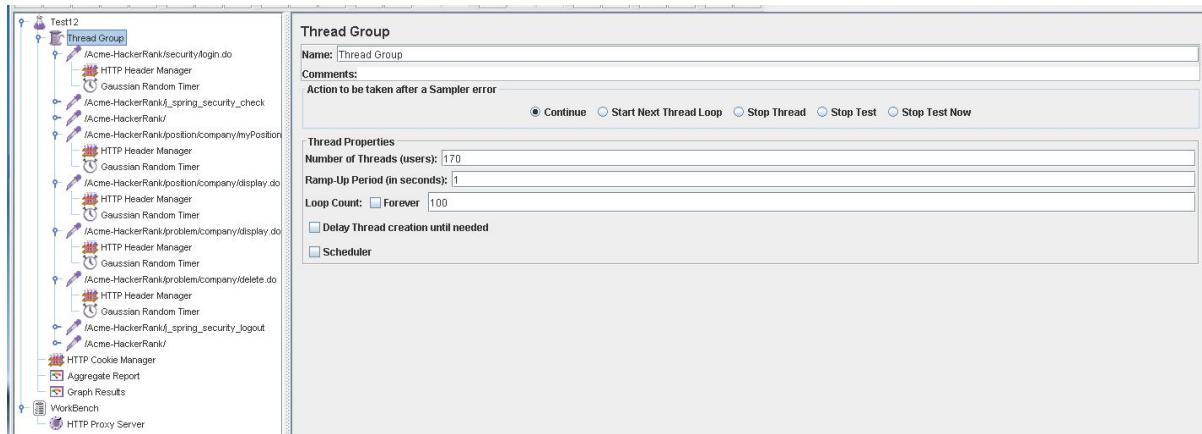
**Descripción del ordenador que ha realizado el caso de uso:**

MacBook Pro:

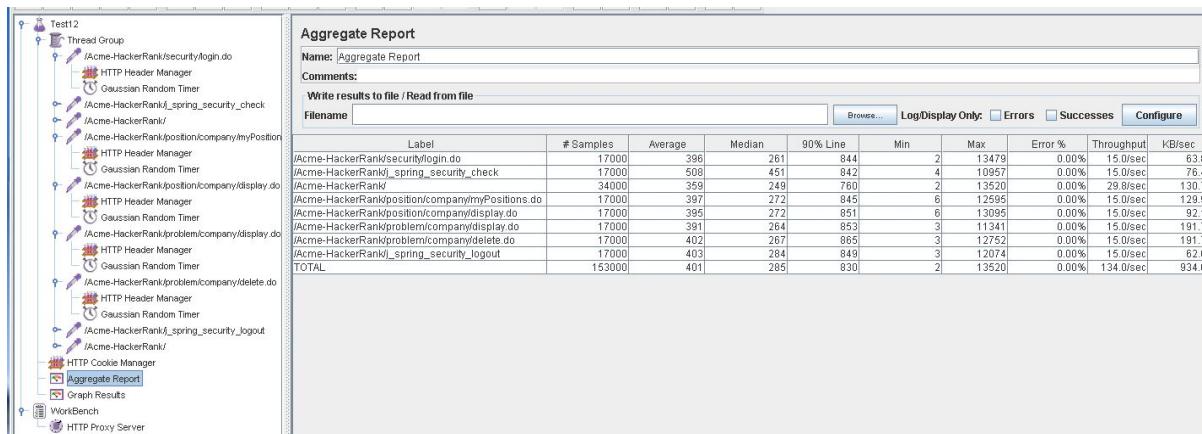
- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 170 clientes.

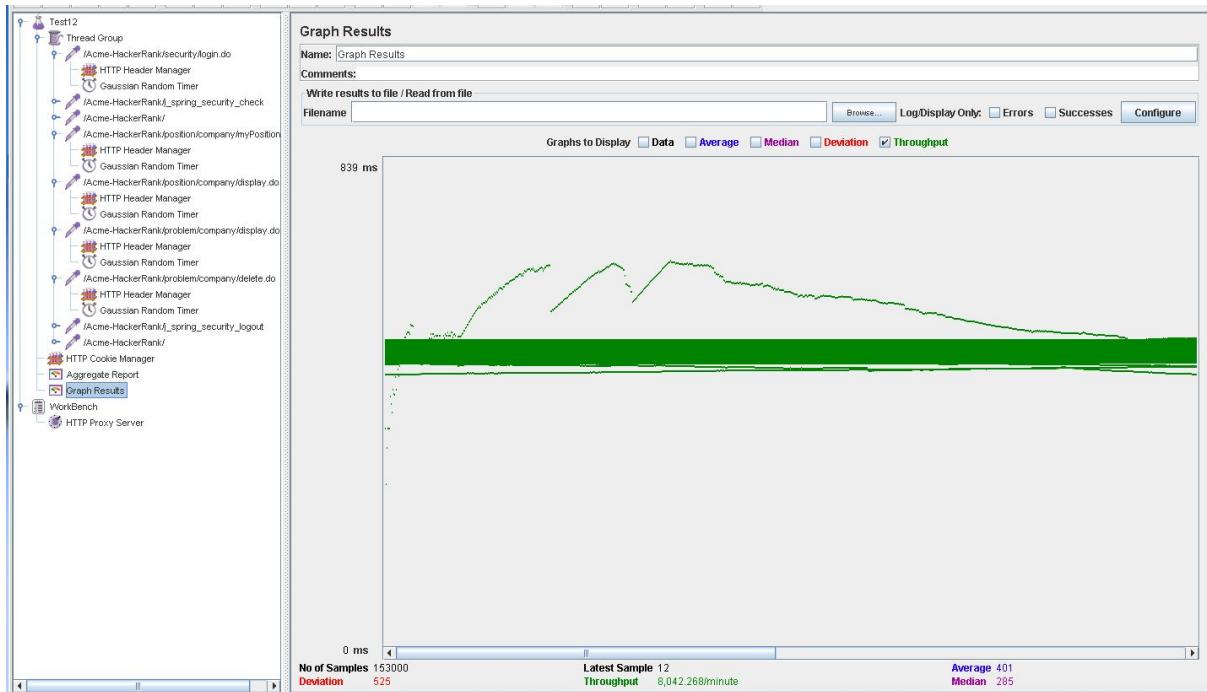
### Thread Group



### Report

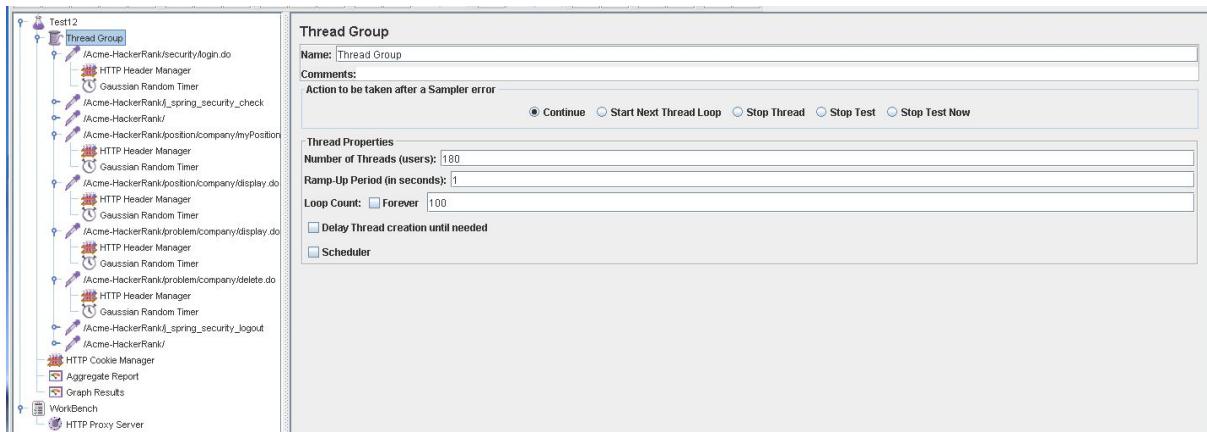


## Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 180 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group



