

Performance report

Acme-Antenna v1.0

Introduction

In order to evaluate the performance of the project, we split the functional requirements into use cases and developed one JMeter test per use case.

200 concurrent users were used in all tests, as when it was increased above that we got random “Connection closed by peer” type errors in JMeter, at a very low probability, which increased if we increased the number of concurrent users more. Since at 200 users the system was always stable with 0.00% errors, we decided that the system supports a maximum of 200 simultaneous users.

Use case 5.1: Register as user

In this use case the user creates an account for himself.

Aggregate Report

Name: Aggregate Report

Comments:

Write results to file / Read from file

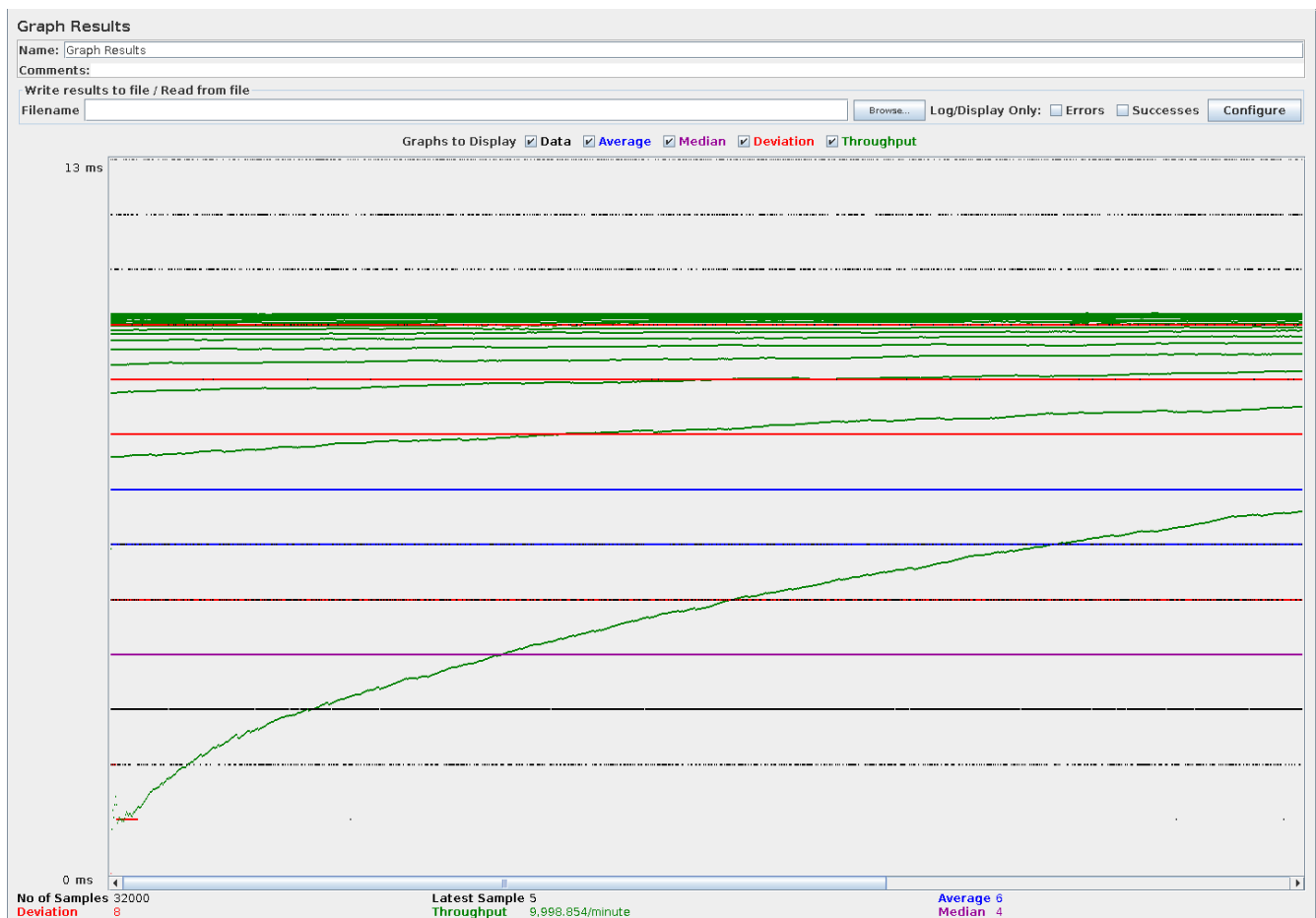
Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	8000	4	3	5	1	302	0.00%	42.4/sec	172.2
/users/new.do	8000	5	5	7	2	340	0.00%	42.3/sec	285.8
/users/create.do	8000	14	13	18	8	351	0.00%	42.3/sec	211.0
/welcome/index.do	8000	4	3	5	1	313	0.00%	42.3/sec	172.1
TOTAL	32000	6	4	14	1	351	0.00%	166.6/sec	827.9



Use case 5.2: Satellite navigation

In this use case the user lists the available satellites, displays one, and navigates to an associated platform.

