

Performance Test Report

For

Execution of

PreRegistration module – 300 users

Date: 12th Nov 2019

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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

The objective of this consistency load test was to observe and record the behavior of the application when users are booking appointments for 300 concurrent users after applying performance code fixes.

Below are the scenario details:

Sprint/Report Name	Booking appointments
Run Date	12-Nov-2019
Period	05:56 AM to 07:04 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:

Label	# Samples	Average (ms)	90% Line (ms)	Min (ms)	Max (ms)	Error %	Throughput (sec)
TR_prereg_homepage	2681	28660	47877	58	66868	0.00%	0.67568
TR_prereg_sendotp	2584	150519	180012	2990	180147	20.36%	0.64326
TR_prereg_validateotp	2031	148610	180027	3481	183328	22.01%	0.50693
TR_prereg_viewbasicdetails	1579	2037	6785	254	25900	0.00%	0.40941
TR_prereg_submitdemographic	1578	4547	10253	242	64688	0.13%	0.40928
TR_prereg_uploadpoidocument	1575	262	390	150	2824	0.00%	0.40949
TR_prereg_uploadpoadocument	1575	182	322	88	1553	0.00%	0.40977
TR_prereg_searchregcenter	1575	101	251	41	490	0.00%	0.40978
TR_prereg_openbookappointmentpage	1574	599	880	109	10139	0.00%	0.40954
TR_prereg_bookappointment	1573	2406	6605	170	39172	0.00%	0.40949
TR_prereglogout	1564	179661	203798	3466	232554	11.13%	0.39904



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 below:

1. TR_prereg_homepage - 28.66 sec
2. TR_prereg_sendotp - 150.519 sec
3. TR_prereg_validateotp - 148.61 sec
4. TR_prereglogout - 179.661 sec

The error rate for all transactions is less than 1% except below request:

1. TR_prereg_sendotp -20.36%
2. TR_prereg_validateotp -22.01%
3. TR_prereglogout - 11.13%

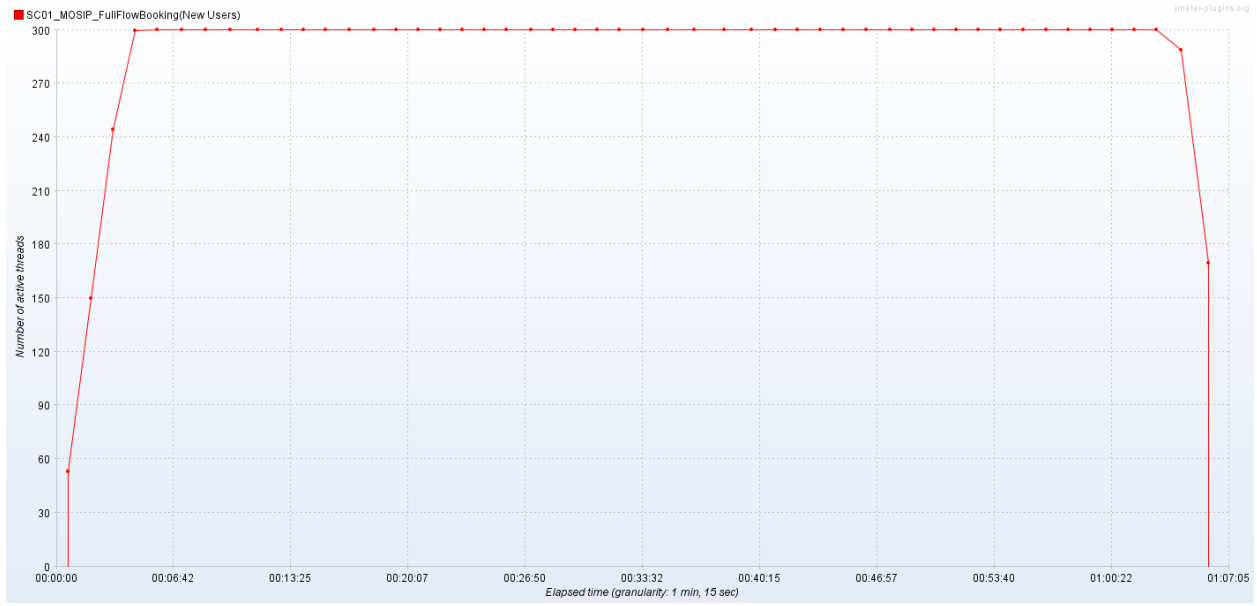
Below are the error messages:

For validate otp ,logout and sendotp requests error message: "Sorry, the page you are looking for is currently unavailable.Please try again later."

