Mindtree

IDA

Performance Test Report

For

Execution of

e-KYC API – 100 users

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Author: Gaurav Sharan

Summary

This report presents the observations and findings of the load test conducted for a load of 100 users accessing the e-KYC API endpoints sequentially running for a duration of 20 minutes.

The objective of this load test was to observe and record the behavior of the application when users access the OTP generation and eKYC API.

Below are the scenario details:

Sprint/Report Name	FIT - 3 IDA – eKYC
Run Date	22-February-2019
Period	05:15 PM to 05:42 PM
Number of concurrent users	100
Ramp up	1 user per second
Run Duration	20 minutes
Ramp down	10 users per second

The transaction response times observed were as below:

Label	# Samples	Average	90% Line	95% Line	Min	Max	Error %	Throughput
OTP Generation	9047	1494	1626	2072	232	908427	0.02%	5.45691
Encode Request	9013	5	8	9	1	92	0.00%	7.19789
e-KYC Request	8984	1384	1657	2047	227	42017	0.01%	7.11952
TOTAL	27044	961	1478	1772	1	908427	0.01%	16.31222

Performance Test Execution Details

Encode request API is the API exposed by demoApp hosted on local machine for encoding the request data to be sent to the e-KYC request.

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

0.01% error occurred is because of network error.

Test Environment

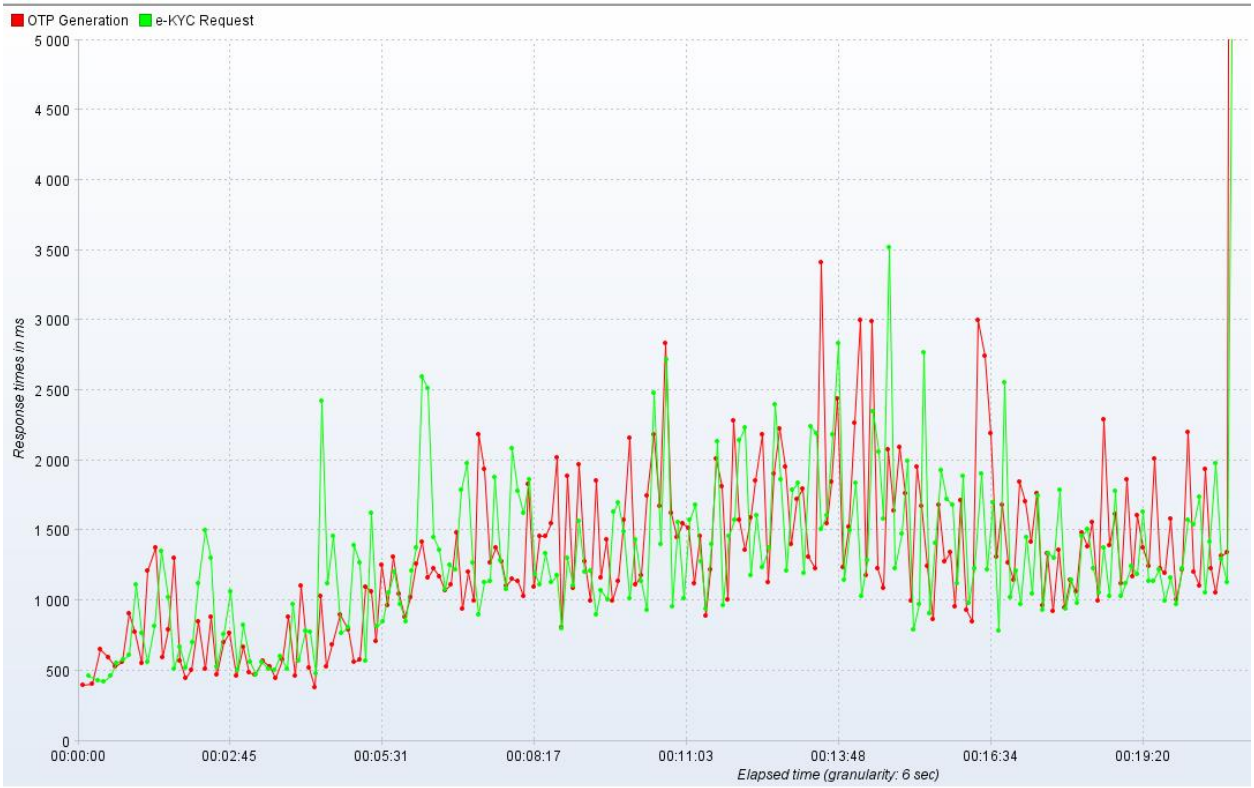
The Integration test environment used for test execution. Configuration of the machine hosting application is as