Aggregate Report

Name: Aggregate Report

Comments:

Write results to file / Read from file

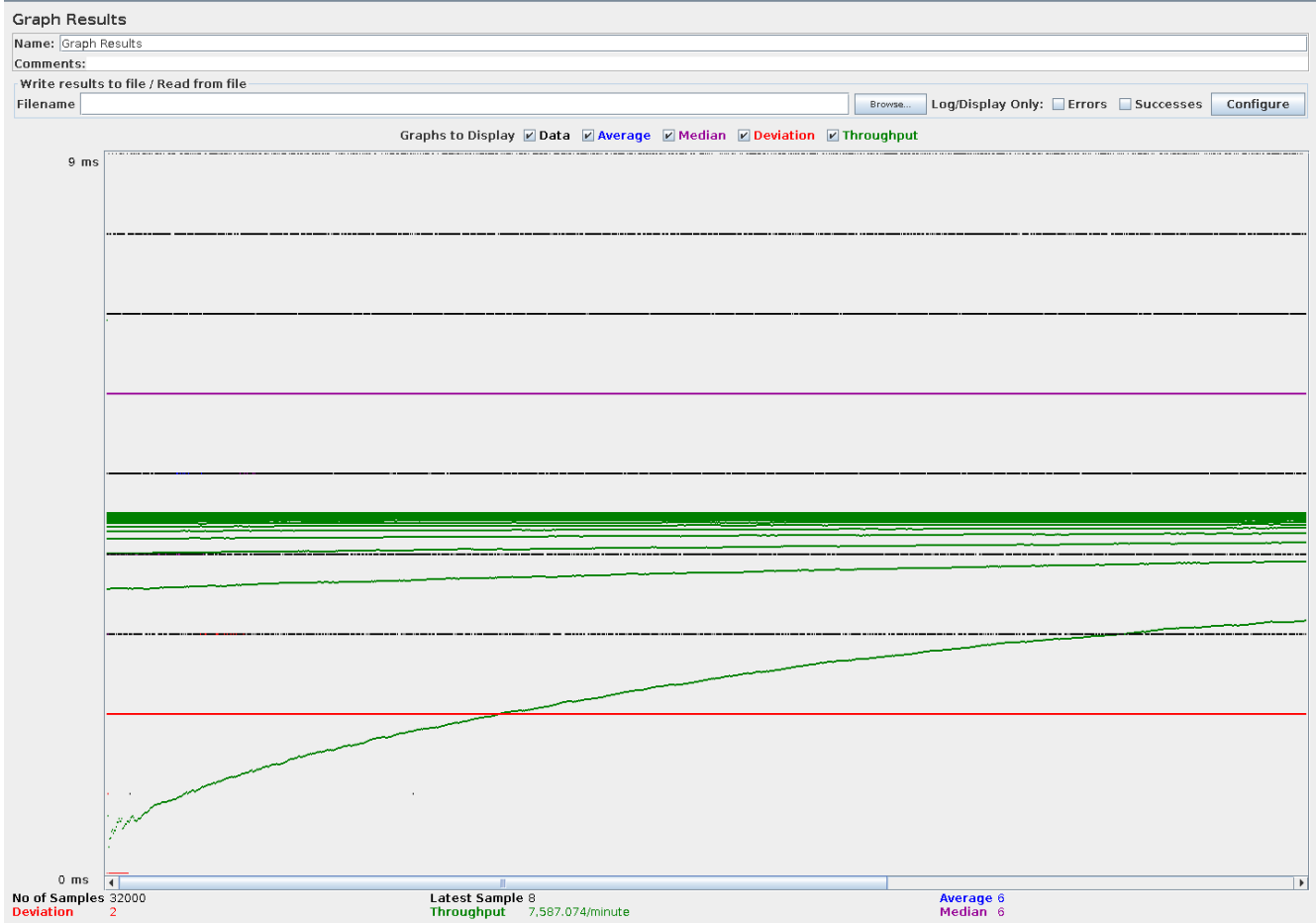
Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	8000	3	4	5	1	226	0.00%	32.2/sec	130.8
/satellites/index.do	8000	6	6	9	3	51	0.00%	32.2/sec	182.5
/satellites/show.do	8000	7	7	9	3	40	0.00%	32.2/sec	157.5
/platforms/show.do	8000	7	7	9	3	60	0.00%	32.2/sec	158.0
TOTAL	32000	6	6	9	1	226	0.00%	126.5/sec	617.8



