

Performance Test Report

For

Packet Receiver Stage

In Registration Processor for different combinations of users and packets

Date: 05 December 2019

Author: Anand Babaleshwar

Summary

This report presents the observations and findings of the load test conducted for Packet Receiver stage in Registration Processor module for different combinations of users and packets.

The objective of this load test was to observe create a comparison report of the application under different loads.

The different combinations are:

- 1 user 1 packet
- 10 packets 10 users
- 50 packets 10 users
- 100 packets 10 users
- 100 concurrent users.



Performance Test Execution Details

We have executed Registration Processor - packet receiver stage alone by disabling the camel bridge.

Here we are uploading packet to the packet receiver stage.

Below are the scenario details for 1 user 1 packet:

Sprint/Report Name	Packet Receiverfor 1 user 1 packet
Run Date	28-November-2019
Period	06:14:30 (UTC)
Number of users	1
Number of packets	1
Time spent	712 ms

Excel report with transaction details attached for 1 user 1 packet:





Glowroot Traces for 1 user 1 packet:



Response time Slow traces (0)	Queries Service cal	lls Thread profile				
			Total time - (ms)	Total count	Avg time (ms)	Avg
select distinct syncregist0i syncre	id as id1_3_, syncre	gist0cr_dtimes as cr_dtime1_1_,	5.7	1	5.7	1.0
select distinct registratioi applican1_0_, r	id as id1_3_, regist	rati0applicant_type as	5.1	3	1.7	0
insert into regprc.registration	on_transaction (cr_d	times, cr_by, del_dtimes, is_deleted,	2.1	1	2.1	1.0
select transactio0id as id1_transactio0	3_0_, transactio0	cr_dtimes as cr_dtime1_2_0_,	1.4	1	1.4	0
select registrati0id as id1_ regist	3_0_, registrati0	applicant_type as applican1_0_0_,	1.4	1	1.4	0
insert into regprc.registration	on (applicant_type,	cr_dtimes, cr_by, del_dtimes,	1.1	1	1.1	1.0

Response time Slow traces (0) Quei	ries Service calls Thread profile		
	Total		Avg
	time	Total	time
	→ (ms)	count	(ms)
POST	79.0	3	26.3
https://preprod.mosip.io/v1			
/authmanager/authenticate/c			
lientidsecretkey			
POST	62.7	1	62.7
https://preprod.mosip.io/v1			
/authmanager/authorize/vali			
dateToken			
POST	43.0	1	43.0
https://preprod.mosip.io/v1			
/signature/sign			
POST	38.0	2	19.0
https://preprod.mosip.io/v1			
/auditmanager/audits			



Below are the scenario details for 10 users 10 packets:

Sprint/Report Name	Packet Receiver for 10 users 10 packets
Run Date	28-November-2019
Period	07:53:30 - 07:54:40 (UTC)
Number of users	10
Number of packets	10
Run Duration	1 minute 19 seconds
Avg Time spent	636.7 ms

Excel report with transaction details attached:

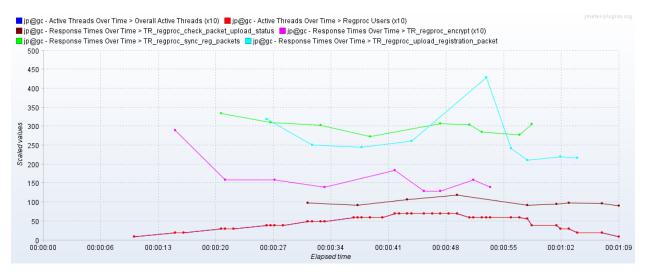




Active Threads Over Time: 10 users - 10packets

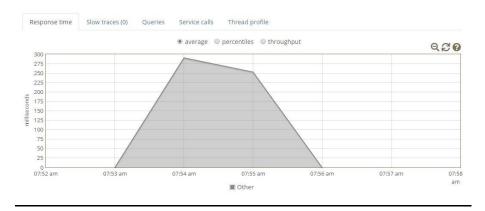


Response Time Graph: 10 users - 10packets





Glowroot Traces for 10 users 10 packets:





Response time Slow traces (0) Querio	es Service calls Thread profile		
	Total		Avg
	time	Total	time
	→ (ms)	count	(ms)
POST	688.6	30	23.0
https://preprod.mosip.io/v1			
/authmanager/authenticate/c			
lientidsecretkey			
POST	307.3	10	30.7
https://preprod.mosip.io/v1			
/signature/sign			
POST	290.3	20	14.5
https://preprod.mosip.io/v1			
/auditmanager/audits			
POST	158.3	10	15.8
https://preprod.mosip.io/v1			
/authmanager/authorize/vali			
dateToken			



Below are the scenario details for 10 users 50 packets:

Sprint/Report Name	Packet Receiver for 10 users 50 packets
Run Date	28-November-2019
Period	07:59:26 - 08:02:18 (UTC)
Number of users	10
Number of packets	50
Run Duration	2 minutes 52 seconds
Avg Time spent	589.56 ms

Excel report with transaction details attached:

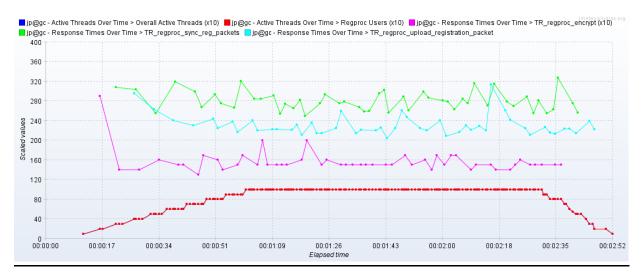




Active Threads Over Time: 10 users - 50packets

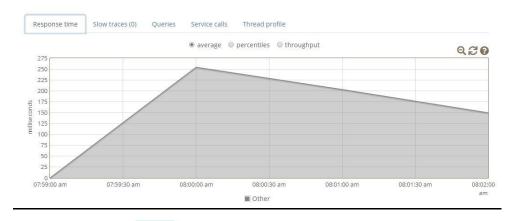


Response Time Graph: 10 users - 50packets





Glowroot Traces for 10 users 50 packets:



Response time	Slow traces (0)	Queries	Service calls	Thread profile				
					Total time • (ms)	Total count	Avg time (ms)	Avg
select distinc applican1_0_,.	AN OTHER WAS ARREST OF THE RES	id as id1_3	3_, registrat	i0applicant_type as	88.4	101	0.88	0.02
insert into re	gprc.registrati	on_transac	tion (cr_dtim	es, cr_by, del_dtimes, is_deleted,	59.8	44	1.4	1.0
select distinc	t syncregist0	id as id1_	3_, syncregis	t0cr_dtimes as cr_dtime1_1_,	50.0	44	1.1	1.0
insert into re is_activ	gprc.registrati	on (applica	ant_type, cr_	dtimes, cr_by, del_dtimes,	38.6	44	0.88	1.0
select transac transacti	tio0id as id1	_3_0_, tra	nsactio0cr_	dtimes as cr_dtime1_2_0_,	38.5	44	0.87	0
select registr	ati0id as id1	_3_0_, reg	istrati0app	licant_type as applican1_0_0_,	33.9	44	0.77	0

Response time Slow traces (0) Que	ries Service calls Thread profile		
	Total		Avg
	time	Total	time
	▼ (ms)	count	(ms)
POST	3,111.7	132	23.6
https://preprod.mosip.io/v1			
/authmanager/authenticate/c			
lientidsecretkey			
POST	1,339.5	44	30.4
https://preprod.mosip.io/v1			
/signature/sign			
POST	1,242.4	88	14.1
https://preprod.mosip.io/v1			
/auditmanager/audits			
POST	367.2	44	8.3
https://preprod.mosip.io/v1			
/authmanager/authorize/vali			
dateToken			



