

# **Performance Test Report**

## **For**

## **Execution of**

## **PreRegistration – 500 users**

Date: 17 July 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 load test was to observe and record the behavior of the application when users are booking appointments for 500 concurrent users with 100K preregistration applications already created in DB.

Below are the scenario details:

<b>Sprint/Report Name</b>	Booking appointments
<b>Run Date</b>	12-July-2019
<b>Period</b>	11:08 AM to 12:08 PM
<b>Number of concurrent users</b>	500
<b>Ramp up</b>	4 min
<b>Run Duration</b>	60 minutes
<b>Ramp down</b>	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	2603	73301	139592	158	240800	0.00%	0.64077
TR_prereg_sendotp	2571	12514	50071	16	153375	0.16%	0.63374
TR_prereg_validateotp	2565	7289	22967	57	148607	0.12%	0.63193
TR_preReg_submitdemographic	2559	1062	2371	126	12214	0.00%	0.63503
TR_prereg_uploadpoidocument	2554	297	573	52	5050	0.08%	0.63384
TR_prereg_uploadpoadocument	2547	199	505	30	3961	0.08%	0.63223
TR_openpreviewpage_uploadpoidocument	2540	11	14	7	214	0.00%	0.63052
TR_prereg_openregcenter_selectionpage	2540	61	57	41	5014	0.00%	0.63051
TR_prereg_searchregcenter	2531	23	24	16	2675	0.00%	0.6279
TR_prereg_openbookappointmentpage	2528	1469	1935	961	12218	0.00%	0.62808
TR_prereg_bookappointment	2525	429	323	118	9116	0.00%	0.62709
TR_mosip_preReg_notify	2519	160	175	79	6621	1.87%	0.62661
TR_prereglogout	2337	76.634	148304	770	331457	0.00%	0.58036

## 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. Homepage – **73.301**sec
2. Logout – **76.634** sec
3. Send otp - **12.514** sec
4. Validate otp – **7.289** sec

