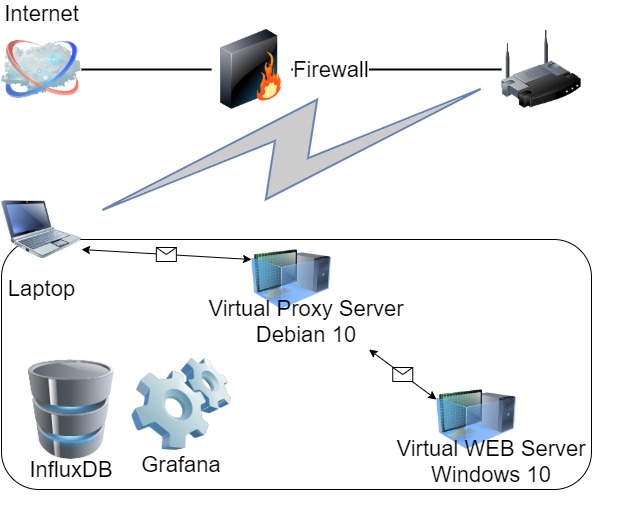
**Environment description.**



**Laptop** Windows 10**:**

Intel Core i7-8665U / 32 GB

**Virtual Proxy Server** Debian 10:

2 CPU (70%) / 4 GB

**Virtual WEB Server** Windows 10:

4 CPU / 4 GB

1. Regular load
   1. Script: Task 7
   2. Users: Editor – 2, Admin – 1, Anonymous – 35
   3. Rump-up: Editor – 120s, Admin – 60s, Anonymous – 1800s
   4. Test duration – 1h
2. KPI & Metrics
   1. Metrics to collect – response time, throughput, percentage of errors, CPU and Memory utilization, Get Home Page (First Page) samples results (avg, 90pct, 95pct)
   2. KPI - Get Home Page (First Page) samples results (avg, 90pct, 95pct)
3. Results:

Get Home Page (First Page) samples:

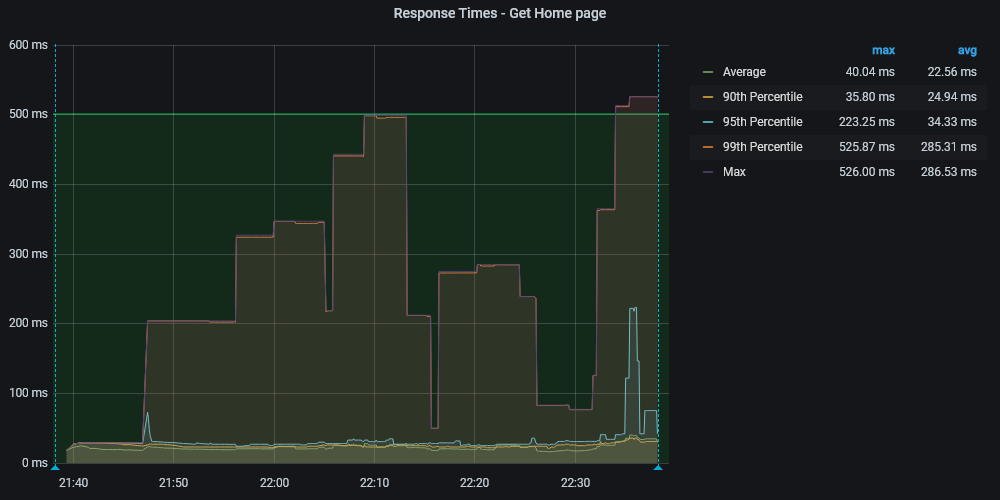
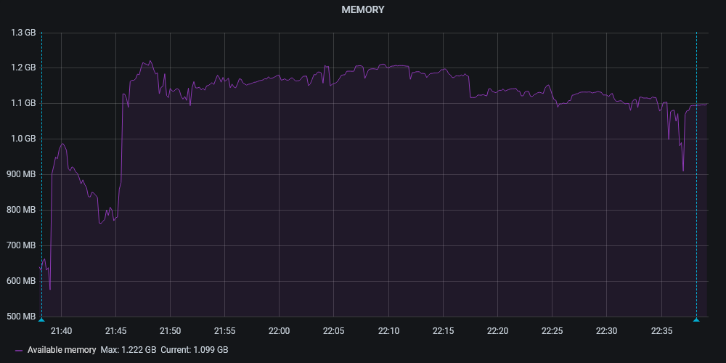
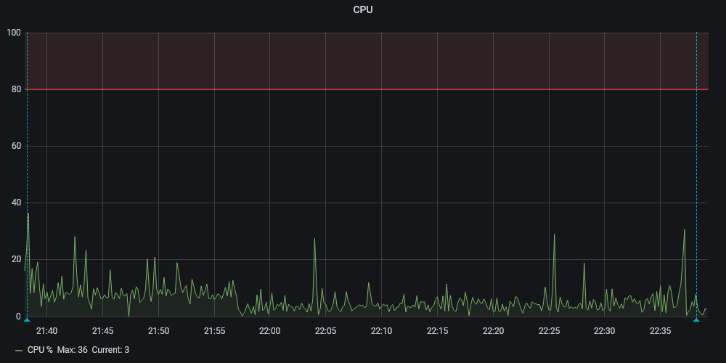
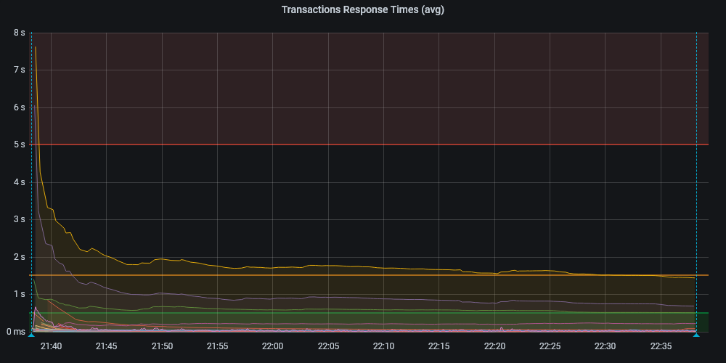
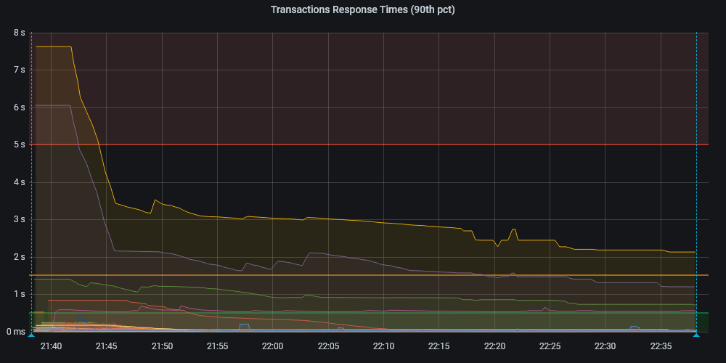
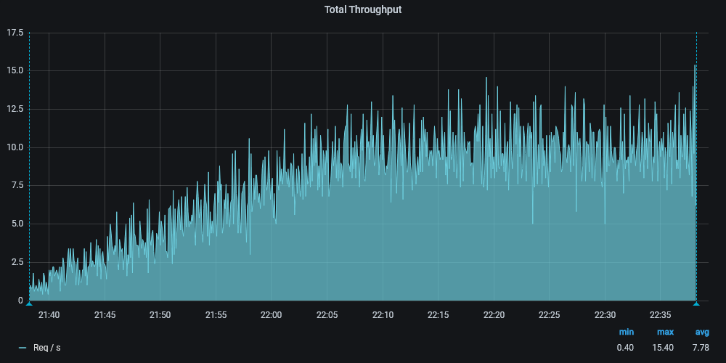
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CPU | 100 | 1000 | 2000 | 5000 | 1000+photo |
| avg | 40.04 ms | 65.08 ms | 171 ms | 681.82 ms | 86.5 ms |
| 90 pct | 35.80 ms | 199.9 ms | 369.1 ms | 2.13 s | 138 ms |
| 95 pct | 223.25 ms | 289.9 ms | 455.25 ms | 3.98 s | 206.75 ms |

