

Performance Test Report For Execution of PreRegistration – 300 users

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Summary

This report presents the observations and findings of the load test conducted for a load of 300 users performing booking appointments full flow planned for 1 hour duration to retest the defect MOS-25581

The objective of this load test was to observe and record the behavior of the application when users are booking appointments for 300 concurrent users.



Below are the scenario details:

Sprint/Report Name	Booking appointments
Run Date	12-July-2019
Period	07:56 to 09:04 AM (UTC)
Number of concurrent users	300
Ramp up	4 min
Run Duration	60 minutes
Ramp down	4min

The transaction response times observed were as below:

	#	Average	90% Line	Min	Max		Throughput
Label	Samples	(ms)	(ms)	(ms)	(ms)	Error %	(sec)
TR_Mosip_preReg_homepage	2876	57813	107666	36	241622	2.99%	0.70684
TR_Mosip_PreReg_send_otp	2755	1746	2722	19	36457	0.25%	0.67958
TR_Mosip_PreReg_validate_otp	2743	1472	2647	82	36308	0.29%	0.67671
TR_Mosip_preReg_submit_demographics	2730	792	1536	119	11718	0.07%	0.67464
TR_Mosip_preReg_upload_poi_document	2718	384	569	139	31191	0.04%	0.67203
TR_Mosip_preReg_upload_poa_document	2708	227	502	34	35026	0.07%	0.66978
TR_Mosip_open_preview_pageupload_poi_document	2700	12	14	7	216	0.00%	0.6698
TR_Mosip_preReg_open_regCeneter_selection_page	2700	61	57	42	6040	0.00%	0.6688
TR_Mosip_PreReg_search_registration_center	2693	21	24	16	2033	0.00%	0.66819
TR_Mosip_preReg_open_book_appointment_page	2688	1142	1222	970	4381	0.00%	0.66869
TR_Mosip_preReg_book_appointment	2684	170	214	120	5134	0.04%	0.6679
TR_Mosip_preReg_logout	2601	61053	111598	312	248953	0.23%	0.64761

Performance Test Execution Details

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



All the transactions average response times were less than 3sec except:

- 1. Homepage 57.813 sec
- 2. Logout -61.053 sec

Under Homepage and Logout page observed that below request is taking more time:

• https://pt.mosip.io/preregistration/v1/login/config - 59.501 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	

Active threads over Time:



Response Time Graph

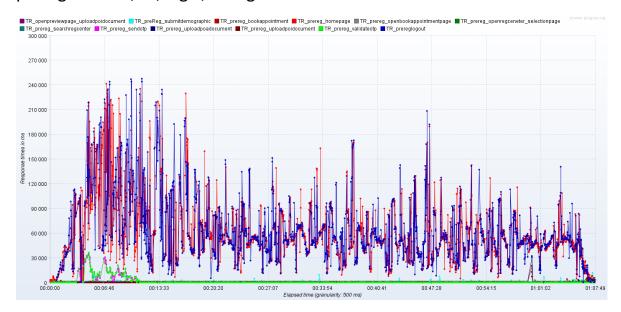


All the transactions average response times are within SLA of 3 Sec except below:

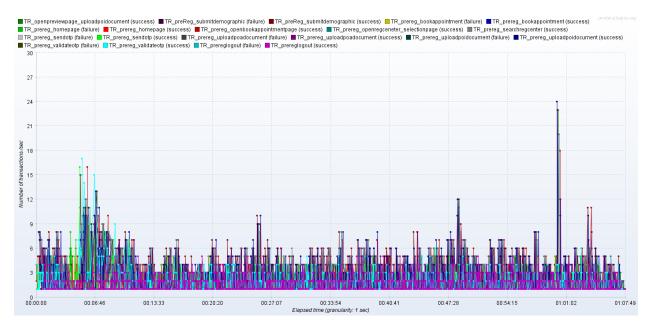
- 1. Homepage -57.813 sec
- 2. Logout -61.053 sec

Under Homepage and Logout page observed that below request is taking more time:

preregistration/v1/login/config - 59.501 sec



Transactions per second:



All key transactions error rate is less than 1% except below:

Homepage – 2.99%

Below is the error screenshot of homepage:

500 Internal Server Error

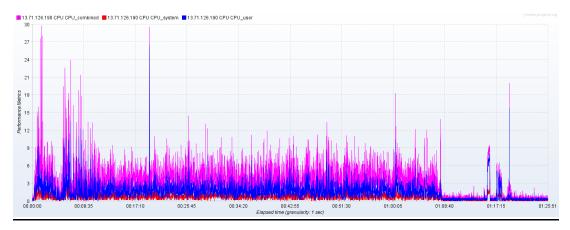
nginx/1.15.12

Resource usage pattern of DB Server:

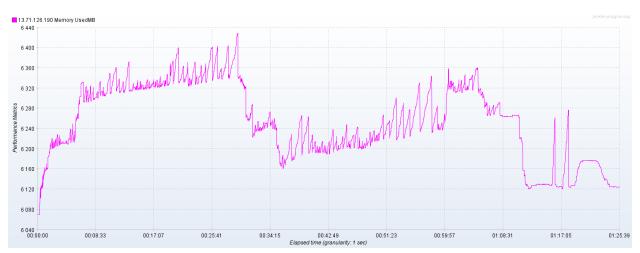
CPU Usage:

There were intermittent spikes observed in overall CPU usage however overall utilization is less than 30%



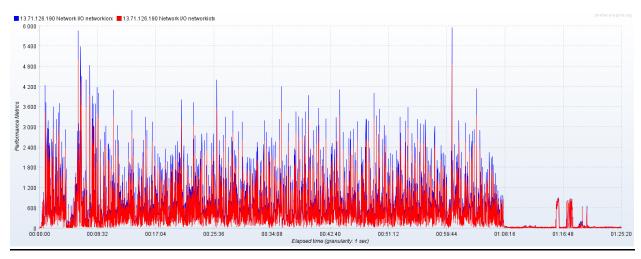


Memory utilization:

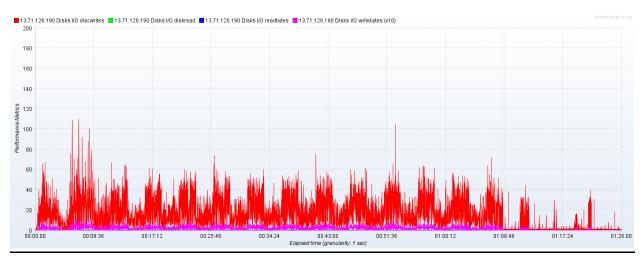


Network io:





Disc Read/writes:



Conclusion and Next Steps

Error details and high response time issue for homepage is raised under defect MOS-27246 and we will doing performance test after the defect is fixed and will continue with more user load.