

Task 9

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Date: 3/14/2023

1 Goal

Test the system under regular load, perform volume testing with different kinds of test data, determine KPI and calculate it.

Data types that are used to perform volume testing:

1 Testing with different number of the text posts 100, 1000, 2000, 5000.

2 Testing with media information and compare results for 1000 text posts and 1000 posts with a text and attached 1Mb photo

As a Regular load, 70% of the System Capacity was taken, namely 27 users, including 23 with the role of anonymous, and two each with the roles of admin and editor.

High-level description of the load model: Testing for a combined scenario describing scenarios for simultaneous work with the BlogEngine.NET 3.2. by users with the roles admin, editor, anonymous.

Testing scenario: simulating user behavior on the site, where:

Admin - Open home page, log in as Admin user, open Admin's page, check number of Anonymous users and decide to add or delete user, finally Log out

Editor - Open home page, log in as an Editor user, open a predefined date, open a random post and edit it, rapid it 50 times, and finally Log out.

Anonymous user - visits different pages, opens posts and leave comments.

Test environment: test application and load generator are running on the same computer. Application is executed on the virtual machine and the load generator is executed on the host.

2 Summary

Volume testing application BlogEngine .NET 3.2 (web) with test data as different numbers of text posts (100, 1000, 2000, 5000) showed the dependence of key Performance Indicators on the number of posts existing in the system.

So Throughput avg for 100 posts was 33 rps, for 1000 posts it decreased to 28 rps and decreased to 22 and 11 for 2000 and 5000 posts respectively.

The change in the number of posts had the same noticeable effect on the response time. So if we compare the total average response time for all requests for 100 posts, then for 1000 posts it increased by 1.9 times, for 2000 posts by 3.4 times and for 5000 posts by 9 times.

Average error rate also significantly depends on the number of posts existing in the system, although it remains within 1%. So Average error rate is 0.1% for 100 posts, 0.3% for 1000 posts, 0.6% for 2000 posts and 0.7% for 5000 posts.

At the same time, the impact on the average CPU usage and Memory usage was not so significant. These parameters remained within 93-99% for average CPU usage and within 81-85% for average Memory usage.

Volume testing application BlogEngine .NET 3.2 (web) with test data as different data types for the same number of posts (compare results for 1000 text posts and 1000 posts with a text and attached 1Mb photo) showed the dependence of some Key Performance Indicators.

So Throughput avg for 1000 text posts was 28 rps, for 1000 posts with media it decreased by 14% to 24 rps.

A more noticeable impact of different types of data had on the response time. So if we compare the overall average response time for all requests for 1000 text posts, then for 1000 posts with media it increased by 85%.

Average error rate, as well as the average values of CPU usage and Memory usage, did not change significantly.

Note: The error rate generally stays under 1%, with the exception of the "Editpost" (TC_Ed_Editpost) and "Add users" (TC_Ad_Add user) requests, which is between 8% and 47% of this type of request. The error is reproduced through the GUI while there is a load. This percentage of errors looks unacceptable in terms of user experience for the "editor" role.

	100_txt_posts	1000_txt_posts	2000_txt_posts	5000_txt_posts	1000_img_posts	1000_img_posts
Error rate TC_Ed_Editpost	8%	31%	47%	34%	26%	26%
Error rate leave a comment	0%	0%	1%	2%	1%	0.7%
Error rate Open Random post	-	0%	-	0%	-	-
Error rate TC_Ad_Add user	2%	4%	6%	6%	5%	4.6%
Error rate TC_Open Home page	-	-	0%	0%	0%	0.1%
Error rate Open first post	-	-	-	0%	-	-
Error rate TC_start_Open Home page	-	-	-	1%	-	-
Error rate TC_Search by Name	-	-	0%	0%	-	-
Error rate TC_Open Random Date	-	-	0%	0%	-	-
Error rate TC_Open Predefined Date	-	0%	-	0%	-	-

3 What was tested

BlogEngine.NET 3.2 (web) (Executed on the application server)

Parameters of the system under test:

VirtualBox Graphical User Interface Version 7.0.4 r154605 (Qt5.15.2), Windows Server 2016 Standard (64-bit)

OS Name: Microsoft Windows 10 Enterprise, (64-bit) Version 10.0.19044 Build 19044

Base memory: 2,0Gb

Processor: Intel(R) Core(TM) i7-10610U CPU @ 1.80GHz, 2304 Mhz, 1 Core(s), 1 Logical Processor(s)

Storage: Virtual size 60.00 GB

Network: Bridged adapter, Intel® Wi-Fi 6 AX201 160Mhz

4 Load generator system options

Load generator tool: Apache JMeter 5.5 (Executed on Host)

OS Name: Microsoft Windows 10 Enterprise (64-bit) Version 10.0.19045 Build 19045

Base memory: 32,0 GB

Processor: Intel(R) Core(TM) i7-10610U CPU @ 1.80GHz, 2304 Mhz, 4 Core(s), 8 Logical Processor(s)

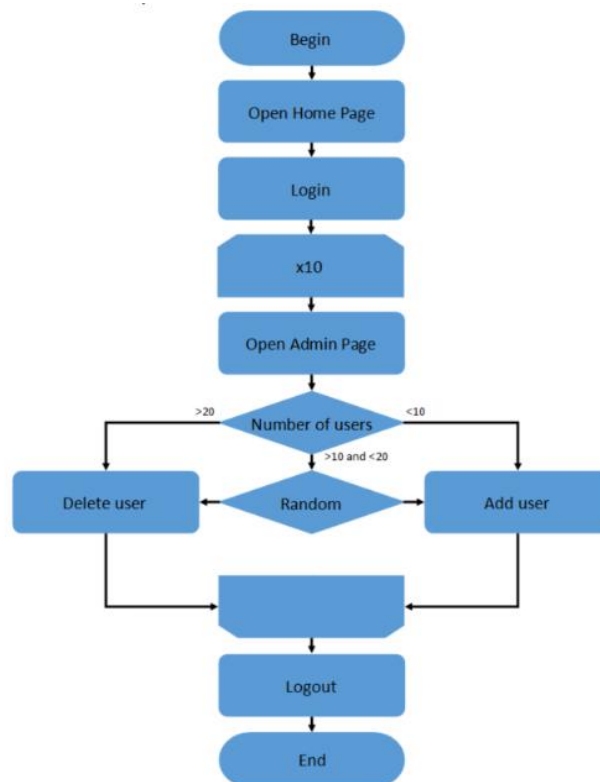
Storage: C: 248 Gb, D: Locked

Running Tests: Jenkins

Collection and visualization of metrics: InfluxDB, Telegraf, Grafana

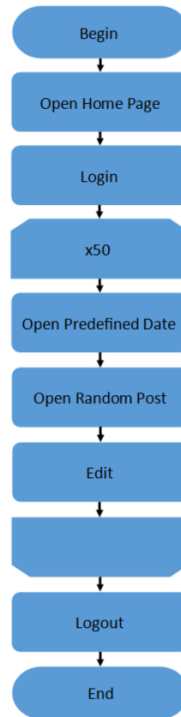
5. Admin script

First, open the home page then log in as an Admin user, after that 10 times check number of Anonymous users and decide to add or delete users, and finally log out.