## Report

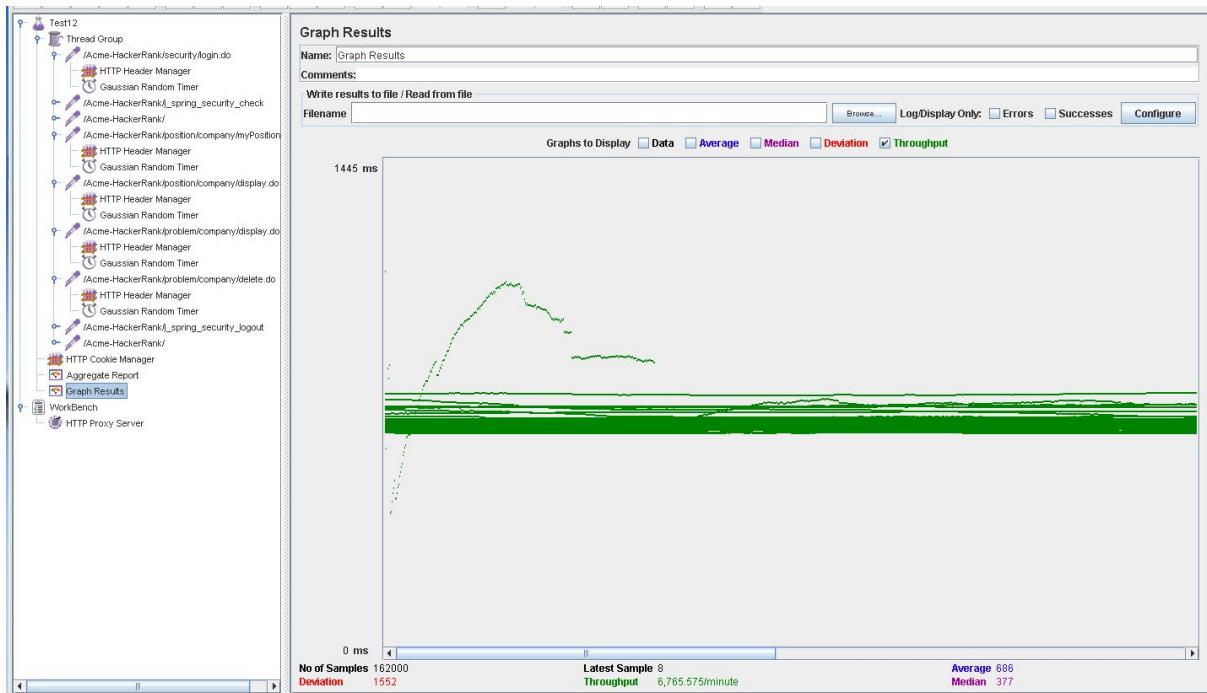
Test Plan Structure:

- Test12
  - Thread Group
    - /Acme-HackerRank/security/login.do
    - /Acme-HackerRank/\_spring\_security\_check
    - /Acme-HackerRank/
    - /Acme-HackerRank/position/company/myPosition
    - /Acme-HackerRank/problem/company/display.do
    - /Acme-HackerRank/problem/company/display.do
    - /Acme-HackerRank/problem/company/delete.do
    - /Acme-HackerRank/\_spring\_security\_logout
    - /Acme-HackerRank/
    - HTTP Cookie Manager
    - Aggregate Report
    - Graph Results
  - WorkBench
  - HTTP Proxy Server

Aggregate Report Data:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/Acme-HackerRank/security/login.do	18000	725	363	2674	2	48751	0.00%	12.6/sec	53.6
/Acme-HackerRank/_spring_security_check	18000	736	518	1045	5	61142	0.00%	12.6/sec	64.3
/Acme-HackerRank/	36000	547	316	1034	2	48468	0.00%	25.1/sec	110.0
/Acme-HackerRank/position/company/myPositions.do	18000	748	373	2715	6	48054	0.00%	12.6/sec	109.2
/Acme-HackerRank/position/company/display.do	18000	726	363	1639	6	47378	0.00%	12.6/sec	77.4
/Acme-HackerRank/problem/company/display.do	18000	736	361	1649	3	48485	0.00%	12.6/sec	161.3
/Acme-HackerRank/problem/company/delete.do	18000	758	365	2663	3	48103	0.00%	12.6/sec	161.2
/Acme-HackerRank/_spring_security_logout	18000	652	345	1278	4	62087	0.00%	12.6/sec	52.6
TOTAL	162000	686	377	1837	2	62087	0.00%	112.8/sec	786.4

## Graph



## 4.11 List applications to their positions, grouped by status

**Descripción del ordenador que ha realizado el caso de uso:**

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

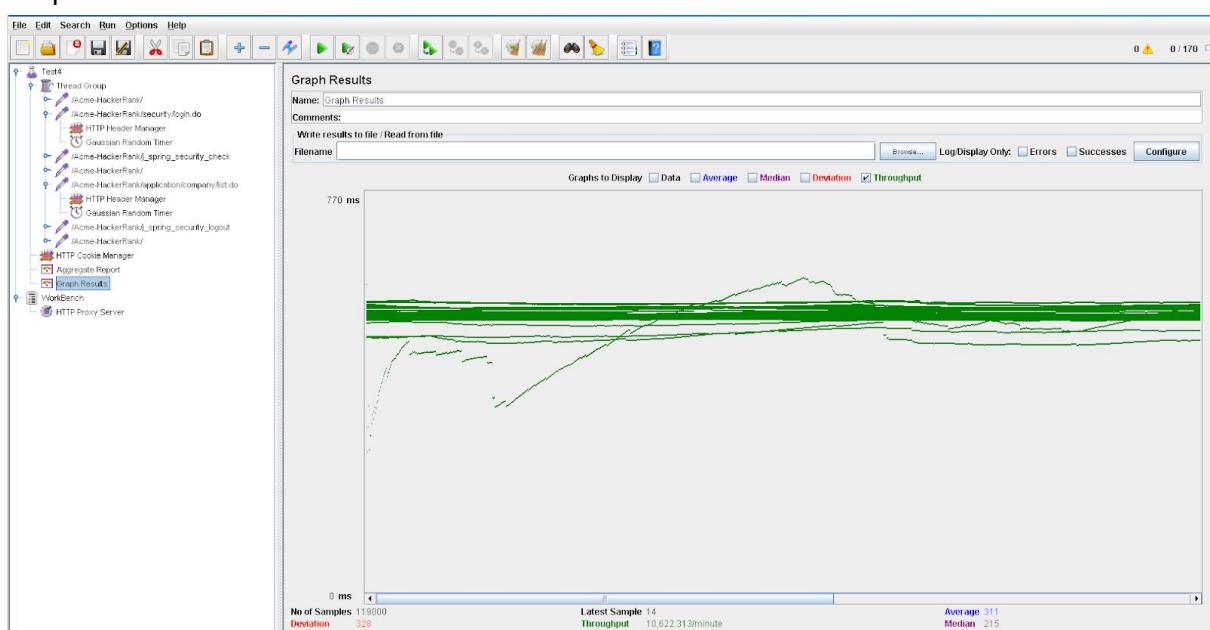
**Caso Positivo:** El sistema, en este caso, es capaz de soportar 170 clientes.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/_security/login.do	51000	202	156	419	2	2423	0.00%	75.9/sec	316.6
Acme-HackerRank/_security/login.do	17000	375	258	921	2	4094	0.00%	26.4/sec	106.2
Acme-HackerRank/_spring_security_check	17000	457	393	875	3	2300	0.00%	25.4/sec	125.3
Acme-HackerRank/_application/company/list.do	17000	367	205	972	10	2410	0.00%	25.4/sec	177.7
Acme-HackerRank/_spring_security_logout	17000	367	280	831	2	2356	0.00%	25.4/sec	105.1
<b>TOTAL</b>	119000	311	215	797	2	4094	0.00%	177.0/sec	828.7