Use case 5.3: Platform navigation

In this use case a user lists the available platform, displays one, and navigates to an associated satellite.

Aggregate Report

Name: /Aggregate Report

Comments:

Write results to file / Read from file

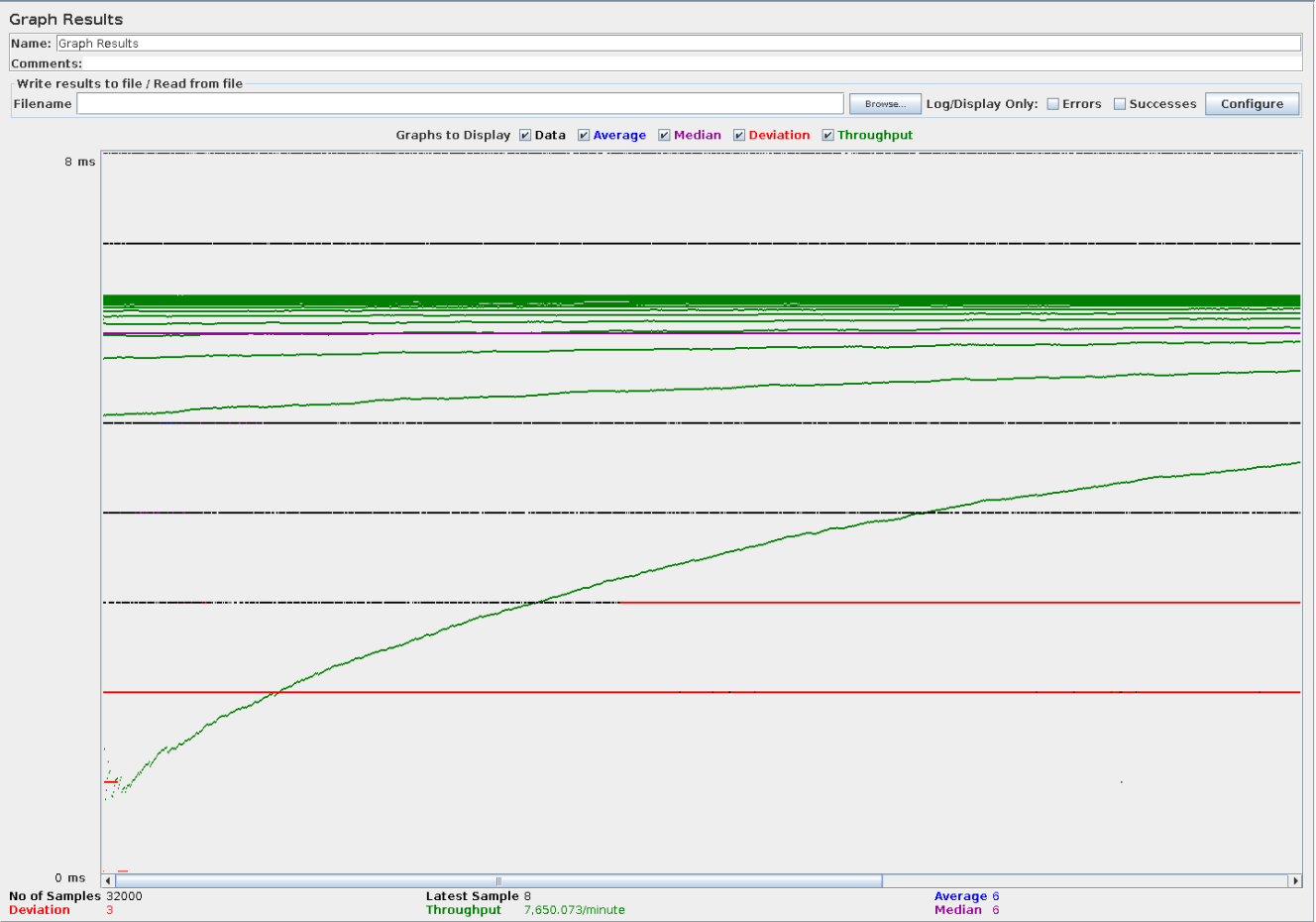
Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	8000	3	4	5	1	22	0.00%	32.5/sec	132.0
/platforms/index.do	8000	6	6	9	3	26	0.00%	32.5/sec	194.4
/platforms/show.do	8000	6	7	9	3	34	0.00%	32.5/sec	159.4
/satellites/show.do	8000	7	7	9	3	324	0.00%	32.5/sec	158.8
TOTAL	32000	6	6	9	1	324	0.00%	127.5/sec	632.9