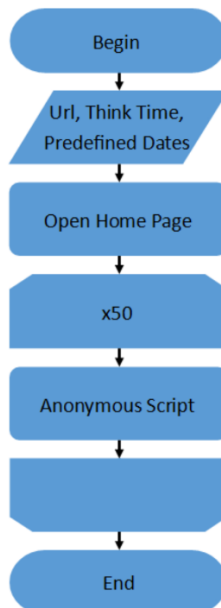
6. Editor script

First, Open home page, log in as an Editor user, open a predefined date, open a random post and edit it, rapid it 50 times, and finally Log out.



7. Anonymous Script

First, open the home page then 50 times runs Anonymous Script.



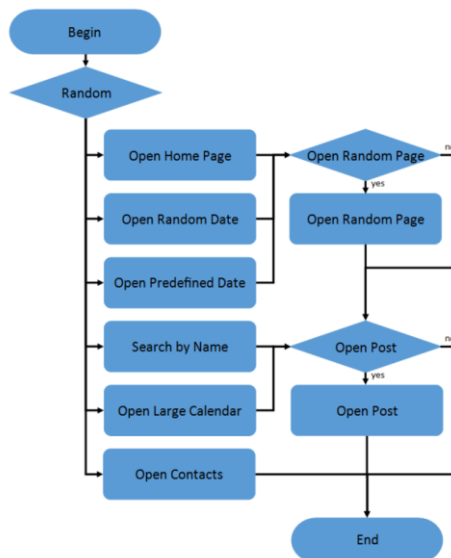
In the Anonymous Script:

Step 1. The following pages open with the following probabilities:

1. Home Page: 15%
2. Open Random Date: 10%
3. Open Predefined Date: 30%
4. Search by Name: 30%
5. Open Large Calendar: 10%
6. Open Contacts: 5%

Step 2. If Step 1 is opened one of the first three pages (home page, page of random date, page of predefined date from csv file) then make a random decision to open or not to open a random page (if there is more than one page with posts).

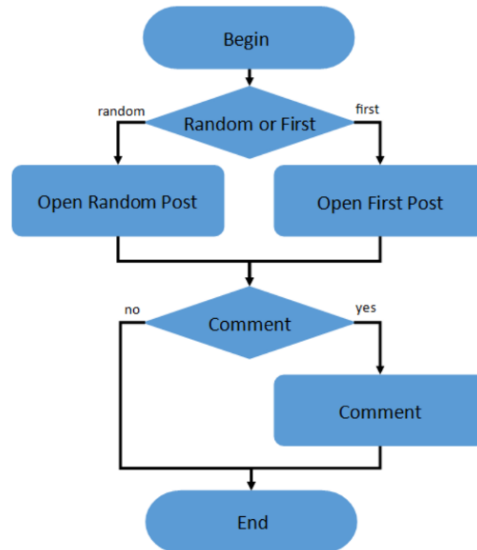
Step 3. After Step 2 (or after Step 1 if there was no opened one of the first three pages) make a decision to open or not to open a post with 80% / 20% probabilities.



If "Open post script" is selected

Step 1. Make a decision to open a random post of the first post with 65% / 35% probabilities.

Step 2. Make a decision to add a comment or not with 20% / 80% probabilities.



8 Aggregated test results

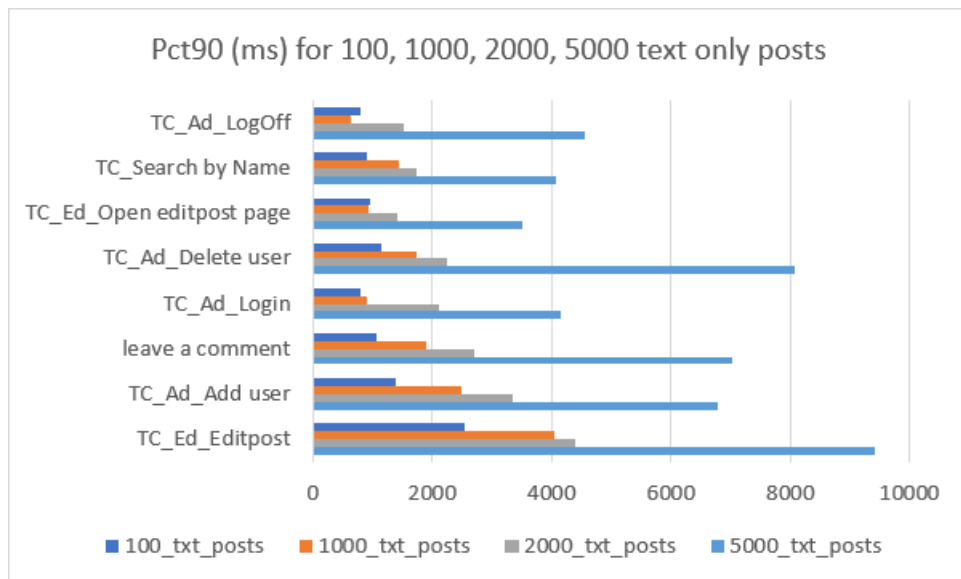
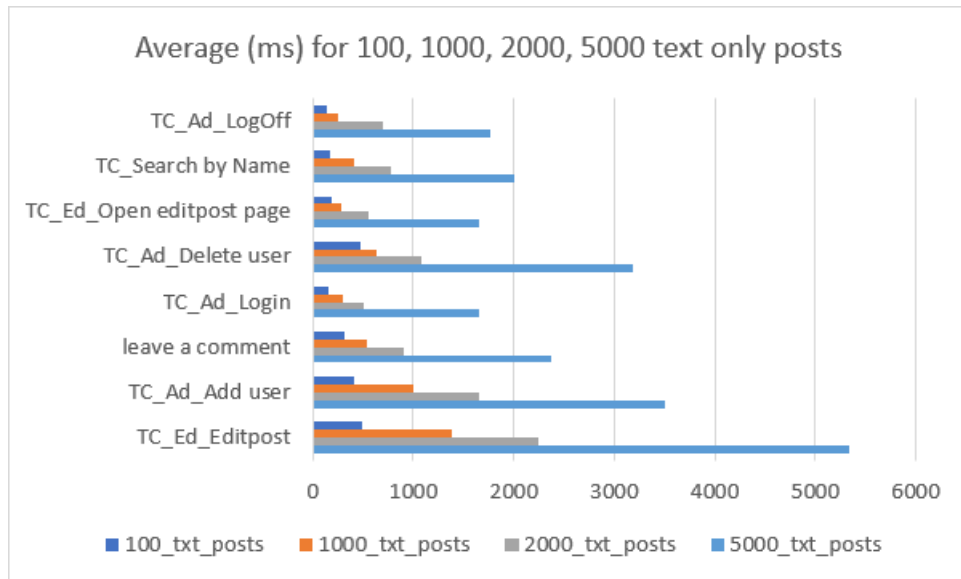
Volume testing application BlogEngine .NET 3.2 (web) with test data as different numbers of text posts (100, 1000, 2000, 5000) showed the dependence of key Performance Indicators on the number of posts existing in the system.