Observed readtimeout errors for sendotp, validate otp and logout request and it is noticed that crypto manager has reached its capacity and observed continuous errors due to kernel auth manager capacity issue

Observed high query time for kernel auth service and raised defect <https://mosipid.atlassian.net/browse/MOS-30011>

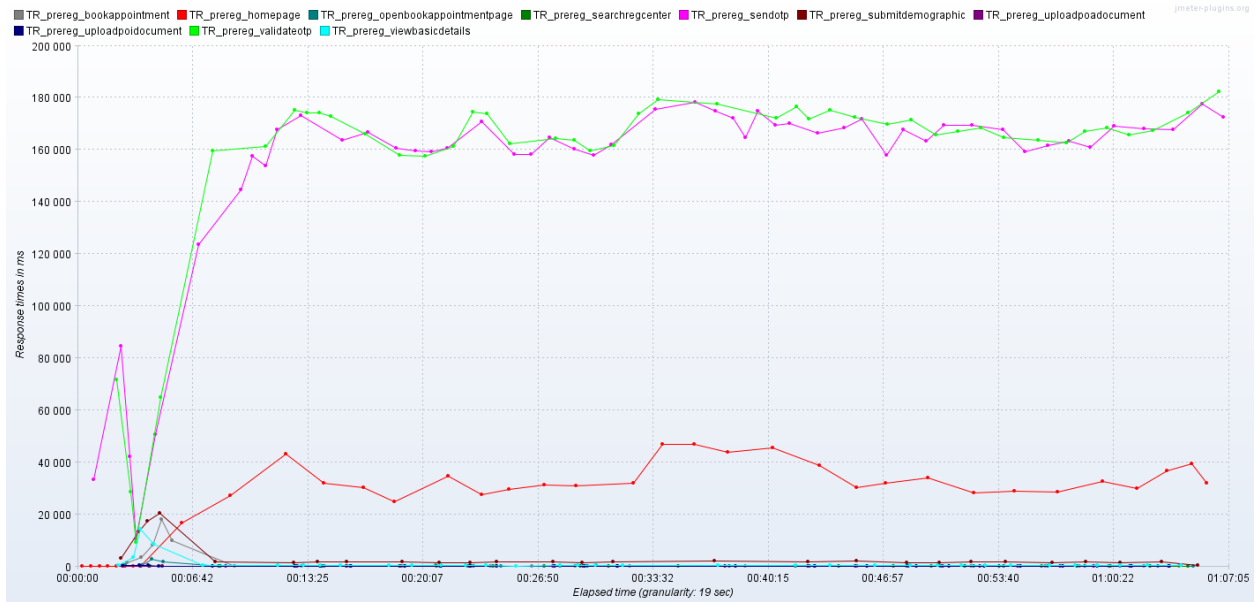
Active threads over Time:



