Mindtree

# Performance Test Report

# For

# Execution of

# Preregistration module – 300 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 300 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

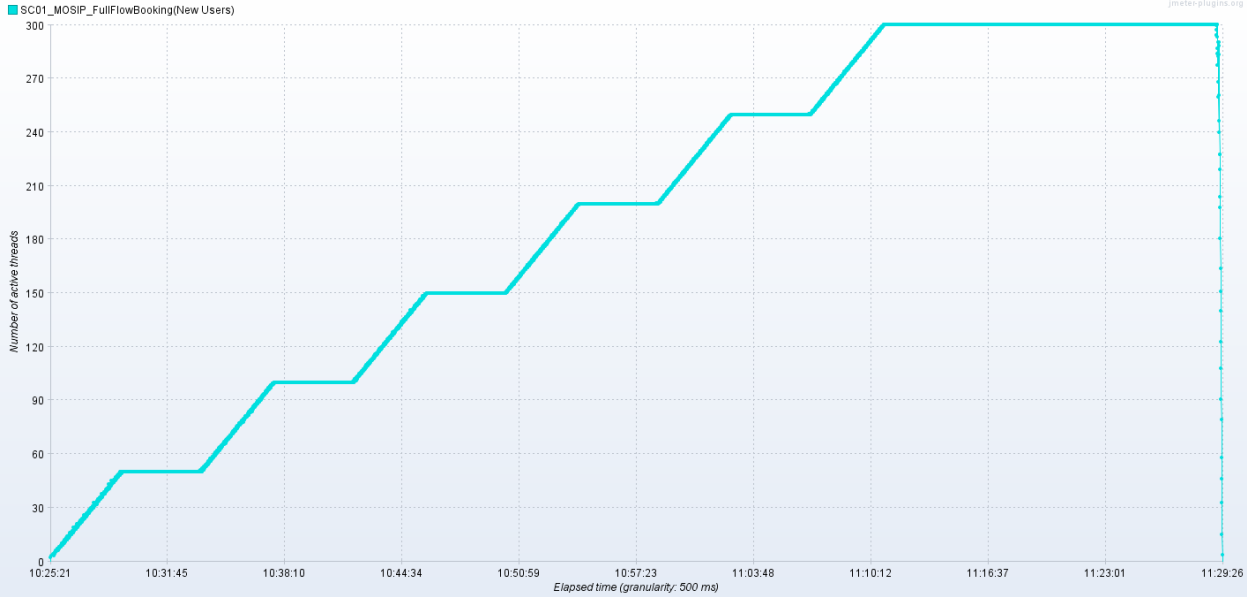
Below are the scenario details:

## Identified Key scenarios:

1) MOSIP_PT_PreReg_UI_BookingfullFlow

| | |
|---|---|
| **Run Date** | 24-Jun-2019 |
| **Period** | 10:25 to 11:29 AM (UTC) |
| **Number of concurrent users** | 300 |
| **Ramp up** | 300 users ramp up refer below ramp up profile |
| **Run Duration** | 1.05 hours |
| **Think time** | 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 | 8521 | 307 | 376 | 206 | 5330 | 0.00% | 2.21644 |
| TR_prereg_sendotp | 8481 | 631 | 1000 | 339 | 4332 | 0.00% | 2.21261 |
| TR_prereg_validateotp | 8461 | 361 | 534 | 196 | 5653 | 0.00% | 2.21027 |
| TR_prereg_viewbasicdetails | 8428 | 97 | 150 | 55 | 891 | 0.00% | 2.20886 |
| TR_prereg_submitdemographic | 8419 | 611 | 930 | 352 | 2911 | 0.07% | 2.20854 |
| TR_prereg_uploadpoidocument | 8387 | 487 | 747 | 296 | 2924 | 0.00% | 2.2044 |
| TR_prereg_uploadpoadocument | 8363 | 382 | 672 | 193 | 2547 | 0.00% | 2.20027 |
| TR_prereg_searchregcenter | 8348 | 140 | 214 | 77 | 4283 | 0.00% | 2.20164 |
| TR_prereg_openbookappointmentpage | 8324 | 148 | 224 | 85 | 1749 | 0.00% | 2.19981 |
| TR_prereg_bookappointment | 8301 | 331 | 499 | 111 | 10231 | 0.06% | 2.19632 |
| TR_prereg_notify | 8238 | 307 | 495 | 166 | 2260 | 7.76% | 2.18983 |
| TR_prereglogout | 7583 | 149 | 218 | 84 | 4927 | 0.00% | 2.0173 |