Performance Indicators	100_txt_posts	1000_txt_posts	2000_txt_posts	5000_txt_posts
Throughput max (rps)	46	42	38	25
Throughput avg (rps)	33	28	22	11
CPU usage max (%)	100	100	100	100
CPU usage avg (%)	93	98	97	99
Memory usage max (%)	90	90	89	85
Memory usage avg (%)	84	85	84	81
IIS stopped during the test	N	N	N	N
An effective duration of test (sec)	908	909	908	908
Transactions count	30099	25255	19773	10374
Error count	28	86	120	68
Average error rate (%)	0.1	0.3	0.6	0.7

So Throughput avg for 100 posts was 33 rps, for 1000 posts it decreased to 28 rps and decreased to 22 and 11 for 2000 and 5000 posts respectively.

The change in the number of posts had the same noticeable effect on the response time. So if we compare the total average response time for all requests for 100 posts, then for 1000 posts it increased by 1.9 times, for 2000 posts by 3.4 times and for 5000 posts by 9 times.

The graphs shows the average response time and the 90th percentile for the 8 most time-consuming queries.



Average error rate also significantly depends on the number of posts existing in the system, although it remains within 1%. So Average error rate is 0.1% for 100 posts, 0.3% for 1000 posts, 0.6% for 2000 posts and 0.7% for 5000 posts.

At the same time, the impact on the average CPU usage and Memory usage was not so significant. These parameters remained within 93-99% for average CPU usage and within 81-85% for average Memory usage.

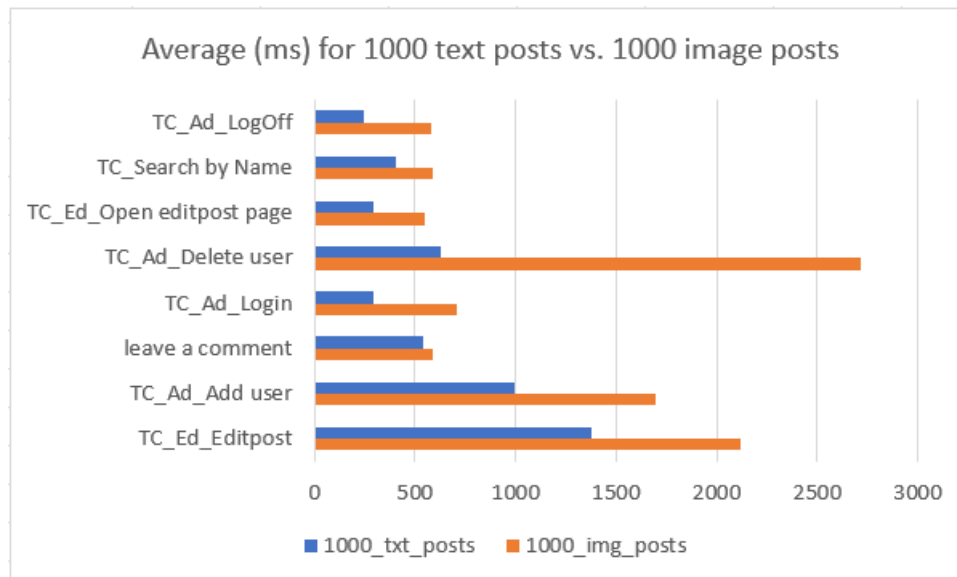
Volume testing application BlogEngine .NET 3.2 (web) with test data as different data types for the same number of posts (compare results for 1000 text posts and 1000 posts with a text and attached 1Mb photo) showed the dependence of some Key Performance Indicators.

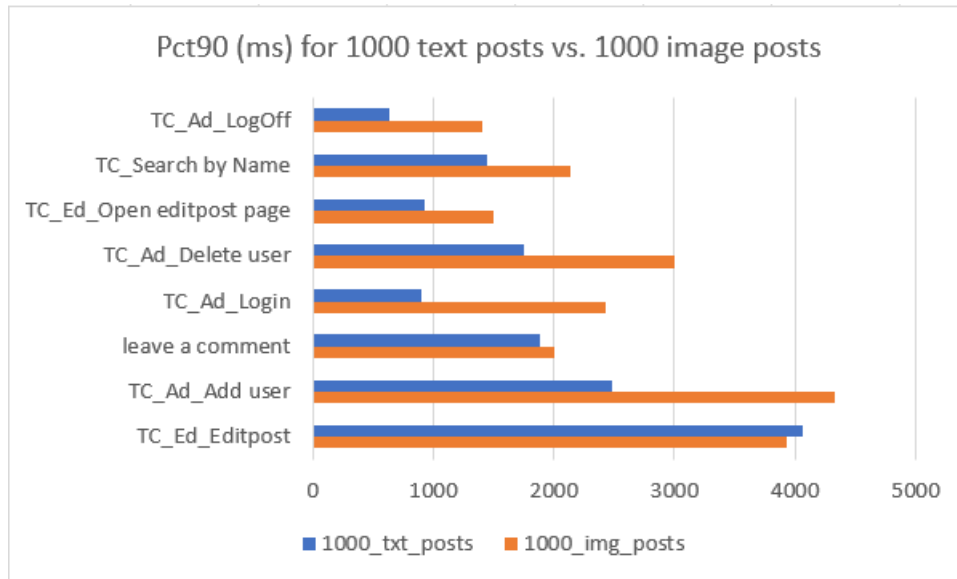
Performance Indicators	1000_txt_posts	1000_img_posts
Throughput max (rps)	42	40
Throughput avg (rps)	28	24
CPU usage max (%)	100	100
CPU usage avg (%)	98	99
Memory usage max (%)	90	90
Memory usage avg (%)	85	83
IIS stopped during the test	N	N
An effective duration of test (sec)	909	907
Transactions count	25255	21555
Error count	86	69
Average error rate (%)	0.3	0.3

So Throughput avg for 1000 text posts was 28 rps, for 1000 posts with media it decreased by 14% to 24 rps.

A more noticeable impact of different types of data had on the response time. So if we compare the overall average response time for all requests for 1000 text posts, then for 1000 posts with media it increased by 85%.

The graphs shows the average response time and the 90th percentile for the 8 most time-consuming queries.





Average error rate, as well as the average values of CPU usage and Memory usage, did not change significantly.

