

Performance Test Report

For

Execution of

PreRegistration module – 500 users

Date: 14th Nov 2019

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Summary

This report presents the observations and findings of the load test conducted for a load of 500 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 500 concurrent users after applying performance code fixes.

Below are the scenario details:

Sprint/Report Name	Booking appointments
Run Date	14-Nov-2019
Period	13:09 PM to 14:20 PM (UTC)
Number of concurrent users	500
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	11627	134	275	53	3059	0.00%	2.94032
TR_prereg_sendotp	11599	240	354	90	2410	0.01%	2.93724
TR_prereg_validateotp	11580	229	325	86	3459	0.00%	2.93468
TR_prereg_viewbasicdetails	11554	7748	20507	252	51116	0.00%	2.9421
TR_prereg_submitdemographic	11540	27283	54167	67	180695	1.21%	2.93867
TR_prereg_uploadpoidocument	11363	397	554	47	5202	0.04%	2.89612
TR_prereg_uploadpoadocument	11342	274	401	109	5615	0.00%	2.89118
TR_prereg_searchregcenter	11328	72	113	39	2950	0.00%	2.89341
TR_prereg_openbookappointmentpage	11306	13637	25617	119	56713	0.00%	2.88979
TR_prereg_bookappointment	11258	39817	76060	215	117641	0.00%	2.87776
TR_prereg_notify	11068	25147	46611	265	141919	2.24%	2.8081
TR_prereglogout	10758	266	422	112	3217	0.00%	2.76518

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_viewbasicdetails - **7.748 sec**
2. TR_prereg_submitdemographic - **27.283 sec**
3. TR_prereg_openbookappointmentpage - **13.637 sec**
4. TR_prereg_bookappointment - **39.817 sec**
5. TR_prereg_notify - **25.147 sec**

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

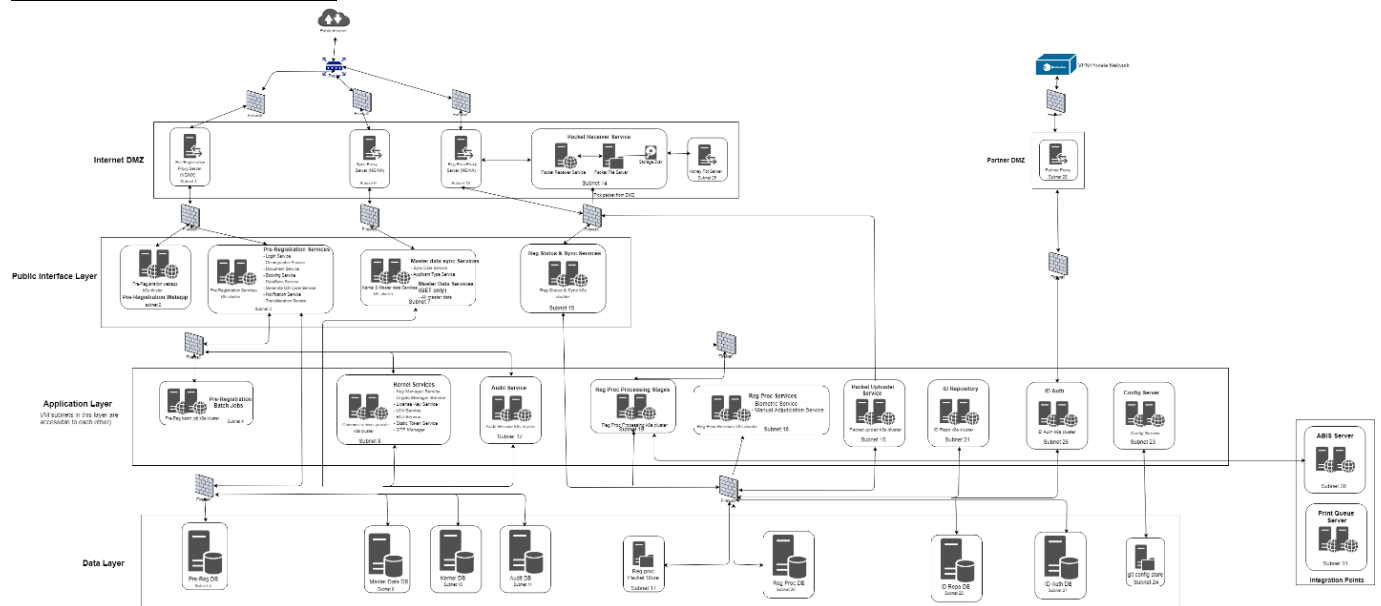
1. TR_prereg_submitdemographic - **1.21%**
2. TR_prereg_notify - **2.24%**