During testing was found issues with CPU utilization – server operation system starts to scan sppsvc.exe process by Software protect, and this action effect CPU utilization and can block some internal process. Also, w3wp.exe process can load CPU for 100%, this issue could be avoided if the environment be configured as it need (Ex.: In Advanced settings of DefaultAppPool trigger in Key “Enable 32-Bit Application” value to “true”)

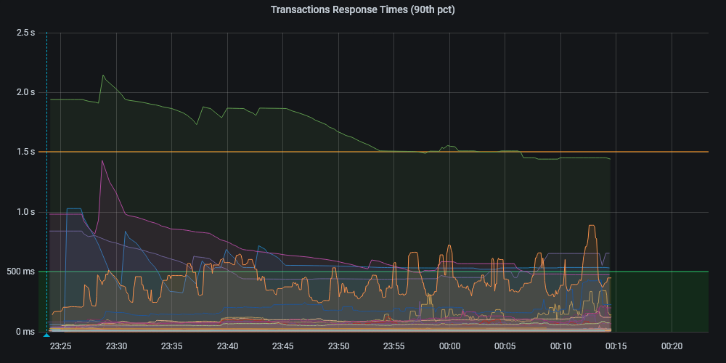
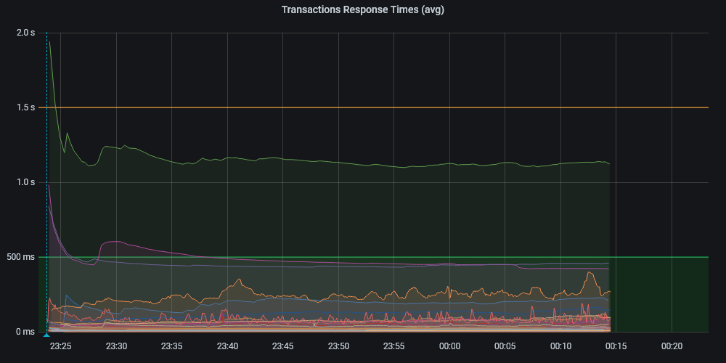
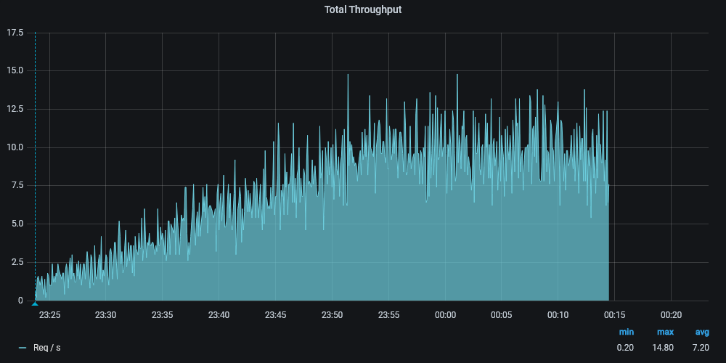
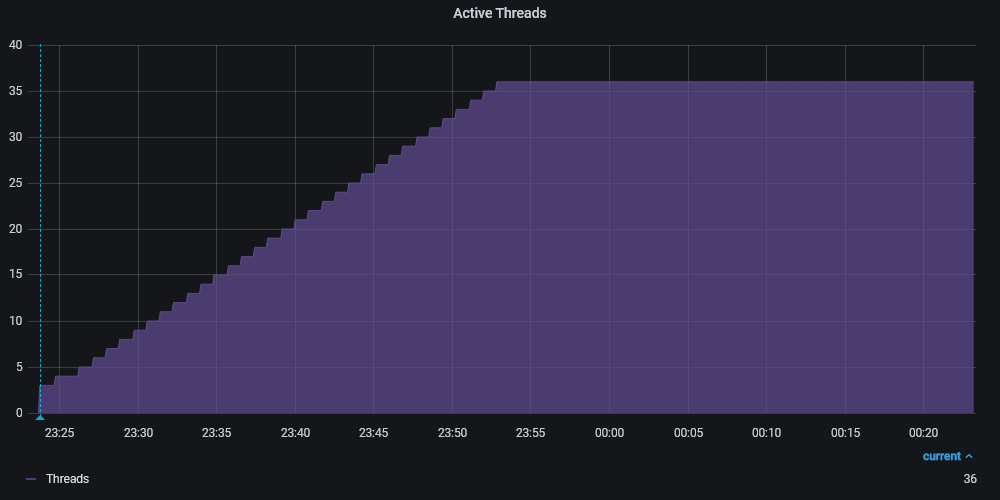
Bottleneck: network configuration (proxy server), file system limitations.