### Graph



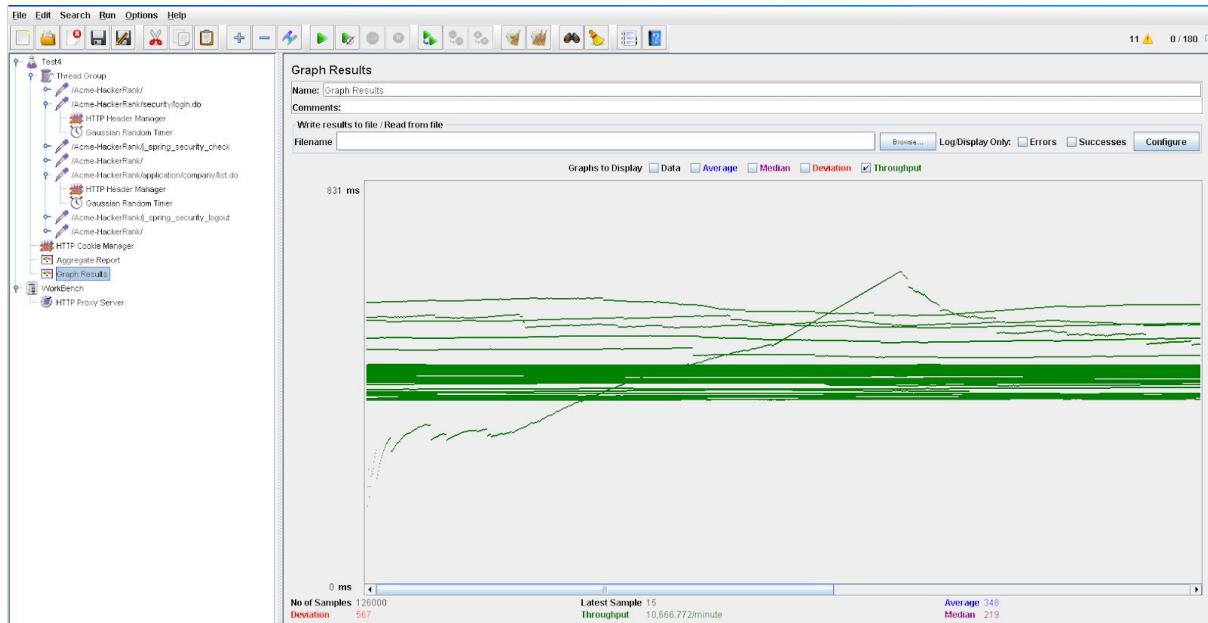
**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 180 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/_security/login.do	54000	216	154	461	2	17157	0.02%	76.2/sec	317.9
Acme-HackerRank/_security/logout.do	18000	413	251	893	2	17609	0.00%	25.5/sec	106.6
Acme-HackerRank/_spring_security_check	18000	555	421	1326	3	17220	0.00%	20.5/sec	125.5
Acme-HackerRank/_application/companylist.do	18000	593	211	1017	11	17597	0.00%	25.5/sec	173.2
Acme-HackerRank/_spring_security_logout	18000	432	302	941	2	16640	0.00%	25.5/sec	105.4
<b>TOTAL</b>	<b>126000</b>	<b>348</b>	<b>219</b>	<b>819</b>	<b>2</b>	<b>17609</b>	<b>0.02%</b>	<b>177.6/sec</b>	<b>832.2</b>

### Graph



## 4.12 Display applications to their positions

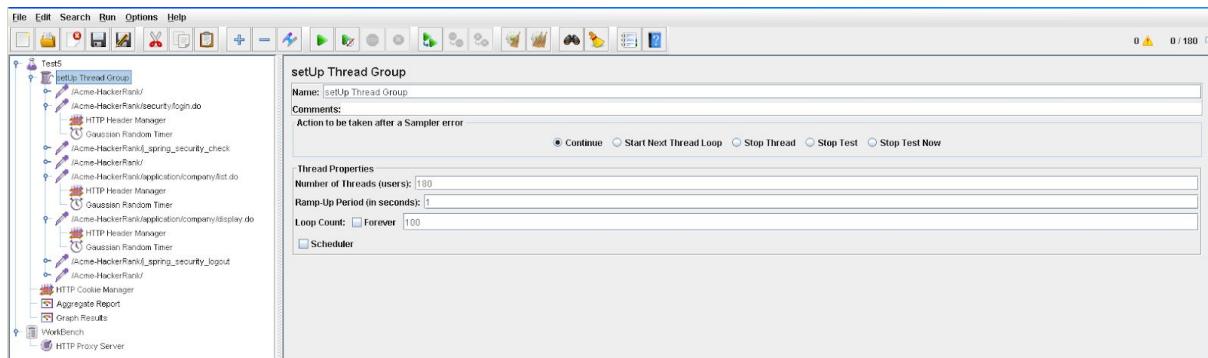
Descripción del ordenador que ha realizado el caso de uso:

MacBook Pro:

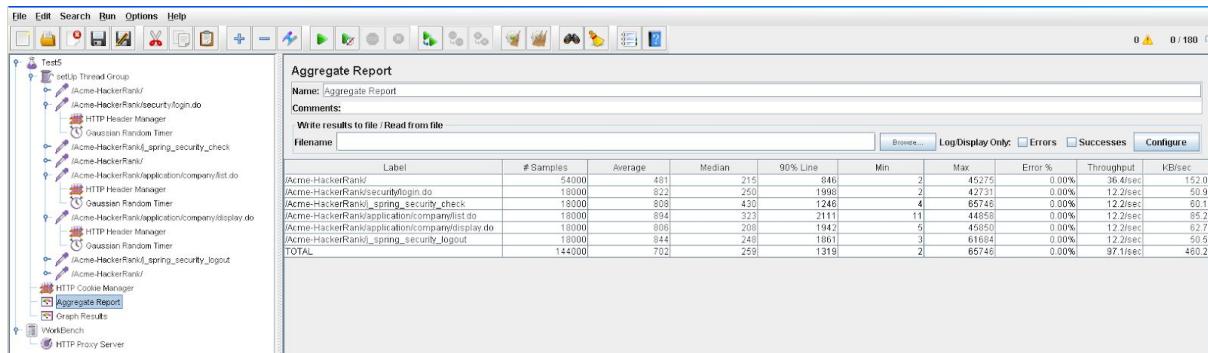
- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 180 clientes.

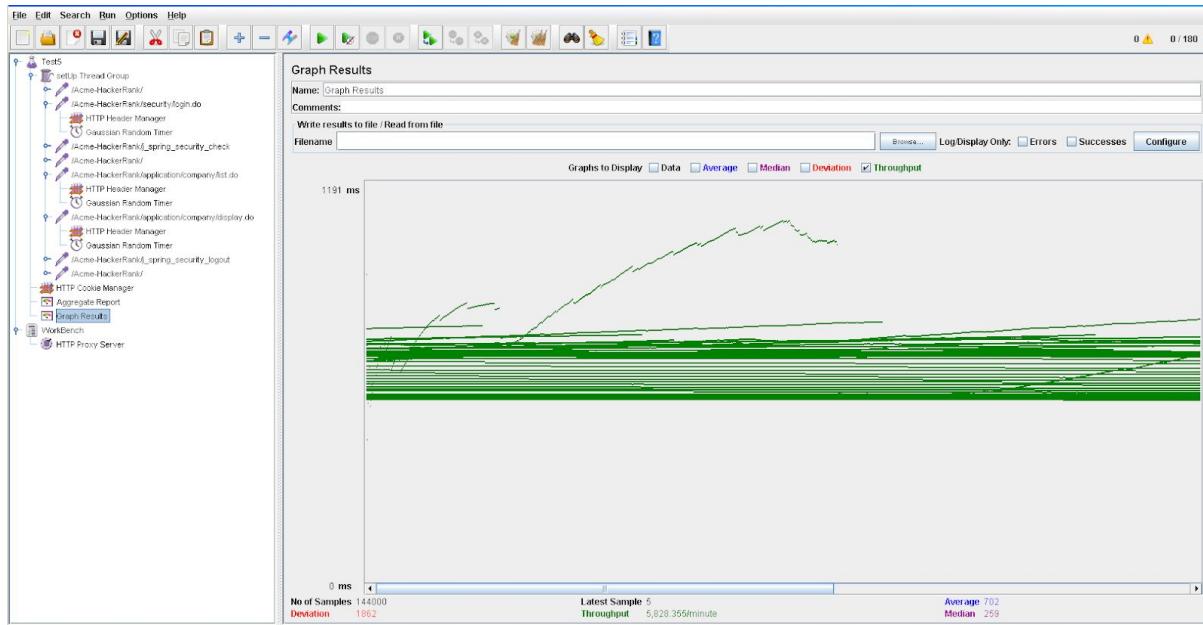
### Thread Group



### Report

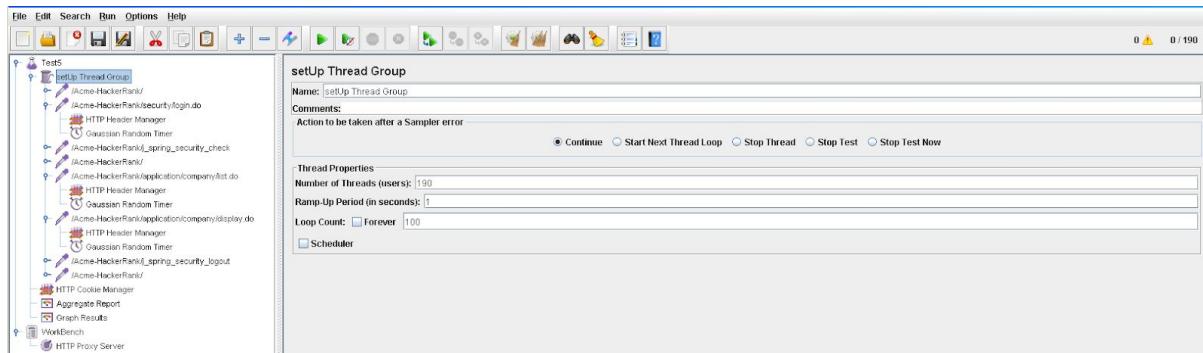


## Graph

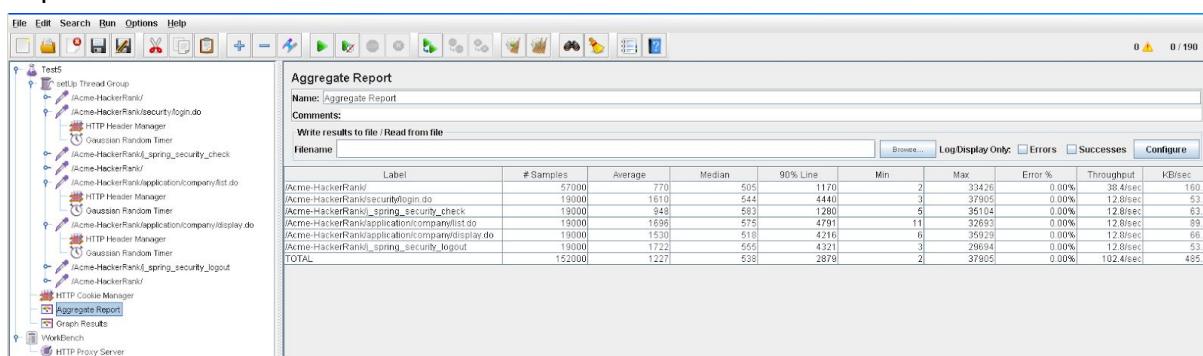


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 190 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

