

# **Performance Test Report**

## **For**

## **Execution of**

## **Preregistration module – 400 users**

Date: 24 Jun 2020

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### **Summary**

This report presents the observations and findings of the load test conducted for a load of 400 concurrent users performing booking full flow scenario for 1.04-hour duration

The objective of this load test was to observe and record the behavior of the application when users are performing booking full flow scenario

Below are the scenario details:

## Identified Key scenarios:

1) MOSIP\_PT\_PreReg\_UI\_BookingfullFlow

<b>Run Date</b>	24-Jun-2019
<b>Period</b>	12:04 to 13:05 AM (UTC)
<b>Number of concurrent users</b>	300
<b>Ramp up</b>	300 users ramp up refer below ramp up profile
<b>Run Duration</b>	1.05 hours
<b>Think time</b>	5 sec

## Ramp-up profile:



Transaction response times observed were as below:

Label	# Samples	Average (ms)	90% Line (ms)	Min (ms)	Max (ms)	Error %	Throughput (sec)
TR_prereg_homepage	10366	1624	394	10	64314	4.17%	2.90724
TR_prereg_sendotp	9934	3002	5776	214	60773	1.74%	2.83668
TR_prereg_validateotp	9761	1098	1863	206	60470	0.54%	2.80337
TR_prereg_viewbasicdetails	9708	303	449	56	60111	0.16%	2.79509
TR_prereg_submitdemographic	9693	1451	3084	345	89505	0.21%	2.77576
TR_prereg_uploadpoidocument	9673	1587	4437	18	20928	0.63%	2.84038
TR_prereg_uploadpoadocument	9612	1501	4625	10	24084	0.69%	2.83335
TR_prereg_searchregcenter	9546	343	591	78	60749	0.07%	2.76934
TR_prereg_openbookappointmentpage	9539	523	851	85	61076	2.25%	2.72857
TR_prereg_bookappointment	9324	1554	3228	99	116213	0.85%	2.68306
TR_prereg_notify	9245	1056	2189	173	60032	12.73%	2.6832
TR_prereglogout	8068	430	773	84	60045	0.16%	2.36294

## Performance Test Execution Details

All of the transactions average response times were less than 2 sec except below

TR\_prereg\_sendotp - 3.002 sec

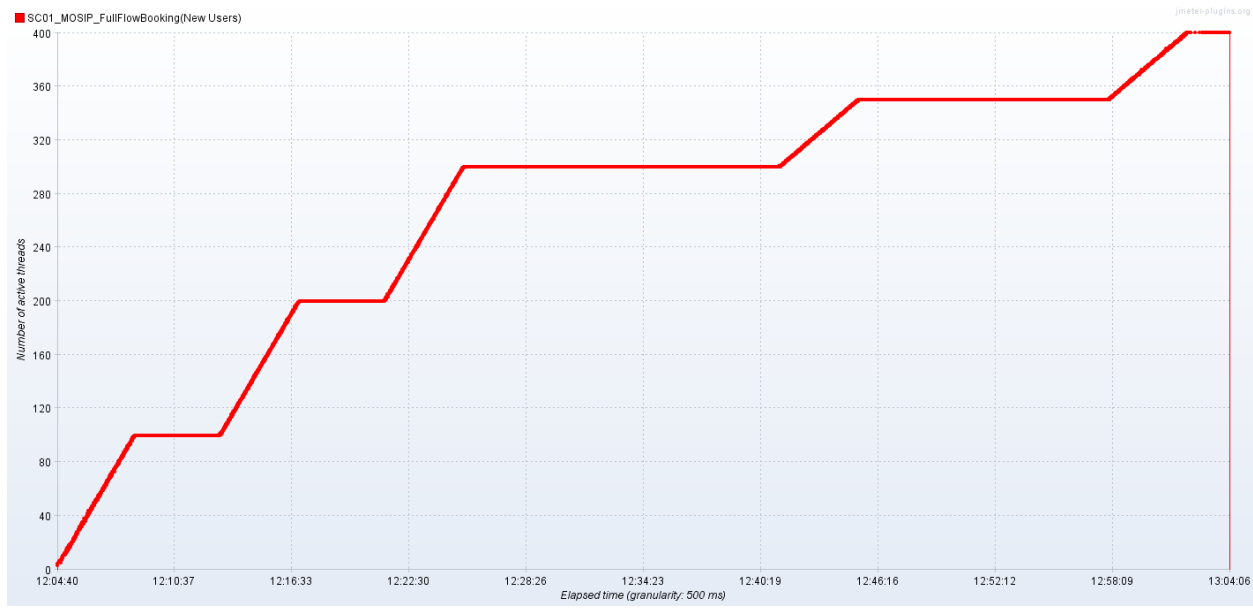
The error rate for below transactions are more than 1%:

Transactions	Error %
TR_prereg_homepage	4.17%
TR_prereg_sendotp	1.74%
TR_prereg_openbookappointmentpage	2.25%
TR_prereg_notify	12.73%

For pre-registration-notification-service observed spike of intermittent invalid response <https://mosip.atlassian.net/browse/MOS-27275>

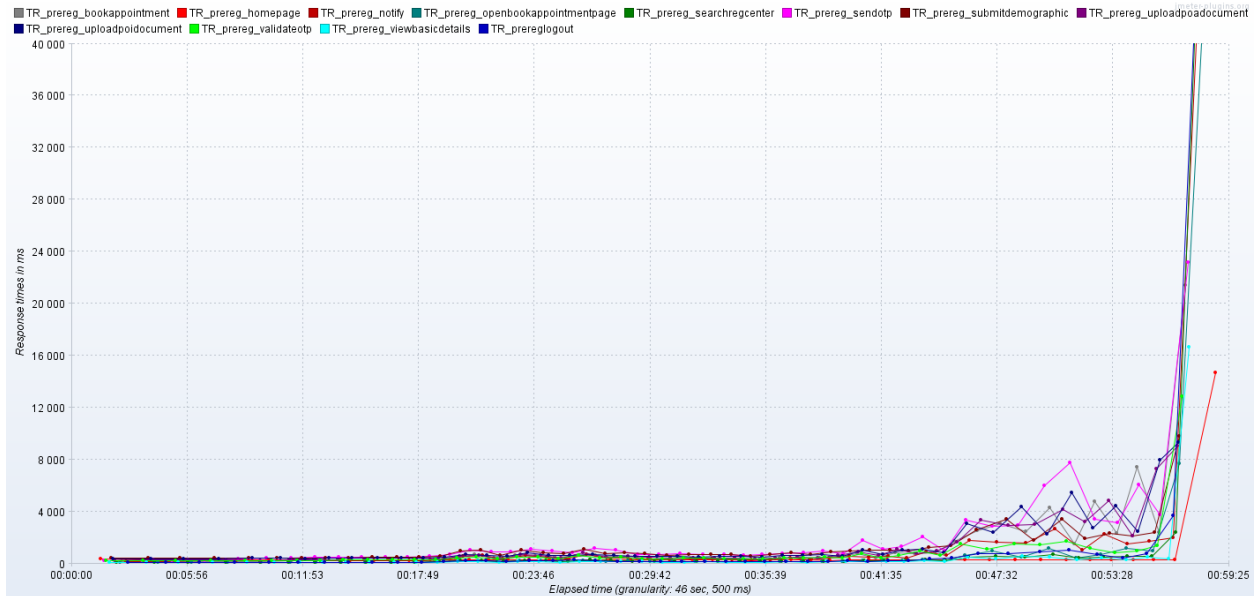
## **Test Environment : Sandbox preprod environment**

