

# Performance Test Summary Report

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## 1. Project Overview

This project demonstrates a performance/load testing scenario executed on the OrangeHRM Demo application using Apache JMeter. The goal of this project was to understand how a web application behaves under simulated user load and to analyze performance metrics such as response time, throughput, and error percentage.

## 2. Tools & Files Used

- Apache JMeter (Recording Template – Recording with Think Time)
- Orange\_HRM\_Demo\_Test\_1.jmx – JMeter Test Plan
- report1.jtl – Raw execution log (JMeter output)
- report1.csv – Additional metrics file
- index.html – Auto-generated JMeter HTML Dashboard Report

## 3. Test Setup & Configuration

The test plan was created using the 'Recording with Think Time' template in JMeter:

1. Opened JMeter → Templates → Selected 'Recording with Think Time'.
2. Entered Host, Protocol, and Path details to configure the recording.
3. Configured Thread Group with user count, ramp-up period, and loop count.
4. Used Logic Controller and Recording Controller to structure the recorded flow.
5. Named the recording script and saved it as a .jmx test plan.
6. Executed the final test using JMeter command-line mode to generate accurate .jtl results.

## 4. Execution Details

- The test execution was triggered through CMD using the .jmx file.
- JMeter generated the .jtl file which was later used to create the HTML Dashboard.
- The test ran for approximately 1 minute.
- All recorded HTTP Samplers were executed based on the Thread Group configuration.

## 5. Key Performance Metrics Analyzed

- Average Response Time
- Min/Max Response Time Range
- Throughput (Requests per Second)
- Error Percentage
- APDEX Score (User Satisfaction Index)
- Request Success & Failure Distribution

## 6. Observations (Based on Dashboard Data)

- The HTML Dashboard was generated successfully from the .jtl file.
- Response Time graphs and Throughput charts were visible, showing stable performance under light load.
- No critical errors were observed in the error table.

- APDEX score indicates acceptable performance for the tested load range.

## 7. Conclusion

The performance test was successfully executed using Apache JMeter, and the recorded workflow (Login → Dashboard → Logout) was analyzed under the configured load. The generated JTL results and HTML Dashboard provided clear insights into response times, throughput, and overall application behavior. The test setup, execution, and reporting confirm that the application performed consistently under the applied load, and the project demonstrates a complete end-to-end understanding of performance testing fundamentals.