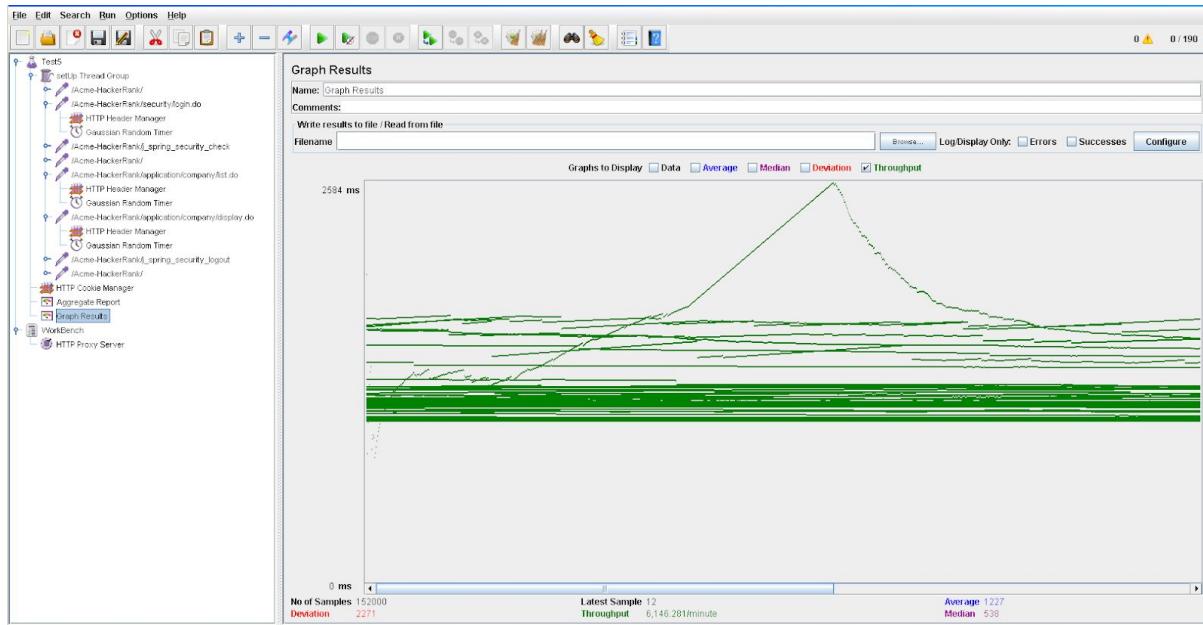
## Thread Group



## Report



## Graph



## 4.13 Update applications to their positions (change its status from SUBMITTED to ACCEPTED)

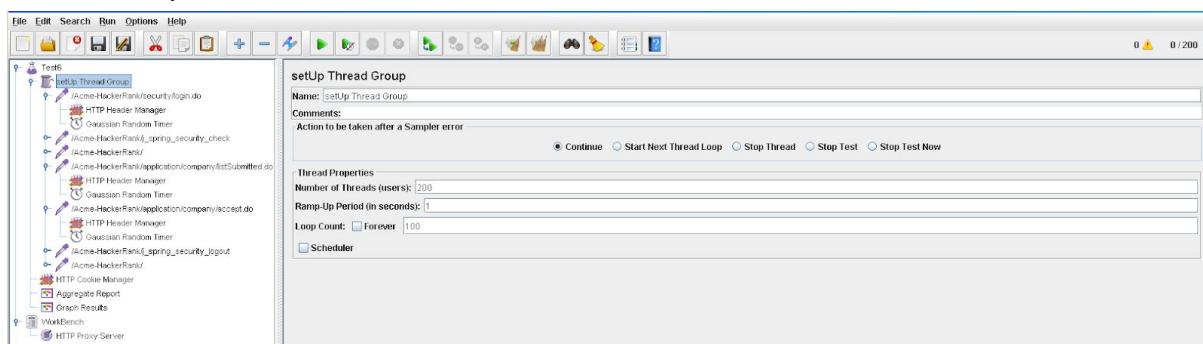
**Descripción del ordenador que ha realizado el caso de uso:**

MacBook Pro:

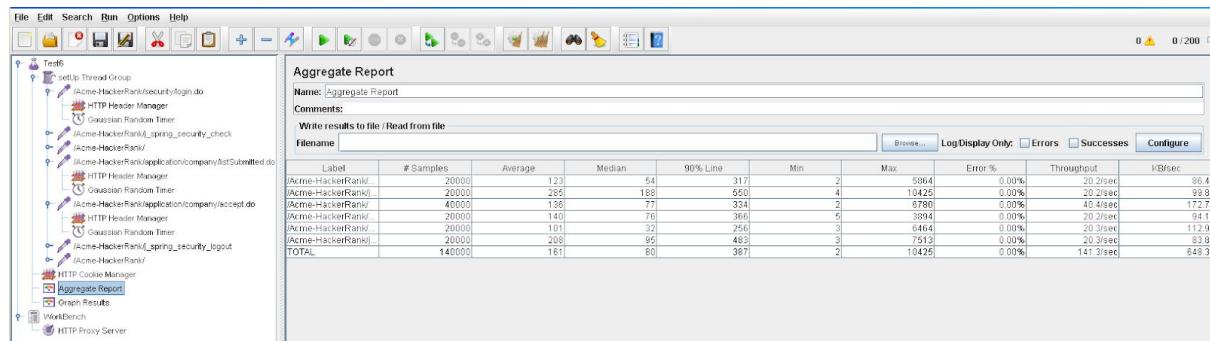
- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 200 clientes.

