

Performance Test Report For Execution of 60 days Slot availability Batch Job

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Summary

This report presents the observations and findings of the 60 days slot availability batch job and load test conducted for a load of 150 users, which will make booking appointments after executing 60 days 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 60 days.



Below are the scenario details:

Sprint/Report Name	Booking appointments after executing slot availability batch job for 60 days				
Run Date	17-June-2019				
Period	07:18 AM to 08:24 AM (UTC)				
Number of concurrent users	150				
Ramp up	4 min				
Run Duration	60 minutes				
Ramp down	2 min				

Batch Job execution details:

Executed slot availability batch job for 60 days and verified in the DB as well after creation of slots for 60 days, below are the details:

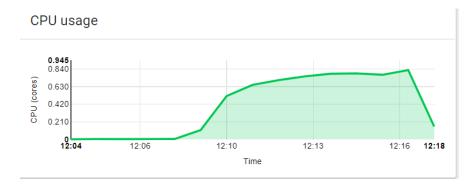
in	stance_id	Create_Time	Start_Time	End_Time	Execution Time	Status	Slots available (DB)	Days (DB)
	1086	2019-06-17 06:38:36.056	2019-06-17 06:38:36.084	2019-06-17 06:46:58.757	00:08:23	Completed	23985	60

Slot availability batch job took **00:08:23** sec for executing 60 days. Batch job status is completed but its created 60days slots. Verified the slots available in DB.

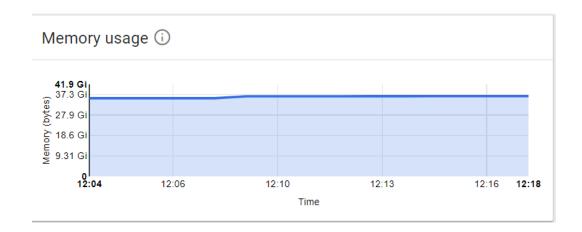
We have taken the CPU and memory utilization graphs of the slot availability batch job (pods), They are below:



CPU Utilization:



Memory utilization:



After verifying the slots available in DB for 60 days and Inorder to create volume in the database executed the booking appointment full flow scenario script the Details are mentioned below:



The transaction response times observed were as below:

Label	# Samples	Average (msec)	90% Line (msec)	Min (msec)	Max (msec)	Error %	Throughput (Sec)
mosip_preReg_homepage	2718	62699	127274	378	240632	0.00%	0.68688
mosip_preReg_send_otp	2686	387	417	15	2298	0.07%	0.6811
mosip_preReg_validate_otp	2682	183	194	112	3163	0.04%	0.6805
mosip_preReg_submit_demographics	2681	1062	1509	33	10989	0.04%	0.68076
mosip_preReg_upload_poi_document	2675	479	557	35	4175	1.01%	0.68063
mosip_preReg_upload_poa_document	2671	428	490	21	5424	0.04%	0.67937
mosip_open_preview_pageupload_poi_document	2661	14	19	9	219	0.00%	0.67957
mosip_preReg_open_regCeneter_selection_page	2661	147	153	41	5291	0.04%	0.67893
mosip_preReg_search_registration_center	2650	64	72	15	1745	0.04%	0.67779
mosip_preReg_open_book_appointment_page	2649	370	392	24	3144	0.04%	0.677
mosip_preReg_book_appointment	2643	310	360	257	5892	0.00%	0.67584
mosip_preReg_logout	2619	64907	121933	602	237098	0.04%	0.67052

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 62.699 sec
- 2. Mosip_preReg_logout- 64.907 sec

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

Uploading POI document -1.01% ,below is the error message:

[{"errorCode":"KER-FSA-001","message":"Exception occured in HDFS Adapter"}]}

Details will be shared to developers for further analysis based on request from team.



Test Environment

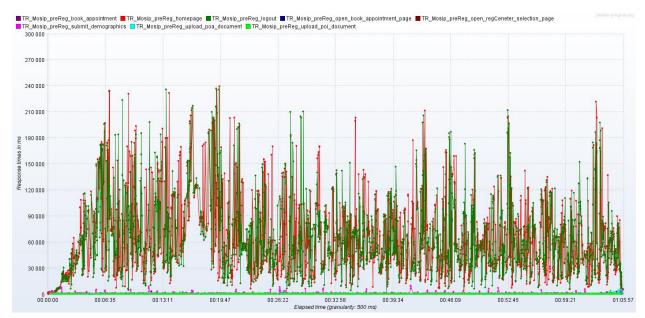
Common proxy server (NGINX)		(Kubernets cluster) apache Tomcat 8.5.31	DB Postgress SQL 10.2
Number Of nodes	1	4	1
RAM	4 GB	112 GB	16GB
PROCESSOR	2 cores	16 core	4 cores

Response Time Graph

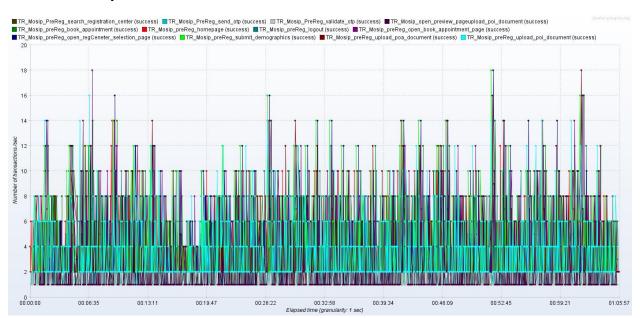
All the transactions average response times are within SLA of 3 seconds except below:

- 1. Mosip_preReg_homepage 62.699 sec
- 2. Mosip_preReg_logout- 64.907 sec





Transactions per second:





Conclusion and Next Steps:

The Execution for 60 days slots availability is completed, the high response times and error rates observed during 150 users load test which was executed for 1 hour steady period and similar issue is mentioned in the ticket https://mosipid.atlassian.net/browse/MOS-25581 and We will proceed slot availability batch for future periods like for 3 months ,4 months ,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