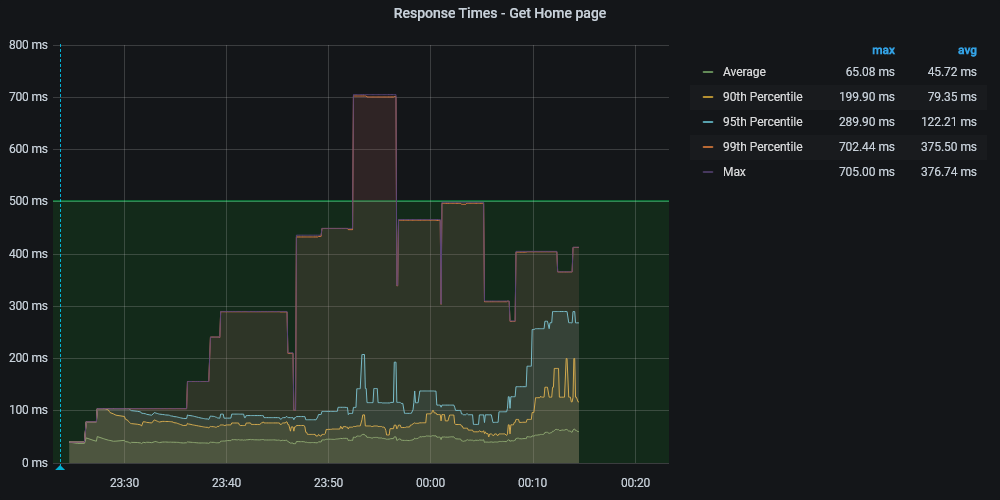
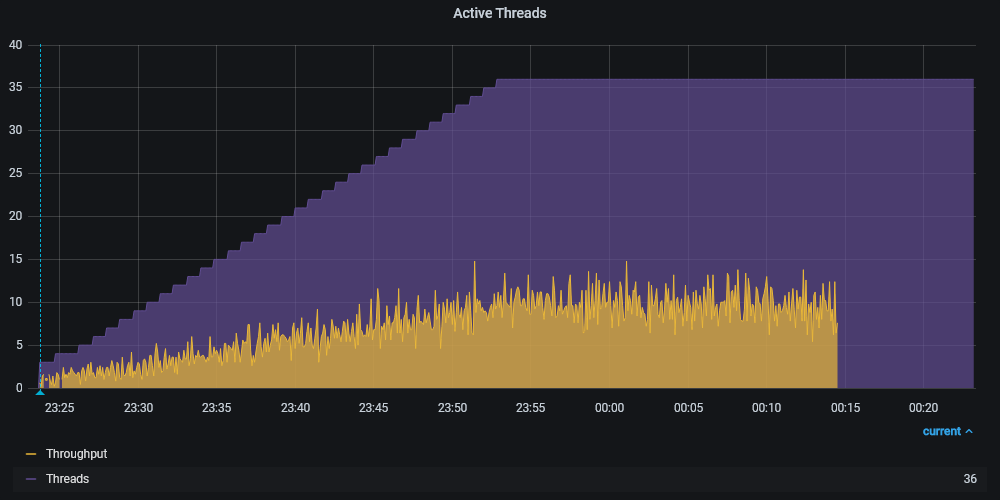
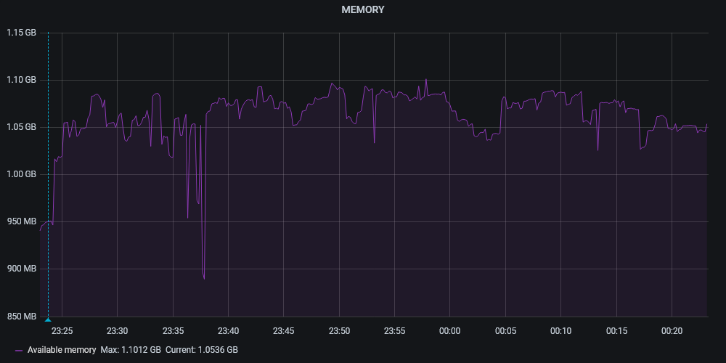
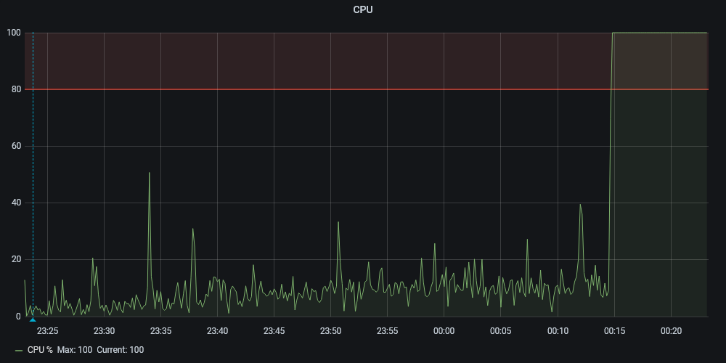
1. Graphs