Use case 5.4: Search for keyword

In this use case an user searches by keyword over the available platforms, then over the available satellites.

Aggregate Report

Name: /Aggregate Report

Comments:

Write results to file / Read from file

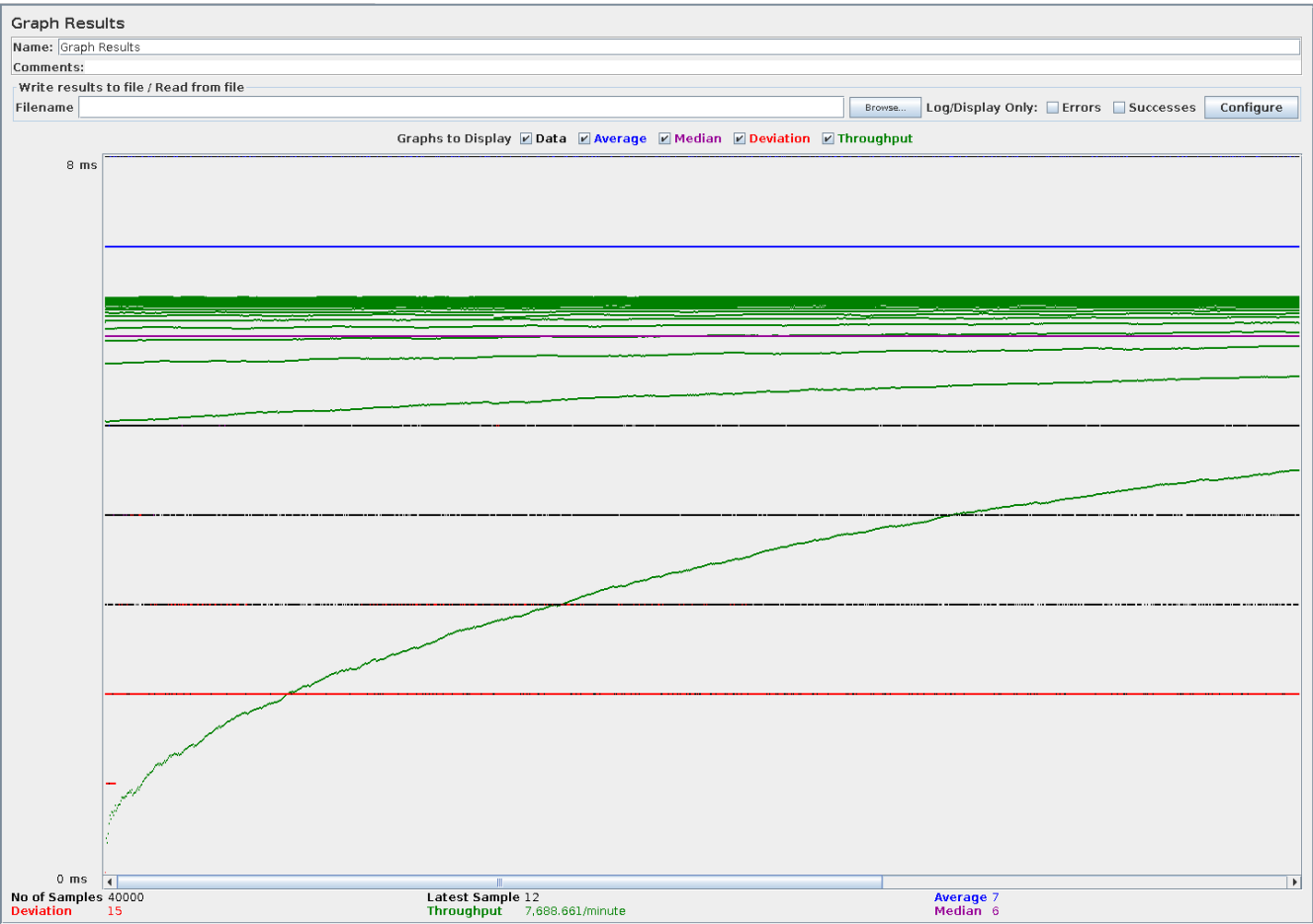
Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	8000	4	4	5	1	518	0.00%	26.1/sec	106.2
/platforms/index.do	16000	7	7	9	3	527	0.00%	52.0/sec	288.0
/satellites/index.do	16000	8	7	9	3	498	0.00%	52.0/sec	280.2
TOTAL	40000	7	6	9	1	527	0.00%	128.1/sec	664.4



