Mindtree

IDA

Performance Test Report

For

Execution of

OTP Authentication – 100 users

Date: 22 February 2019

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Summary

This report presents the observations and findings of the load test conducted for a load of 100 users accessing the IDA OTP Auth API Endpoints for a duration of 20 minutes.

The objective of this load test was to observe and record the behavior of the application when users generate OTP and authenticate the same using APIs.

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Below are the scenario details:

Sprint/Report Name	FIT - 3 IDA OTP Authentication
Run Date	22-February-2019
Period	15:35 PM to 15:55 PM
Number of concurrent users	100
Ramp up	1 user per second
Run Duration	20 minutes
Ramp down	1 user per second

The transaction response time observed were as below:

Label	#Sample	Average	90% line(ms)	Min(ms)	Max(ms)	Error%	Throughput/Sec
Generate OTP	10316	2099	3035	280	42014	0.09%	8.09
OTP authentication	10273	2223	3290	85	42018	0.16%	8.15

Performance Test Execution Details

The average transaction response time is within the SLA of 3 seconds and the 90th percentile time is more than 3 seconds.

During the test, it was observed that the CPU resource is utilized more than 100% for most of the time and there are no other issues observed in the integration server.

There were few failures observed during the load test due to 503 Service Unavailable error (Error rate - 0.16%).

Test Environment

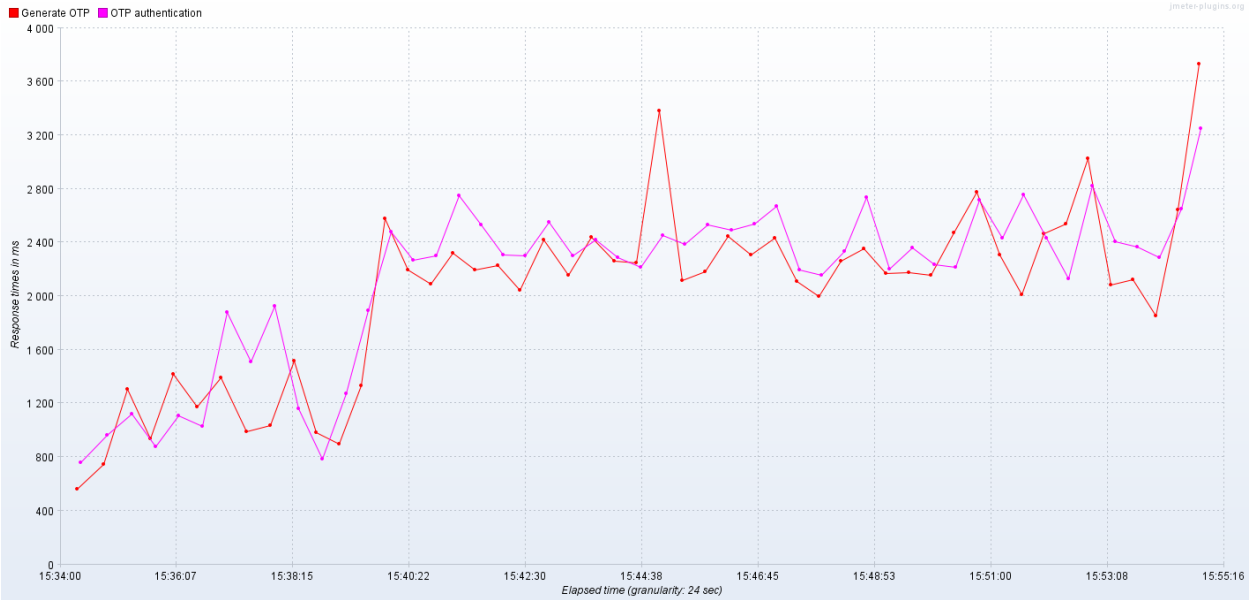
The Integration test environment used for test execution.

