

# Relatório Técnico

## Resumo Executivo

A capacidade máxima de usuários que a API suporta no cenário de CPU é 161, já no cenário de I/O foi próxima de 20 mil VUs

## Evidências

- Smoke Test

```
THRESHOLDS
checks
✓ 'rate==1' rate=100.00%
http_req_failed
✓ 'rate==0' rate=0.00%

TOTAL RESULTS
checks_total.....: 30      0.997439/s
checks_succeeded.: 100.00% 30 out of 30
checks_failed....: 0.00%   0 out of 30
✓ status 200

HTTP
http_req_duration.....: avg=1.31ms min=415µs med=1.39ms max=2.67ms p(90)=1.84ms p(95)=2.29ms
{ expected_response:true }....: avg=1.31ms min=415µs med=1.39ms max=2.67ms p(90)=1.84ms p(95)=2.29ms
http_req_failed.....: 0.00% 0 out of 30
http_reqs.....: 30      0.997439/s

EXECUTION
iteration_duration.....: avg=1s    min=1s    med=1s    max=1s    p(90)=1s    p(95)=1s
iterations.....: 30      0.997439/s
vus.....: 1      min=1      max=1
vus_max.....: 1      min=1      max=1

NETWORK
data_received.....: 8.7 kB 288 B/s
data_sent.....: 2.3 kB 76 B/s

running (0m30.1s), 0/1 VUs, 30 complete and 0 interrupted iterations
default ✓ [=====] 1 VUs 30s
```

## - Teste de Carga

```
THRESHOLDS
http_req_duration
✓ 'p(95)<500' p(95)=290.91ms

http_req_failed
✓ 'rate<0.01' rate=0.00%

TOTAL RESULTS
checks_total.....: 6911    32.77908/s
checks_succeeded.: 100.00% 6911 out of 6911
checks_failed....: 0.00%   0 out of 6911

✓ status 201

HTTP
http_req_duration.....: avg=199.37ms min=99.74ms med=198.95ms max=304.78ms p(90)=280.75ms p(95)=290.91ms
  { expected_response:true }...: avg=199.37ms min=99.74ms med=198.95ms max=304.78ms p(90)=280.75ms p(95)=290.91ms
http_req_failed.....: 0.00% 0 out of 6911
http_reqs.....: 6911    32.77908/s

EXECUTION
iteration_duration.....: avg=1.2s    min=1.1s   med=1.19s   max=1.3s    p(90)=1.28s   p(95)=1.29s
iterations.....: 6911    32.77908/s
vus.....: 1      min=1      max=50
vus_max.....: 50     min=50     max=50

NETWORK
data_received.....: 2.0 MB 9.7 kB/s
data_sent.....: 1.2 MB 5.5 kB/s

running (3m30.8s), 00/50 VUs, 6911 complete and 0 interrupted iterations
default ✓ [=====] 00/50 VUs 3m30s
```

## - Teste de Estresse

```
TOTAL RESULTS
checks_total.....: 21882  58.701003/s
checks_succeeded.: 31.84% 6969 out of 21882
checks_failed....: 68.15% 14913 out of 21882

✗ status 201
↳ 31% - ✓ 6969 / ✗ 14913

HTTP
http_req_duration.....: avg=1.52s min=0s      med=0s      max=1m0s  p(90)=3.25s p(95)=3.28s
  { expected_response:true }...: avg=3.08s min=49.43ms med=3.21s max=57.8s p(90)=3.29s p(95)=3.31s
http_req_failed.....: 68.15% 14913 out of 21882
http_reqs.....: 21882  58.701003/s

EXECUTION
iteration_duration.....: avg=6.76s min=49.49ms med=7.77s max=1m0s  p(90)=7.77s p(95)=7.77s
iterations.....: 21882  58.701003/s
vus.....: 16      min=2      max=999
vus_max.....: 1000    min=1000    max=1000

NETWORK
data_received.....: 2.2 MB 5.9 kB/s
data_sent.....: 1.1 MB 2.9 kB/s

running (6m12.8s), 0000/1000 VUs, 21882 complete and 0 interrupted iterations
default ✓ [=====] 0000/1000 VUs 6m0s
```

## - Teste de Pico

```
■ TOTAL RESULTS

checks_total.....: 16672  163.174815/s
checks_succeeded.: 100.00% 16672 out of 16672
checks_failed....: 0.00%  0 out of 16672

✓ status 201

HTTP
http_req_duration.....: avg=200.2ms min=99.72ms med=199.72ms max=302.68ms p(90)=280.2ms p(95)=290.63ms
  { expected_response:true }.: avg=200.2ms min=99.72ms med=199.72ms max=302.68ms p(90)=280.2ms p(95)=290.63ms
http_req_failed.....: 0.00%  0 out of 16672
http_reqs.....: 16672  163.174815/s

EXECUTION
iteration_duration....: avg=1.2s   min=1.09s  med=1.2s   max=1.3s   p(90)=1.28s  p(95)=1.29s
iterations.....: 16672  163.174815/s
vus.....: 10      min=1      max=300
vus_max.....: 300     min=300    max=300

NETWORK
data_received.....: 4.9 MB 48 kB/s
data_sent.....: 2.8 MB 28 kB/s

running (1m42.2s), 000/300 VUs, 16672 complete and 0 interrupted iterations
default ✓ [=====] 000/300 VUs 1m41s
```

## Análise de Estresse

A partir do VU 161, começaram a aparecer erros de timeout

```
WARN[0096] Request Failed
WARN[0097] Request Failed
WARN[0098] Request Failed
WARN[0098] Request Failed
WARN[0099] Request Failed
WARN[0099] Request Failed
WARN[0100] Request Failed
WARN[0101] Request Failed
WARN[0101] Request Failed
^C

■ TOTAL RESULTS

checks_total.....: 2049  20.058218/s
checks_succeeded.: 99.56% 2040 out of 2049
checks_failed....: 0.43%  9 out of 2049

✗ status 201
  ↳ 99% - ✓ 2040 / ✗ 9

HTTP
http_req_duration.....: avg=2.71s min=48.9ms  med=2.14s max=1m0s  p(90)=2.97s p(95)=3.08s
  { expected_response:true }.: avg=2.46s min=48.9ms  med=2.14s max=59.94s p(90)=2.97s p(95)=3.08s
http_req_failed.....: 0.43%  9 out of 2049
http_reqs.....: 2049  20.058218/s

EXECUTION
iteration_duration....: avg=2.71s min=48.95ms med=2.14s max=1m0s  p(90)=2.97s p(95)=3.08s
iterations.....: 2049  20.058218/s
vus.....: 170      min=2      max=170
vus_max.....: 1000    min=1000   max=1000

NETWORK
data_received.....: 640 kB 6.3 kB/s
data_sent.....: 333 kB 3.3 kB/s
```