Below are the error messages:

```
{"id":"mosip.pre-registration.notification.notify","version":"1.0","responsetime":null,"response":null,"errors":null}
```

Observed read time out errors for submit demographics requests

Test Environment: we are using scale-down version of below Architecture



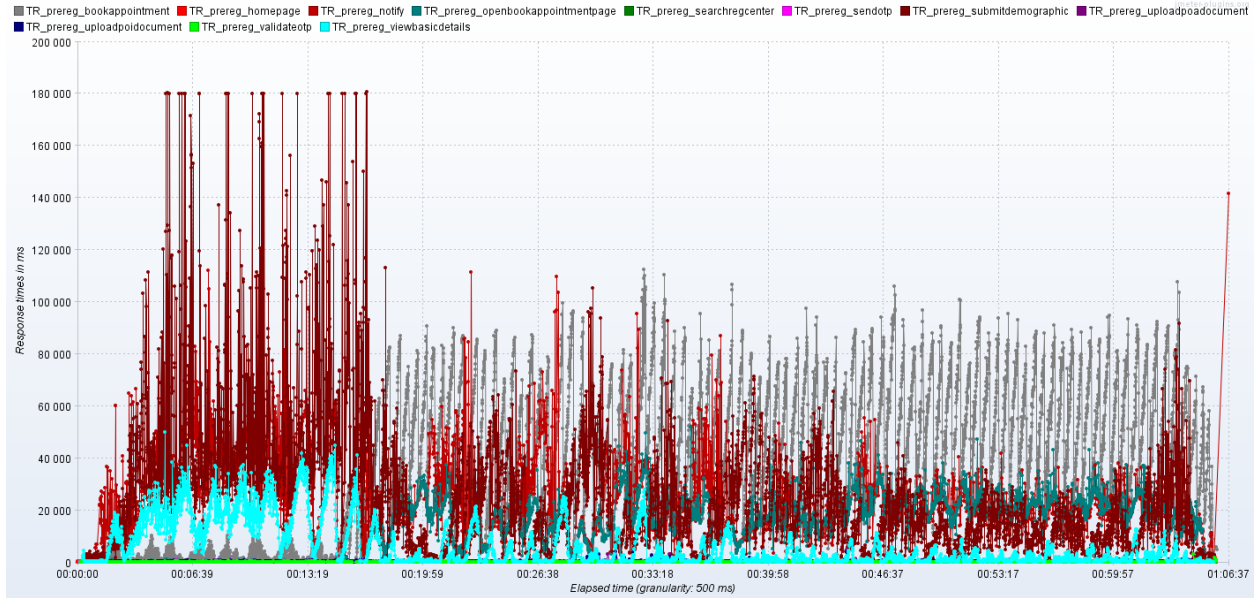
Active threads over Time:



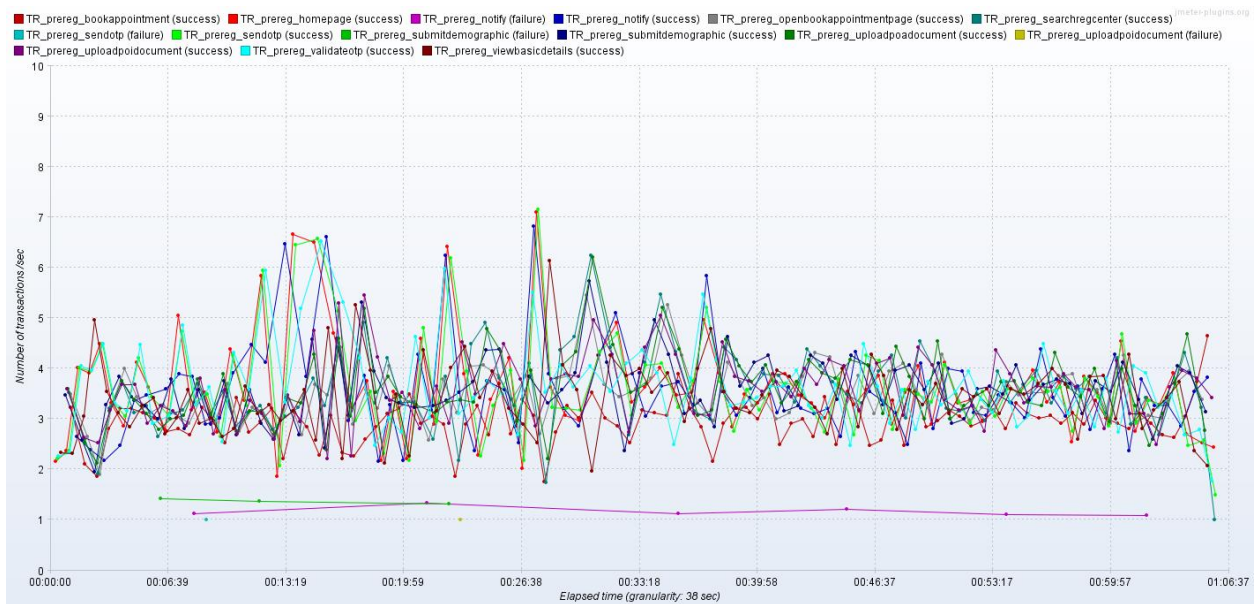
Response Time Graph

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2. TR_prereg_submitdemographic - **27.283** sec
3. TR_prereg_openbookappointmentpage - **13.637** sec
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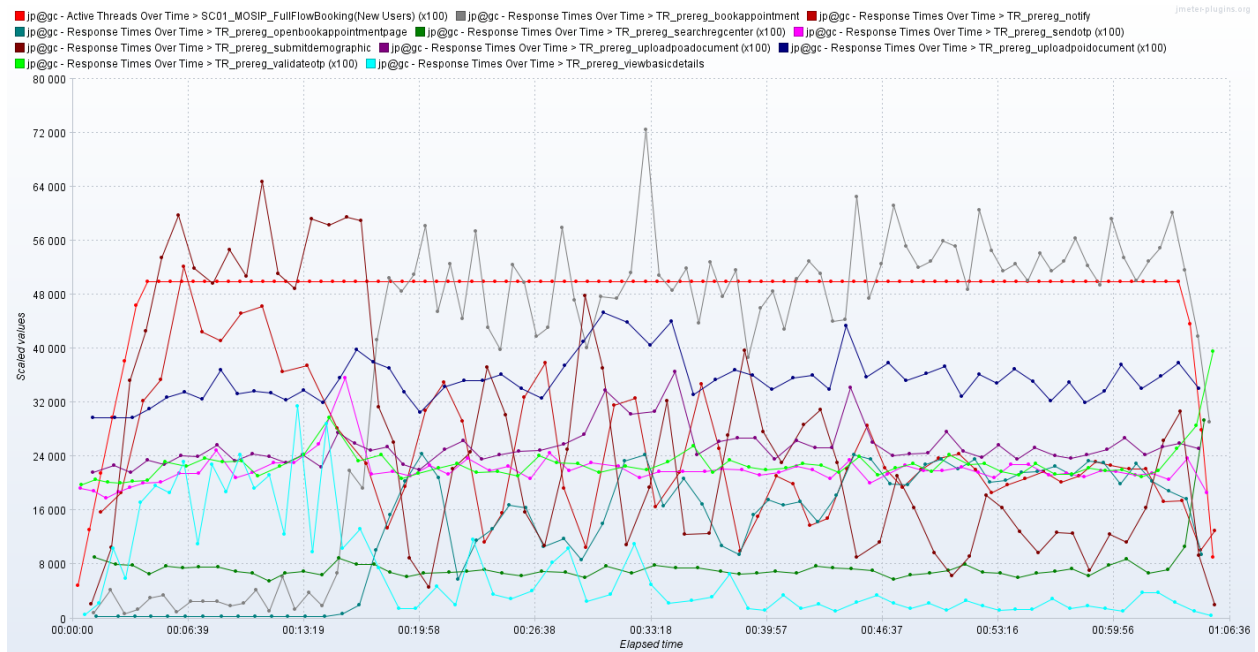


Transactions per second:



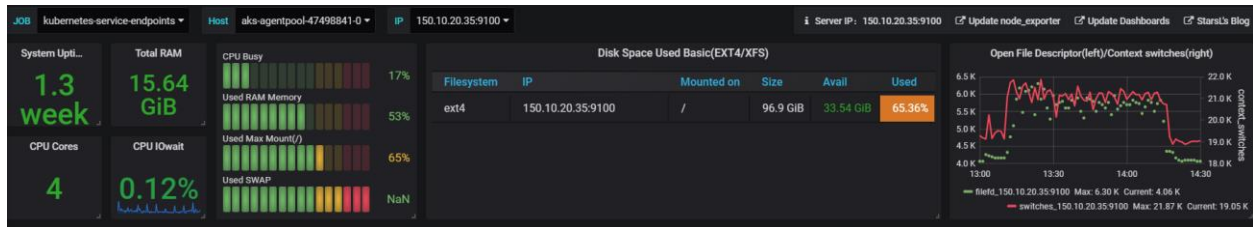


Active threads vs response times over time:

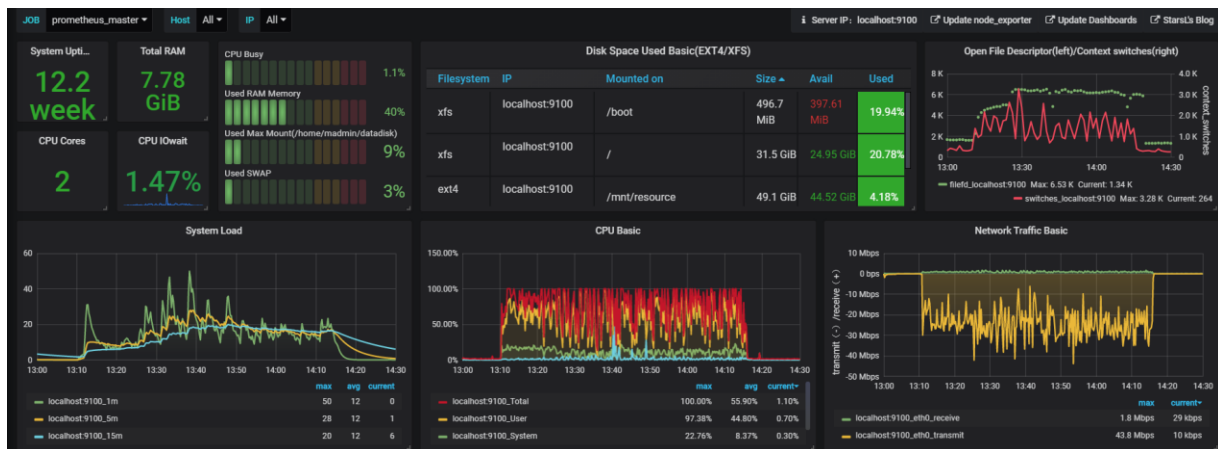




Preregistration cluster node monitoring:

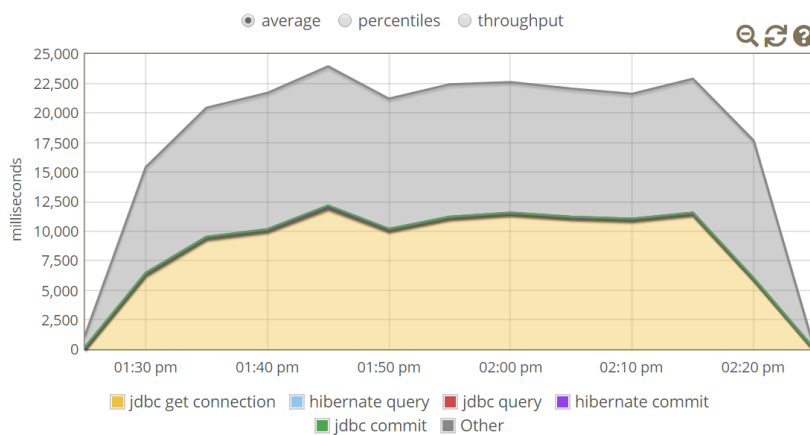


Preregistration DB node monitoring:





Booking service response time graph in Glowroot:



Conclusion and Next Steps

This performance test executed in order to test the application behavior after defect fixes deployed in pre-prod environment, Raised below defects for the issues observed in perf run and we will follow on defects and rerun postfix applied.

MOS-30026, MOS-30092, MOS-30080, MOS-30077