No of Cores: 2

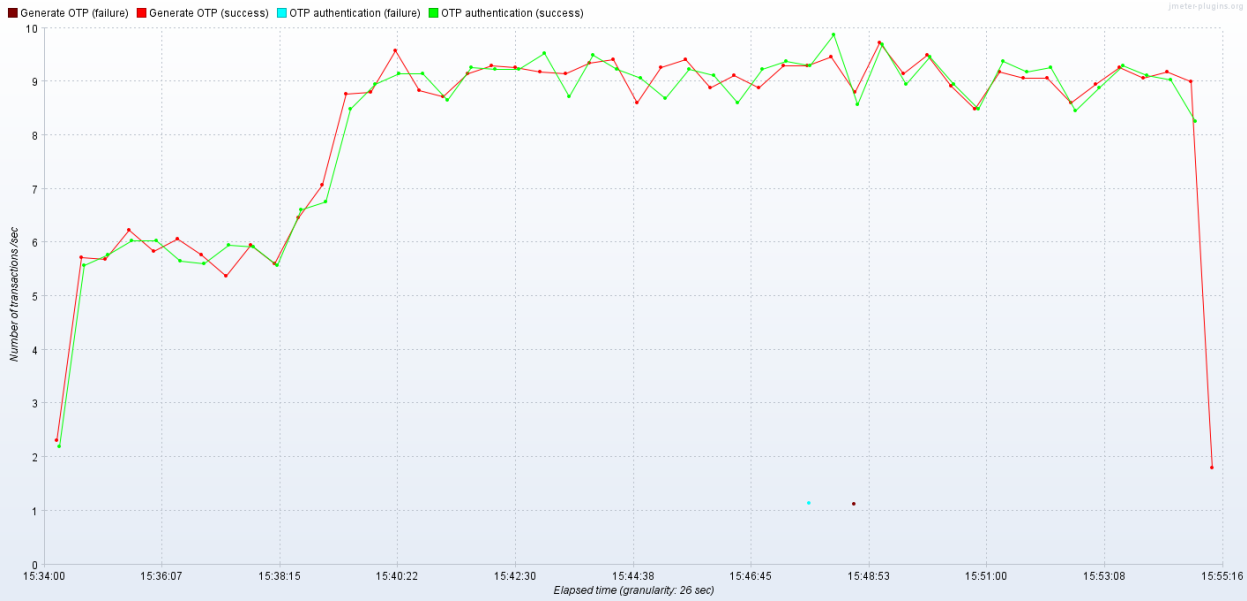
Memory: 8GB

Response Time Graph

The response times of all the transactions were normal and below the SLA throughout the duration of the test.



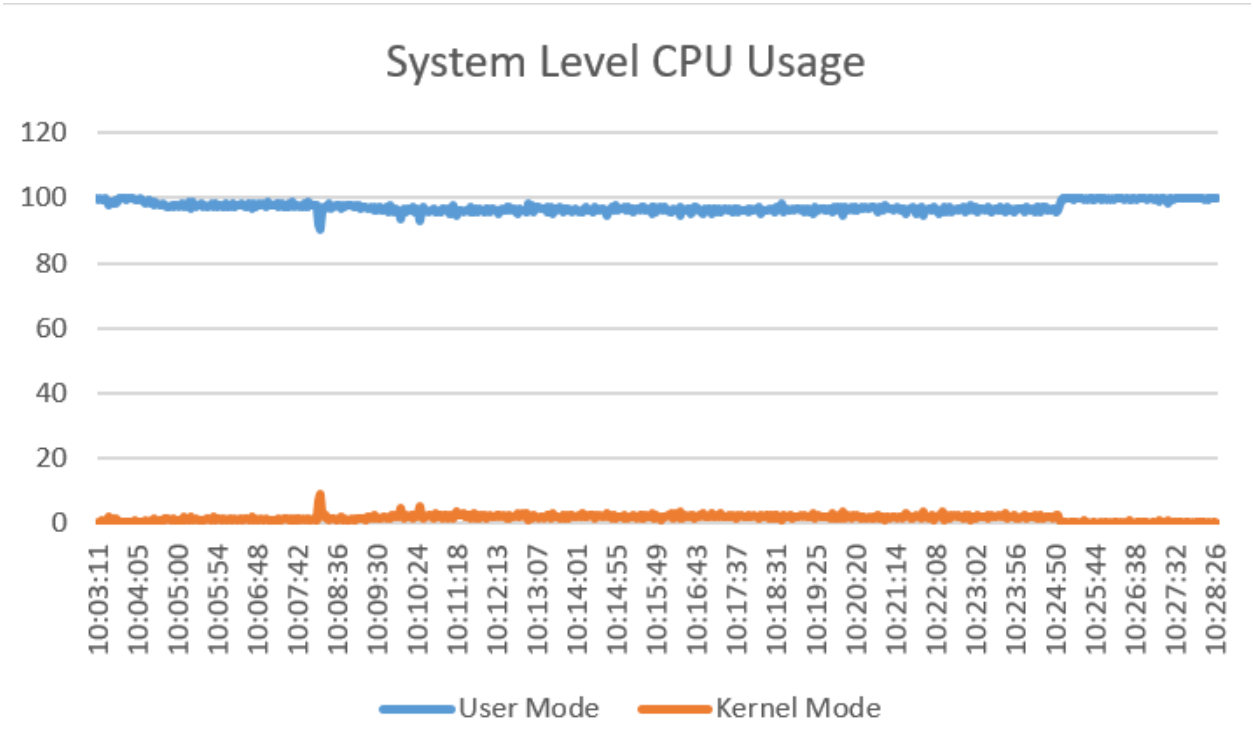
Transactions per second:



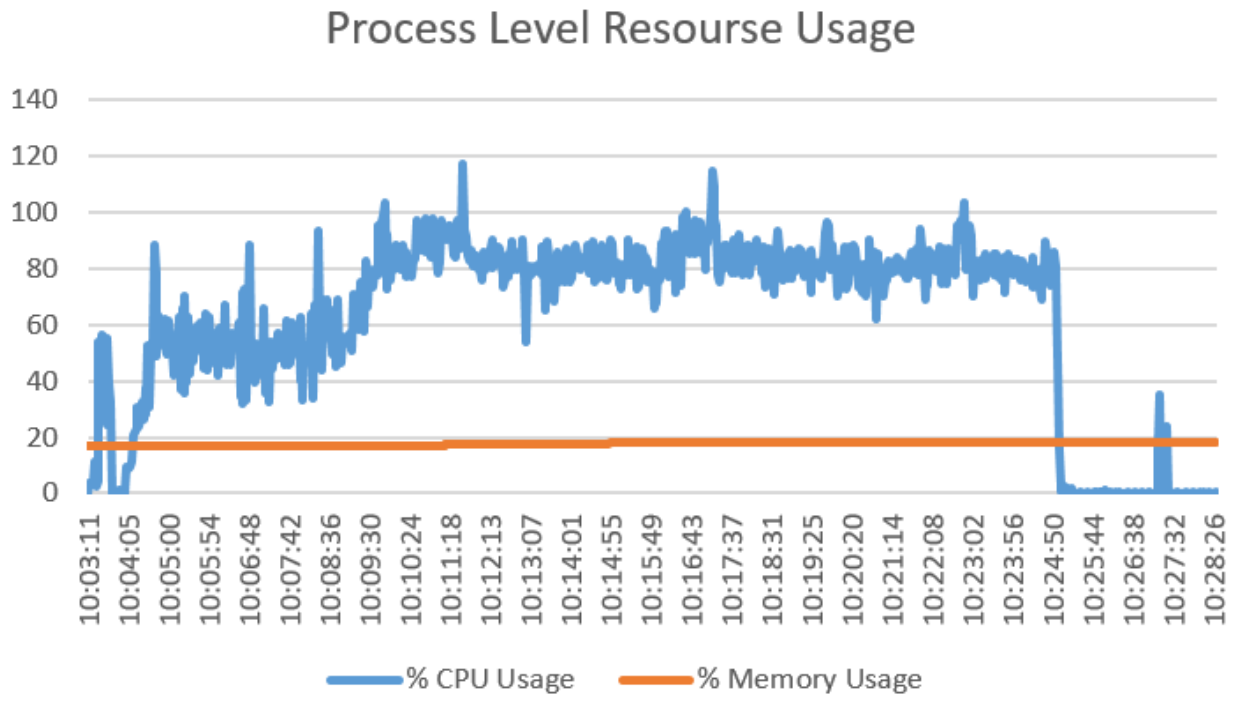
Resource Usage Metrics

Top command of Linux was used to monitor and record the resource usage. System level and process level data for CPU and memory usage is demonstrated in the below graphs.

CPU Usage at System and User level:



Process Level CPU and Memory Usage



Conclusion and Next Steps

The CPU usage was more than 80% for most of the time and it reached even more than 100% at some time. The response time is with the expected SLA of 3 seconds.

A JIRA ticket will be raised for high CPU usage and the same will be shared with development team for root cause analysis.