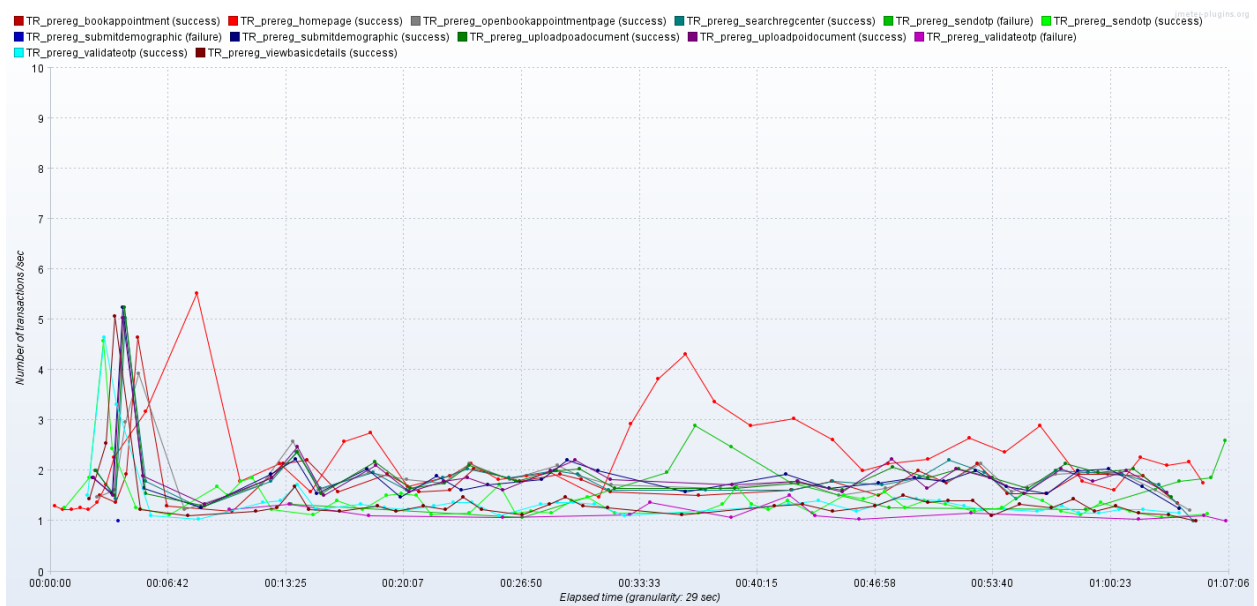
Response Time Graph

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

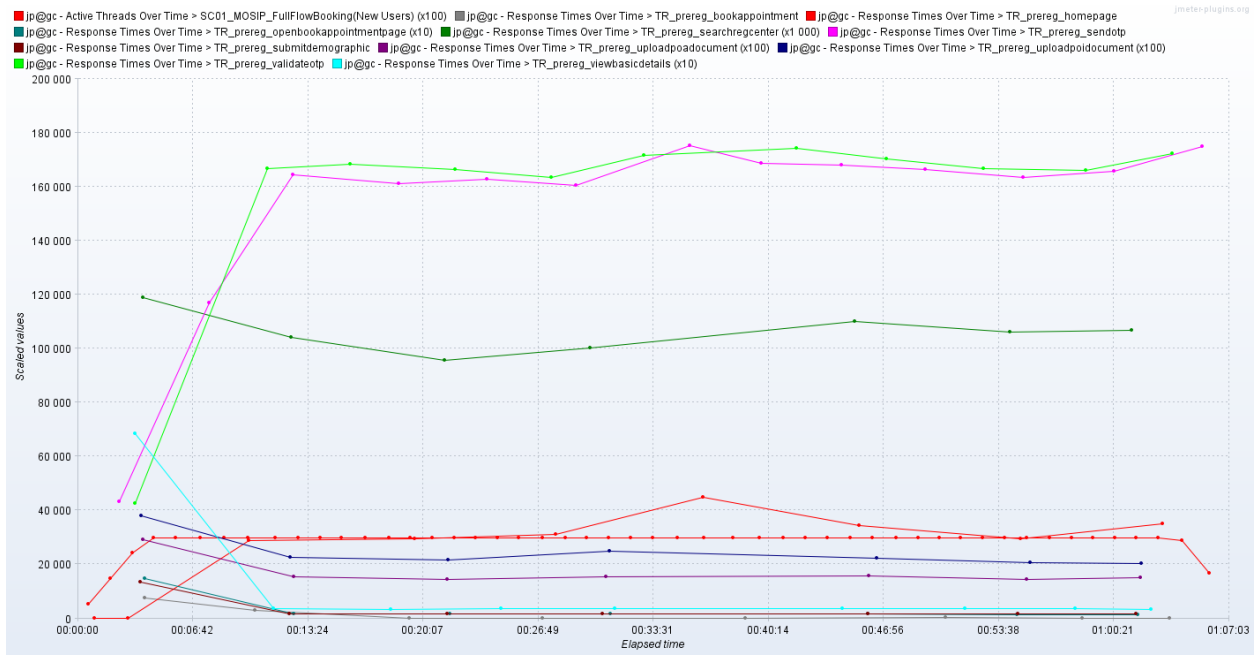
1. TR_prereg_homepage - 28.66 sec
2. TR_prereg_sendotp - 150.519 sec
3. TR_prereg_validateotp - 148.61 sec
4. TR_prereglogout - 179.661 sec