## Performance Test Execution Details

All of the transactions average response times were less than 1 sec

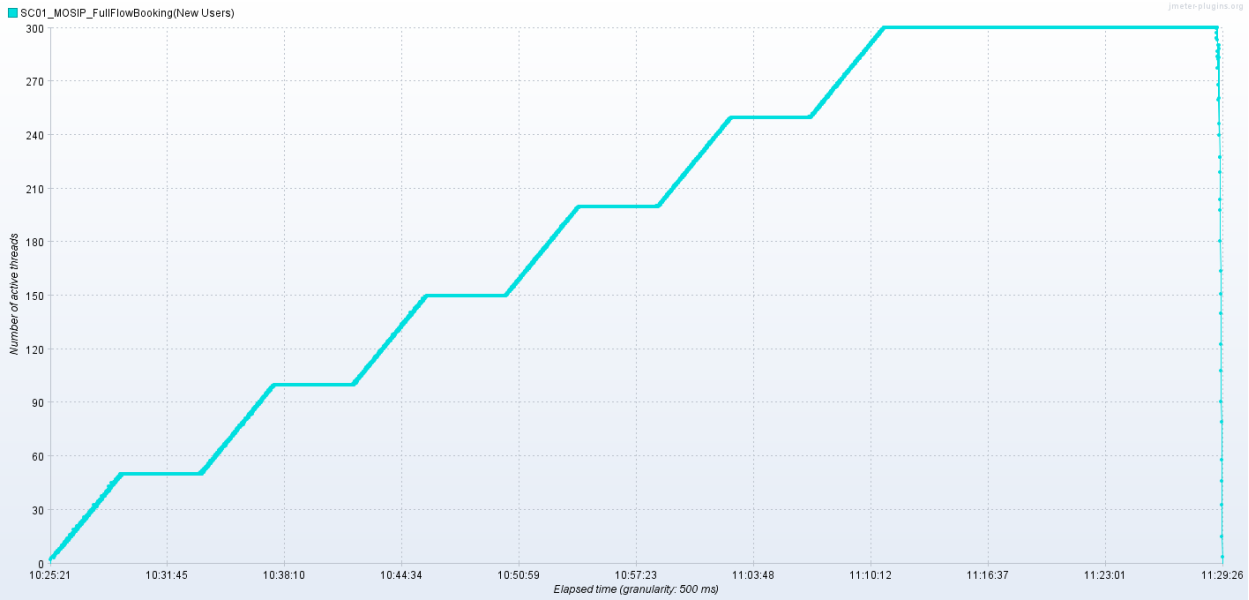
The error rate for below transactions are more than 1%:

| Transactions | Error % |
|---|---|
| TR_prereg_notify | 7.76% |

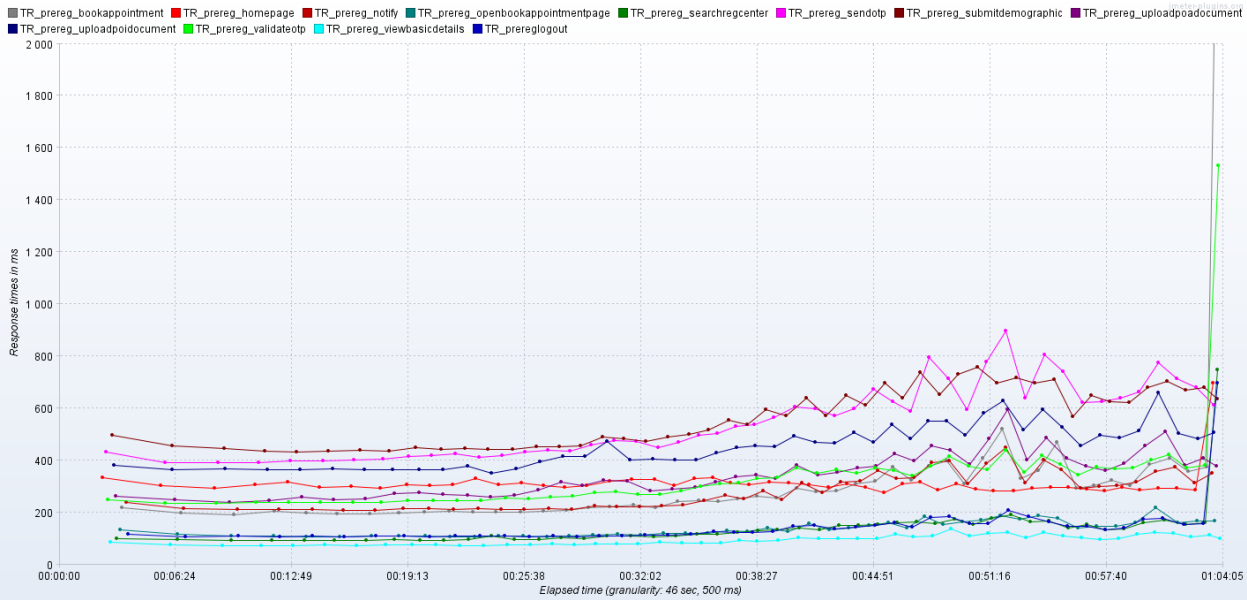
For pre-registration-notification-service observed spike of intermittent invalid response https://mosip.atlassian.net/browse/MOS-27275

