Stress Test report

Objective: searching for breaking point of system

### Iteration 1

```
stages: [
{ duration: '1m', target: 100 }, // ramp up to 100 users in 1 minute
{ duration: '2m', target: 100 }, // keep at 100 users for 2 minutes
{ duration: '30s', target: 0 }, // ramp down to 0 users
],
```

### Report

```
checks.
data_received..
                                     11 MB 54 kB
7.6 MB 36 kB
data_sent.
                                                                                 http_req_blocked.
                                     avg=148.82μs min=0s
http_req_connecting.....http_req_duration....
                                     avg=136.16µs min=0s
avg=50.48ms min=0s
                                                                  med=0s
{ expected_response:true } ...: http_req_failed ...:
                                     avg=148.6ms min=501.9μs med=136.52ms max=4.41s
                                                                                                p(90)=256.52ms p(95)=289.35ms
                                     66.02% (
http_req_receiving
http_req_sending
http_req_tls_handshaking
                                     avg=239.71μs min=0s
                                                                  med=0s
                                                                                 max=185.71ms p(90)=981.5\mus p(95)=1.36ms
                                                                                                p(90)=0s
p(90)=0s
                                                                                                                 p(95)=0s
p(95)=0s
                                     avg=12.5μs min=0s
                                                                  med=0s
                                                                                 max=6.42ms
                                     avg=50.23ms min=0s
96050 457 272
                                                                                                p(90)=233.7ms p(95)=248.65ms
http_req_waiting.
http_reqs
                                                                                 max=4.4s
                                                                  med=0s
                                                                                                p(90)=371.71ms p(95)=406.37ms
iteration_duration.
                                      avg=172.02ms min=501.9μs med=157.13ms max=4.41s
iterations
vus_max
```

### Result:

Error rate at 66.03% caused by system crashed with error messages below

```
WARN[6209] Request Failed

yone usage of each socket address (protocol/network address/port) is normally permitted."

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warn[6200] Request Failed

yone usage of e
```



### This site can't be reached

The webpage at http://127.0.0.1:5000/ might be temporarily down or it may have moved permanently to a new web address.

ERR\_ADDRESS\_IN\_USE

## Iteration 2

```
stages: [
{ duration: '1s', target: 10 }, // ramp up to 100 users in 1 minute
{ duration: '10s', target: 50 }, // keep at 100 users for 2 minutes
{ duration: '3s', target: 0 }, // ramp down to 0 users
],
```

Result

Result passed

### Iteration 3

```
stages: [
{ duration: '1s', target: 10 }, // ramp up to 100 users in 1 minute
{ duration: '10s', target: 80 }, // keep at 100 users for 2 minutes
{ duration: '3s', target: 0 }, // ramp down to 0 users
],
```

```
execution: local
      script: stress_test_login.js
    scenarios: (100.00%) 1 scenario, 80 max VUs, 44s max duration (incl. graceful stop):
    * default: Up to 80 looping VUs for 14s over 3 stages (gracefulRampDown: 30s, gracefulStop: 30s)
    √ is status 200
                 ...... 100.00% 7002 out of 7002
    checks.
    2.4 MB 174 kB/s
1.6 MB 117 kB/s
   http_req_failed
http_req_receiving
                                 0.00% 0 out of 7000
avg=685.72µs min=0s
                                                       med=601.65μs max=6.97ms
                                                                               p(90)=1.43ms p(95)=1.63ms
    med=0s
                                                                   max=6.21ms
max=0s
                                 avg=48.85µs min=0s
avg=0s min=0s
                                                                               p(90)=0s
p(90)=0s
                                                                                            p(95)=513.9μs
                                                                                            p(95) = 05
                                                       med=0s
                                  avg=80.82ms min=1.51ms med=80.26ms max=363.79ms p(90)=141.38ms p(95)=164.57ms
    http_reqs.
                                 avg=82.11ms min=2.19ms med=81.6ms max=365.9ms p(90)=142.64ms p(95)=165.8ms
    iteration_duration....
    iterations.....
    vus.
running (14.0s), 00/80 VUs, 7002 complete and 0 interrupted iterations
                                          ===] 00/80 VUs 14s
```

Result passed

# Iteration 4

```
stages: [
{ duration: '1s', target: 10 }, // ramp up to 100 users in 1 minute
{ duration: '10s', target: 90 }, // keep at 100 users for 2 minutes
{ duration: '3s', target: 0 }, // ramp down to 0 users
],
```

```
checks : 36.40% 3619 out of 9940 data_received : 1.3 MB 90 kB/s data_sent : 845 kB 60 kB/s

      data_sent
      845 kB 60 kB/s

      http_req_blocked
      avg=146.09µs min=0s

      http_req_connecting
      avg=135.36µs min=0s

      http_req_duration
      avg=7.64ms min=0s

                                                                                        med=0s
                                                                          med=0s
                                                                          med=0s
        { expected_response:true } . . . :
                                            avg=20.99ms min=502.49\mu s med=18.72ms max=339.84ms p(90)=34.08ms p(95)=47.65ms
      http_req_failed.....
                                            63.59% 63
                                                                                        \begin{array}{lll} \max = 10.81 ms & p(90) = 563.33 \mu s & p(95) = 768.33 \mu s \\ \max = 1.52 ms & p(90) = 0s & p(95) = 0s \\ \max = 0s & p(90) = 0s & p(95) = 0s \end{array}
      http_req_receiving....:
                                            avg=137.31μs min=0s
                                                                          med=0s
     avg=8.77μs min=0s
                                                                          med=0s
                                            avg=0s
                                                          min=0s
                                                                          med=0s
                                            avg=7.49ms
      http_req_waiting......
                                                          min=0s
                                                                          med=0s
                                                                                        max=339.33ms p(90)=25.89ms p(95)=31.09ms
      http_reqs.
      iteration_duration.....
                                            avg=64.42ms min=502.49\mu s med=50.09ms max=342.54ms p(90)=135.07ms p(95)=138.09ms
     iterations ... .: 9940 709.948498/s
vus ... .: 1 min=1
      vus_max....:
```



#### This site can't be reached

The webpage at http://127.0.0.1:5000/ might be temporarily down or it may have moved permanently to a new web address.

ERR\_ADDRESS\_IN\_USE

Result: system crashed

### Conclusion

During stress testing, when the number of requests was set to 90 and 100, the system failed, suggesting that it could not handle that load. However, with a target load of fewer than 80 requests, the system operated normally without any issues. So we can conclude that the breaking point is around 90 rps