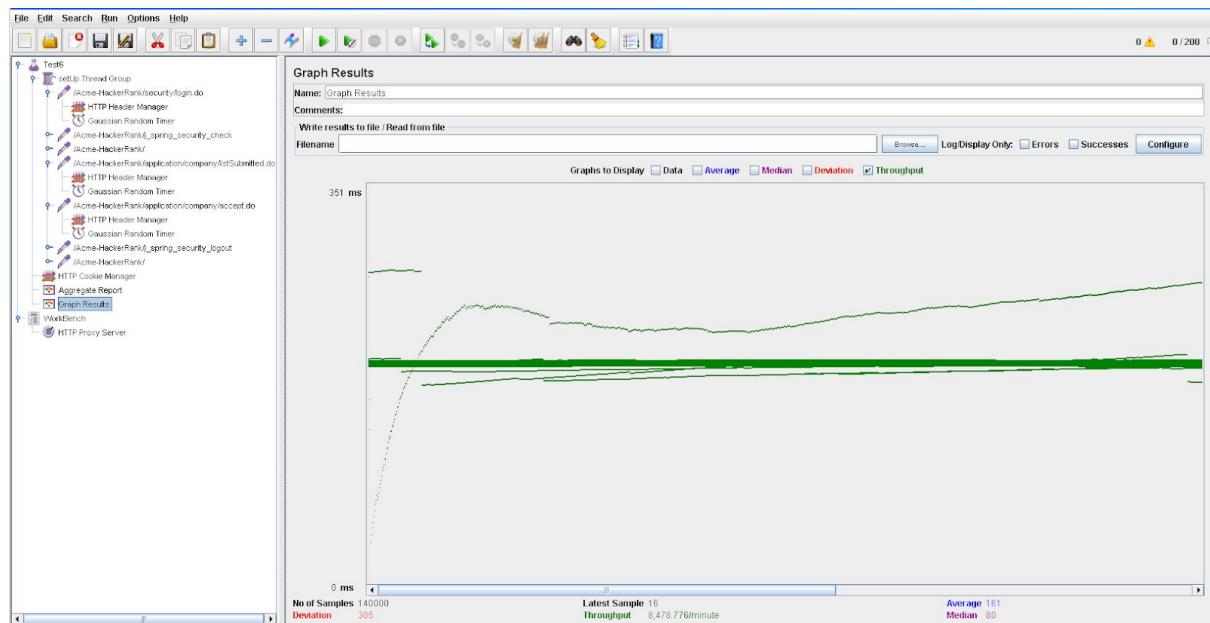
## Thread Group



## Report

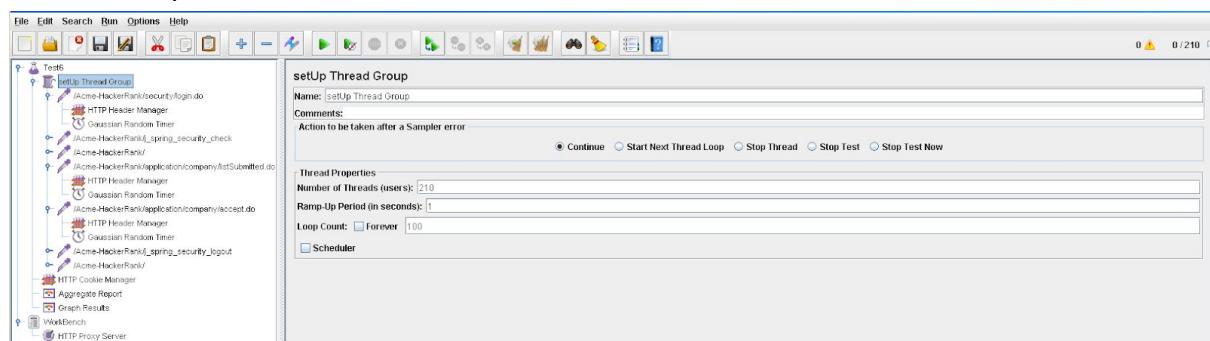


## Graph

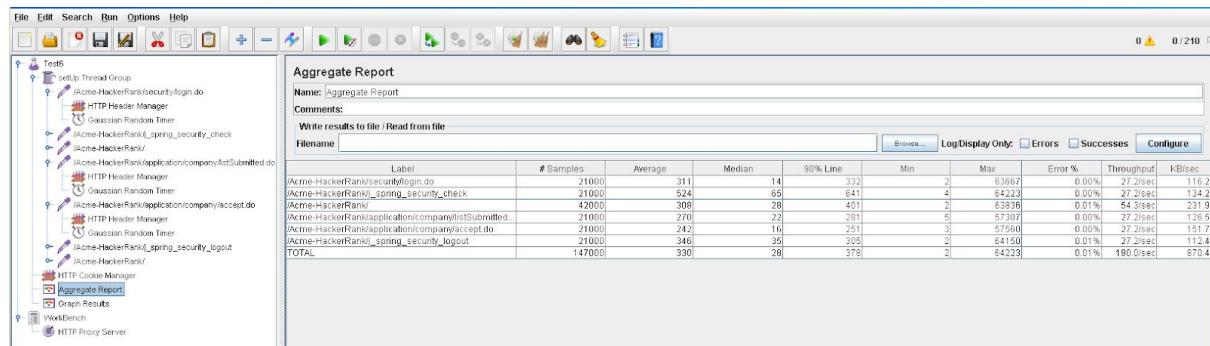


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 210 clientes, ya que hay % de error en una request cuando hace su acción indicada.

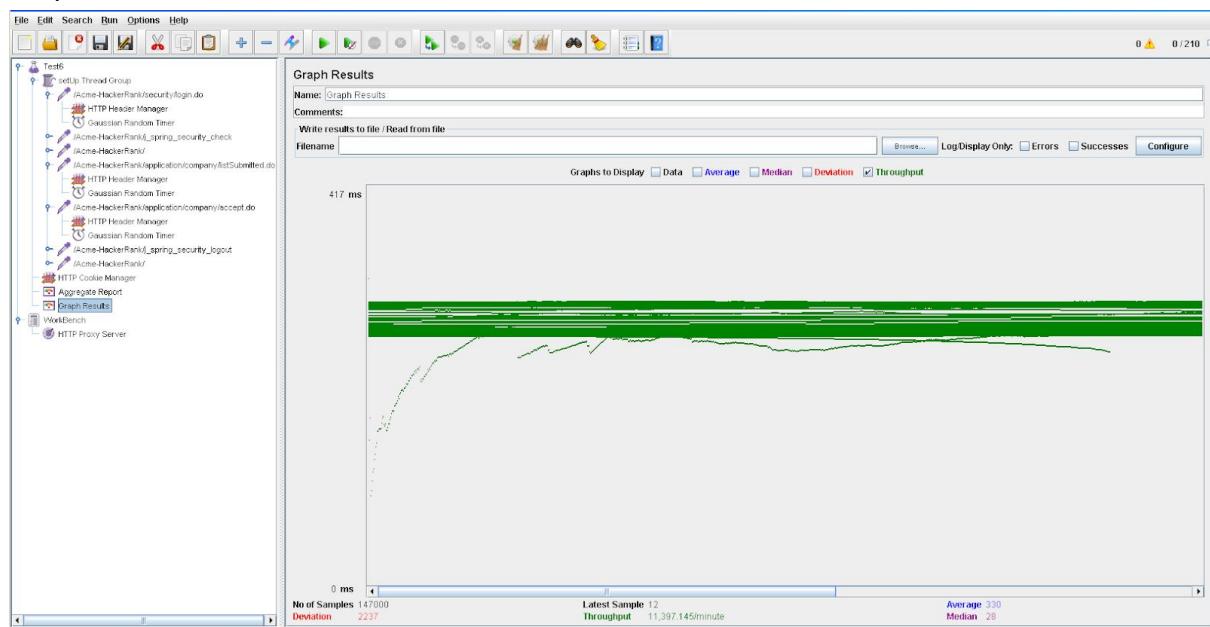
## Thread Group



## Report



## Graph



## 4.14 Update applications to their positions (change its status from SUBMITTED to REJECTED)

**Descripción del ordenador que ha realizado el caso de uso:**

MacBook Pro:

- Procesador: 2,3GHz Intel Core i5
- Memoria RAM: 8 GB 2133 MHz LPDDR3

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 70 clientes.

### Thread Group

The screenshot shows the JMeter interface with a test plan containing a single thread group named "setUp Thread Group". The thread group has the following properties:

- Name: setUp Thread Group
- Comments: Action to be taken after a Sampler error
- Number of Threads (users): 70
- Ramp-Up Period (in seconds): 1
- Loop Count: Forever 100
- Scheduler: Unchecked

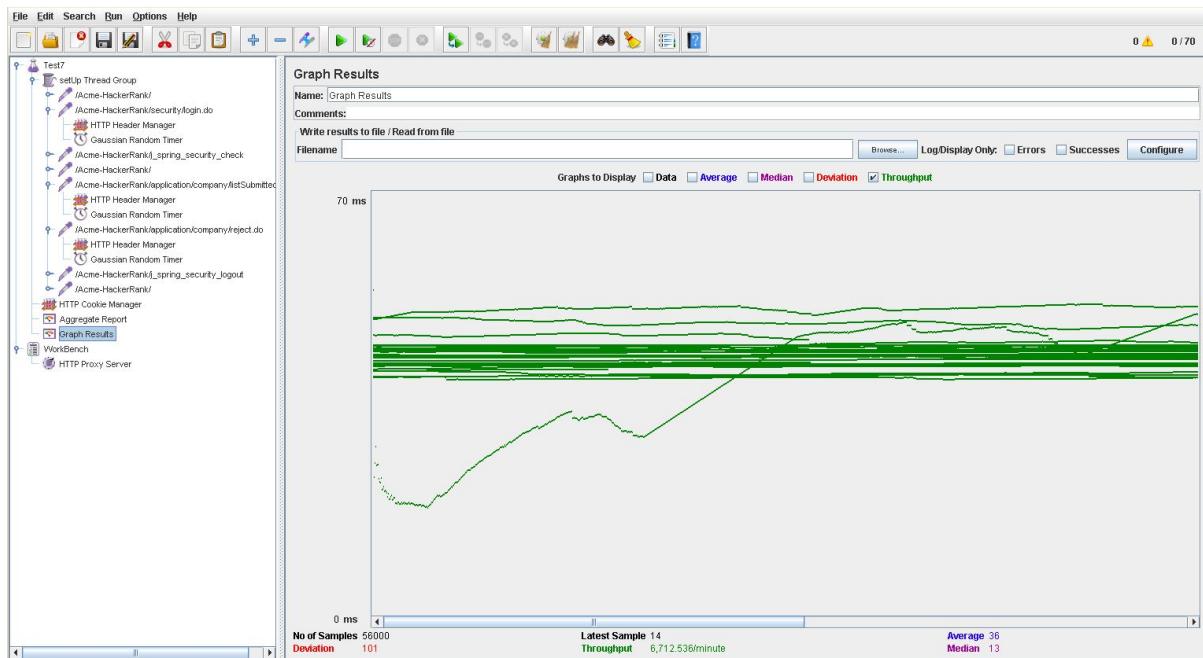
The left sidebar shows other elements like "Aggregate Report" and "Graph Results".

