

Performance Test Report

For

Execution of

Pre-Registration – 150 users

Date: 06 June 2019

Author: Gaurav Sharan

Summary

This report presents the observations and findings of the load test conducted for a load of 150 users performing end-to-end operations for a 01 hour duration

The objective of this load test was to observe and record the behavior of the application when users are booking appointments after executing slot availability for 60 days.

Below are the scenario details:

Sprint/Report Name	Booking appointments
Run Date	06-June-2019
Period	03:48 PM to 04:54 PM (UTC)
Number of concurrent users	150
Ramp up	4 min
Run Duration	60 minutes
Ramp down	NA

The transaction response times observed were as below:

Label	# Samples	Average(ms)	90% Line(ms)	Min(ms)	Max(ms)	Error %	Throughput
Mosip_preReg_homepage	2450	32670	80963	377	228594	0	0.63226
Mosip_PreReg_send_otp	2447	499	600	18	3507	0.00123	0.63262
Mosip_PreReg_validate_otp	2442	140	148	103	3146	0	0.63155
Mosip_preReg_submit_demographics	2434	8844	16878	507	36687	0	0.63064
Mosip_preReg_upload_poi_document	2415	35621	86940	407	237795	0.00994	0.62757
Mosip_preReg_upload_poa_document	2384	35508	83395	356	239906	0	0.62158
Mosip_open_preview_pageupload_poi_document	2384	25	31	10	253	0	0.62167
Mosip_preReg_open_regCeneter_selection_page	2384	172	186	143	1859	0	0.62165
Mosip_PreReg_search_registration_center	2384	80	89	65	1461	0	0.62166
Mosip_preReg_open_book_appointment_page	2367	2827	5435	335	23839	0	0.6201
Mosip_preReg_book_appointment	2367	5179	15499	288	24600	0	0.6201
Mosip_preReg_logout	2326	30919	69761	358	193089	0	0.60883



Performance Test Execution Details

We have executed the booking appointment user flow, which has transactions mentioned in above table.

Response times for most of the transactions started exceeding the SLA (3 sec) after certain duration of time

The error rate for all transactions is less than 1%.Details will be shared to developers for further analysis.

Below listed transactions are the highest time taking:

1. Mosip_preReg_upload_poi_document (35.6 sec)
2. Mosip_preReg_upload_poa_document (35.5 sec)
3. Mosip_preReg_homepage (32.6 sec)
4. Mosip_preReg_bookAppointment (5.1 sec)

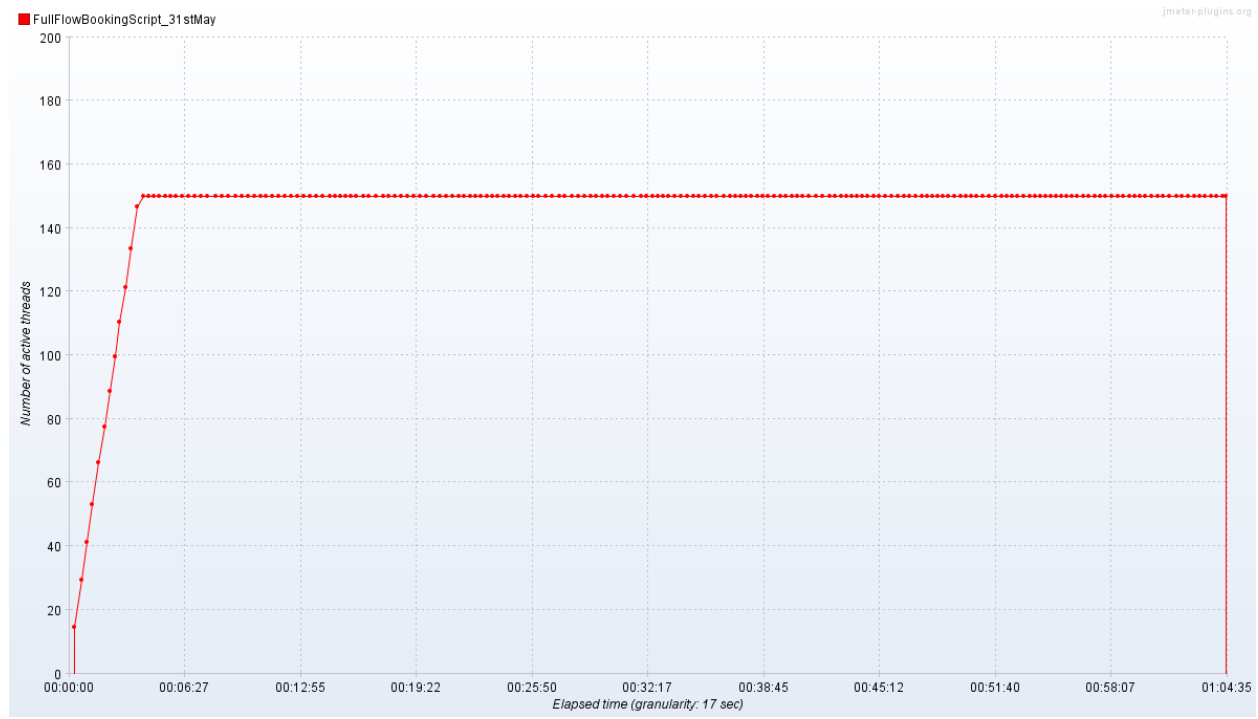
Transactions having most erroneous responses are as below table:

Errors per Transaction	
transaction	sum ▼
TR_Mosip_preReg_upload_poi_document	24
TR_Mosip_PreReg_send_otp	3

Test Environment

	Common proxy server (NGINX)	(Kubernetes cluster) apache Tomcat 8.5.31	DB Postgress SQL 10.2
Number Of nodes	1	4	1
RAM	4 GB	112 GB	16GB
PROCESSOR	2 cores	16 core	4 cores

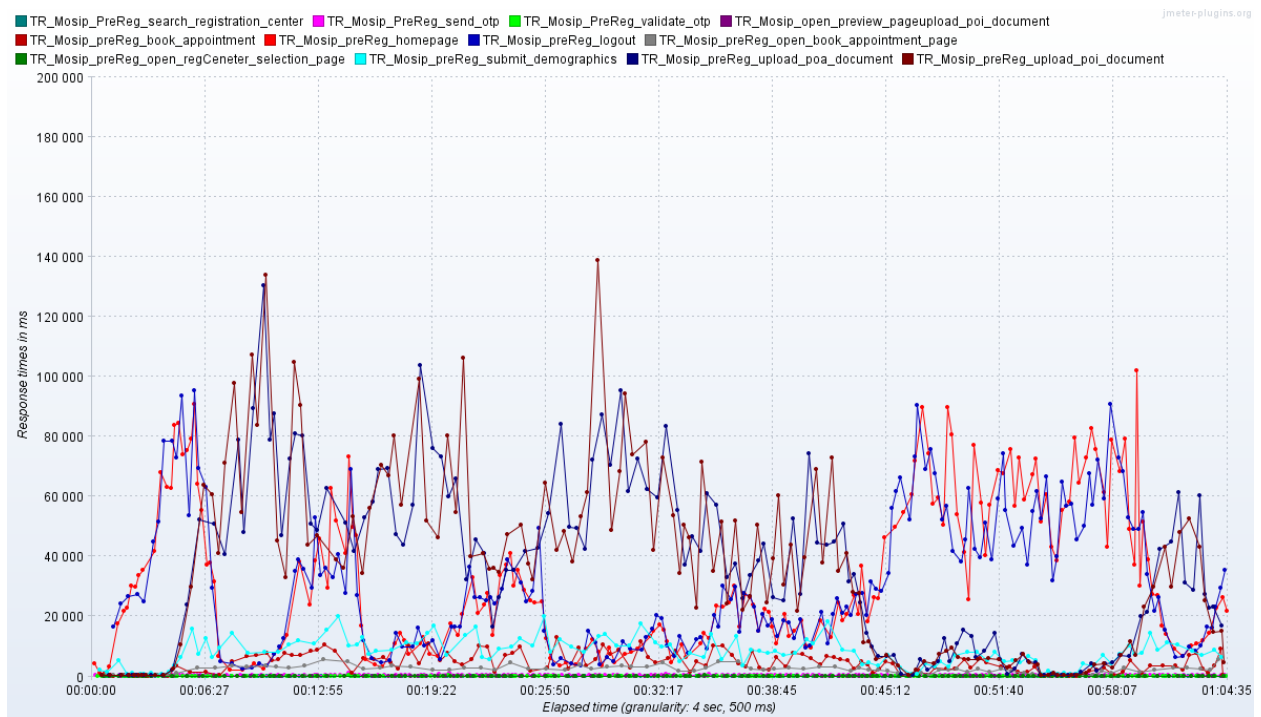
Active Threads Over Time



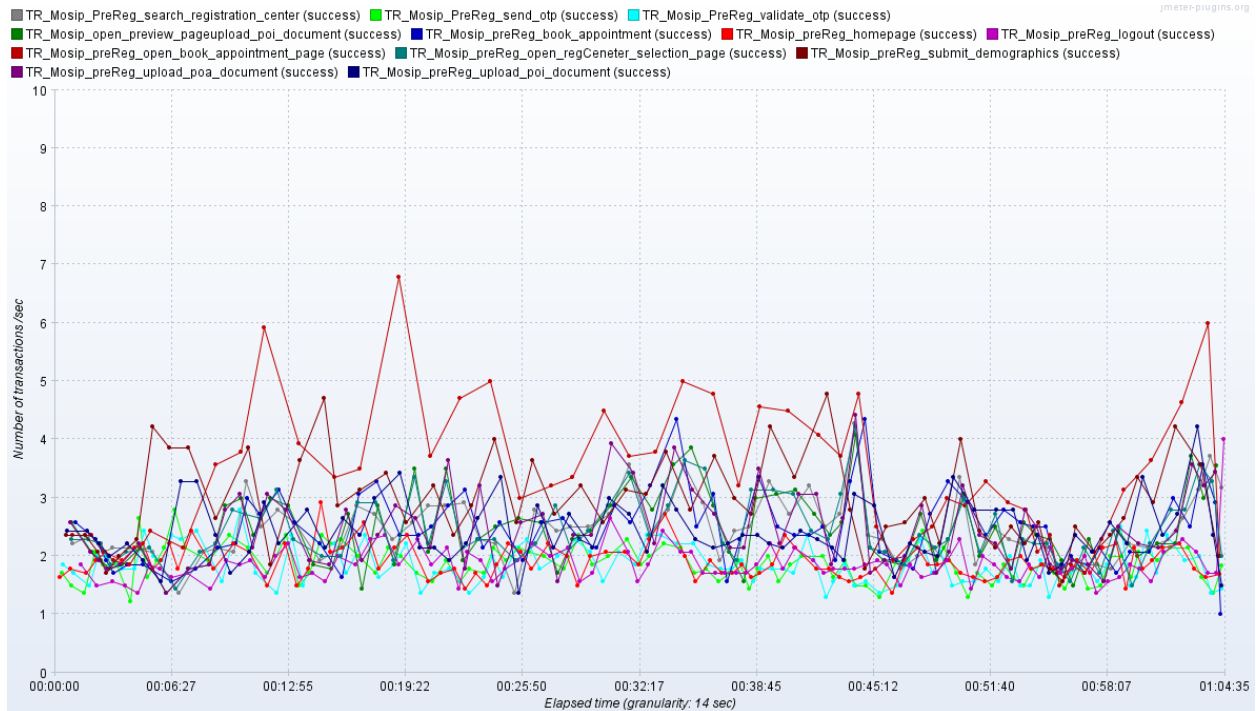
Response Time Graph



Most of the transactions have response time above the SLA (3 sec). Response time has raised high along with arrival of users.



Transactions per second:



Some Error Responses:

Error rate for none of the pages seem crossing 1% mark, but below transactions have observed some erroneous response (less than 1%) as marked below:-

Send OTP –

```
{"id":"mosip.pre-registration.login.sendotp","version":"1.0","responsetime":"2019-06-06T15:54:39.506Z","response":null,"errors":[{"errorCode":"PRG_PAM_CORE_001","message":"Request id is invalid"}]}
```

Upload document request –

```
{"id":"mosip.pre-registration.document.upload","version":"1.0","responsetime":"2019-06-06T16:28:16.804Z","response":null,"errors":[{"errorCode":"KER-FSA-001","message":"Exception occurred in HDFS Adapter"}]}
```

Conclusion and Next Steps

We will repeat the test for 150 users and observe the behavior. The erroneous responses obtained during the load test will be shared with the developer team for further analysis.