3.1 Number of text Posts – 100

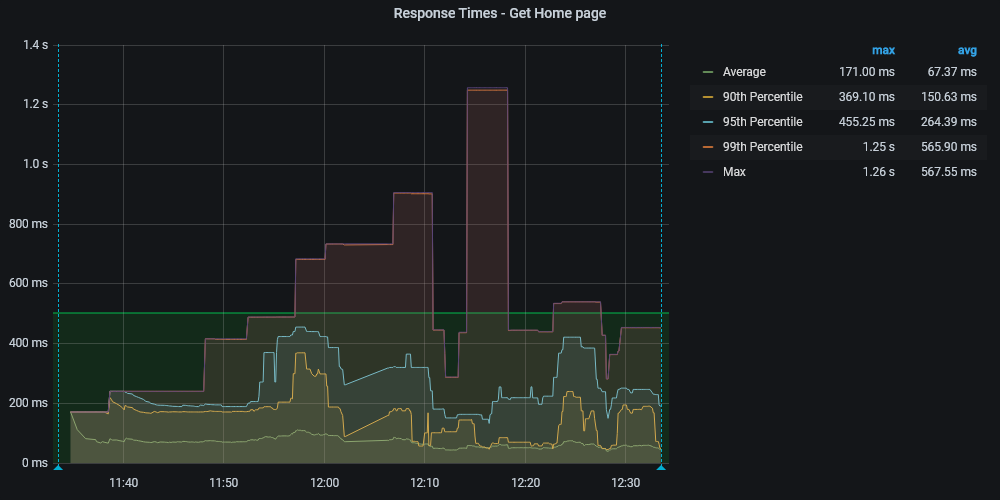
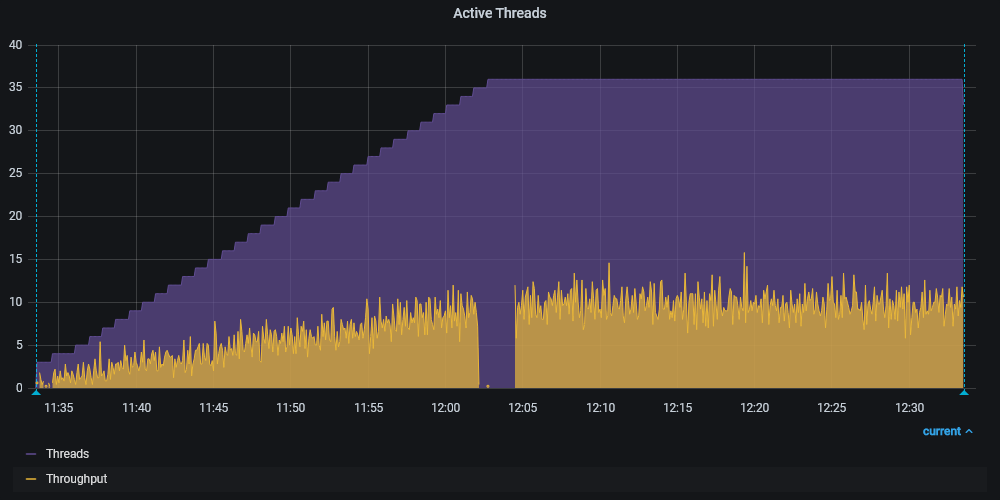
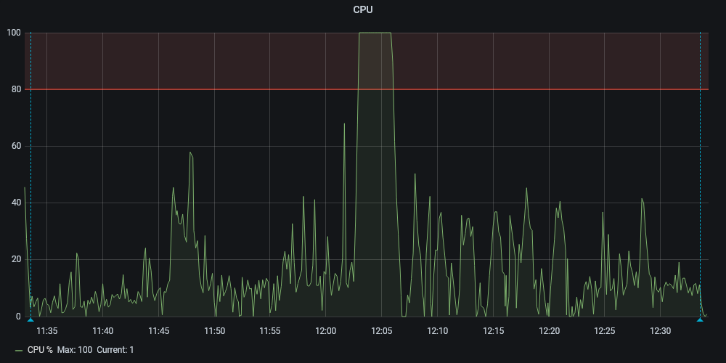
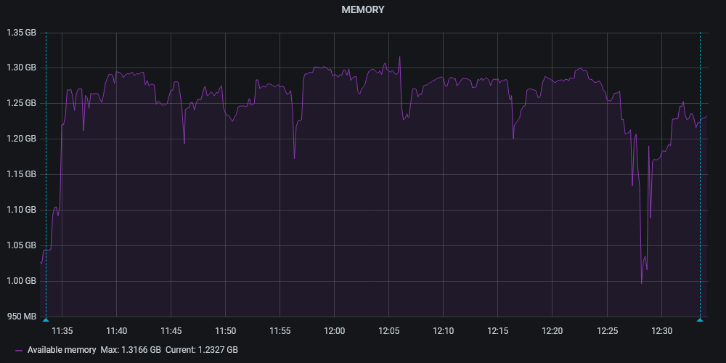
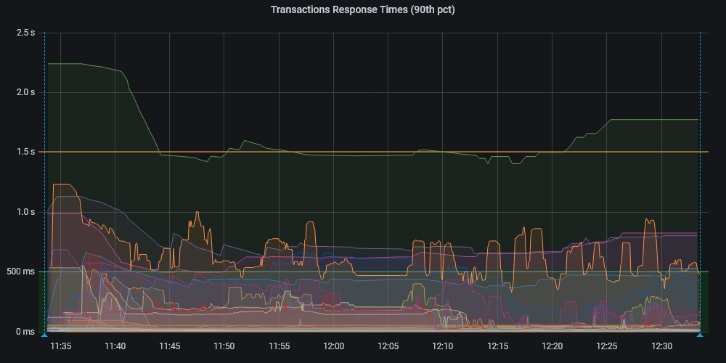
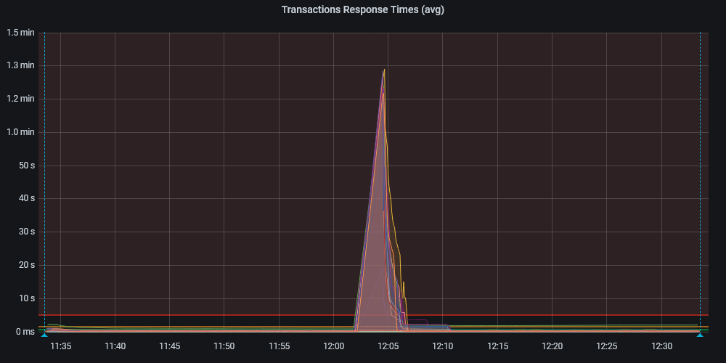
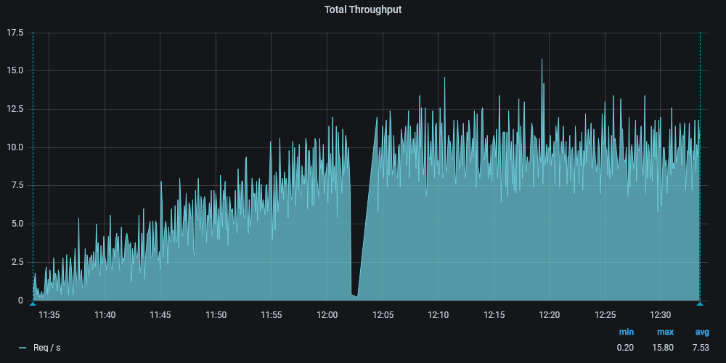
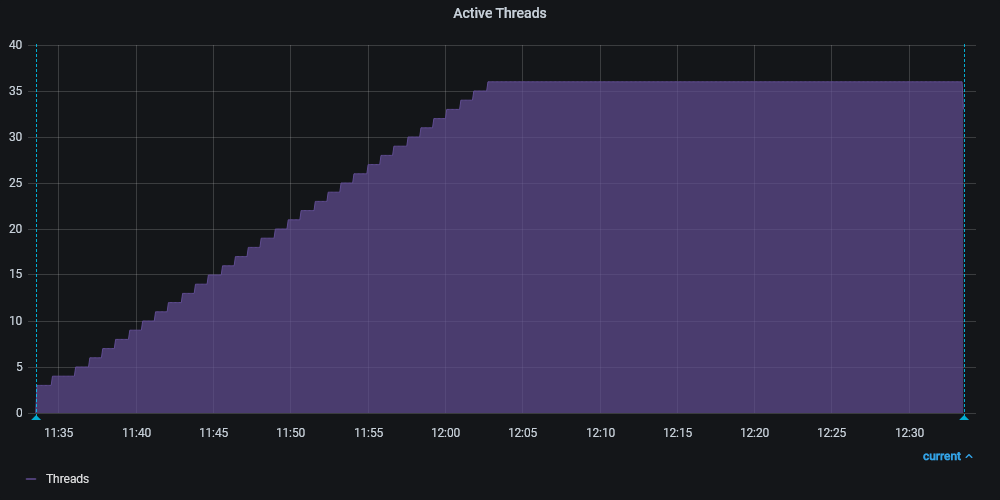