Use case 6.2: Antenna management

In this use case an user lists the available antennas, then displays, creates, updates and then deletes a new antenna.

Aggregate Report

Name: Aggregate Report

Comments:

Write results to file / Read from file

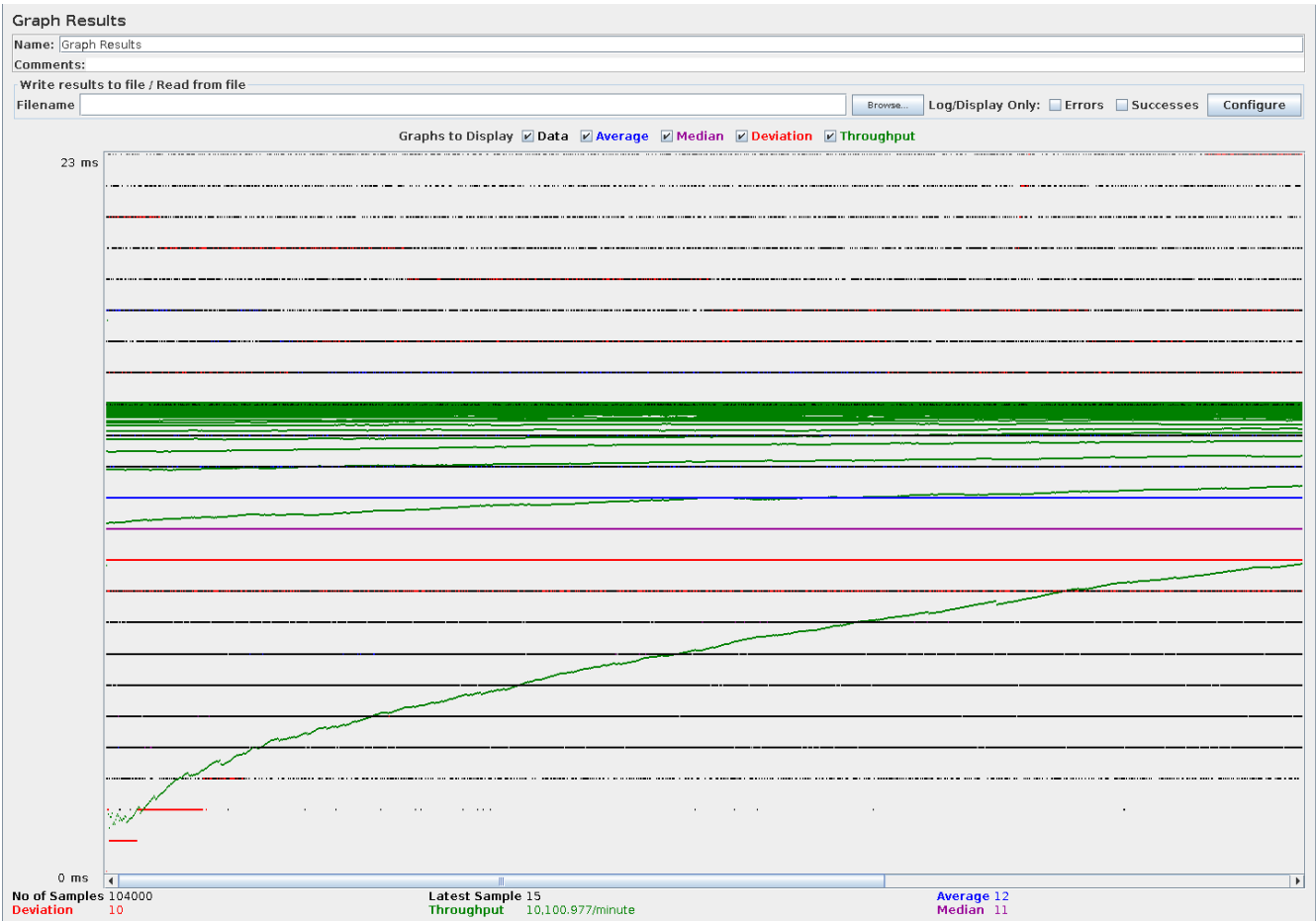
Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	16000	6	5	8	2	369	0.00%	26.4/sec	121.0
/security/login.do	8000	6	5	8	3	271	0.00%	13.2/sec	64.7
/j_spring_security.ch...	8000	10	9	14	5	140	0.00%	13.2/sec	63.7
/antennas/index.do	16000	14	13	21	7	356	0.00%	26.1/sec	238.6
/antennas/new.do	8000	11	10	17	5	296	0.00%	13.2/sec	94.2
/antennas/create.do	8000	18	15	27	10	152	0.00%	13.2/sec	79.1
/antennas/show.do	16000	8	7	12	3	304	0.00%	26.3/sec	150.0
/antennas/edit.do	8000	17	15	27	8	253	0.00%	13.2/sec	95.6
/antennas/update.do	8000	18	16	28	10	124	0.00%	13.2/sec	79.0
/antennas/delete.do	8000	22	20	32	12	306	0.00%	13.2/sec	124.6
TOTAL	104000	12	11	22	2	369	0.00%	168.3/sec	1091.0