### **Active threads over Time:**

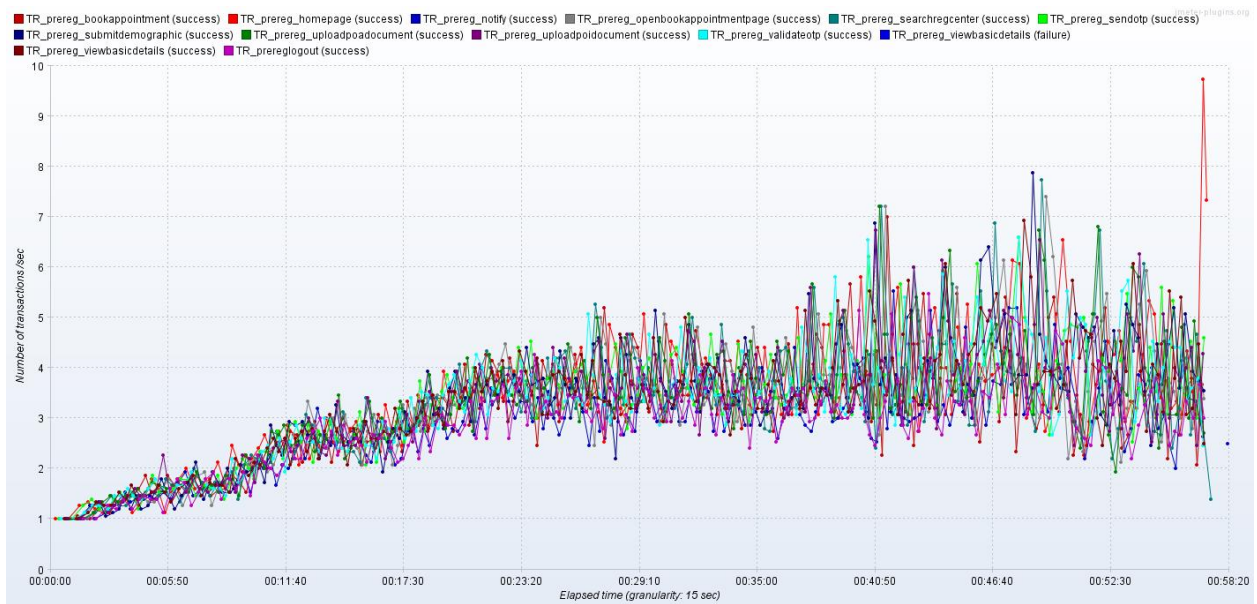




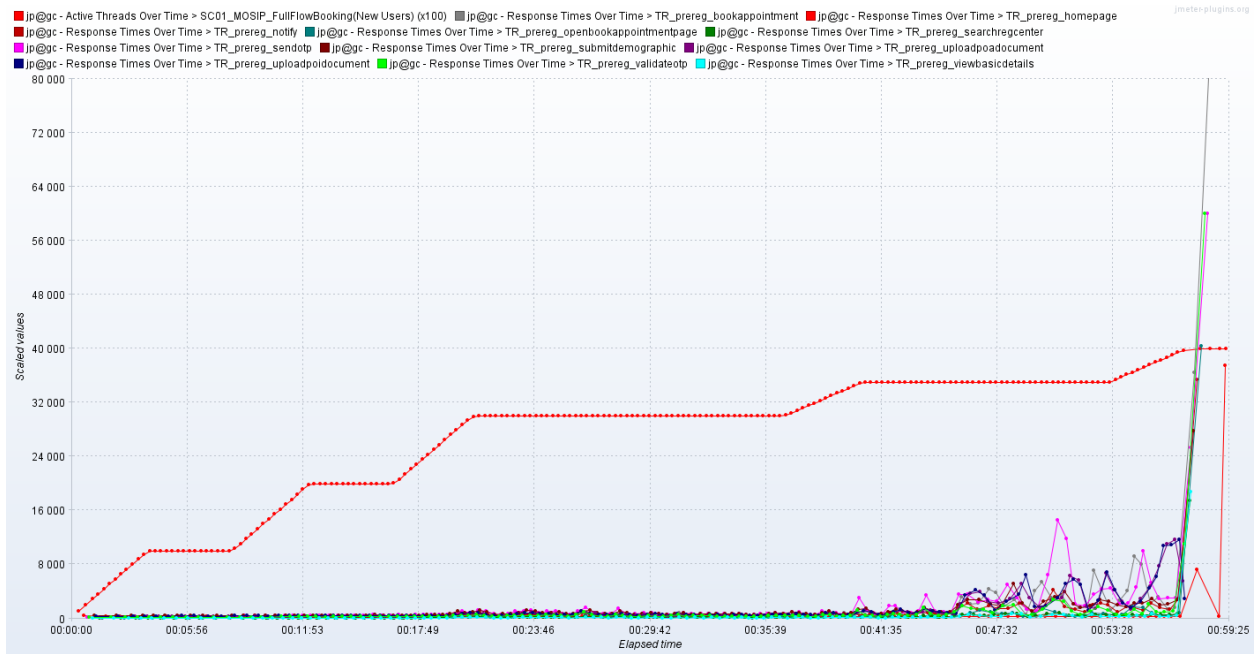
## Response Time Graph