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

- <https://pt.mosip.io/preregistration/v1/login/config> - **73.280** sec

## 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:



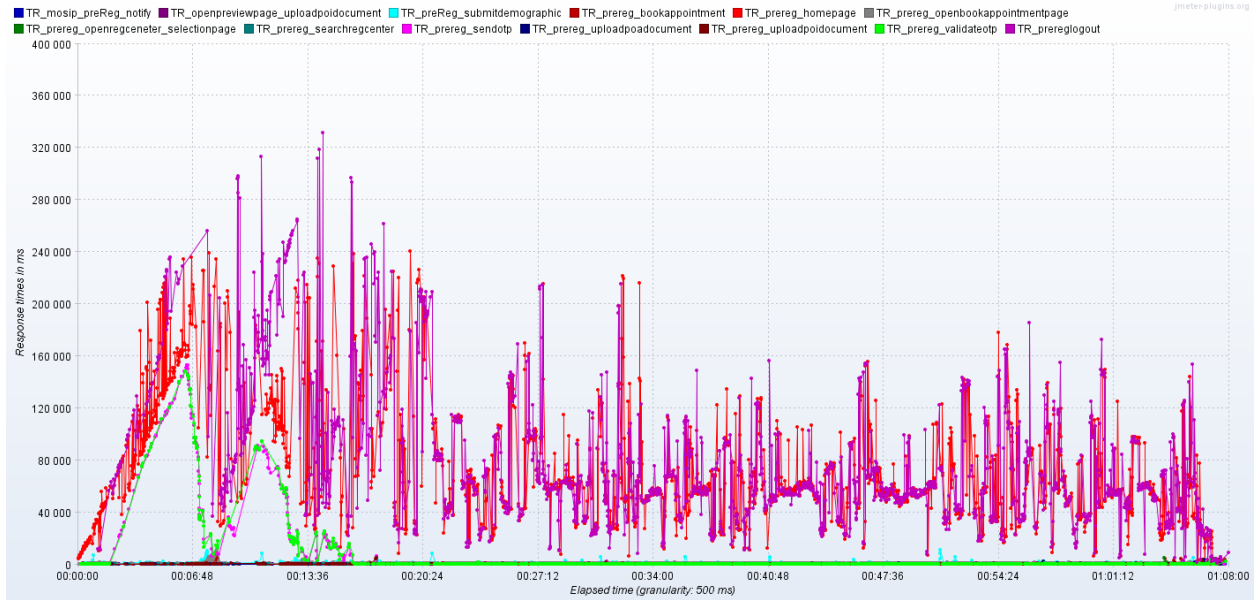
## Response Time Graph

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

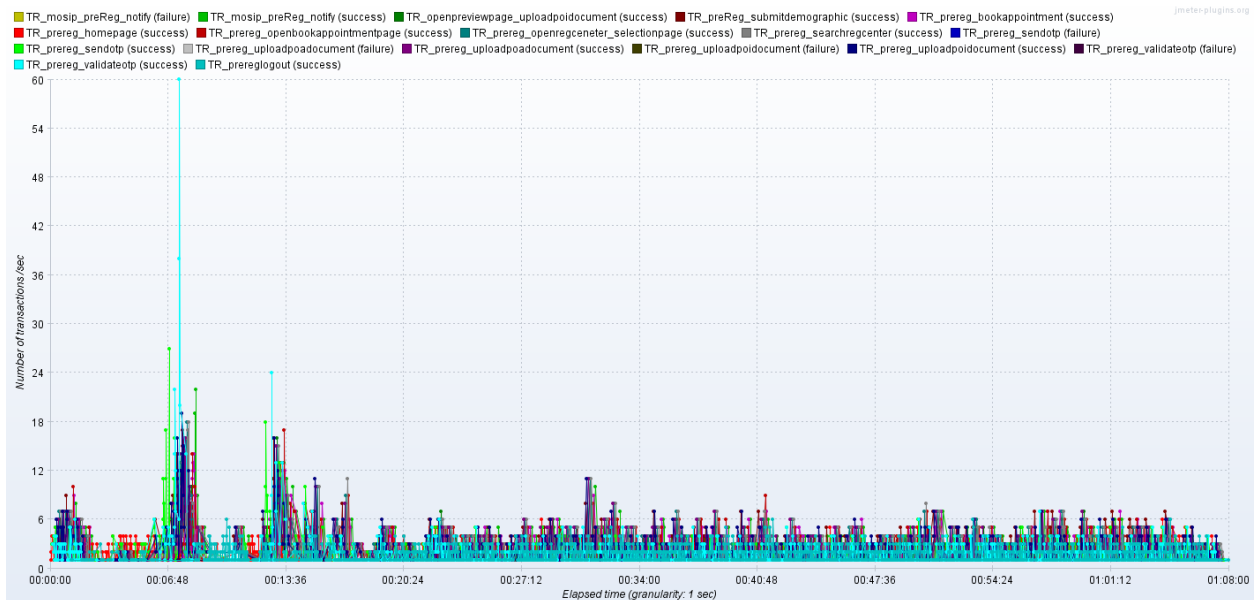
1. Homepage – 73.301sec
2. Logout – 76.634 sec
3. Send otp -12.514 sec
4. Validate otp – 7.289 sec

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

preregistration/v1/login/config – 73.280 sec



## Transactions per second:



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

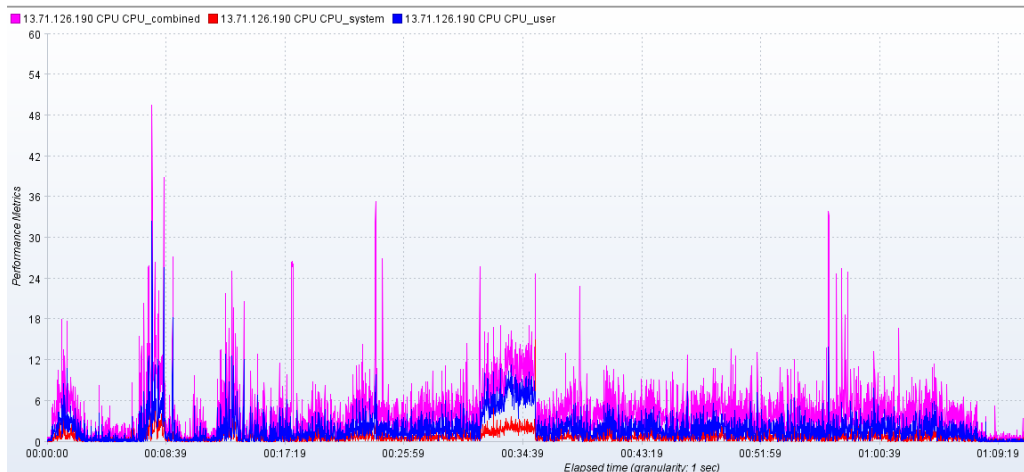
<https://pt.mosip.io/preregistration/v1/notification/notify> – 1.87%