CPU: 2 cores

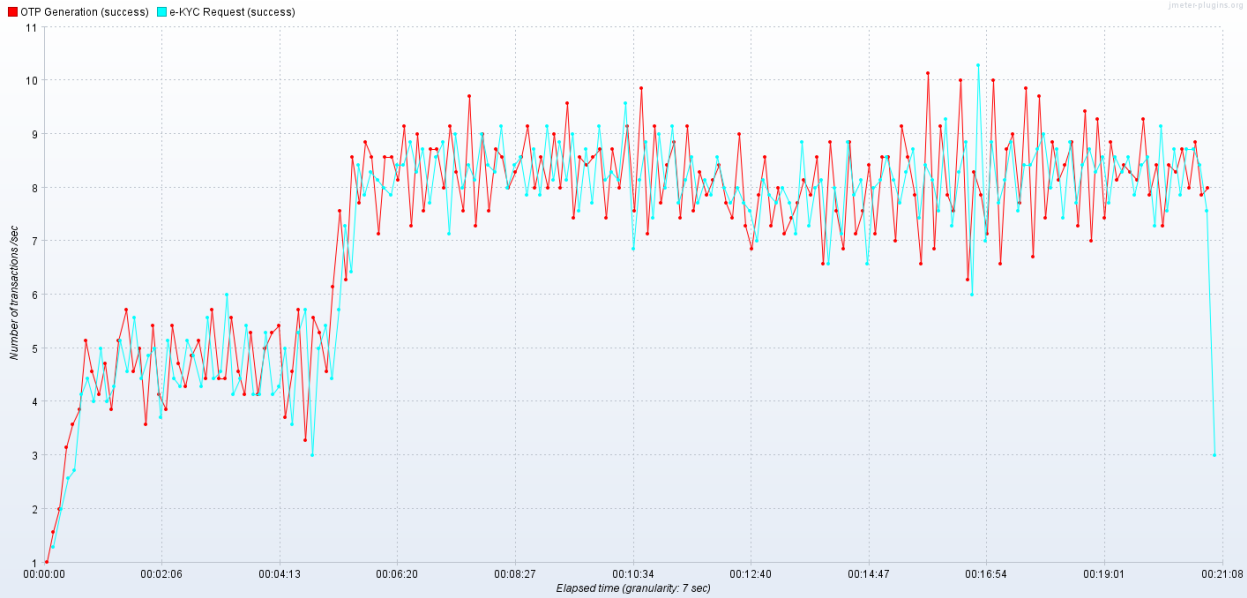
RAM: 8 GB

Response Time Graph

The average response times of all the transactions were normal and below the SLA throughout the duration of the test. Very few number of requests are observed to be have high response time.



Transactions per second:



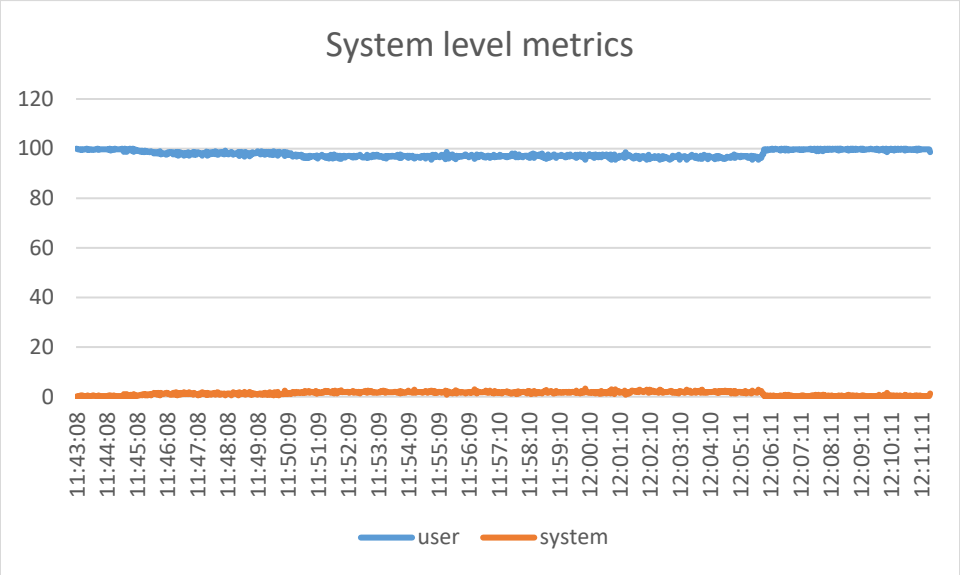
Resource Usage Metrics

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.

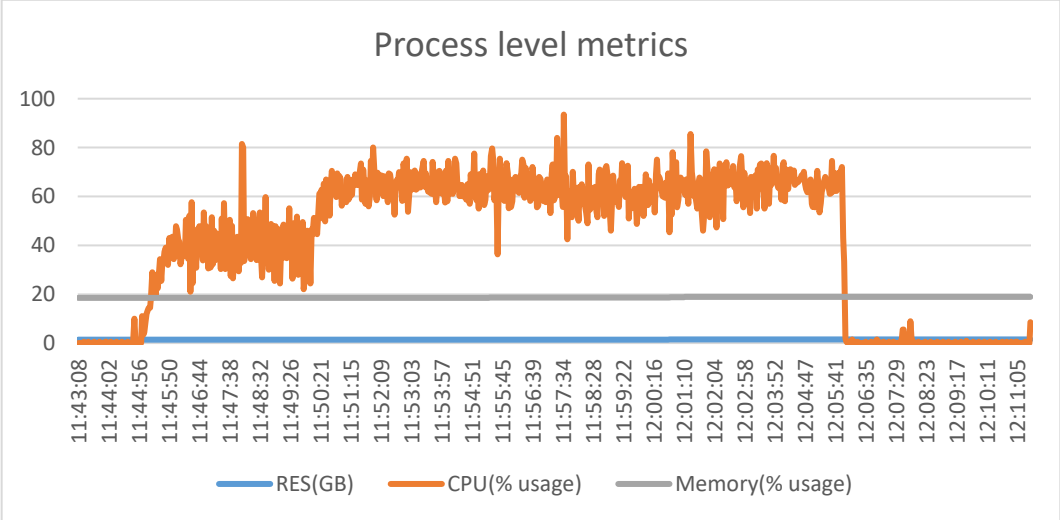
With 50 users, process level CPU usage is nearly 37%, it goes to a level of approx. 78% when 100 users are there.

Memory usage stays at a level of 18-19% during the load test.

System Level CPU Usage (Kernel mode and user mode)



Process Level CPU and Memory Usage



Conclusion and Next Steps

The CPU usage was around 90% level when users count ramped to 100. It was close to 50% with when the load was 50 users.

The response time of the transactions are within the expected SLA of 3 seconds for each APIs.