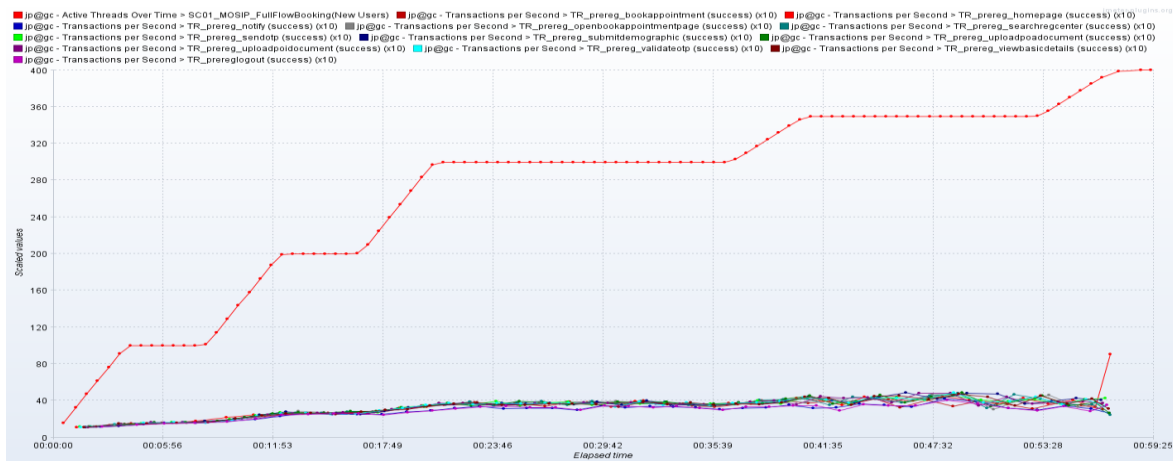
## Transactions per second:



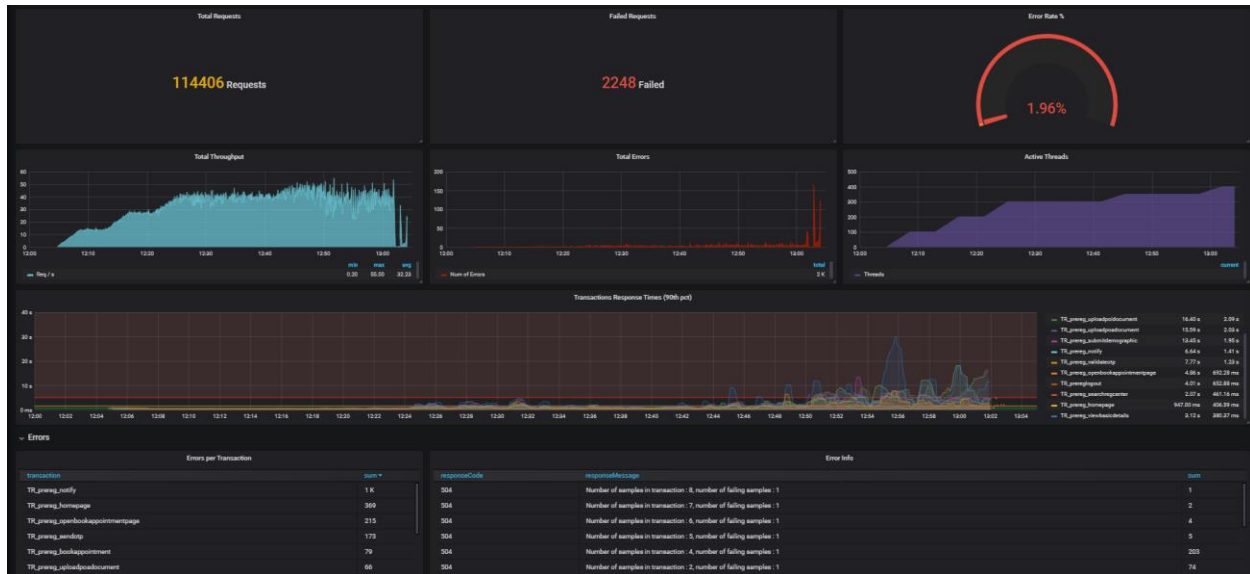
## Active threads vs response times over time:



## Active threads vs transactions per sec:



**JMeter graph:**



## Booking appointment request:

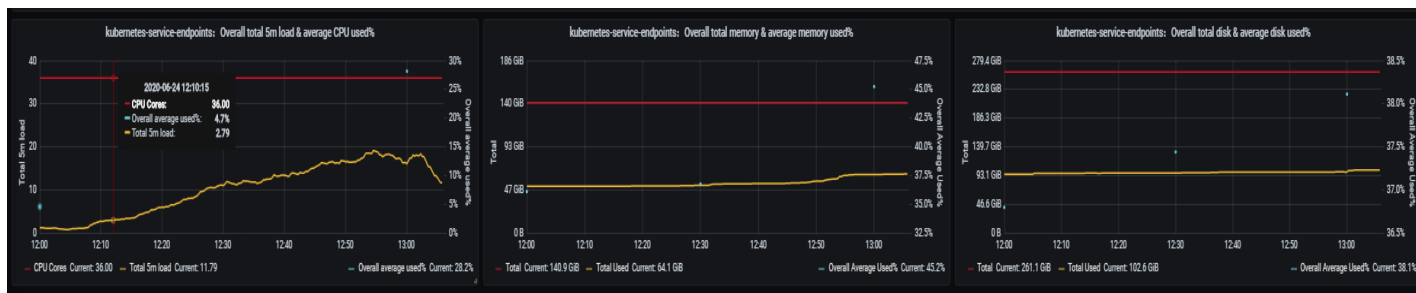


## MZ cluster node monitoring (9 VM's)

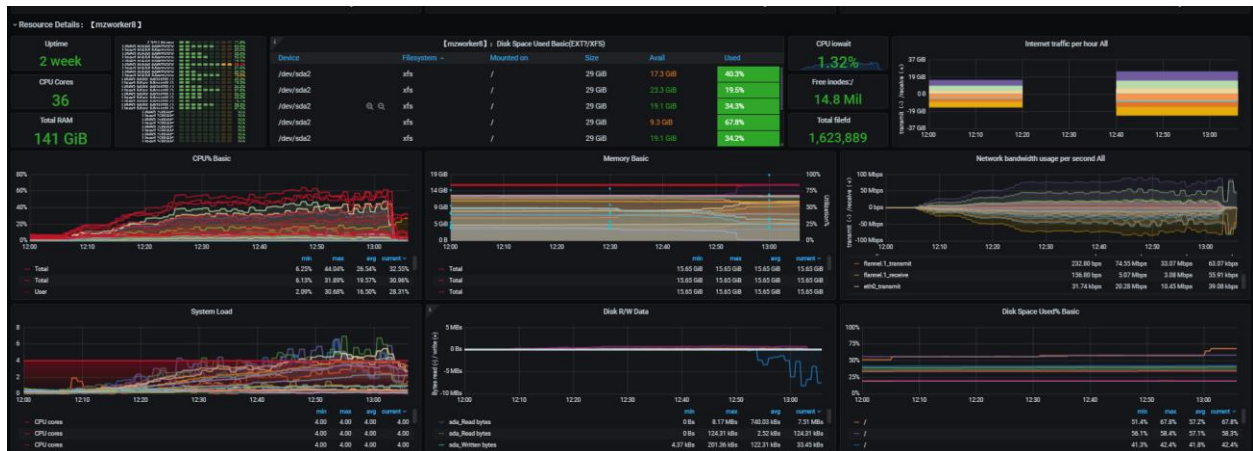


~ Resource Overview (associated JOB) Host: **mzworker8** Instance: 10.0.0.11:9100 + 10.0.0.12:9100 + 10.0.0.13:9100 + 10.0.0.15:9100 + 10.0.0.16:9100 + 10.0.0.4:9100 + 10.0.0.5:9100 + 10.0.0.6:9100 + 10.0.0.8:9100