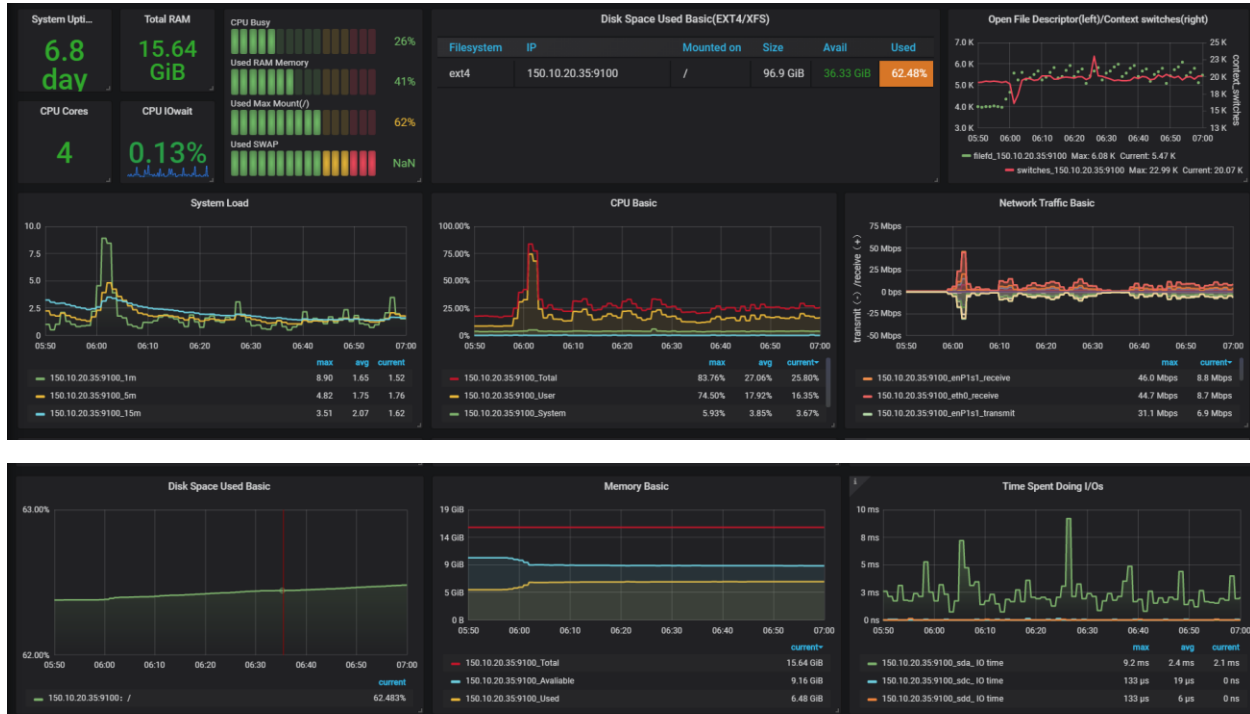
Transactions per second:



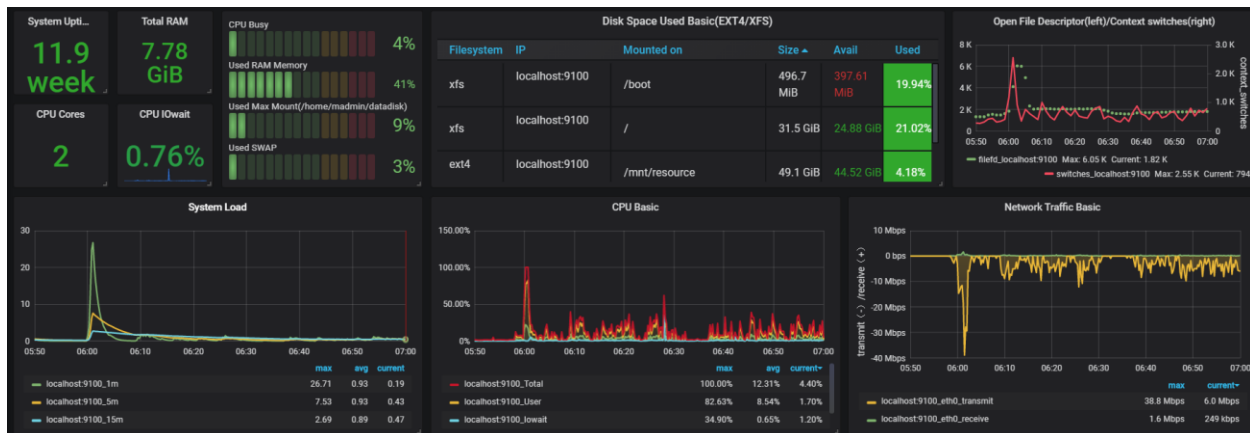
Active threads vs response times over time:



Preregistration cluster node monitoring:



Preregistration DB node monitoring:





Kernelauth high querytime graph in Glowroot:

Response time	Slow traces (27,361)	Queries	Service calls	Thread profile		
			Total time ▼ (ms)	Total count	Avg time (ms)	Avg rows
select use.id,use.name,use.email,use.mobile,use.lang_code,role.code from iam...			448,701,002.9	17,151	26,161.8	1.0
select user_id,auth_token,refresh_token,expiration_time from iam.oauth_access...			389,629,925.9	171,213	2,275.7	1.0
select user_id,auth_token,refresh_token,expiration_time from iam.oauth_access...			49,447,454.6	2,169	22,797.4	1.0

Conclusion and Next Steps:

In current performance run observed that 3 querries of kernel auth services are taking more and raised defect <https://mosipid.atlassian.net/browse/MOS-30011> to optimize queries and once queries are optimized I will execute the performance run again to validate defect