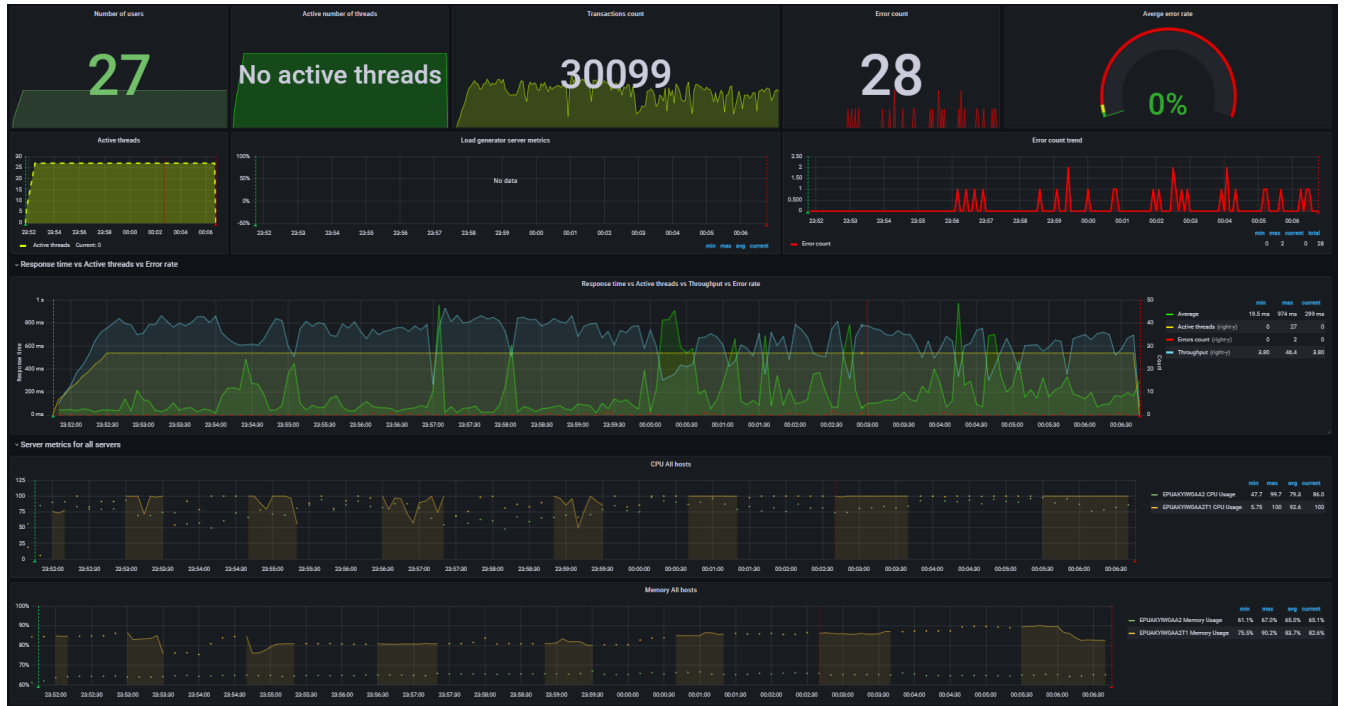
Note: The error rate generally stays under 1%, with the exception of the "Editpost" (TC_Ed_Editpost) and "Add users" (TC_Ad_Add user) requests, which is between 8% and 47% of this type of request. The error is reproduced through the GUI while there is a load. This percentage of errors looks unacceptable in terms of user experience for the "editor" role.

	100_txt_posts	1000_txt_posts	2000_txt_posts	5000_txt_posts	1000_img_posts	1000_img_posts
Error rate TC_Ed_Editpost	8%	31%	47%	34%	26%	26%
Error rate leave a comment	0%	0%	1%	2%	1%	0.7%
Error rate Open Random post	-	0%	-	0%	-	-
Error rate TC_Ad_Add user	2%	4%	6%	6%	5%	4.6%
Error rate TC_Open Home page	-	-	0%	0%	0%	0.1%
Error rate Open first post	-	-	-	0%	-	-
Error rate TC_start_Open Home page	-	-	-	1%	-	-
Error rate TC_Search by Name	-	-	0%	0%	-	-
Error rate TC_Open Random Date	-	-	0%	0%	-	-
Error rate TC_Open Predefined Date	-	0%	-	0%	-	-

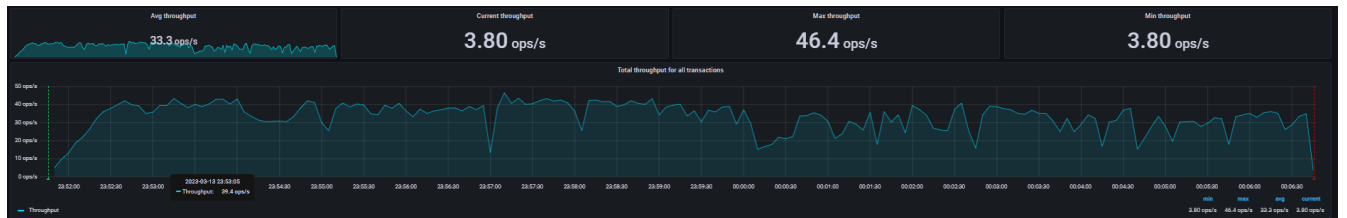
9 Detailed test results

1 Test results for 100 text posts:

Response time vs Active threads vs Throughput vs Error rate graph:



Throughput:

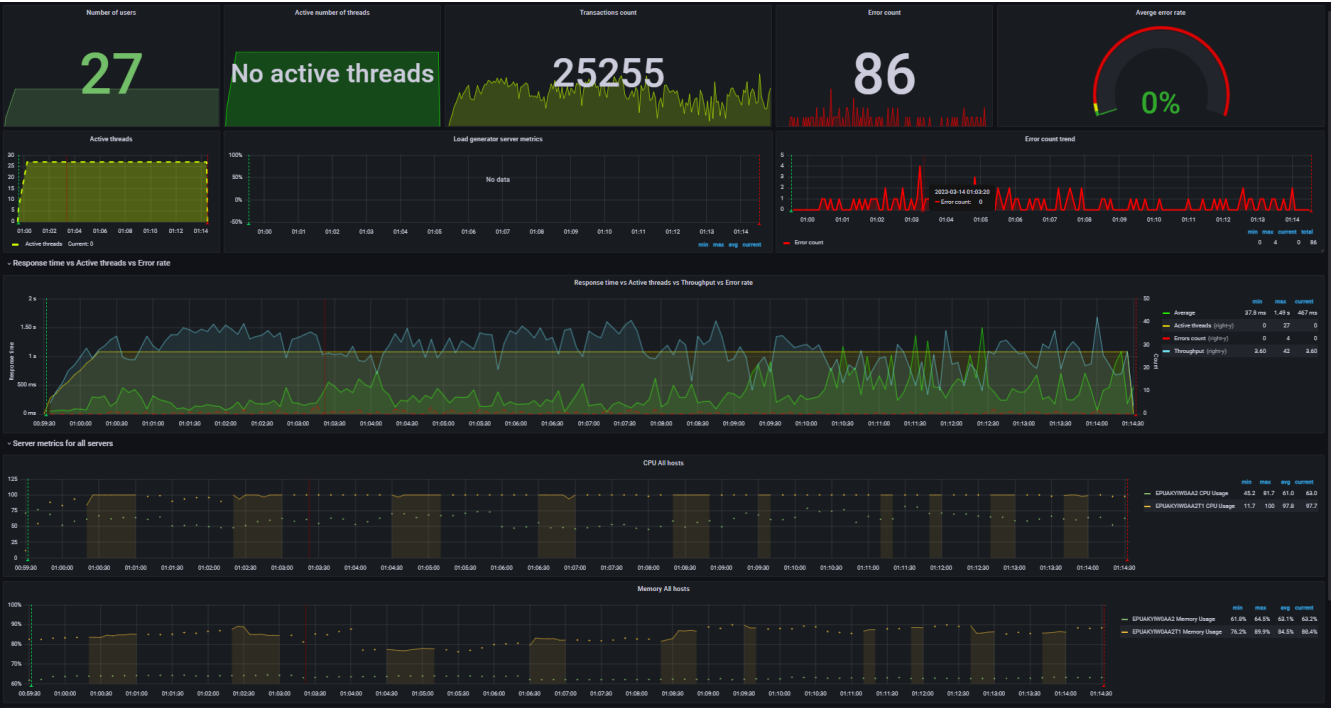


Aggregate report:

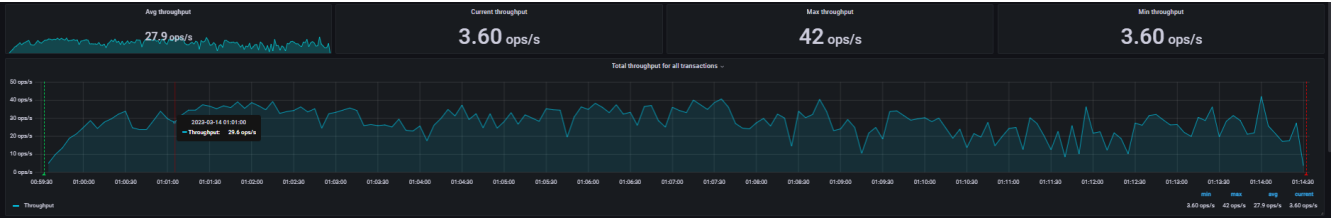
transaction	NumberOfSamples	Average	pct50	pct95	pct99	Min	Max	Error Count
TC_start_Open Home page	312.00	111.06	396.40	751.45	2.13 K	7.00	2.13 K	-
TC_Search by Name	4.35 K	170.79	898.00	2.28 K	2.68 K	0.00	2.68 K	-
TC_Open Random page >1	1.01 K	140.88	552.00	2.41 K	2.68 K	0.00	2.68 K	-
TC_Open Random page <1	139.00	94.59	398.40	843.30	2.48 K	8.00	2.48 K	-
TC_Open Random Date	1.53 K	137.43	648.70	1.96 K	2.59 K	5.00	2.60 K	-
TC_Open Predefined Date	4.55 K	150.85	807.00	2.04 K	2.70 K	6.00	2.72 K	-
TC_Open Large Calendar	1.47 K	146.28	889.80	2.13 K	2.61 K	0.00	2.62 K	-
TC_Open Home page	2.25 K	162.38	1.02 K	2.41 K	2.73 K	7.00	2.73 K	-
TC_Open Contacts	581.00	111.56	353.20	551.10	2.53 K	0.00	2.54 K	-
TC_Ed_Open login page	6.00	123.89	206.00	206.00	206.00	104.00	206.00	-
TC_Ed_Open editpost page	263.00	193.52	963.50	1.70 K	2.59 K	7.00	2.59 K	-
TC_Ed_Open Random post	263.00	120.19	423.10	812.85	2.22 K	11.00	2.22 K	-
TC_Ed_Open Predefined Date	263.00	107.08	356.80	690.30	2.52 K	7.00	2.53 K	-
TC_Ed_Open Home page	6.00	37.38	122.00	122.00	122.00	15.00	122.00	-
TC_Ed_Login	6.00	53.12	155.00	155.00	155.00	28.00	155.00	-
TC_Ed_LogOff	4.00	97.67	168.00	168.00	168.00	13.00	168.00	-
TC_Ad_Open login page	40.00	258.14	1.25 K	1.45 K	2.82 K	68.00	2.82 K	-
TC_Ad_Open Users page	383.00	300.66	1.55 K	2.51 K	3.00 K	22.00	3.01 K	-
TC_Ad_Open USERS menu	383.00	96.38	403.40	536.85	2.21 K	3.00	2.21 K	-
TC_Ad_Open Home page	40.00	90.41	449.40	1.54 K	2.33 K	10.00	2.33 K	-
TC_Ad_Open Admin Page	383.00	106.49	397.30	1.21 K	2.21 K	2.00	2.21 K	-
TC_Ad_Login	40.00	159.45	793.10	1.39 K	2.13 K	15.00	2.13 K	-
TC_Ad_LogOff	38.00	145.54	787.10	1.28 K	1.56 K	14.00	1.56 K	-
TC_Ad_Delete user	194.00	471.57	1.15 K	2.46 K	22.29 K	11.00	22.29 K	-
Open first post	3.18 K	172.01	731.00	2.55 K	2.79 K	6.00	2.79 K	-
Open Random post	5.97 K	138.12	879.80	2.10 K	2.69 K	6.00	2.69 K	-
TC_Ed_Editpost	262.00	497.28	2.55 K	2.97 K	4.14 K	49.00	4.14 K	21.00
TC_Ad_Add user	190.00	410.65	1.40 K	2.46 K	3.52 K	28.00	3.52 K	4.00
leave a comment	1.83 K	314.86	1.08 K	2.14 K	96.02 K	7.00	96.97 K	3.00

2 Test results for 1000 text posts:

Response time vs Active threads vs Throughput vs Error rate graph:



Throughput:

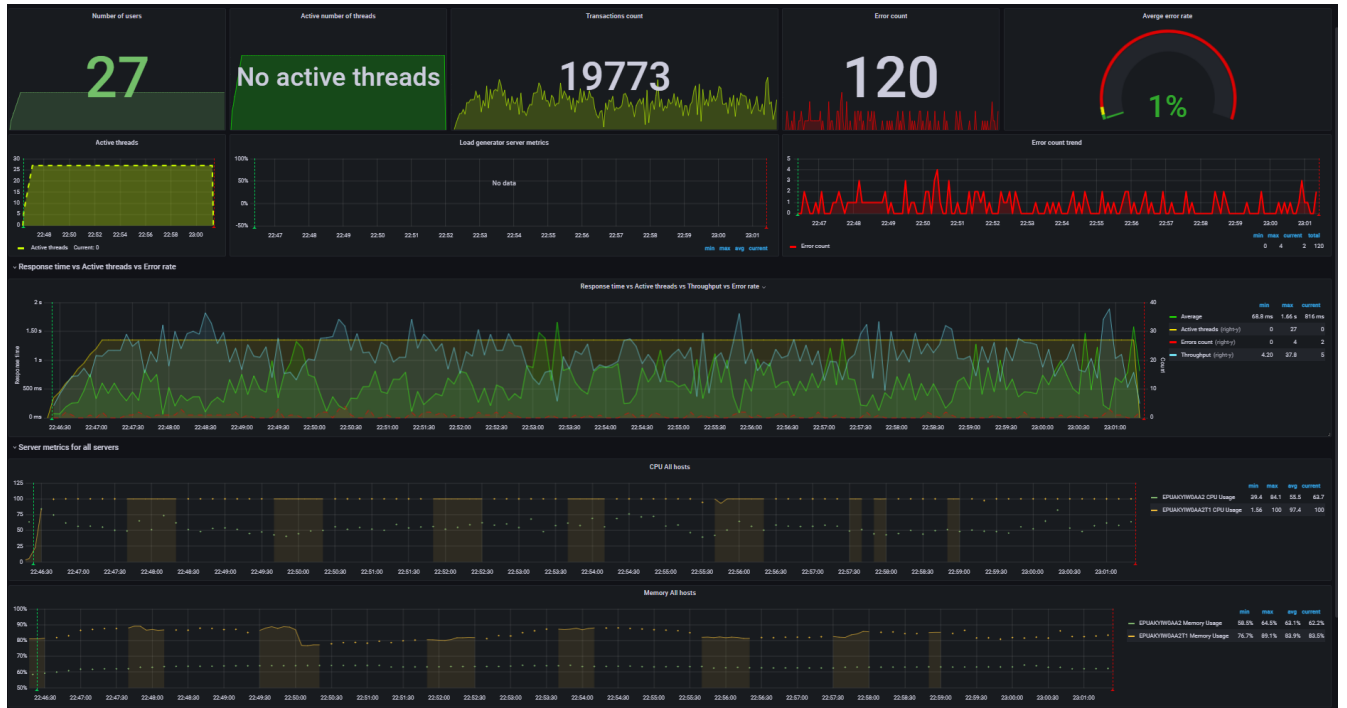


Aggregate report:

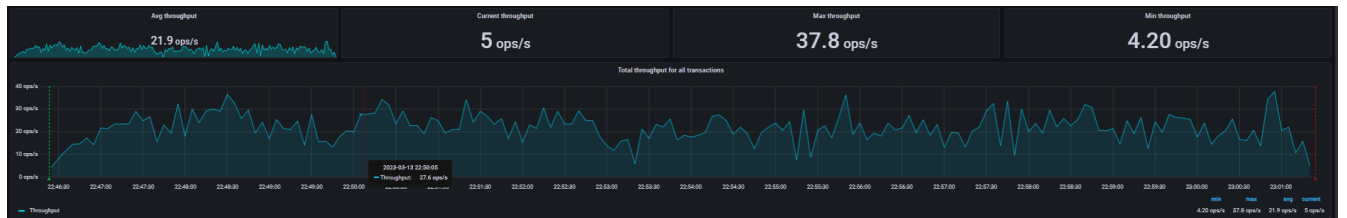
transaction	NumberOfSamples	Average	p90	p95	p99	Min	Max	Error Count
TC_Start_Open Home page	250.00	219.97	1.13 K	1.68 K	2.34 K	11.00	2.34 K	-
TC_Search by Name	3.70 K	405.92	1.44 K	2.63 K	5.06 K	8.00	5.06 K	-
TC_Open Random page +1	902.00	287.00	1.31 K	3.00 K	4.96 K	0.00	4.97 K	-
TC_Open Random page +1	117.00	179.77	323.80	928.00	2.97 K	8.00	2.97 K	-
TC_Open Random Date	1.22 K	263.33	1.29 K	2.77 K	3.29 K	0.00	3.29 K	-
TC_Open Home page	1.79 K	290.13	1.85 K	3.07 K	5.02 K	10.00	5.04 K	-
TC_Open Contacts	439.00	233.75	1.09 K	2.40 K	3.97 K	0.00	3.97 K	-
TC_Ed_Open login page	6.00	224.18	443.00	527.00	527.00	156.00	527.00	-
TC_Ed_Open editpost page	222.00	290.41	930.20	1.19 K	2.55 K	9.00	2.56 K	-
TC_Ed_Open Random post	222.00	174.11	402.00	669.15	2.22 K	11.00	2.22 K	-
TC_Ed_Open Predefined Date	222.00	203.51	630.20	2.07 K	2.93 K	9.00	2.94 K	-
TC_Ed_Open Home page	6.00	51.44	370.00	370.00	370.00	15.00	370.00	-
TC_Ed_Login	6.00	149.13	479.00	479.00	479.00	33.00	479.00	-
TC_Ed_LogOff	4.00	200.44	907.00	907.00	907.00	23.00	907.00	-
TC_Aid_Open login page	33.00	466.61	1.02 K	2.17 K	3.01 K	109.00	3.01 K	-
TC_Aid_Open Home page	33.00	143.79	404.40	591.20	608.00	13.00	608.00	-
TC_Aid_Open Admin Page	323.00	177.33	720.40	1.68 K	2.81 K	2.00	2.82 K	-
TC_Aid_Login	33.00	291.68	906.10	1.66 K	1.85 K	28.00	1.85 K	-
TC_Aid_LogOff	31.00	246.90	639.00	861.75	928.00	19.00	928.00	-
Open first post	2.70 K	295.84	1.13 K	2.78 K	5.11 K	9.00	5.11 K	-
TC_Ed_Editpost	221.00	1.38 K	4.06 K	5.03 K	35.21 K	0.00	35.21 K	69.00
TC_Aid_Add user	158.00	993.77	2.48 K	4.20 K	5.80 K	73.00	5.80 K	7.00
leave a comment	1.87 K	339.03	1.89 K	4.43 K	92.20 K	8.00	93.12 K	3.00
TC_Aid_Delete user	163.00	638.48	1.75 K	2.52 K	3.83 K	11.00	3.83 K	2.00
TC_Open Predefined Date	3.33 K	267.61	1.23 K	2.74 K	3.52 K	0.00	3.52 K	1.00
TC_Open Large Calendar	1.17 K	270.23	1.47 K	2.52 K	3.44 K	0.00	3.43 K	1.00
TC_Aid_Open Users page	323.00	466.47	2.49 K	3.03 K	4.03 K	24.00	4.04 K	1.00
TC_Aid_Open USERS menu	323.00	220.97	683.00	2.71 K	3.38 K	3.00	3.38 K	1.00
Open Random post	5.33 K	284.10	1.59 K	3.09 K	5.19 K	9.00	5.19 K	1.00

3 Test results for 2000 text posts:

Response time vs Active threads vs Throughput vs Error rate graph:



Throughput:



Aggregate report:

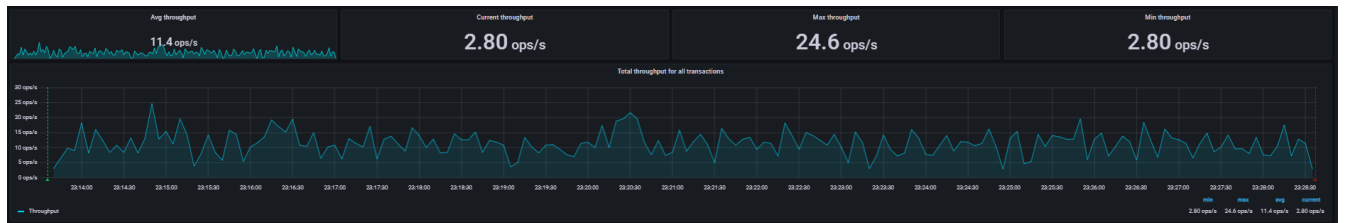
transaction	NumberOfSamples	Average	pct97	pct95	pct99	Min	Max	Error Count
TC_start_Open Home page	194.00	426.96	1.52 K	3.13 K	3.80 K	10.00	3.31 K	-
TC_Open Random page=1	914.00	445.34	1.06 K	2.27 K	4.81 K	14.00	4.82 K	-
TC_Open Random page=1	146.00	411.15	846.10	1.10 K	1.81 K	20.00	1.81 K	-
TC_Open Predefined Date	2.76 K	440.00	1.20 K	2.88 K	4.90 K	0.00	4.90 K	-
TC_Open Large Calendar	862.00	432.64	1.09 K	2.73 K	3.83 K	0.00	3.85 K	-
TC_Open Contacts	376.00	464.27	1.50 K	3.35 K	4.73 K	11.00	4.73 K	-
TC_Est_Open login page	4.00	394.65	2.49 K	2.49 K	2.49 K	122.00	2.49 K	-
TC_Est_Open editpost page	191.00	348.96	1.41 K	1.58 K	1.79 K	27.00	1.79 K	-
TC_Est_Open Random post	191.00	342.09	879.00	1.30 K	1.80 K	15.00	1.81 K	-
TC_Est_Open Predefined Date	191.00	336.17	882.00	1.20 K	2.75 K	15.00	2.76 K	-
TC_Est_Open Home page	4.00	265.47	856.00	856.00	856.00	52.00	856.00	-
TC_Est_Login	4.00	306.42	1.49 K	1.49 K	1.49 K	36.00	1.49 K	-
TC_Est_LogOff	2.00	1.13 K	1.77 K	1.77 K	1.77 K	911.00	1.77 K	-
TC_Ast_Open login page	26.00	741.82	2.04 K	3.05 K	3.59 K	217.00	3.59 K	-
TC_Ast_Open Users page	227.00	771.41	1.90 K	2.76 K	4.69 K	32.00	4.69 K	-
TC_Ast_Open Home page	26.00	296.42	1.49 K	2.67 K	2.85 K	52.00	2.85 K	-
TC_Ast_Open Admin Page	238.00	335.81	999.70	1.42 K	3.30 K	2.00	3.31 K	-
TC_Ast_Login	26.00	505.71	2.11 K	2.55 K	2.55 K	33.00	2.55 K	-
TC_Ast_LogOff	24.00	702.02	1.53 K	4.83 K	4.83 K	47.00	4.83 K	-
Open first post	2.12 K	505.47	1.61 K	2.68 K	4.92 K	13.00	4.92 K	-
Open Random post	4.08 K	519.45	1.64 K	3.23 K	4.93 K	13.00	4.93 K	-
TC_Est_Editpost	191.00	2.25 K	4.48 K	5.30 K	6.21 K	220.00	6.21 K	90.00
leave a comment	1.28 K	901.54	2.70 K	4.99 K	11.30 K	10.00	11.37 K	16.00
TC_Ast_Add user	123.00	1.66 K	3.34 K	4.33 K	5.78 K	31.00	5.78 K	7.00
TC_Search by Name	2.78 K	779.33	1.75 K	2.75 K	5.07 K	12.00	5.07 K	2.00
TC_Ast_Open USERS menu	238.00	410.61	1.91 K	2.32 K	4.76 K	3.00	4.76 K	2.00
TC_Open Random Date	862.00	416.03	1.63 K	1.90 K	4.76 K	12.00	4.79 K	1.00
TC_Open Home page	1.45 K	452.47	1.49 K	2.10 K	4.78 K	16.00	4.78 K	1.00
TC_Ast_Delete user	123.00	1.08 K	2.26 K	2.78 K	3.63 K	37.00	3.63 K	1.00

4 Test results for 5000 text posts:

Response time vs Active threads vs Throughput vs Error rate graph:



Throughput:



Aggregate report:

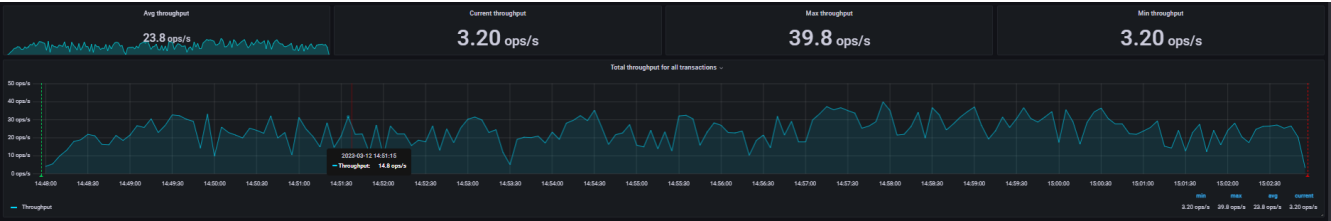
Transaction	NumberOfSamples	Average	pt50	pt95	pt99	Min	Max	Error Count
TC_Open Random page >1	531.00	1.30 K	3.05 K	3.60 K	6.27 K	0.00	6.28 K	-
TC_Open Random page <1	28.00	1.16 K	3.14 K	5.65 K	6.25 K	112.00	6.25 K	-
TC_Open Large Calendar	481.00	1.26 K	3.13 K	5.53 K	6.85 K	43.00	6.85 K	-
TC_Open Contacts	211.00	1.14 K	2.86 K	4.23 K	6.00 K	23.00	6.00 K	-
TC_Ed_Open login page	4.00	1.00 K	3.91 K	3.91 K	3.91 K	478.00	3.91 K	-
TC_Ed_Open editpost page	112.00	1.65 K	3.51 K	4.27 K	5.69 K	17.00	5.50 K	-
TC_Ed_Open Random post	112.00	978.69	2.13 K	2.36 K	2.58 K	63.00	2.58 K	-
TC_Ed_Open Predefined Date	112.00	876.24	2.28 K	2.97 K	3.47 K	41.00	3.47 K	-
TC_Ed_Open Home page	4.00	233.63	622.00	622.00	622.00	88.00	622.00	-
TC_Ed_Login	4.00	794.52	2.96 K	2.96 K	2.96 K	37.00	2.96 K	-
TC_Ed_LogOff	2.00	1.40 K	1.42 K	1.42 K	1.42 K	1.39 K	1.42 K	-
TC_Aid_Open login page	14.00	2.25 K	7.22 K	7.22 K	7.22 K	118.00	7.22 K	-
TC_Aid_Open Users page	136.00	2.11 K	5.58 K	7.10 K	8.83 K	100.00	8.84 K	-
TC_Aid_Open USERS menu	137.00	989.79	2.39 K	3.75 K	5.25 K	0.00	5.25 K	-
TC_Aid_Open Home page	14.00	939.43	2.33 K	2.44 K	2.44 K	244.00	2.44 K	-
TC_Aid_Open Admin Page	137.00	911.39	2.70 K	3.70 K	6.08 K	6.00	6.08 K	-
TC_Aid_Login	14.00	1.66 K	4.15 K	4.15 K	4.15 K	154.00	4.15 K	-
TC_Aid_LogOff	12.00	1.76 K	4.55 K	4.57 K	4.57 K	316.00	4.57 K	-
TC_Aid_Delete user	68.00	3.19 K	8.68 K	8.68 K	9.39 K	283.00	9.39 K	-
TC_Ed_Editpost	112.00	5.34 K	9.42 K	10.85 K	11.25 K	748.00	11.28 K	38.00
leave a comment	648.00	2.38 K	7.04 K	8.60 K	11.84 K	111.00	11.85 K	12.00
Open Random post	2.13 K	1.53 K	4.05 K	5.90 K	7.30 K	36.00	7.30 K	5.00
TC_Aid_Add user	68.00	3.51 K	6.80 K	9.25 K	9.57 K	291.00	9.57 K	4.00
TC_Open Home page	714.00	1.31 K	3.16 K	4.31 K	6.48 K	0.00	6.48 K	3.00
Open first post	1.09 K	1.49 K	3.64 K	5.93 K	7.36 K	51.00	7.36 K	2.00
TC_start_Open Home page	112.00	958.87	2.37 K	2.96 K	5.59 K	55.00	5.59 K	1.00
TC_Search by Name	1.41 K	2.81 K	4.07 K	6.40 K	7.42 K	0.00	7.42 K	1.00
TC_Open Random Date	480.00	1.15 K	2.56 K	3.15 K	5.70 K	0.00	5.72 K	1.00
TC_Open Predefined Date	1.48 K	1.31 K	3.27 K	5.08 K	7.19 K	0.00	7.20 K	1.00

