

# **Performance Test Report For Execution of 4 months Slot availability Batch Job**

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Author: Anand Babaleshwar

## **Summary**

This report presents the observations and findings of the 4 months slot availability batch job and load test conducted for a load of 150 users, which will make booking appointments after executing 4 months Slot availability batch jobs running for a duration of 1 hour.

The objective of this load test was to observe and record the behavior of the application when users are booking appointments after executing slot availability for 4 months.

Below are the scenario details:

<b>Sprint/Report Name</b>	Booking appointments after executing slot availability batch job for 4 months
<b>Run Date</b>	19-June-2019
<b>Period</b>	10:41 AM to 11:42 AM (UTC)
<b>Number of concurrent users</b>	150
<b>Ramp up</b>	4 min
<b>Run Duration</b>	60 minutes
<b>Ramp down</b>	2 min

### **Batch Job execution details:**

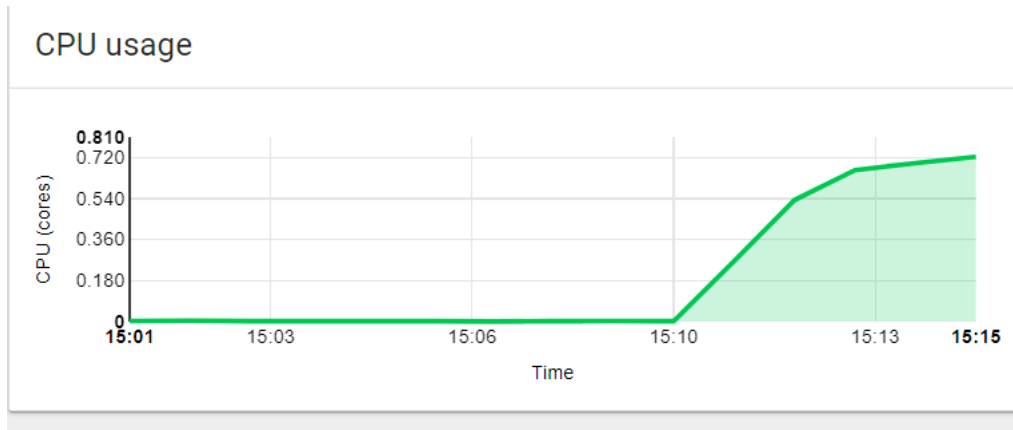
Executed slot availability batch job for 4 months and verified in the DB as well after creation of slots for 4 months, below are the details:

instance_id	Create_Time	Start_Time	End_Time	Execution Time	Status	Slots available (DB)	Days (DB)
1107	2019-06-19 09:40:30.142	2019-06-19 09:40:30.169	2019-06-19 10:09:03.667	00:28:33	Completed	48159	120

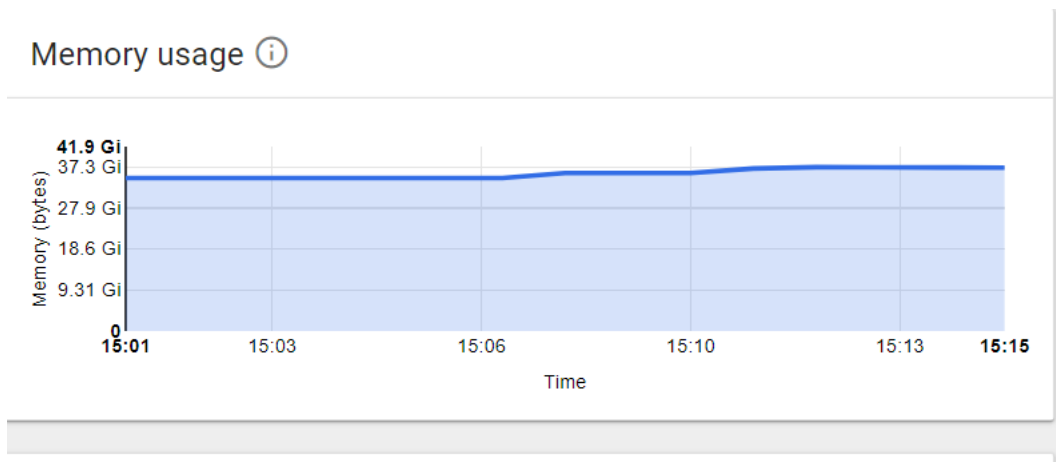
Slot availability batch job took **00:28:33** sec for executing 4 months. Batch job status is completed but its created 4 months slots. Verified the slots available in DB.

