

PR Reviewer Service – Load Testing Report

Summary:

The load test executed using k6 validated core service functionality under high load.

All functional checks passed with 100% success across 14,035 checks.

Tested Functionality:

- Team creation (POST /team/add)
- Pull request creation with automatic reviewer assignment
- Reassign reviewer under concurrency
- Merge PR and idempotent merge re-calls
- Fetch PRs assigned to a user
- Latency SLA validation (<300ms)

Key Metrics:

- Total checks: 14,035
- Checks succeeded: 100%
- HTTP Requests: 12,030
- Average latency: 3.66 ms
- p90 latency: 9.04 ms
- p95 latency: 16.45 ms
- Max latency: 74 ms
- Iterations: 2005 (~50/s)
- Virtual users: up to 20
- Data received: 2.9 MB
- Data sent: 2.6 MB

Interpretation of Errors:

The 16.66% http_req_failed rate was not due to server failures.

k6 treats expected 400-validation responses (from reassign logic)

as “failed” unless configured with expected_response:true.

Conclusion:

The service demonstrates excellent performance:

- Fully satisfies SLA (<300 ms)
- Stable under 20 VU and ~300 RPS
- Handles concurrency safely
- Merge operation is confirmed idempotent
- All business logic validated under load