### Report

The screenshot shows the JMeter interface with a report titled "Aggregate Report" for the same test plan. The report displays the following summary statistics:

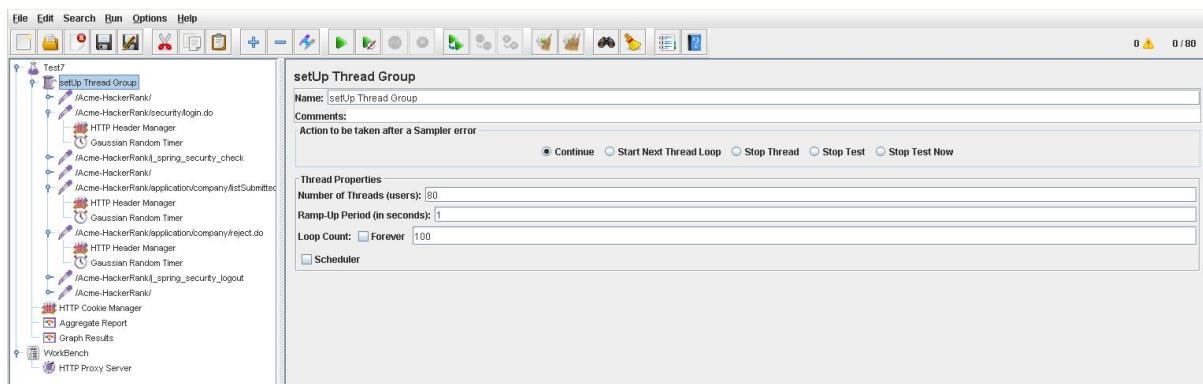
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	kB/sec
(Acme-HackerRank)	21000	31	11	58	2	3282	0.00%	42.0/sec	178.7
(Acme-HackerRank)/security/login.do	7000	27	8	43	3	3900	0.00%	14.1/sec	59.9
(Acme-HackerRank)/spring_security_check	7000	52	19	101	3	3595	0.00%	14.1/sec	72.0
(Acme-HackerRank)/application/company/listSubmitted.do	7000	39	19	75	6	2912	0.00%	14.1/sec	67.4
(Acme-HackerRank)/application/company/reject.do	7000	39	14	73	6	2508	0.00%	14.1/sec	67.5
(Acme-HackerRank)/spring_security_logout	7000	38	14	68	2	2770	0.00%	14.1/sec	58.7
TOTAL	56000	36	13	67	2	3900	0.00%	111.9/sec	500.4

## Graph

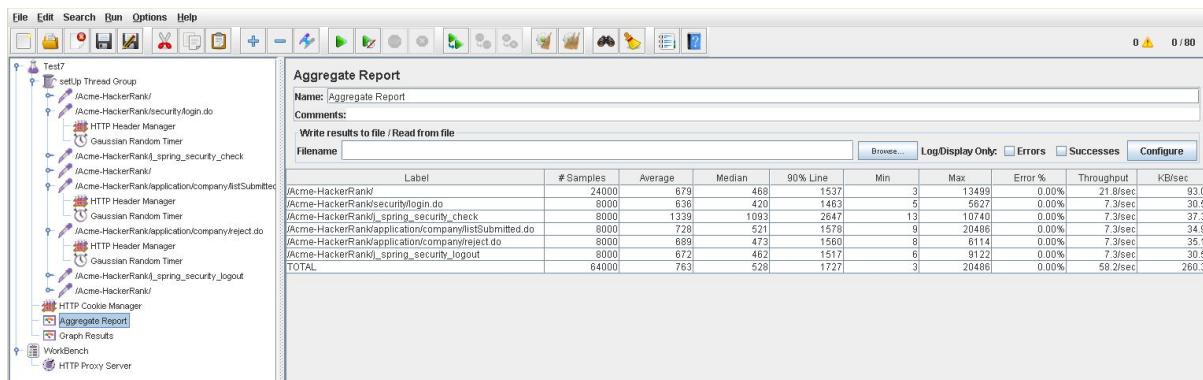


**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 80 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

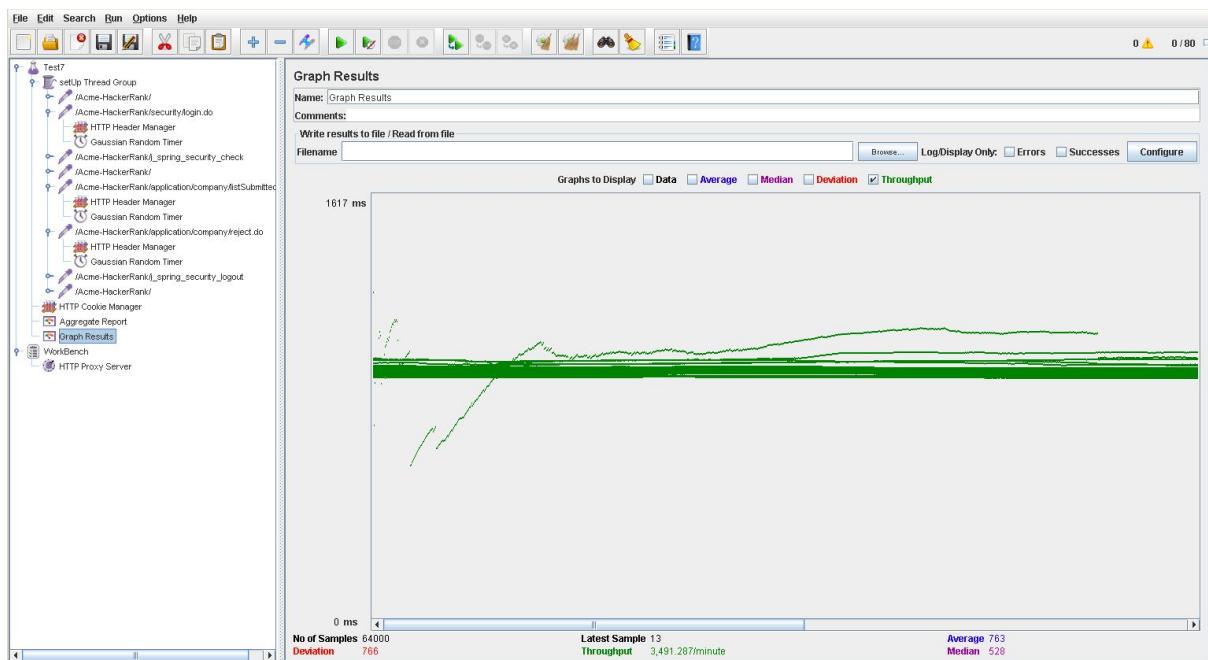
## Thread Group



## Report



## Graph



# 5. Admin use cases

## 5.1 Create new administrator

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 150 clientes.

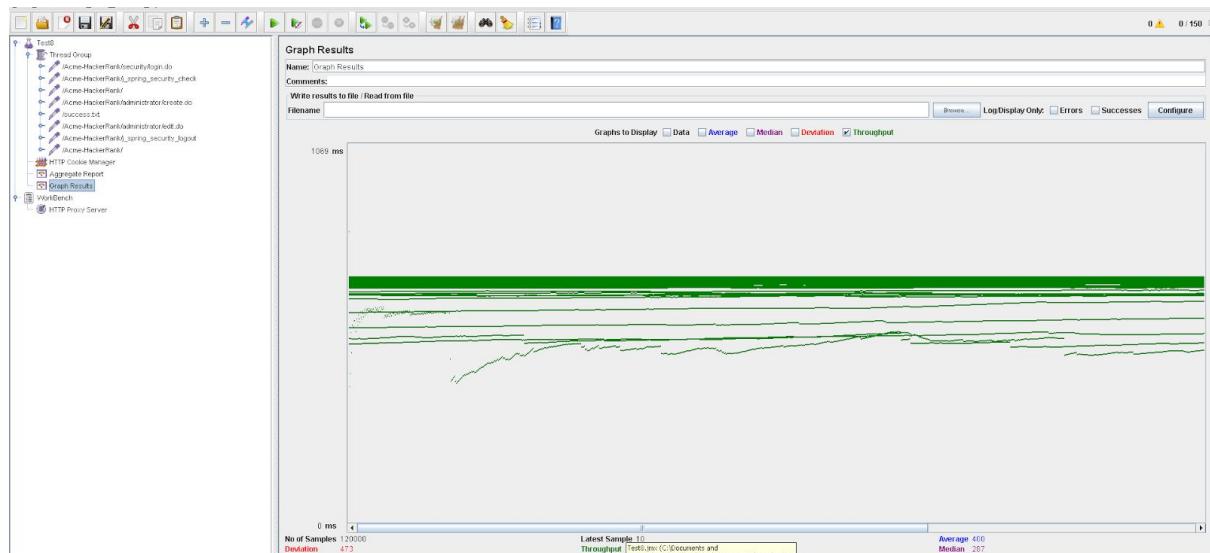
### Thread Group

Thread Group  
Name: Thread Group  
Comments:  
Action to be taken after a Sampler error  
Number of Threads (users): 150  
Ramp-Up Period (in seconds): 1  
Loop Count:  Forever 100  
 Delay thread creation until needed  
 Scheduler