Use case 6.3: Platform subscription

In this use case an user subscribes to a platform using a credit card.



Use case 7.1: Display administrator dashboard

In this use case an user displays the administrator dashboard.

Aggregate Report

Name: Aggregate Report

Comments:

Write results to file / Read from file

Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

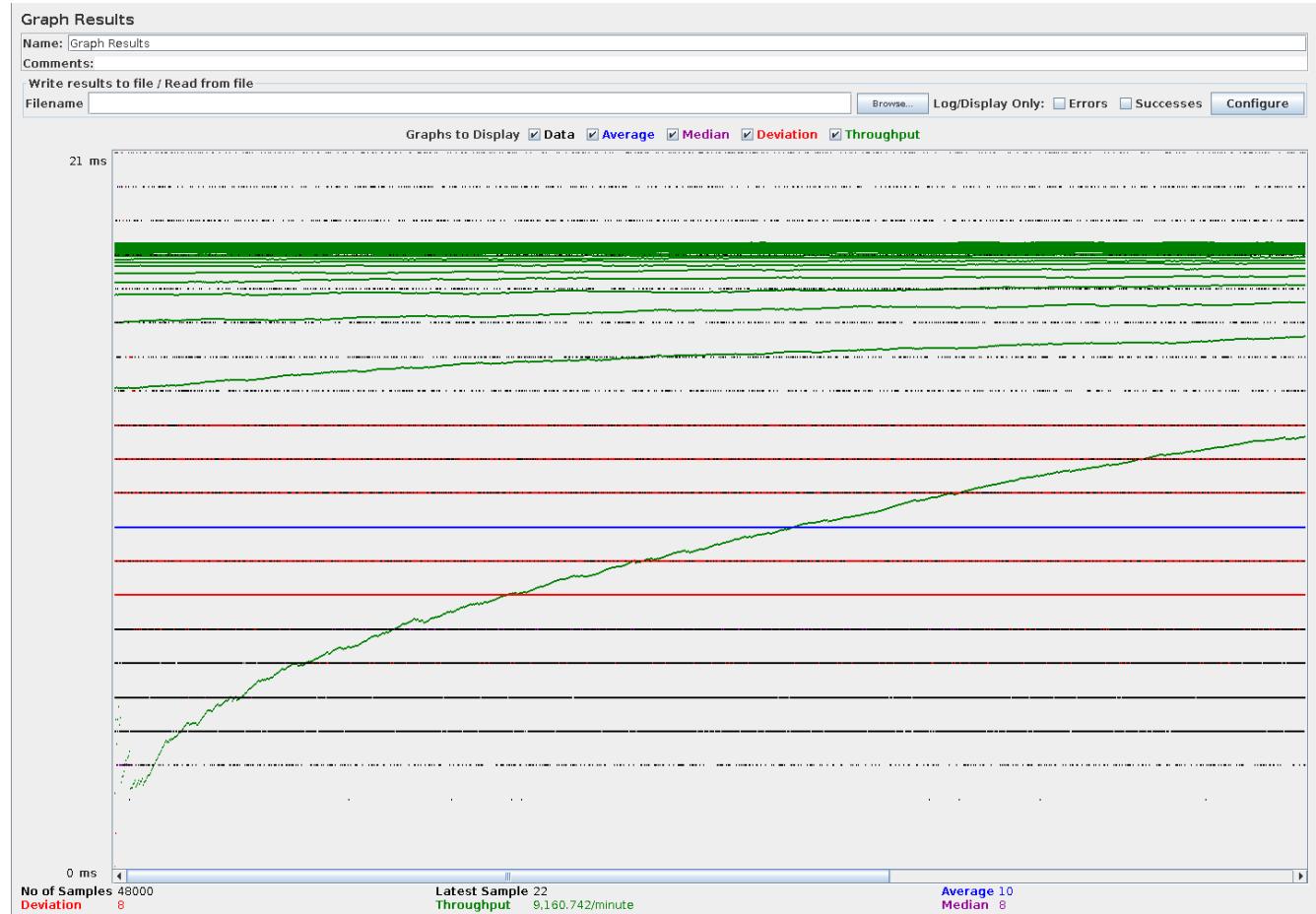
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	16000	6	5	8	2	56	0.00%	63.7/sec	275.3
/security/login.do	8000	5	5	7	2	36	0.00%	32.2/sec	148.8
/j.spring_security_ch...	8000	9	9	13	5	47	0.00%	32.2/sec	146.2
/administrators/das...	8000	22	20	30	12	89	0.00%	32.3/sec	246.2
TOTAL	40000	9	7	21	2	89	0.00%	158.3/sec	805.2