Below are the scenario details for 10 users 100 packets:

Sprint/Report Name	Packet Receiver for 10 users 100 packets
Run Date	28-November-2019
Period	12:18:38 - 12:23:39 (UTC)
Number of users	10
Number of packets	100
Run Duration	5 minutes 01 second
Avg Time spent	672.61 ms

Excel report with transaction details attached:





Active Threads Over Time: 10 users - 100packets

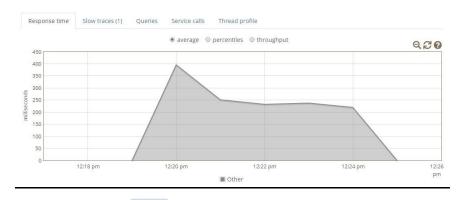


Response Time Graph: 10 users - 100packets





Glowroot Traces for 10 users 100 packets:



Response time Slow traces (1)	Queries	Service calls	Thread profile				
				Total time • (ms)	Total count	Avg time (ms)	Avg
select distinct registratio: applican1_0	id as id1_	3_, registrat	tiOapplicant_type as	269.8	231	1.2	0.07
insert into regprc.registration	on_transac	tion (cr_dtir	mes, cr_by, del_dtimes,	147.5	100	1.5	1.0
select distinct syncregist0: syn	id as id1_	3_, syncregis	st0cr_dtimes as cr_dtime1_1_,	132.2	100	1.3	1.0
insert into regprc.registration	on (applic	ant_type, cr_	_dtimes, cr_by, del_dtimes,	108.9	100	1.1	1.0
select registratiOid as id1_reg	_3_0_, reg	istrati0app	olicant_type as applican1_0_0_,	106.9	100	1.1	0
select transactio0id as id1_transact	_3_0_, tra	nsactio0cr	_dtimes as cr_dtime1_2_0_,	97.9	100	0.98	0

Response time Slow traces (1) Queries	Service calls	Thread profile	
		otal	Avg
		ime Total (ms) count	time (ms)
POST	8,0	03.4 300	26.7
https://preprod.mosip.io/v1			
/authmanager/authenticate/c			
lientidsecretkey			
POST	3,4	84.5	34.8
https://preprod.mosip.io/v1			
/signature/sign			
POST	3,2	89.3 200	16.4
https://preprod.mosip.io/v1			
/auditmanager/audits			
POST	9	76.8 100	9.8
https://preprod.mosip.io/v1			
/authmanager/authorize/vali			
dateToken			



Below are the scenario details for 100 concurrent users:

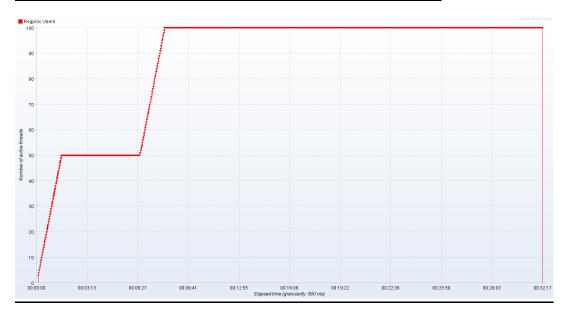
Sprint/Report Name	Packet Receiver for 100 concurrent users
Run Date	29-November-2019
Period	06:41:45 - 07:13:02 (UTC)
Number of concurrent users	100
Number of packets uploaded	5888 success out of 5905 uploaded
Ramp up	2 minutes
Run Duration	32 minutes 17 seconds
Think Time	5 seconds
Avg Time spent	3.453 sec

Excel report with transaction details attached:

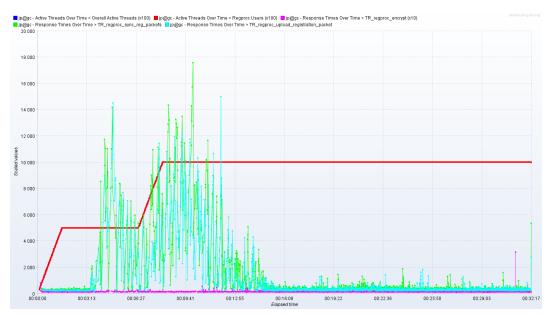




Active Threads Over Time: 100 concurrent users:

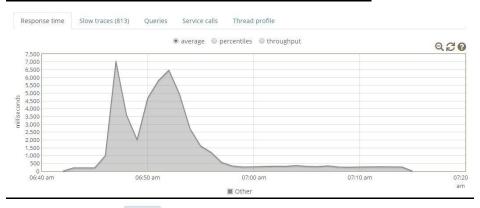


Response Time Graph: 100 concurrent users:





Glowroot Traces for 100 concurrent users:



Response ti	ime	Slow traces (813)	Queries	Service calls	Thread profile				
						Total time • (ms)	Total count	Avg time (ms)	Avg
select dis	stinct	registratiOid	l as id1_3_,	registratio	applicant_type as applican1	43,239.3	15,421	2.8	0.07
select dis	stinct	syncregist0id	d as id1_3_,	syncregist6	cr_dtimes as cr_dtime1_1_,	16,032.5	6,686	2.4	1.0
insert int	to regp	orc.registration	_transactio	n (cr_dtimes	s, cr_by, del_dtimes, is_delet	13,895.7	6,450	2.2	1.0
insert int	to regp	rc.registration	(applicant	_type, cr_dt	imes, cr_by, del_dtimes, is_a	13,105.3	6,453	2.0	1.0
select tra	ansacti	.00id as id1_3	0_, transa	ctio0cr_dt	imes as cr_dtime1_2_0_, trans	12,773.0	6,452	2.0	0
select reg	gistrat	i0id as id1_3	B_O_, regist	rati0appli	.cant_type as applican1_0_0_,	11,794.2	6,456	1.8	0.0002
select dis	stinct	registrati0id	as id1_3_,	registrati6	applicant_type as applican1	1.3	1	1.3	1.0
update reg	gprc.re	egistration set	applicant_t	ype=?, cr_by	r=?, del_dtimes=?, is_active=?	0.61	1	0.61	1.0

Response time	Slow traces (813)	Queries	Service calls	Thread profile		
			То	tal		Avg
			ti	me	Total	time
			→ (I	ns)	count	(ms)
POST			4,740,61	0.0	19,007	249.4
https://preprod	.mosip.io/v1					
/authmanager/au	thenticate/c					
lientidsecretke	у					
POST			509,99	2.2	12,768	39.9
https://preprod	.mosip.io/v1					
/auditmanager/a	udits					
POST			290,194.4		5,744	50.5
https://preprod	.mosip.io/v1					
/signature/sign						
POST			66,56	5.9	6,913	9.6
https://preprod	.mosip.io/v1					
/authmanager/au	thorize/vali					
dateToken						



Resource Monitoring

Kubernetes nodes were monitored using Prometheus and Grafana from

29th November 06:41:45 - 07:13:02 (UTC) ,there is no issues observed from node monitoring perceptive

aks-agentpool-32091406-0 (VM 1)



aks-agentpool-32091406-1 (VM 2):





aks-agentpool-32091406-2 (VM 3):



aks-agentpool-32091406-3 (VM 4):









Comparison between time taken in packet receiver stage on different loads

Load description	Average Time taken in Packet Receiver stage(sec)			
1 user 1 packet	0.712			
10 users 10 packets	0.636			
10 users 50 packets	0.589			
10 users 100 packets	0.672			
100 concurrent users	3.453			

Total execution time for 5888 packets is 5.64 hour and average time is 3.453 sec

Conclusion:

As we see in the above report, from the test conducted for different combinations of loads, the average execution time is 3.4 sec for 100 concurrent users (5889 packets processed out of 5905).