

Performance Test Report For Execution of Pre-Registration – 200 users

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Summary

This report presents the observations and findings of the load test conducted for a load of 200 users performing end-to-end operations planned for 30 minutes duration, but test was stopped after 10 minutes due to error(s).

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	02:40 PM to 02:50 PM
Number of concurrent users	200
Ramp up	4 min
Run Duration	10 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	437	61842	144370	376	240467	0.23%	0.7233
Mosip_PreReg_send_otp	423	9704	19531	19	107053	1.42%	0.70965
Mosip_PreReg_validate_otp	411	9798	18526	940	107184	0.24%	0.69965
Mosip_preReg_submit_demographics	411	3172	8216	47	14926	1.22%	0.69986
Mosip_preReg_upload_poi_document	398	1728	5585	32	12132	2.01%	0.68475
Mosip_preReg_upload_poa_document	392	2039	7782	40	13450	1.28%	0.68042
Mosip_open_preview_pageupload_poi_document	392	18	27	10	59	0.00%	0.68095
Mosip_preReg_open_regCeneter_selection_page	381	188	188	44	1255	1.05%	0.6864
Mosip_PreReg_search_registration_center	381	97	92	17	1289	1.05%	0.68648
Mosip_preReg_open_book_appointment_page	381	1115	3942	27	8818	1.31%	0.68608
Mosip_preReg_book_appointment	370	896	2566	273	9640	2.16%	0.66407
Mosip_preReg_logout	295	87170	164955	2190	255954	1.02%	0.53597



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 homepage 61 sec
- 2. Mosip_preReg_send_otp 9.7 sec
- 3. Mosip_preReg_validate_otp 9.7 sec
- 4. Mosip preReg submit demographics 3.1 sec
- 5. Mosip_preReg_upload_poa_document 2.0 sec

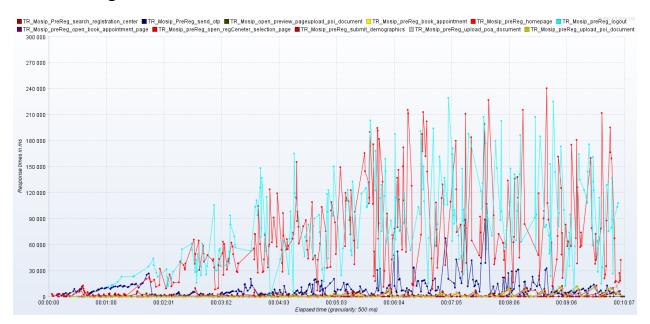
Test Environment

	Common proxy server (NGINX)	(Kubernets 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

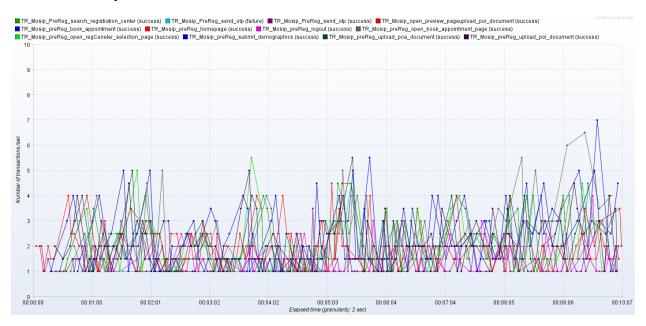
Response Time Graph



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



Transactions per second:





Some Error Responses:

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

```
Send OTP (1.42%) —

{"id":"mosip.pre-registration.login.sendotp","version":"1.0","responsetime":"2019-06-
06T09:14:25.897Z","response":null,"errors":[{"errorCode":"PRG_PAM_CORE_001","message":"Request id is invalid"}]}

Upload document request (2.01%) —

{"id":"mosip.pre-registration.document.upload","version":"1.0","responsetime":"2019-06-
06T09:15:05.067Z","response":null,"errors":[{"errorCode":"KER-FSA-001","message":"Exception occured in HDFS Adapter"}]}

Submit Demographics(1.22%) —

{"id":"mosip.pre-registration.demographic.create","version":"1.0","responsetime":"2019-06-
06T09:15:58.593Z","response":null,"errors":[{"errorCode":"PRG_PAM_CORE_011","message":"encryption failed"}]}
```

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.