We have taken the CPU and memory utilization graphs of the slot availability batch job (pods) , They are below:

### CPU Utilization:

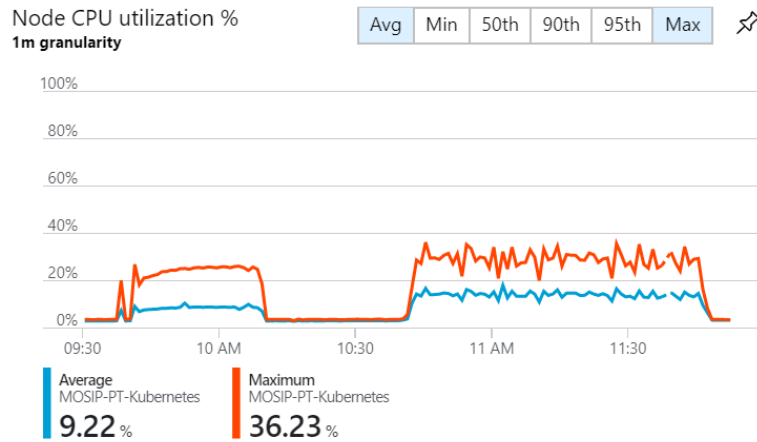


### Memory utilization:





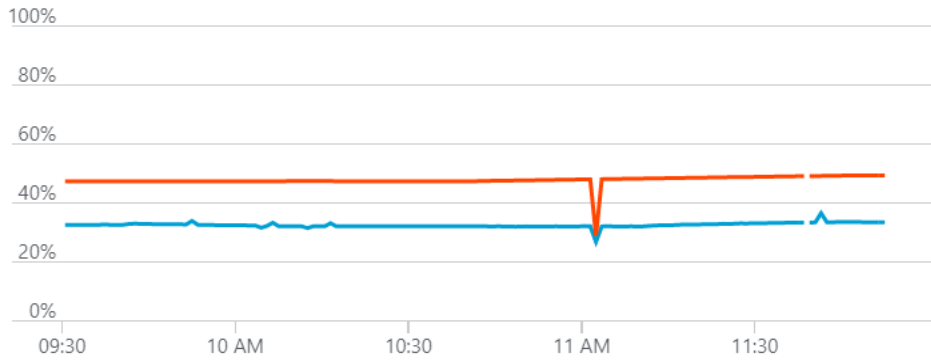
## CPU and Memory utilization from Kubernetes cluster:





## Node memory utilization % 1m granularity

Avg Min 50th 90th 95th Max

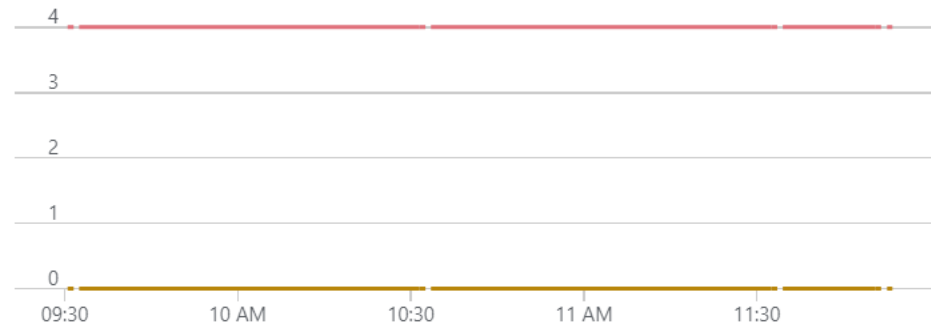


Average  
MOSIP-PT-Kubernetes  
**32.48 %**

Maximum  
MOSIP-PT-Kubernetes  
**49.32 %**

## Node count 1m granularity

Total Ready Not Ready



Ready  
MOSIP-PT-Kubernetes  
**4**

Not Ready  
MOSIP-PT-Kubernetes  
**0**

After verifying the slots available in DB for 4 months and In-order to create volume in the database executed the booking appointment full flow scenario script the Details are mentioned below:

The transaction response times:

Label	# Samples	Average (msec)	90% Line (msec)	Min (msec)	Max (msec)	Error %	Throughput (Sec)
mosip_preReg_homepage	2754	64195	132045	387	242382	0.00%	0.69792
mosip_preReg_send_otp	2717	348	379	17	3330	0.07%	0.69043
mosip_preReg_validate_otp	2713	189	196	100	2900	0.04%	0.68939
mosip_preReg_submit_demographics	2710	987	1436	32	13965	0.04%	0.68852
mosip_preReg_upload_poi_document	2705	499	585	38	5441	0.81%	0.68688
mosip_preReg_upload_poa_document	2700	429	499	20	5600	0.04%	0.68818
mosip_open_preview_pageupload_poi_document	2697	14	18	9	219	0.00%	0.68748
mosip_preReg_open_regCenter_selection_page	2697	149	155	47	6048	0.04%	0.68744
mosip_preReg_search_registration_center	2690	66	72	18	2926	0.04%	0.68769
mosip_preReg_open_book_appointment_page	2688	910	1076	36	2542	0.07%	0.68676
mosip_preReg_book_appointment	2685	353	423	285	4912	0.00%	0.68708
mosip_preReg_logout	2663	64782	129282	22	242944	0.04%	0.68167

## Performance Test Execution Details

We have executed the booking appointment user flow scenario script, which has transactions mentioned in above table.

Most of the transactions average response times are beyond SLA of **3 seconds**, They are listed below:

1. Mosip\_preReg\_homepage - 64.195 sec
2. Mosip\_preReg\_logout- 64.782 sec

The error rate for all transactions is less than 1%.