### Report

Label	# Samples	Average	Median	99% Line	Min	Max	Err %	Throughput	HP/Sec
Acme-HackerRand/succ...	15000	328	19	771	5	1490	0.00%	14.9/sec	63.4
Acme-HackerRand_tp...	15000	505	51.6	1583	6	6173	0.00%	14.9/sec	71.7
Acme-HackerRand...	30000	422	397	914	4	5216	0.00%	29.3/sec	128.0
Acme-HackerRand/admin...	15000	345	239	809	9	4996	0.00%	14.9/sec	131.6
Successes	150000	68	29	67	11	7152	0.00%	14.9/sec	5.8
Acme-HackerRand/tp...	15000	405	294	660	10	1121	0.00%	14.9/sec	123.3
Acme-HackerRand_tp...	15000	502	39.8	1128	6	9255	0.00%	14.9/sec	62.0
<b>TOTAL</b>	<b>120000</b>	<b>400</b>	<b>287</b>	<b>662</b>	<b>4</b>	<b>14061</b>	<b>0.00%</b>	<b>119.0/sec</b>	<b>692.0</b>

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 160 clientes, ya que supera los 3 segundos (2550 ms en el 90% line), tiempo que hemos estimado para que una request haga su acción indicada.

## Thread Group

Screenshot of the JMeter Thread Group configuration:

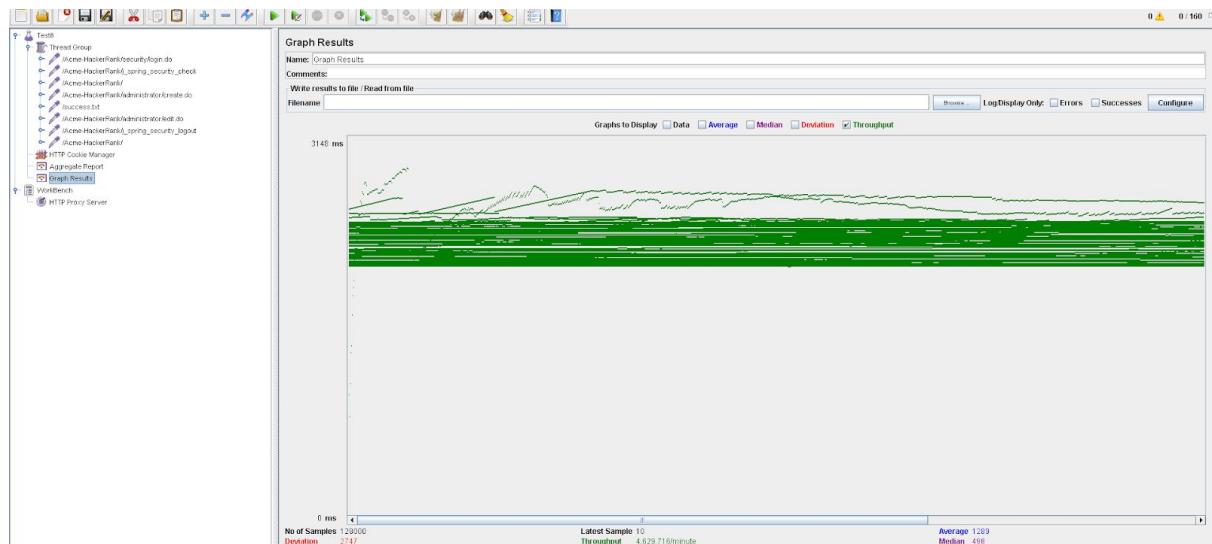
- Name:** Thread Group
- Comments:** Action to be taken after a Sampler error
- Number of Threads (users):** 160
- Ramp-Up Period (in seconds):** 1
- Loop Count:** Forever (100)
- Thread Properties:**
  - Delay thread creation until needed
  - Scheduler

## Report

Screenshot of the JMeter Aggregate Report:

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerPark/accru...	16000	1634	695	4243	4	60759	0.00%	9.7/sec	41.1
Acme-HackerPark/ep...	16000	1542	697	2669	8	50373	0.00%	9.7/sec	45.6
Acme-HackerPark/jdm...	16000	3204	1056	4931	4	32320	0.00%	13.0/sec	62.1
Acme-HackerPark/vadm...	16000	1712	695	4514	10	64298	0.00%	9.7/sec	65.1
success_bt	16000	36	25	43	10	3029	0.00%	9.7/sec	3.6
Acme-HackerPark/vadm...	16000	1986	632	4393	16	49319	0.00%	9.7/sec	65.1
Acme-HackerPark/vadm...	16000	1570	631	3874	2	40221	0.00%	9.7/sec	62.4
Total	129000	1269	493	2703	3	60759	0.00%	77.2/sec	384.1

## Graph



## 5.2 Display dashboard

**Descripción del ordenador que ha realizado el caso de uso:**

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 150 clientes.

### Thread Group

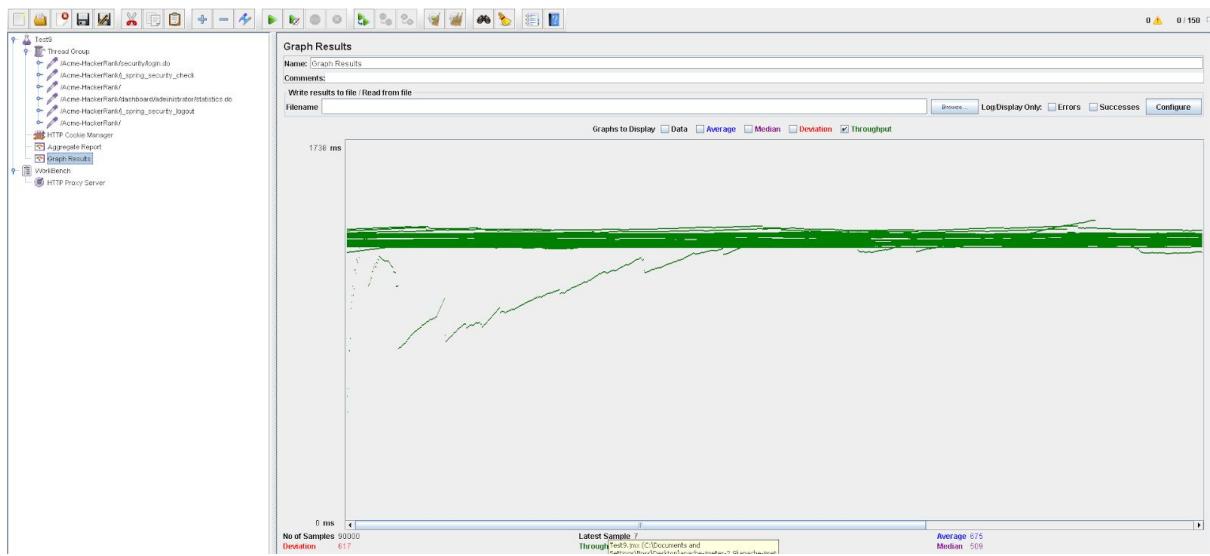
The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Name' field is set to 'Thread group'. The 'Number of Threads (users)' is set to 150. The 'Ramp-Up Period in seconds' is set to 1. The 'Loop Count' is set to 'Forever'. Other options like 'Delay Thread creation until needed' and 'Scheduler' are unchecked.

### Report

The screenshot shows the 'Aggregate Report' section of the JMeter interface. It displays a table of results for 150 threads. The columns include Label, # Samples, Average, Median, 99% Line, Min, Max, Error %, Throughput, and kB/sec. The data shows various requests like 'Acme-HackerRand\_d...\_do...' with their respective metrics.