3.2 Number of text Posts - 1000

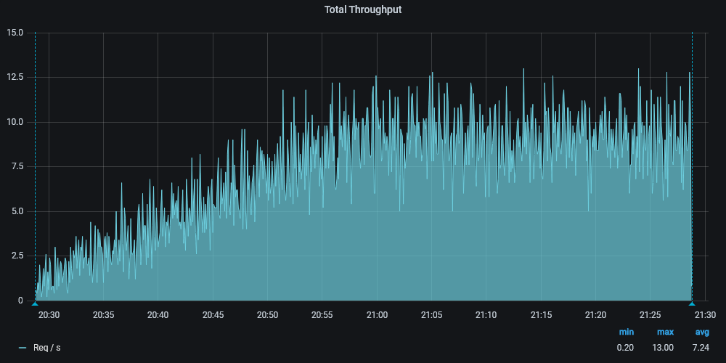
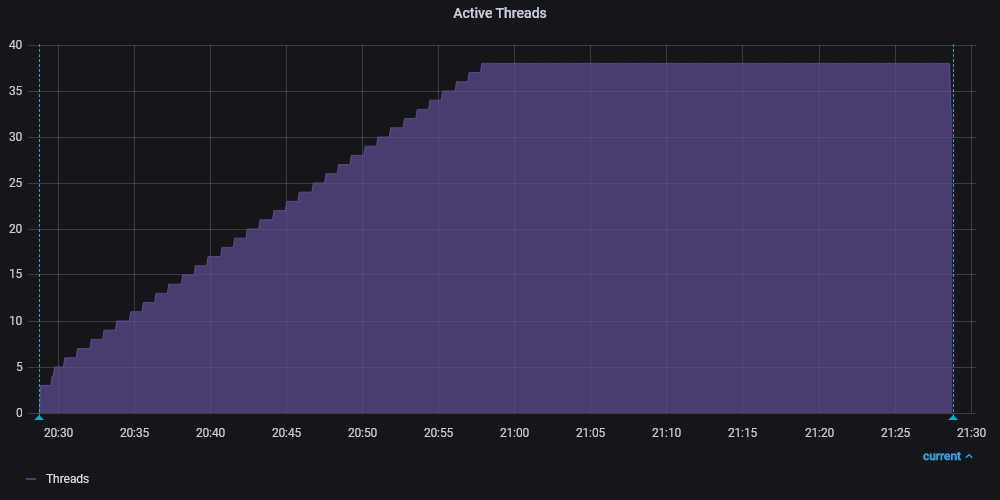