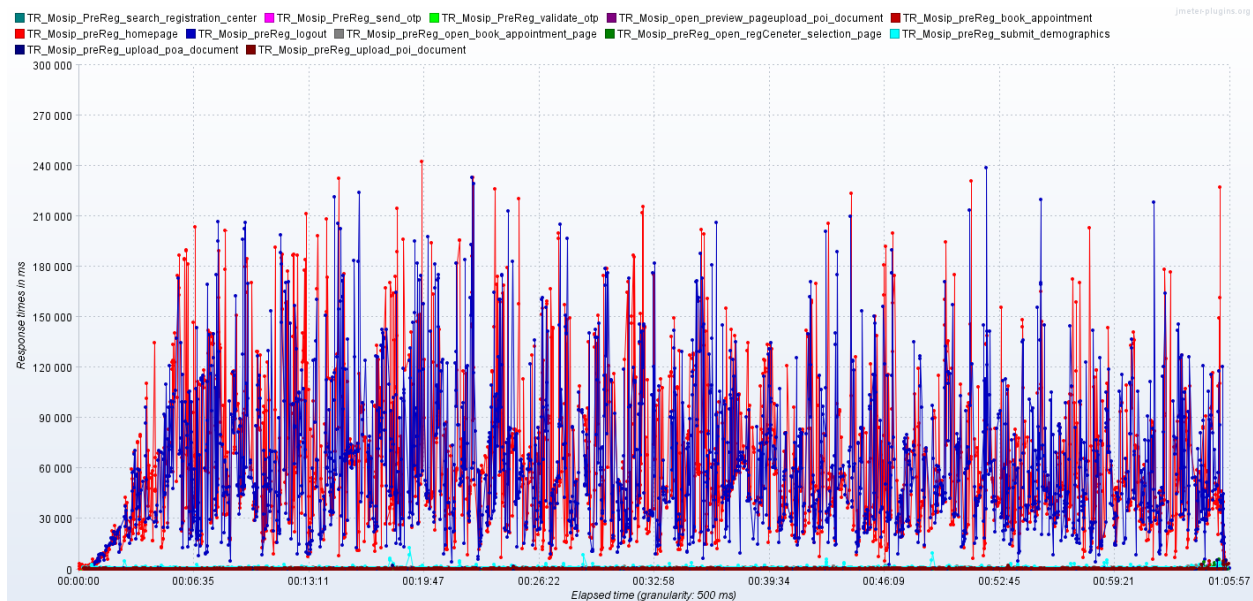
## Test Environment

	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

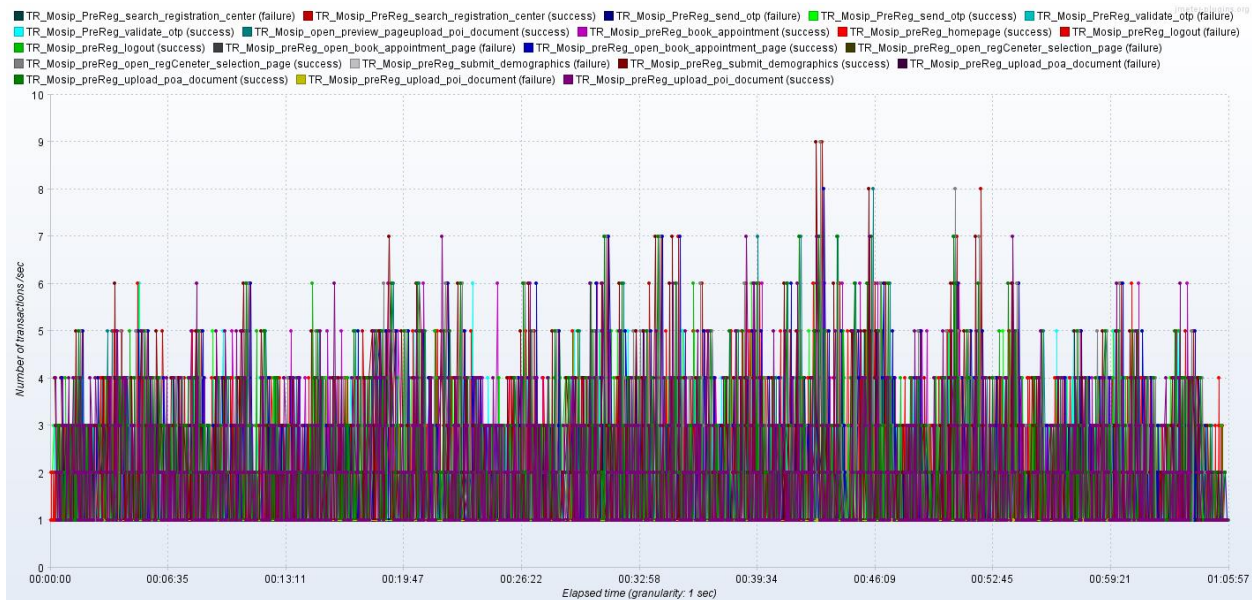
## Response Time Graph

All the transactions average response times are within SLA of 3 seconds except below:

1. Mosip\_preReg\_homepage - 64.195 sec
2. Mosip\_preReg\_logout- 64.782 sec



## Transactions per second:



## Conclusion and Next Steps:

The Execution for 4 months slots availability is completed, the high response times observed during 150 users load test which was executed for 1 hour steady period and similar issue is covered in the ticket <https://mosipid.atlassian.net/browse/MOS-25581> and We will proceed slot availability batch for future periods like for 5 Months and 6 Months and we will repeat the same performance test and observe the performance of transactions and execution time for batch jobs