Use case 15.2: List and display tutorial

In this use case an user lists the available tutorials, then displays one.

Aggregate Report											
Name: Aggregate Report											
Comments:											
Write results to file / Read from file											
Filename											
Log/Display Only: <input type="checkbox"/> Errors <input type="checkbox"/> Successes <input type="button" value="Configure"/>											
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec		
/	16000	6	5	8	2	112	0.00%	51.4/sec	235.9		
/security/login.do	8000	6	6	8	2	70	0.00%	26.0/sec	126.8		
/j_spring_security_ch...	8000	10	9	14	5	119	0.00%	26.0/sec	124.8		
/tutorials/index.do	8000	10	9	14	5	137	0.00%	26.0/sec	185.0		
/tutorials/show.do	8000	21	19	30	11	272	0.00%	25.9/sec	614.9		
TOTAL	48000	10	8	19	2	272	0.00%	152.7/sec	1265.0		



Use case 15.3: Tutorial management

In this use case an user creates, then updates a tutorial.

Aggregate Report

Name:

Aggregate Report

Comments:

Write results to file / Read from file

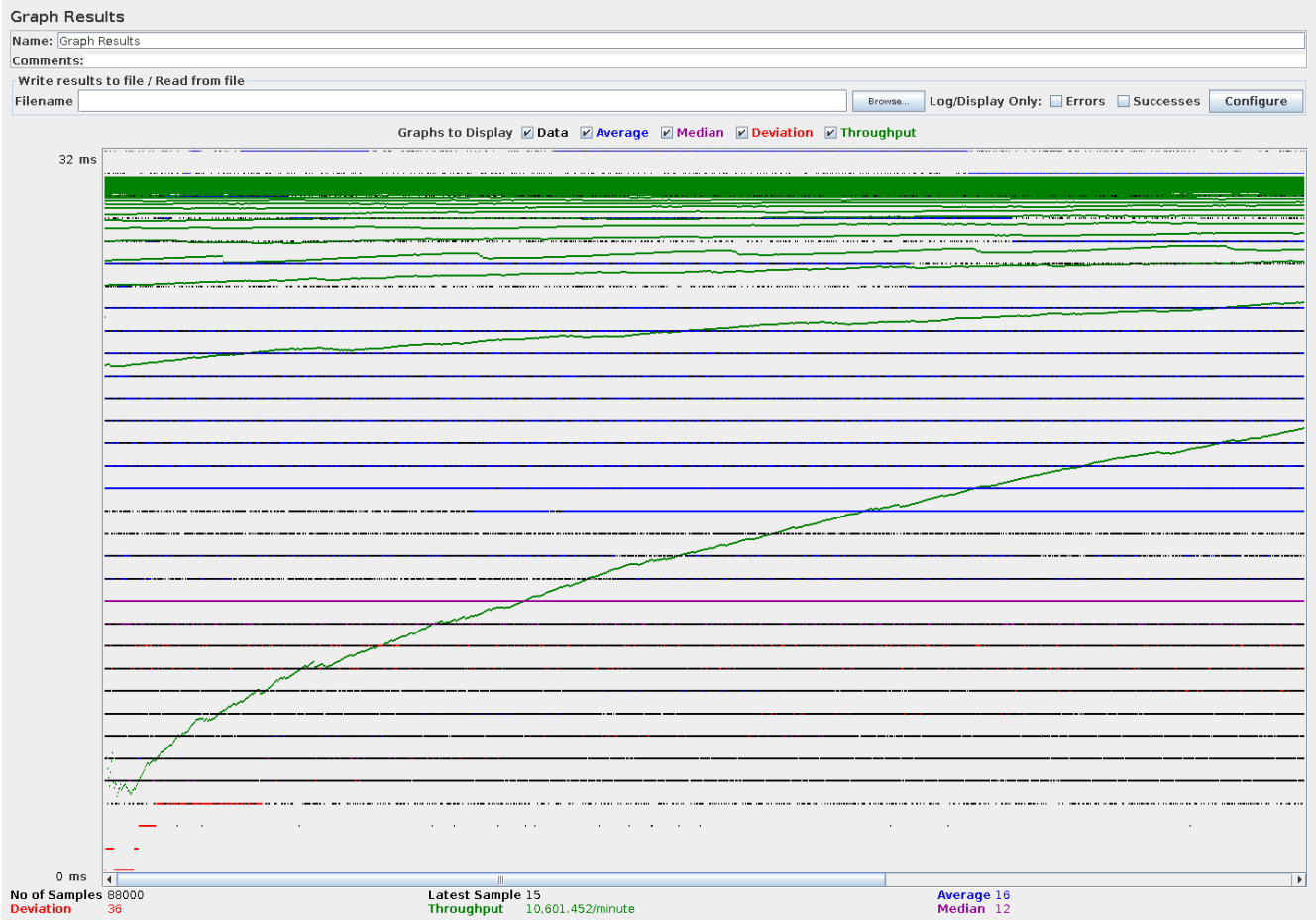
Filename

Browse...

Log/Display Only: ☐ Errors ☐ Successes

Configure

Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec
/	16000	8	5	11	2	1701	0.00%	32.6/sec	149.7
/security/login.do	8000	7	6	11	2	530	0.00%	16.4/sec	80.1
/j.spring.security.ch...	8000	12	10	20	5	775	0.00%	16.4/sec	78.9