## Test Environment : Sandbox preprod environment

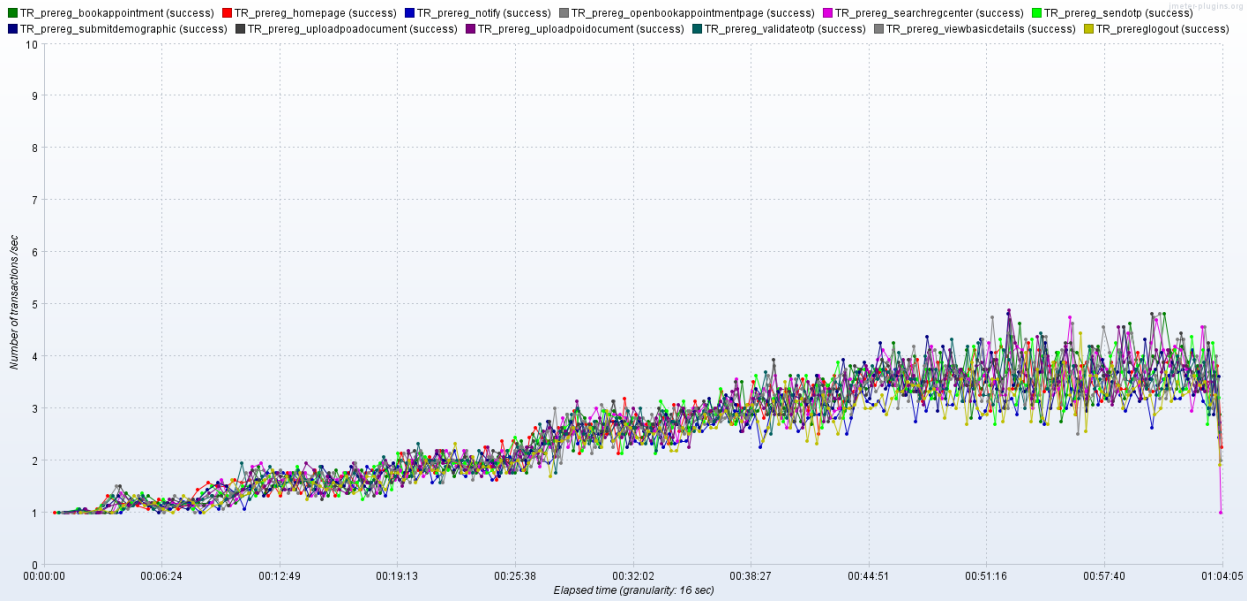
## Active threads over Time:



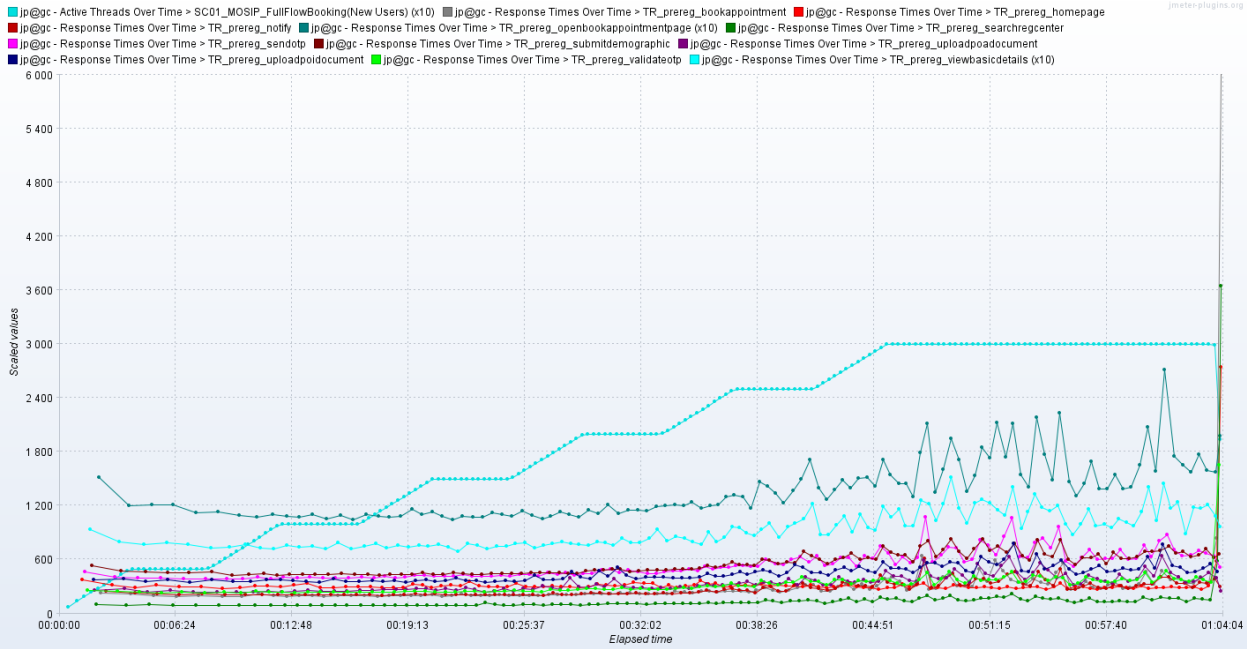

## Response Time Graph



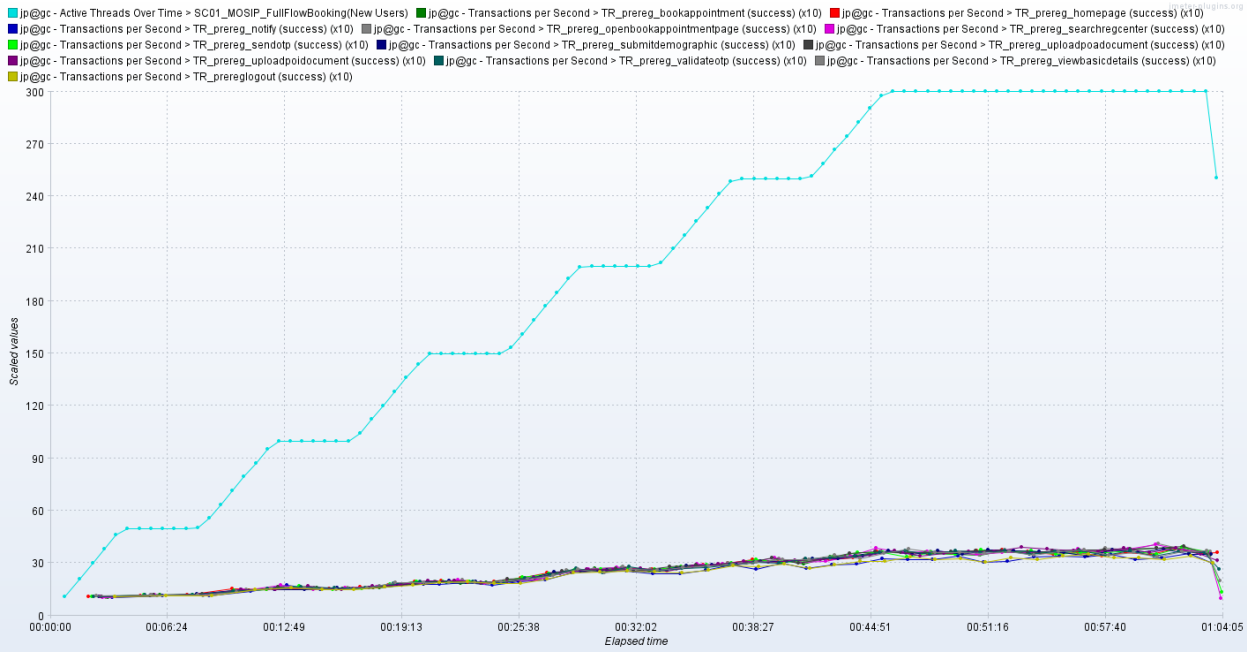

## Transactions per second:



## Active threads vs response times over time:




## Active threads vs transactions per sec:

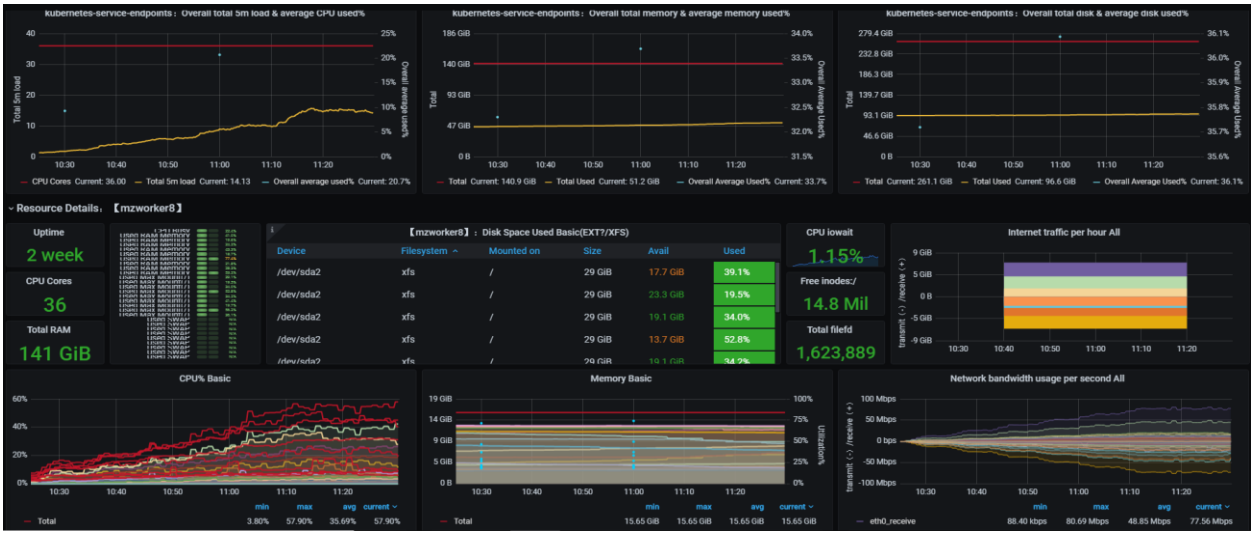


**JMeter graph:**


# Booking appointment request:

# MZ cluster  node monitoring (9 VM's)


| IP（Link to details） | Hostname | Uptime | Memory | CPU Cores | 5m load | CPU used% | Memory used% | Partition used%* | Disk read* | Disk write* | Download* | Upload* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.0.0.11:9100 | mzworker5 | 2.03 week | 15.65 GiB | 4 | 1.23 | 19.28% | 40.97% | 39.15% | 0 Bs | 138.65 kBs | 38.25 Mbps | 41.57 Mbps |
| 10.0.0.12:9100 | mzworker1 | 2.03 week | 15.65 GiB | 4 | 0.39 | 6.00% | 19.64% | 19.53% | 0 Bs | 19.32 kBs | 9.28 Mbps | 8.61 Mbps |
| 10.0.0.13:9100 | mzworker7 | 2.03 week | 15.65 GiB | 4 | 0.60 | 8.75% | 24.17% | 34.04% | 0 Bs | 48.74 kBs | 6.45 Mbps | 5.99 Mbps |