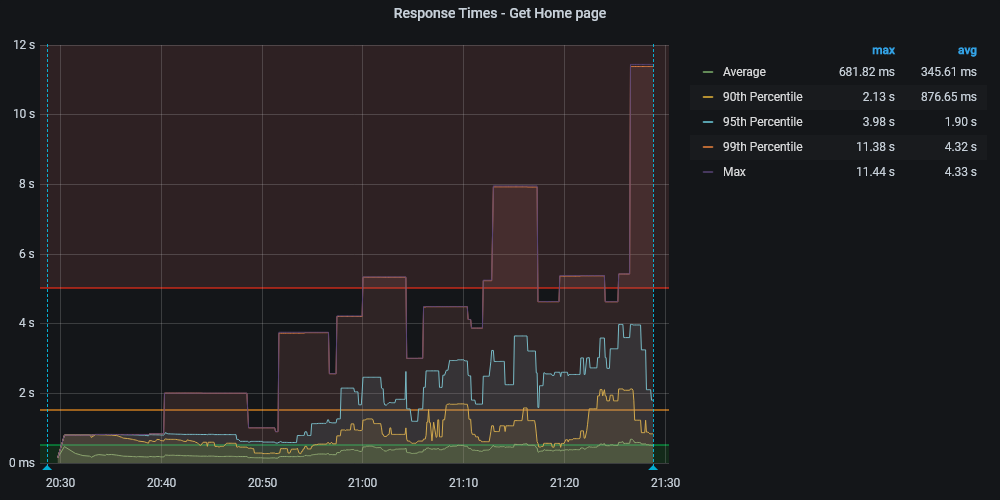
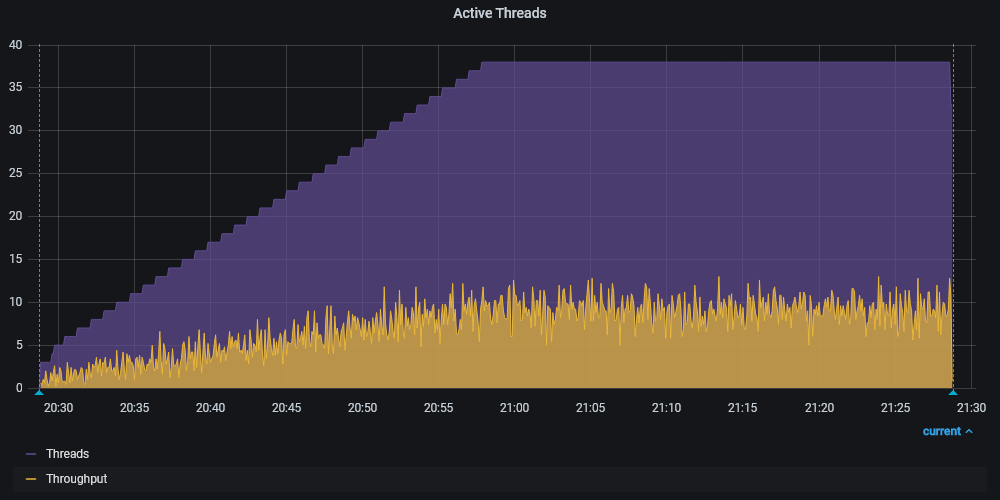
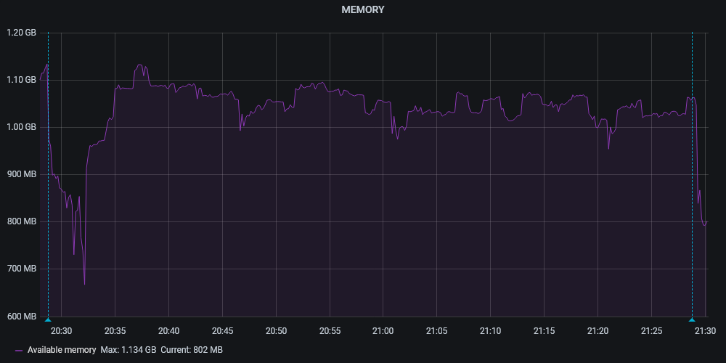
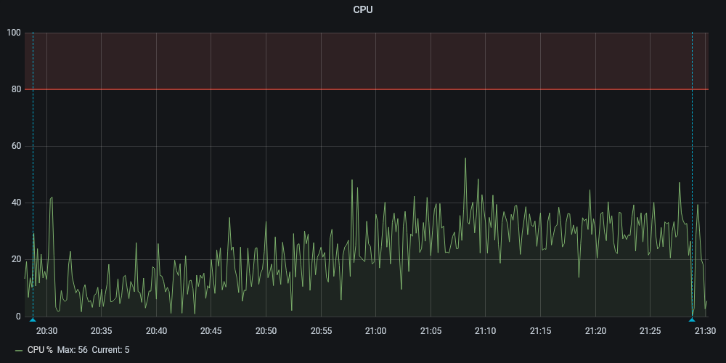
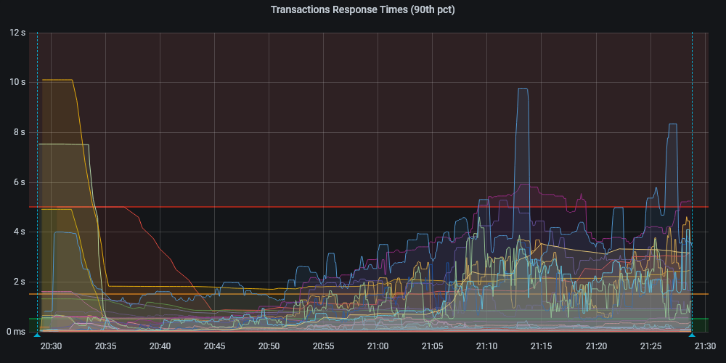
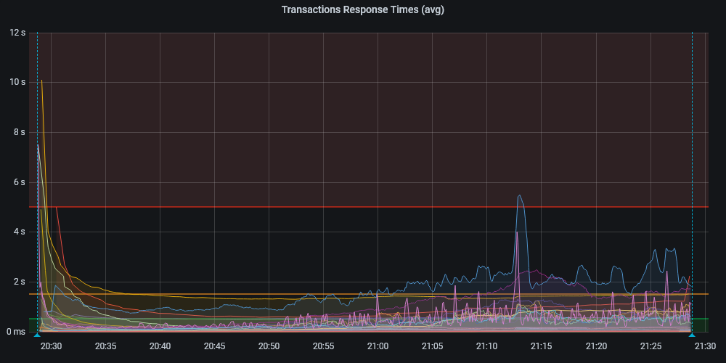


