# K6 PERFORMANCE TEST REPORT

## Ø=Üª STRESS TEST

FAILED

Generated: 28/1/2026, 10:51:14
Test Date: 28/1/2026, 10:44:13

| P95 | P99 | Error Rate | RPS |
|---|---|---|---|
| 1m 0s | 1m 0s | 68.74% | 2.57 |

# Executive Summary

Overall Health Score: 15/100 (Critical)

Test Result: SOME THRESHOLDS FAILED

## Threshold Results

| Metric | Threshold | Status |
|---|---|---|
| http_req_duration | p(99)<60000 | FAIL |
| http_req_failed | rate<0.05 | FAIL |
| rejected_semaphore | count<1e9 | PASS |
| shortcircuit | count<1e9 | PASS |

## Quick Statistics

| | |
|---|---|
| Total Requests | 1078 |
| Failed Requests | 741 |
| Error Rate | 68.74% |
| Test Duration | 7m 0s |
| Max VUs | 101 |
| Avg Response Time | 18.08s |
| P95 Response Time | 1m 0s |
| P99 Response Time | 1m 0s |
| Requests/Second | 2.57 |

# Metrics Glossary

This section explains all performance metrics used in this report. Understanding these metrics is essential for interpreting the test results correctly.

## Response Time Percentiles

Percentiles show what percentage of requests completed faster than the given value.
They are more meaningful than averages because they show the actual user experience distribution.

P50 (Median) - 50% of requests were faster than this value

P90 (90th Percentile) - 90% of requests were faster than this value

P95 (95th Percentile) - 95% of requests were faster than this value

P99 (99th Percentile) - 99% of requests were faster than this value

## Throughput Metrics

RPS (Requests Per Second) - Number of requests the system processes per second

Iterations - Total number of complete test cycles executed

## Error Metrics

Error Rate - Percentage of requests that failed

HTTP 500 Errors - Internal Server Error count

HTTP 503 Errors - Service Unavailable count

HTTP 504 Errors - Gateway Timeout count

Timeouts - Requests that exceeded the timeout threshold

## K6 HTTP Metrics

HTTP Request Duration - Total time for the complete request-response cycle

HTTP Request Waiting (TTFB) - Time to First Byte - time waiting for server response

HTTP Connecting Time - Time spent establishing TCP connection

HTTP Blocked Time - Time spent waiting for a free connection slot

HTTP Sending Time - Time spent sending request data

HTTP Receiving Time - Time spent receiving response data

HTTP Request Failed - Rate of failed HTTP requests

HTTP Requests - Total count of HTTP requests made

## Custom Application Metrics

Bad Responses - Total count of responses that failed validation

Rejected Semaphore - Requests rejected due to semaphore limits

Circuit Breaker Activations - Times the circuit breaker was triggered

Success Rate - Percentage of successful requests

Payload Size (Bytes) - Size of request payload in bytes

SOAP Processing Time - Server-side processing time for SOAP requests

## Virtual Users (VUs)

Virtual Users simulate concurrent users making requests to your application.
Each VU runs in parallel, executing the test script independently.

VUs (Current) - Number of active virtual users at this moment

VUs Max - Maximum number of virtual users during the test

# About This Test: STRESS TEST

## Objective

Find the system breaking point

## Description

The Stress Test pushes the system beyond normal capacity to find its breaking point.
Load is gradually increased until the system starts failing or degrading significantly.

This test answers: "What is our maximum capacity?" and "How does the system behave when overloaded?"

Note: This test is expected to eventually fail. The goal is to OBSERVE and MEASURE, not to pass.

## When To Run This Test

- Periodically to understand capacity limits
- Before major traffic events (campaigns, launches)
- When planning infrastructure scaling
- After significant architecture changes

## What This Test Identifies

- Maximum throughput capacity
- Breaking point (when errors start)
- Degradation pattern under extreme load
- Resource bottlenecks (CPU, memory, connections)
- System behavior during and after overload

## How To Interpret Results

Observe: Look for the exact point where errors begin

# Detailed Results

## Response Time Statistics

| | |
|---|---|
| Minimum | 76ms |
| Maximum | 1m 0s |
| Average | 18.08s |
| Median (P50) | 2.51s |
| P90 | 1m 0s |
| P95 | 1m 0s |
| P99 | 1m 0s |

## Custom Application Metrics

| | |
|---|---|
| payload_bytes | Count: 1102, Sum: 6424660 |
| payload_mb | Count: 1102, Sum: 6.13 |
| success_rate | Count: 1078, Sum: 337 |
| response_size_bytes | Count: 337, Sum: 90653 |
| dropped_iterations | Count: 52, Sum: 52 |
| bad_responses | Count: 741, Sum: 741 |
| http_500 | Count: 519, Sum: 519 |
| rejected_semaphore | Count: 231, Sum: 231 |
| shortcircuit | Count: 288, Sum: 288 |
| http_504 | Count: 222, Sum: 222 |

## HTTP Status Code Distribution

| | |
|---|---|
| 2xx (Success) | -404 |
| 3xx (Redirect) | 0 |
| 4xx (Client Error) | 0 |
| 5xx (Server Error) | 741 |
| Timeout | 0 |

# Results Interpretation

## Overall Assessment

Based on the test results, the system health score is
15/100 (Critical)

## Threshold Analysis

Total Thresholds: 4
Passed: 2
Failed: 2

## Recommendations

1. CRITICAL: Error rate exceeds 10%. Investigate error causes immediately.

2. P95 response time exceeds 10 seconds. Consider performance optimization.

# Technical Details

## Test Configuration

| | |
|---|---|
| Test Type | stress |
| Source File | stress-latest.json |
| Test Date | 28/1/2026, 10:44:13 |
| Total Duration | 7m 0s |
| Max Virtual Users | 101 |
| Total Iterations | 1078 |

## Execution Environment

| | |
|---|---|
| Report Generated | 28/1/2026, 10:51:14 |
| Generator | K6 Performance Testing Framework |
| Report Version | 1.0.0 |