

Performance Test Report

For

Execution of

Identity-Authentication – 100 users

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Summary

This report presents the observations and findings of the load test conducted for a load of 100 users performing multifactor authentication for address-DOB and name DOB which is executed for peak load for 60 minutes duration.

The objective of this load test was to observe and record the behavior of the application when users are authenticating using multifactor authentication.

Authentication APIs include name and DOB authentications with UIN & address and DOB authentication with VID.

Below are the summary of the test executed:

Sprint/Report Name	Multifactor authentication (Address-DOB-VID and Name-DOB-UIN)
Run Date	14-November-2019
Period	20:49 to 22:17 UTC
Number of concurrent users	100 (peak load)
Ramp up	15 users per 100 seconds
Run Duration	1 hour 27 minutes (60 minutes at peak load)
Ramp down	NA

The transaction response times observed were as below:

Label	# Samples	Average(ms)	90% Line(ms)	Min(ms)	Max(ms)	Error %	Throughput
TR_ida_name_dob_authenticate-uin	29573	4415	6332	40	9916	1.12%	5.62888
TR_ida_dob_address_authenticate-vid	27922	4855	6873	39	10982	1.66%	5.31446
TOTAL	57495	4629	6652	39	10982	1.38%	10.94314

Performance Test Execution Details

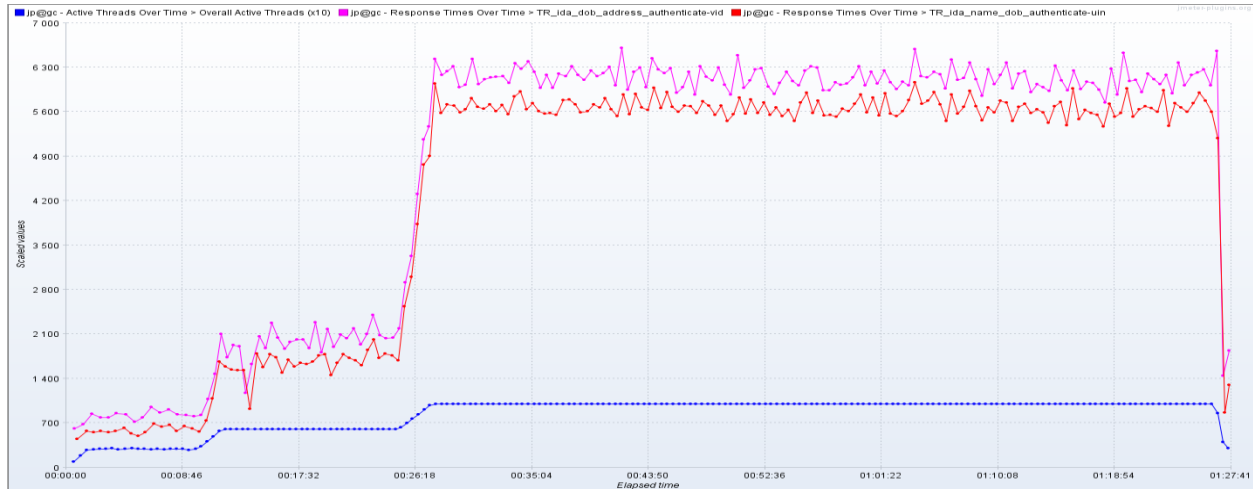
We have executed JMeter script for Multifactor Authentication API for authentication using Address-DOB and Name-DOB, which has transactions mentioned in the above table.

Average response time of Authentication request is 4 seconds and also error rate is above 1%.

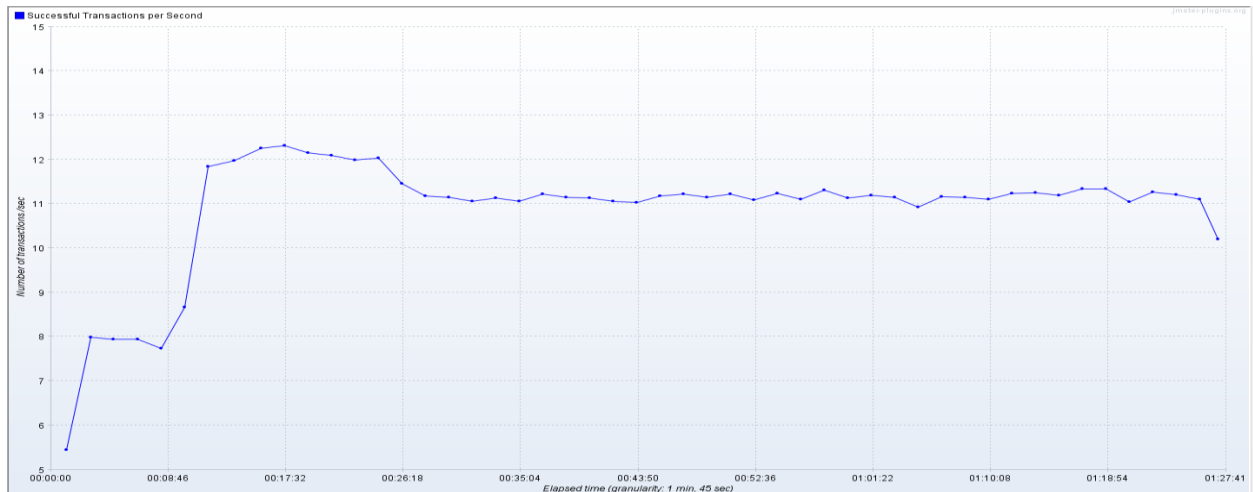


Response Time Graph:

As seen in the below graph, average response time for the authentications are around 6 seconds when 100 users are active and TPS (throughput) at that time is at 10 transactions per second.



Transactions per second:



Some Error Responses:

Erroneous responses of the transactions having failure rate above 1% are given below for further debugging.

Ida_dob_address_authenticate-vid:

```
{"transactionID":"1000234574","version":"1.0","id":"mosip.identity.auth","errors":[{"errorCode":"IDA-MLC-007","errorMessage":"Request could not be processed. Please try again"}],"responseTime":"2019-11-14T21:03:33.739Z","response":{"authStatus":false,"staticToken":null}}
```

```
{"transactionID":"1000234625","version":"1.0","id":"mosip.identity.auth","errors":[{"errorCode":"IDA-RST-007","errorMessage":"5XX - Server Error occurred"}],"responseTime":"2019-11-14T21:16:45.008Z","response":{"authStatus":false,"staticToken":null}}
```

```
{"transactionID":"1000234604","version":"1.0","id":"mosip.identity.auth","errors":[{"errorCode":"IDA-MLC-007","errorMessage":"Request could not be processed. Please try again"}, {"errorCode":"IDA-RST-006","errorMessage":"4XX - Client Error occurred"}],"responseTime":"2019-11-14T21:15:31.997Z","response":{"authStatus":false,"staticToken":null}}
```

Similar errors were observed for Ida_dob_name_authenticate-uin request as well.

Conclusion and Next Steps

We will repeat the test for 100 users and observe the behavior once developer confirms the issue is fixed. The erroneous responses obtained during the load test will be shared with the developer team for further analysis.