3.3 Number of text Posts – 2000

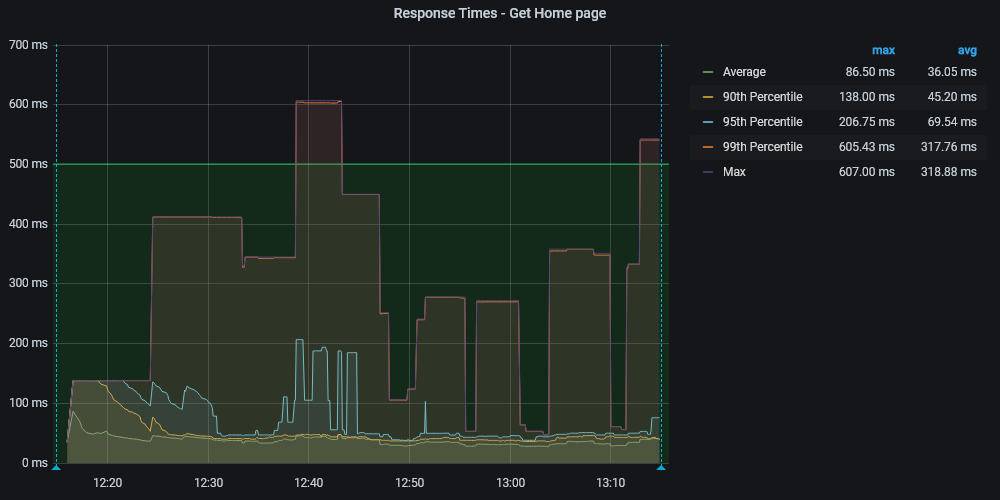
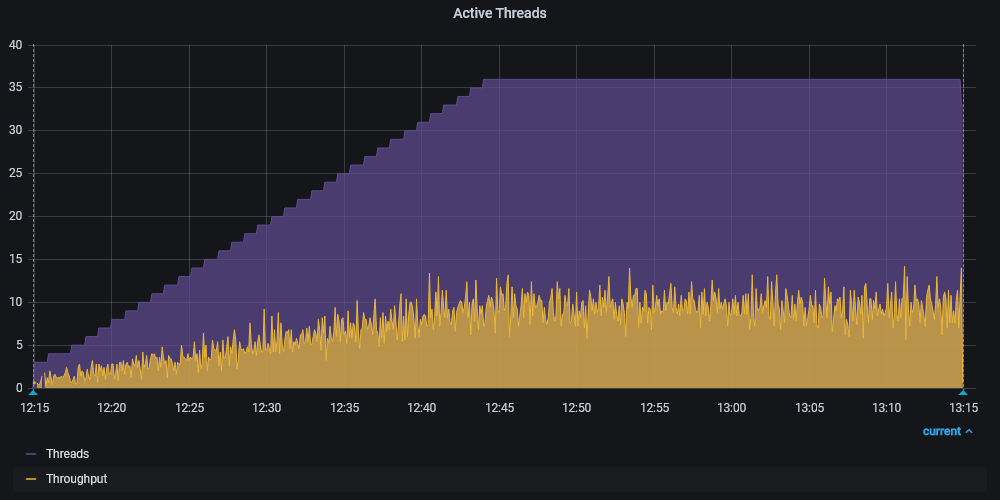
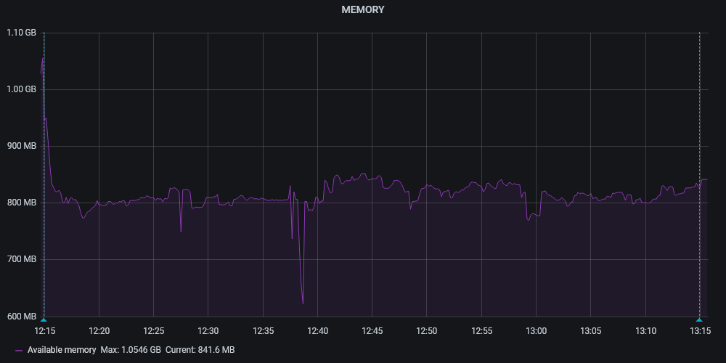
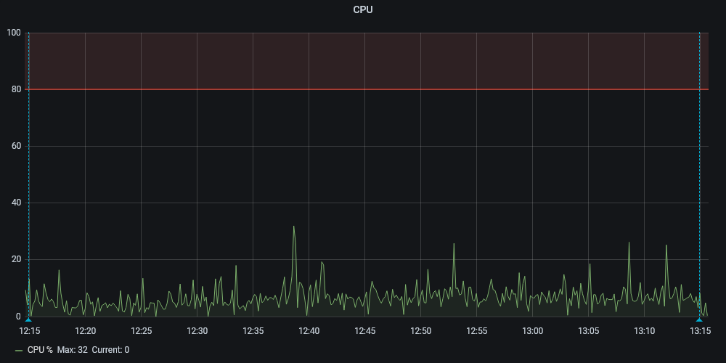
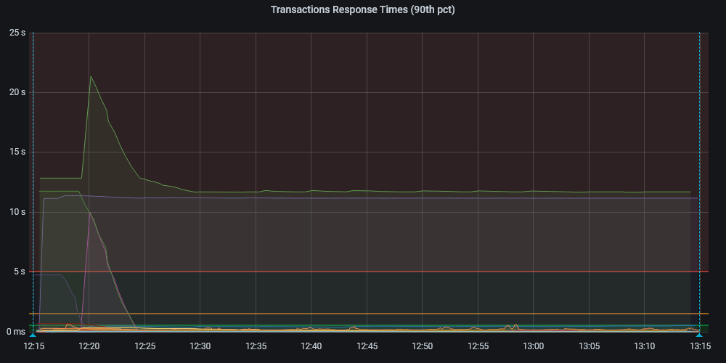
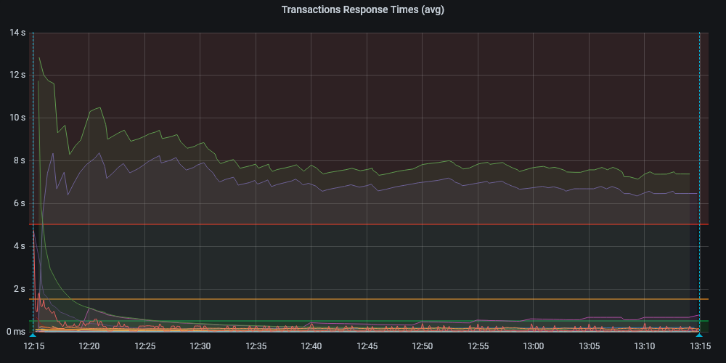
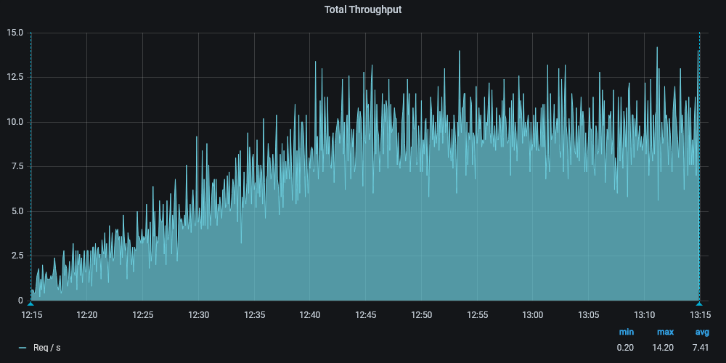
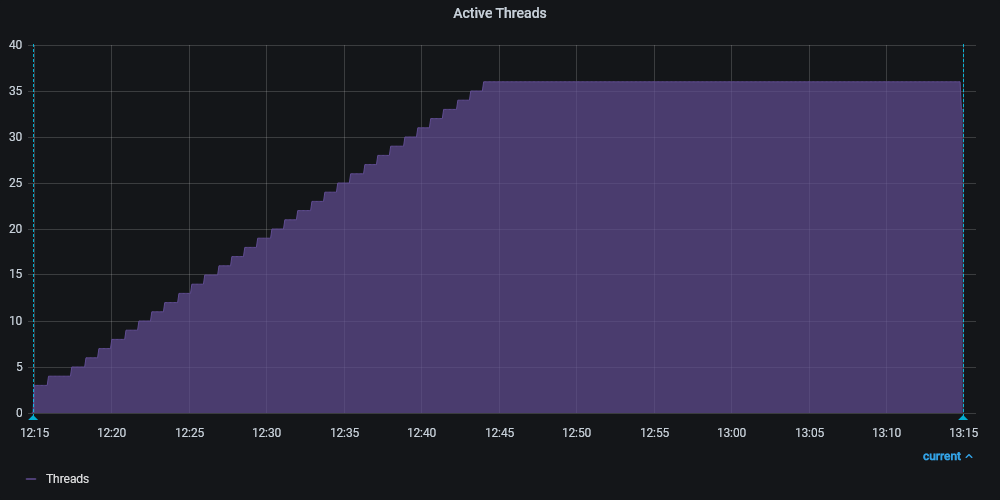