- a. API request is "<https://pt.mosip.io/preregistration/v1/notification/notify>" and below is invalid response:
  - i. {"id":"mosip.pre-registration.notification.notify","version":"1.0","responsetime":null,"response":null,"errors":null}
- b. Expected successful response is :
  - i. {"id":"mosip.pre-registration.notification.notify","version":"1.0","responsetime":"2019-07-16T10:21:57.215","response":{"message":"Email and sms request successfully submitted"},"errors": null}

## **Resource usage pattern of DB Server:**

CPU Usage:

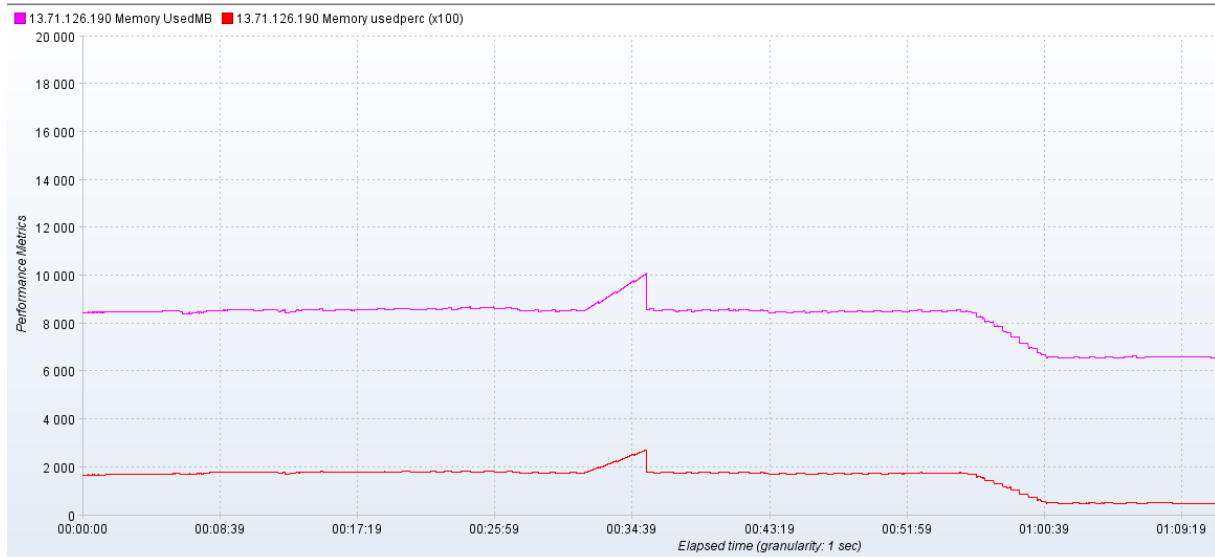
There were intermittent spikes observed in overall CPU usage however overall utilization is less than 50%



