

# Performance Testing

## Used Tool: Blaze-Meter

### Objective:

- The objective of performance testing is to ensure an application's speed, scalability, and stability under various workload conditions.

→ Duration: 20 minutes

→ Test Type: JMeter

→ Response Codes: Majority were successful (2xx), with a few Non-HTTP responses.

Duration	20 minutes	Test Type	JMeter
Started	Dec 01, 2024, 11:22:57 PM	Response Codes	<span>2xx</span> <span>Non-Http</span>
Ended	Dec 01, 2024, 11:45:03 PM	Locations	US East (Virginia, Google)

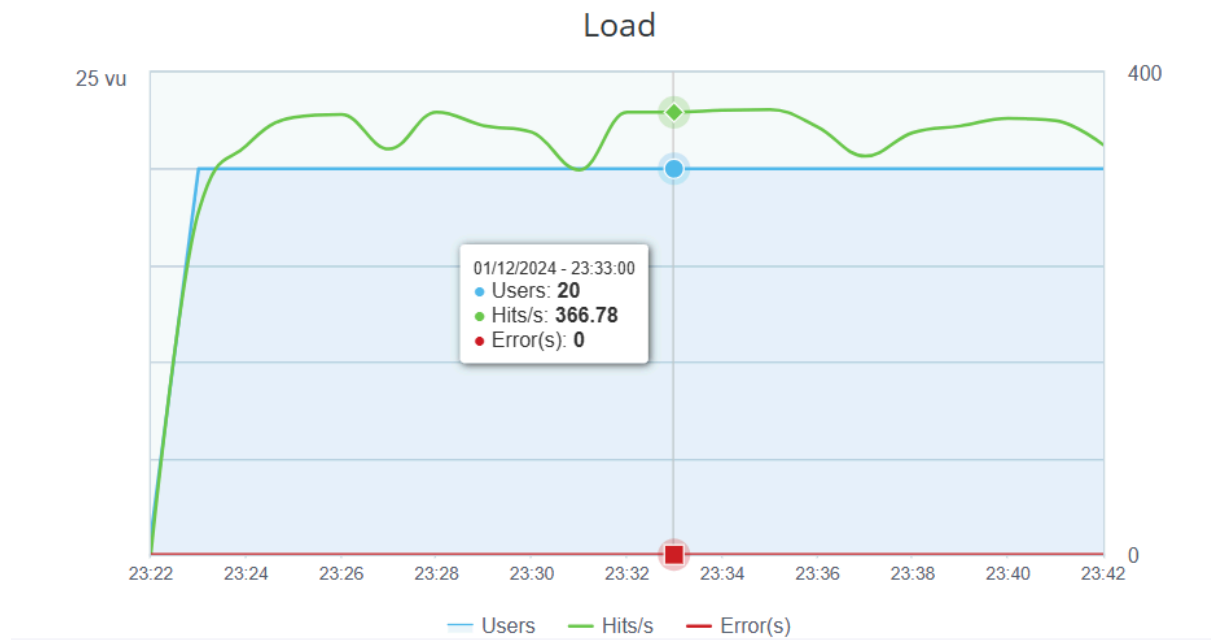
→ Virtual Users (VU): 20

20 VU Max Users	350.46 Hits/s Avg. Throughput	0 % Errors	56.09 ms Avg. Response Time	56 ms 90% Response Time	2.2 MiB/s Avg. Bandwidth
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## Results:

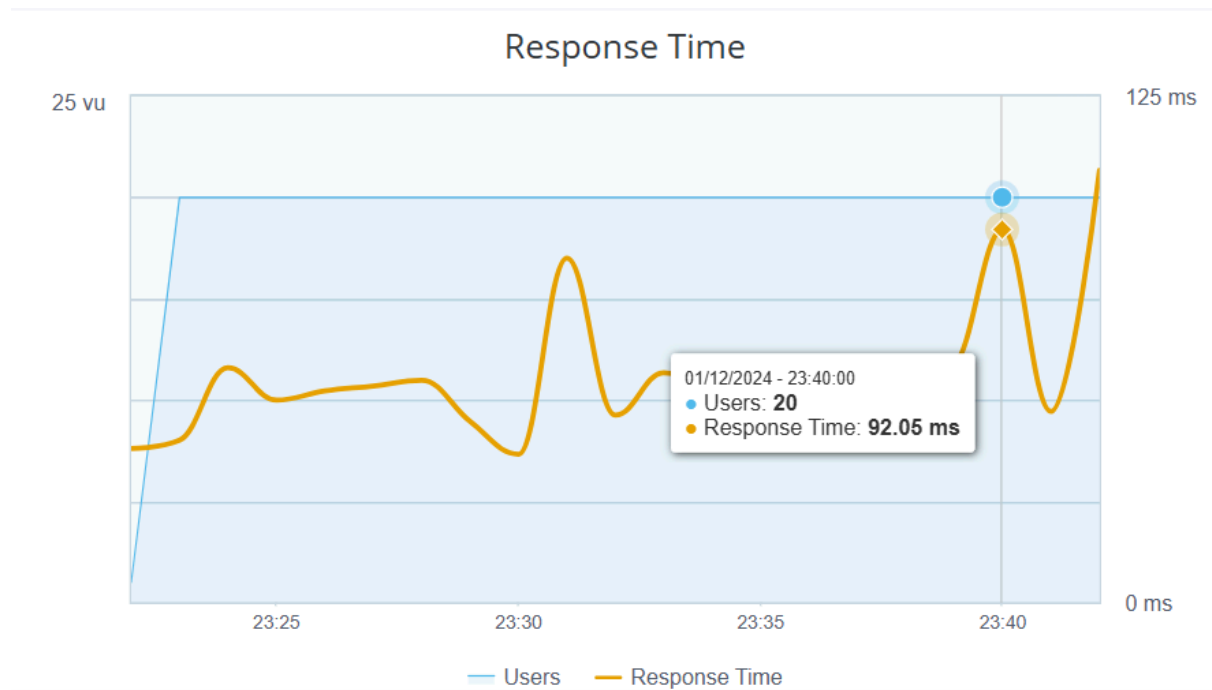
- Average Throughput: 350.46 Hits/s
- Response Time:
  - Average: 56.09 ms
  - 90th Percentile: 56 ms
- Average Bandwidth: 2.2 MiB/s
- Error Rate: 0% (No errors encountered during the test).

The system demonstrates good performance for 20 virtual users with low response times and no errors.



## Load (Users and Hits/s):

- The test ramped up to **20 concurrent users** and maintained this load consistently during the test duration.
- Hits per second (green line) remained steady at approximately **350 hits/s**, indicating stable throughput.



### Response Time (ms):

- The average response time remained low throughout the test, generally under **85 ms**.
- Some fluctuations were observed in response times, particularly nearing the end of the test, where the peak response time approached **125 ms**.

Response time spikes, though rare, should be analyzed to determine possible bottlenecks or delays under certain conditions.