Label	# Samples	Average	Median	99% Line	Min	Max	Error %	Throughput	kB/sec
Acme-HackerRand_d..._do...	15000	753	478	1899	5	4094	0.00%	15.4/sec	65.5
Acme-HackerRand_d..._sp...	15000	915	812	1793	5	4542	0.00%	15.4/sec	74.2
Acme-HackerRand_d..._sp...	30000	429	358	889	4	4246	0.00%	30.8/sec	139.6
Acme-HackerRand_d..._sp...	15000	815	801	1542	26	4276	0.00%	15.4/sec	165.9
Acme-HackerRand_d..._sp...	15000	712	641	1253	2	4220	0.00%	15.4/sec	64.5
Acme-HackerRand_d..._sp...	90000	675	598	1475	4	4542	0.00%	92.3/sec	441.0

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 160 clientes, ya que hay % de error en una request cuando hace su acción indicada.

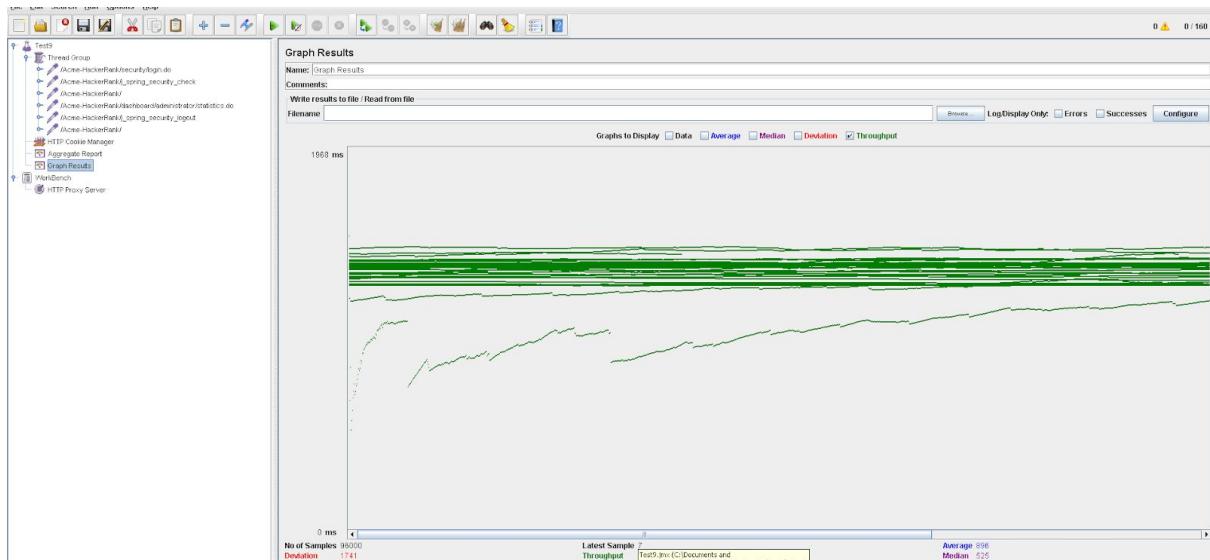
### Thread Group

Thread Group  
Name: Thread group  
Comments:  
Action to be taken after a Sampler error  
Number of Threads (users): 160  
Ramp Up Period in seconds: 1  
Loop Count:  Forever [100]  
 Delay Thread creation until needed  
 Scheduler

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/secu...	16000	1092	429	2120	1	43202	0.90%	15.2/sec	64.0
Acme-HackerRank_secu...	16000	1177	638	2685	1	38937	0.90%	15.2/sec	73.4
Acme-HackerRank...	16000	206	393	1103	1	46577	0.90%	30.4/sec	129.8
Acme-HackerRank/das...	16000	1942	693	2164	20	49107	0.90%	15.2/sec	105.6
Acme-HackerRank_das...	16000	845	694	1752	2	56980	0.90%	15.2/sec	63.6
TOTAL	96000	886	625	1630	1	56300	0.95%	91.1/sec	435.4

### Graph



## 5.3 Notify data branch

Descripción del ordenador que ha realizado el caso de uso:

Toshiba Satelite P50B10V:

-Procesador: 2,5GHz Intel Core i7

-Memoria RAM: 8 GB

**Caso Positivo:** El sistema, en este caso, es capaz de soportar 150 clientes.

### Thread Group

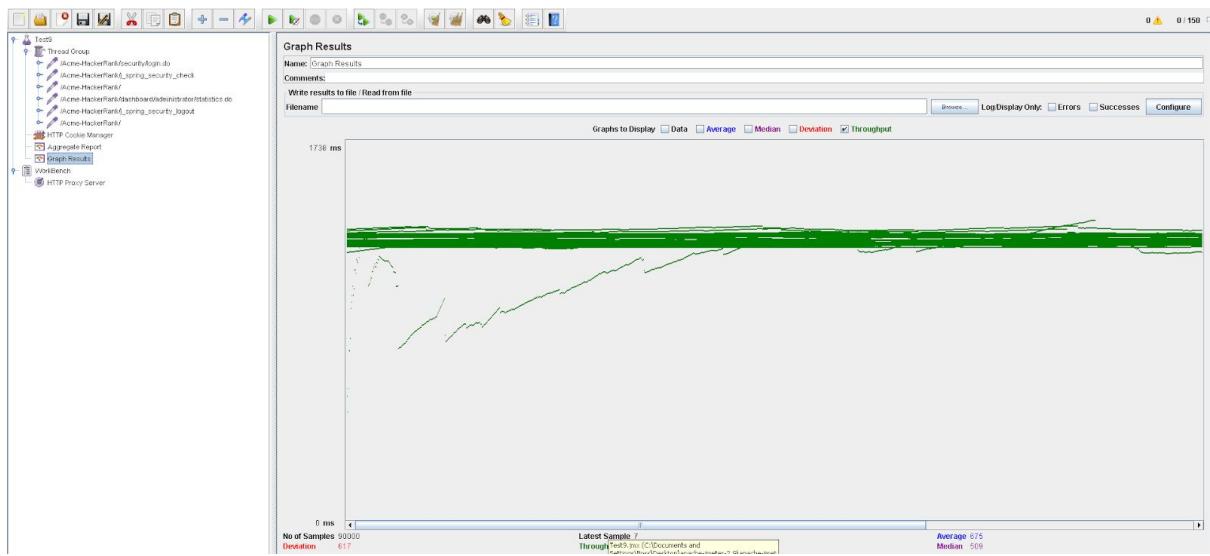
The screenshot shows the JMeter interface with the 'Thread Group' configuration open. The 'Name' field is 'Thread group'. The 'Comments' field contains the note: 'Action to be taken after a Sampler error'. Under 'Thread Properties', the 'Number of Threads (users)' is set to 150, and the 'Ramp-Up Period in seconds' is 1. The 'Loop Count' is set to 'Forever'.

### Report

The screenshot shows the 'Aggregate Report' section of the JMeter results. It displays performance metrics for 150 users. The average response time is 753 ms, the median is 478 ms, and the throughput is 65.5 kB/sec. Other metrics shown include 99% Line (1899 ms), Min (5 ms), Max (4094 ms), Error % (0.00%), and Throughput (65.5 kB/sec).

Label	# Samples	Average	Median	99% Line	Min	Max	Error %	Throughput	kB/sec
Armen-HackerRank_dg...	15000	753	478	1899	5	4094	0.00%	15.49sec	65.5
Armen-HackerRank_dg...	15000	915	812	1793	5	4542	0.00%	15.49sec	74.2
Armen-HackerRank_M...	30000	429	358	889	4	4246	0.00%	30.8sec	130.6
Armen-HackerRank_dg...	15000	815	581	1542	26	4276	0.00%	15.48sec	105.9
Armen-HackerRank_dg...	15000	712	641	1253	2	4220	0.00%	15.49sec	64.5
Armen-HackerRank_dg...	90000	675	598	1475	4	4542	0.00%	92.33sec	441.0

### Graph



**Caso Negativo:** El sistema, en este caso, no es capaz de soportar 160 clientes, ya que hay % de error en una request cuando hace su acción indicada.

### Thread Group

Thread Group  
Name: Thread group  
Comments:  
Action to be taken after a Sampler error  
Number of Threads (users): 160  
Ramp Up Period in seconds: 1  
Loop Count:  Forever [100]  
 Delay Thread creation until needed  
 Scheduler

### Report

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
Acme-HackerRank/secu...	16000	1092	429	2120	1	43202	0.90%	15.2/sec	64.0
Acme-HackerRank_secu...	16000	1177	638	2685	1	38937	0.90%	15.2/sec	73.4
Acme-HackerRank...	16000	206	393	1103	1	46577	0.90%	30.4/sec	129.8
Acme-HackerRank/das...	16000	1942	693	2164	20	49107	0.90%	15.2/sec	165.6
Acme-HackerRank_das...	16000	845	694	1752	2	56980	0.90%	15.2/sec	63.6
<b>Total:</b>	<b>96000</b>	<b>886</b>	<b>623</b>	<b>1639</b>	<b>1</b>	<b>56360</b>	<b>0.95%</b>	<b>91.1/sec</b>	<b>435.4</b>

### Graph