3.4 Number of text Posts – 5000





3.5 Number of text Posts with attached photo 1 MB – 1000



1. Summary KPI data:

100 posts: Max avg response time – 1.95 s

Max 90pct response time – 3.53 s

Max throughput – 15.4 req/s

Percentage of errors – 0.01%

Max CPU utilization – 31 %

Average CPU utilization – 12 %

Min available Memory – 981.3 MB

Get Home Page: avg – 40.04 ms, 90pct – 35.80 ms, 95pct – 223.25 s.

1000 posts: Max avg response time – 1.25 s

Max 90pct response time – 2.15

Max throughput – 14.8 req/s

Percentage of errors – 0.15 %

Max CPU utilization – 51 %

Average CPU utilization – 15 %

Min available Memory – 889.5 MB

Get Home Page: avg – 65.08 ms, 90pct – 199.9 ms, 95pct – 289.9 ms.

2000 posts: Max avg response time – 2.04 s

Max 90pct response time – 2.24 s

Max throughput – 15.8 req/s

Percentage of errors – 3.6 %

Max CPU utilization – 100 %

Average CPU utilization – 25 %

Min available Memory – 996.3 MB

Get Home Page: avg – 171 ms, 90pct – 369.1 ms, 95pct – 455.25 ms.

5000 posts: Max avg response time – 5.49 s

Max 90pct response time – 9.77 s

Max throughput – 13 req/s

Percentage of errors – 0.01 %

Max CPU utilization – 56 %

Average CPU utilization – 30 %

Min available Memory – 667 MB

Get Home Page: avg – 834.64 ms, 90pct – 3.35 s, 95pct – 6.70 s.

1000 posts

with photo: Max avg response time – 8.86 s

Max 90pct response time – 11.8 s

Max throughput – 14.2 req/s

Percentage of errors – 3.67 %

Max CPU utilization – 32 %

Average CPU utilization – 10 %

Min available Memory – 622 MB

Get Home Page: avg – 1.02 s, 90pct – 4.70 s, 95pct – 7.31 s.