Server Resource Overview (10 lines per page)												
IP (Link to details)	Hostname	Uptime	Memory	CPU Cores	5m load	CPU used%	Memory used%	Partition used%*	Disk read*	Disk write*	Download*	Upload*
<a href="#">10.0.0.11:9100</a>	mzworker5	2.03 week	15.65 GiB	4	1.11	30.96%	62.63%	40.33%	16.04 kBs	21.44 kBs	138.51 kbps	178.55 kbps
<a href="#">10.0.0.12:9100</a>	mzworker1	2.03 week	15.65 GiB	4	0.26	2.58%	20.05%	19.52%	0 Bs	18.84 kBs	62.17 kbps	33.29 kbps
<a href="#">10.0.0.13:9100</a>	mzworker7	2.03 week	15.65 GiB	4	0.28	6.68%	33.58%	34.31%	0 Bs	23.42 kBs	304.34 kbps	465.21 kbps
<a href="#">10.0.0.15:9100</a>	mzworker3	2.03 week	15.65 GiB	4	2.28	32.55%	52.18%	67.83%	0 Bs	16.38 kBs	347.71 kbps	399.36 kbps
<a href="#">10.0.0.16:9100</a>	mzworker8	2.03 week	15.65 GiB	4	0.11	5.63%	19.31%	34.21%	0 Bs	7.78 kBs	533.84 kbps	433.55 kbps
<a href="#">10.0.0.4:9100</a>	mzworker2	2.03 week	15.65 GiB	4	1.80	9.67%	98.41%	42.25%	2.59 MBs	22.25 kBs	708.89 kbps	793.92 kbps
<a href="#">10.0.0.5:9100</a>	mzworker4	2.03 week	15.65 GiB	4	0.23	2.49%	21.87%	19.72%	0 Bs	11.33 kBs	75.76 kbps	37.01 kbps
<a href="#">10.0.0.6:9100</a>	mzworker0	2.03 week	15.65 GiB	4	2.68	8.99%	30.47%	58.31%	0 Bs	33.45 kBs	48.36 Mbps	45.49 Mbps
<a href="#">10.0.0.8:9100</a>	mzworker6	2.03 week	15.65 GiB	4	2.67	6.95%	70.56%	37.22%	124.31 kBs	9.63 kBs	359.64 kbps	325.76 kbps



~ Resource Details: **mzworker8**







## Conclusion and Next Steps:

We have observed high response times for most of the transactions when the userload is above 320 users and started observing spike of 10 to 15 count of errors for most of the transactions, So has to abort the test

*Below are the existing issues on Old preprod environment*

### Issues for 300 concurrent users:

For pre-registration-notification-service observed spike of intermittent invalid response and read timeout errors

1. <https://mosip.atlassian.net/browse/MOSIP-436>
2. <https://mosip.atlassian.net/browse/MOS-27275>

Observed high average response time for booking appointment (~59.12 sec) -

<https://mosip.atlassian.net/browse/MOSIP-697>, <https://mosip.atlassian.net/browse/MOS-30796>

### Issues for 400 concurrent users:

<https://mosip.atlassian.net/browse/MOS-31257>, <https://mosip.atlassian.net/browse/MOSIP-436>, <https://mosip.atlassian.net/browse/MOS-27275>

### Issues for 500,600 and 700 concurrent users:

<https://mosip.atlassian.net/browse/MOS-31257>, <https://mosip.atlassian.net/browse/MOSIP-436>, <https://mosip.atlassian.net/browse/MOS-27275>, <https://mosip.atlassian.net/browse/MOSIP-261>, <https://mosip.atlassian.net/browse/MOSIP-262>, <https://mosip.atlassian.net/browse/MOSIP-544>, <https://mosip.atlassian.net/browse/MOSIP-243>, <https://mosip.atlassian.net/browse/MOS-31208>, <https://mosip.atlassian.net/browse/MOS-29629>, <https://mosip.atlassian.net/browse/MOS-28263>