5 Test results for 1000 images posts:

Response time vs Active threads vs Throughput vs Error rate graph:



Throughput:



Aggregate report:

transaction	NumberOfSamples	Average	p950	p955	p995	Min	Max	Error Count
TC_start_Open Home page	216.00	433.45	1.23 K	2.61 K	4.99 K	11.00	4.99 K	-
TC_Search by Name	310 K	588.51	2.13 K	3.02 K	5.25 K	11.00	5.25 K	-
TC_Open Random page +1	882.00	409.45	1.43 K	2.61 K	4.40 K	0.00	4.42 K	-
TC_Open Random page +1	89.00	425.74	969.20	2.32 K	2.75 K	14.00	2.75 K	-
TC_Open Random Date	1.04 K	420.31	1.36 K	2.59 K	3.03 K	0.00	3.03 K	-
TC_Open Predefined Date	3.03 K	406.75	1.67 K	2.46 K	5.06 K	0.00	5.06 K	-
TC_Open Large Calendar	1.06 K	427.81	1.32 K	2.42 K	2.96 K	0.00	2.97 K	-
TC_Open Contacts	422.00	422.68	1.21 K	2.76 K	3.05 K	0.00	3.06 K	-
TC_Ed_Open login page	4.00	247.03	828.00	828.00	828.00	70.00	828.00	-
TC_Ed_Open editpost page	200.00	545.53	1.30 K	2.99 K	3.06 K	10.00	3.06 K	-
TC_Ed_Open Random post	200.00	335.22	1.03 K	1.14 K	2.01 K	17.00	2.02 K	-
TC_Ed_Open Predefined Date	200.00	341.25	854.80	1.70 K	1.99 K	11.00	1.99 K	-
TC_Ed_Open Home page	4.00	151.14	582.00	582.00	582.00	38.00	582.00	-
TC_Ed_Login	4.00	212.04	975.00	975.00	975.00	28.00	975.00	-
TC_Ed_LogOff	2.90	905.00	956.00	956.00	956.00	888.00	956.00	-
TC_Ad_Open login page	27.00	1.04 K	4.14 K	4.14 K	4.14 K	44.00	4.14 K	-
TC_Ad_Open USERS menu	259.00	387.29	1.09 K	2.64 K	3.21 K	3.00	3.21 K	-
TC_Ad_Open Home page	27.00	282.35	791.00	956.60	999.00	15.00	999.00	-
TC_Ad_Open Admin Page	259.00	386.97	1.13 K	2.52 K	3.40 K	2.00	3.40 K	-
TC_Ad_Login	27.00	711.32	2.43 K	2.61 K	2.61 K	31.00	2.61 K	-
TC_Ad_LogOff	25.00	582.39	1.40 K	2.53 K	2.81 K	42.00	2.81 K	-
TC_Ad_Delete user	128.00	272 K	3.00 K	96.49 K	96.49 K	0.00	96.49 K	-
Open first post	233 K	424.73	1.76 K	2.77 K	4.61 K	10.00	4.64 K	-
Open Random post	433 K	444.98	1.95 K	3.07 K	3.27 K	10.00	3.27 K	-
TC_Ed_Editpost	199.00	212 K	3.93 K	4.81 K	7.41 K	0.00	7.41 K	51.00
leave a comment	1.36 K	584.80	2.00 K	2.70 K	5.97 K	9.00	5.98 K	10.00
TC_Ad_Add user	131.00	1.70 K	4.33 K	5.08 K	5.67 K	28.00	5.67 K	6.00
TC_Open Home page	1.55 K	407.42	1.27 K	2.53 K	4.43 K	11.00	4.47 K	1.00
TC_Ad_Open Users page	259.00	735.14	2.15 K	3.26 K	5.68 K	38.00	5.68 K	1.00

Links to source data:

Number of posts	Links
100	http://localhost:3000/d/rxKcwpFmk_3/load-test-monitoring_3?orgId=1&from=1678744299569&to=1678745207301&var-group_time=5s&var-metric=All&var-scenario=All&var-transactions=All&var-server_measurements=All&var-host=All&var-measurement=jmeter
1000	http://localhost:3000/d/rxKcwpFmk_3/load-test-monitoring_3?orgId=1&from=1678748365307&to=1678749274343&var-group_time=5s&var-metric=All&var-scenario=All&var-transactions=All&var-server_measurements=All&var-host=All&var-measurement=jmeter
2000	http://localhost:3000/d/rxKcwpFmk_3/load-test-monitoring_3?orgId=1&from=1678740377059&to=1678741284761&var-group_time=5s&var-metric=All&var-scenario=All&var-transactions=All&var-server_measurements=All&var-host=All&var-measurement=jmeter
5000	http://localhost:3000/d/rxKcwpFmk_3/load-test-monitoring_3?orgId=1&from=1678742010189&to=1678742917819&var-group_time=5s&var-metric=All&var-scenario=All&var-transactions=All&var-server_measurements=All&var-host=All&var-measurement=jmeter
1000 posts with a text and attached 1Mb photo	http://localhost:3000/d/rxKcwpFmk_3/load-test-monitoring_3?orgId=1&from=1678625270804&to=1678626178052&var-group_time=5s&var-metric=All&var-scenario=All&var-transactions=All&var-server_measurements=All&var-host=All&var-measurement=jmeter