/tutorials/index.do	8000	26	23	35	13	1696	0.00%	16.4/sec	123.8
/tutorials/new.do	8000	13	9	19	4	1453	0.00%	16.4/sec	100.4
/tutorials/create.do	8000	28	22	47	12	878	0.00%	16.4/sec	114.9
/tutorials/show.do	16000	19	13	30	6	1726	0.00%	32.6/sec	219.6
/tutorials/edit.do	8000	13	10	20	5	1184	0.00%	16.4/sec	101.7
/tutorials/update.do	8000	29	23	47	13	1139	0.00%	16.4/sec	115.1
TOTAL	88000	16	12	30	2	1726	0.00%	176.7/sec	1064.0



Use case 15.4: Commenting on tutorials.

In this use case an user writes a comment on a tutorial.

Aggregate Report											
Name: <input type="text" value="Aggregate Report"/>											
Comments: <input type="text"/>											
Write results to file / Read from file											
Filename <input type="text"/>	<input type="button" value="Browse..."/>		Log/Display Only: <input type="checkbox"/> Errors <input type="checkbox"/> Successes		<input type="button" value="Configure"/>						
Label	# Samples	Average	Median	90% Line	Min	Max	Error %	Throughput	KB/sec		
/	16000	4	4	8	1	85	0.00%	42.9/sec	197.1		
/security/login.do	8000	5	4	8	2	41	0.00%	21.6/sec	105.6		
/j_spring_securi...	8000	8	7	14	3	55	0.00%	21.6/sec	104.0		
/tutorials/index...	8000	7	6	10	3	53	0.00%	21.6/sec	154.2		
/tutorials/show...	16000	26	15	56	6	119	0.00%	43.1/sec	777.5		
/tutorials/creat...	8000	45	57	69	11	175	0.00%	21.6/sec	396.1		
TOTAL	64000	16	8	55	1	175	0.00%	169.6/sec	1704.8		