| 10.0.0.15:9100 | mzworker3 | 2.03 week | 15.65 GiB | 4 | 1.76 | 31.24% | 43.34% | 52.75% | 0 Bs | 714.62 kBs | 9.59 Mbps | 10.41 Mbps |
| 10.0.0.16:9100 | mzworker8 | 2.02 week | 15.65 GiB | 4 | 0.18 | 5.59% | 18.70% | 34.19% | 0 Bs | 6.55 kBs | 273.02 kbps | 197.52 kbps |
| 10.0.0.4:9100 | mzworker2 | 2.03 week | 15.65 GiB | 4 | 2.41 | 26.90% | 77.36% | 41.43% | 0 Bs | 112.84 kBs | 6.16 Mbps | 11.48 Mbps |
| 10.0.0.5:9100 | mzworker4 | 2.03 week | 15.65 GiB | 4 | 0.25 | 5.51% | 21.75% | 19.69% | 0 Bs | 10.10 kBs | 6.57 Mbps | 6.08 Mbps |
| 10.0.0.6:9100 | mzworker0 | 2.03 week | 15.65 GiB | 4 | 3.84 | 57.90% | 28.31% | 56.15% | 0 Bs | 163.09 kBs | 77.56 Mbps | 72.77 Mbps |
| 10.0.0.8:9100 | mzworker6 | 2.03 week | 15.65 GiB | 4 | 3.08 | 40.33% | 53.15% | 36.14% | 0 Bs | 211.42 kBs | 33.01 Mbps | 28.88 Mbps |




## Conclusion and Next Steps:

**Since we have not observed major issues we are proceeding with 450 concurrent users performance run**

**Below are the existing issues on Old prepod 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