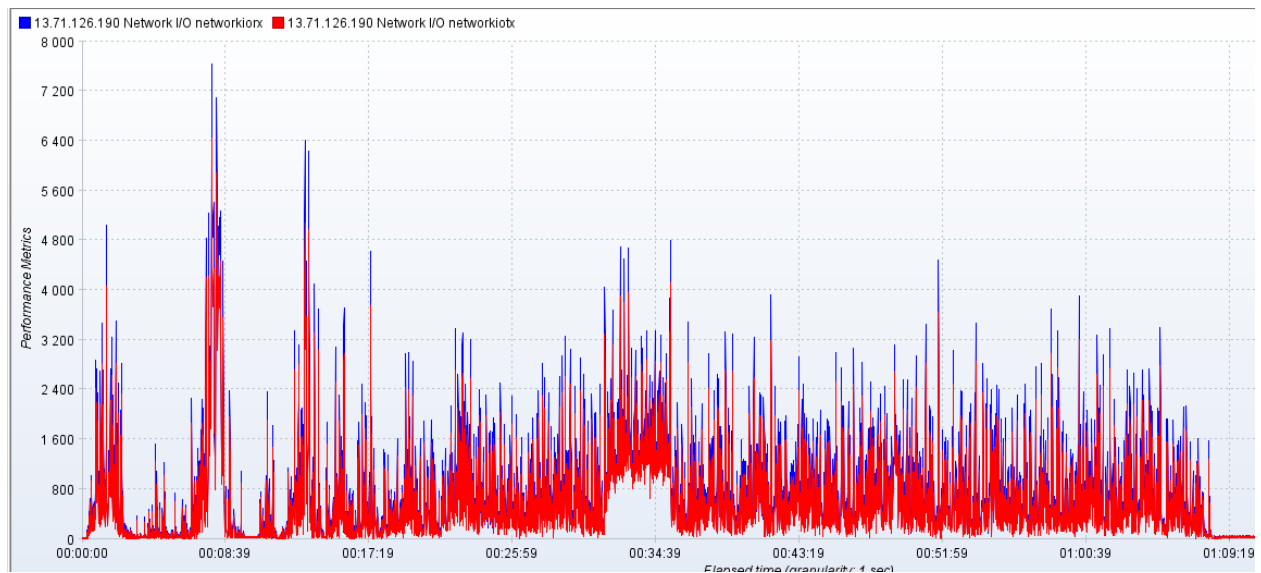


## Memory utilization:

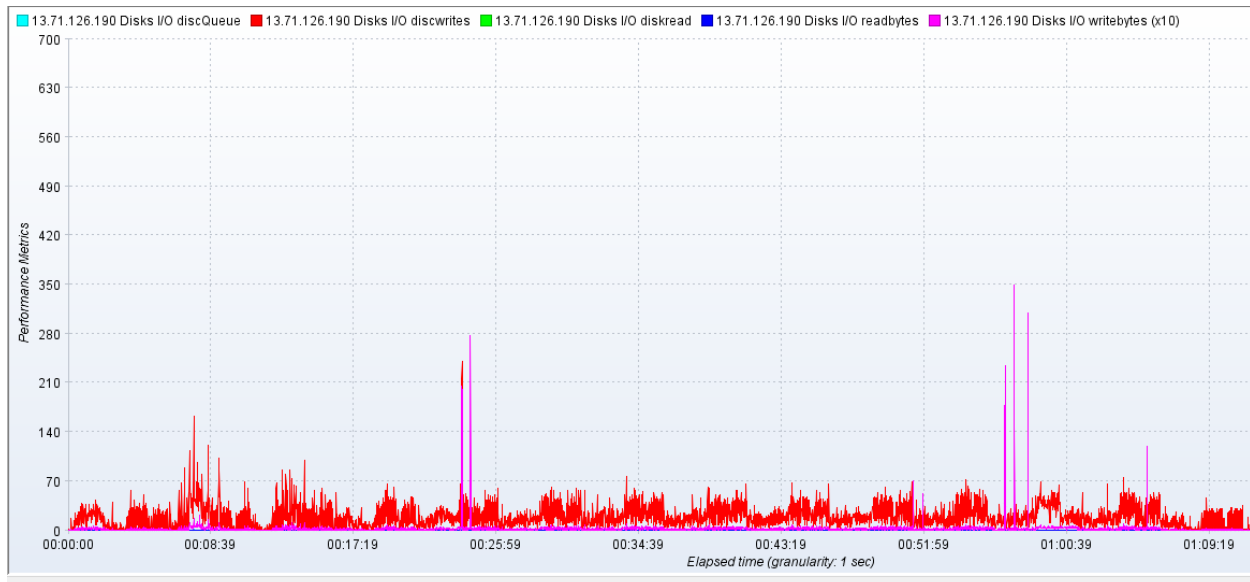
Memory utilization 27% used out of 16GB



## Network io:



## Disc Read/writes:



## Conclusion and Next Steps

Below defects are raised for the issues observed in today test

- a) MOS-27246
- b) MOS-27275
- c) MOS-27273

Once the above issues fixed ,We will be continuing with performance tests