

# **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:**

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

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

Here is the attached excel sheet where time taken in each stage is calculated for all packets.

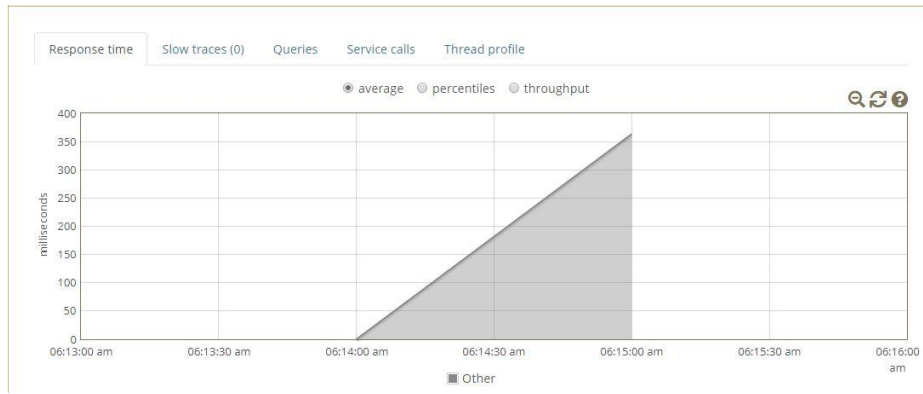


TransactionTime.xls

x



## Glowroot Traces for 1 user 1 packet:



Response time Slow traces (0) Queries Service calls Thread profile

	Total time → (ms)	Total count	Avg time (ms)	Avg rows
<code>select distinct syncregist0_.id as id1_3_, syncregist0_.cr_dtimes as cr_dtime1_1_, syncre...</code>	5.7	1	5.7	1.0
<code>select distinct registrati0_.id as id1_3_, registrati0_.applicant_type as applican1_0_, r...</code>	5.1	3	1.7	0
<code>insert into regprc.registration_transaction (cr_dtimes, cr_by, del_dtimes, is_deleted, la...</code>	2.1	1	2.1	1.0
<code>select transactio0_.id as id1_3_0_, transactio0_.cr_dtimes as cr_dtime1_2_0_, transactio0...</code>	1.4	1	1.4	0
<code>select registrati0_.id as id1_3_0_, registrati0_.applicant_type as applican1_0_0_, regist...</code>	1.4	1	1.4	0
<code>insert into regprc.registration (applicant_type, cr_dtimes, cr_by, del_dtimes, is_active,...</code>	1.1	1	1.1	1.0

Response time Slow traces (0) Queries Service calls Thread profile

	Total time → (ms)	Total count	Avg time (ms)
POST https://preprod.mosip.io/v1/authmanager/authenticate/clientidsecretkey	79.0	3	26.3
POST https://preprod.mosip.io/v1/authmanager/authorize/validateToken	62.7	1	62.7
POST https://preprod.mosip.io/v1/signature/sign	43.0	1	43.0
POST https://preprod.mosip.io/v1/auditmanager/audits	38.0	2	19.0

**Below are the scenario details for 10 users 10 packets:**

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

**Excel report with transaction details attached :**

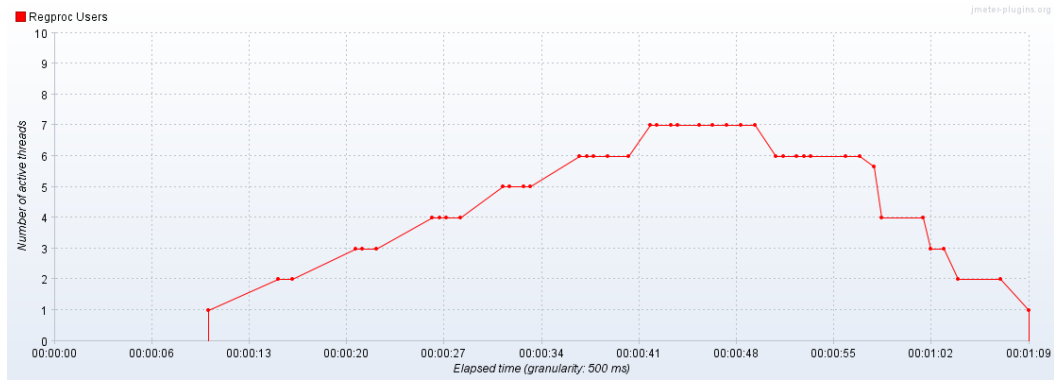
Here is the attached excel sheet where time taken in each stage is calculated for all packets.



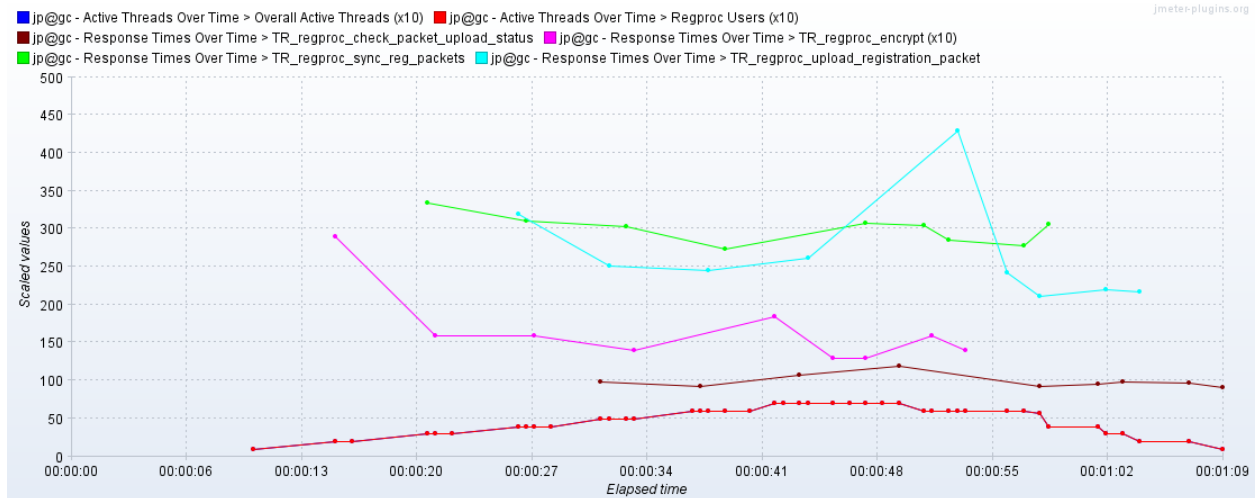
TransactionTime.xls  
x

---

## Active Threads Over Time : 10 users - 10packets

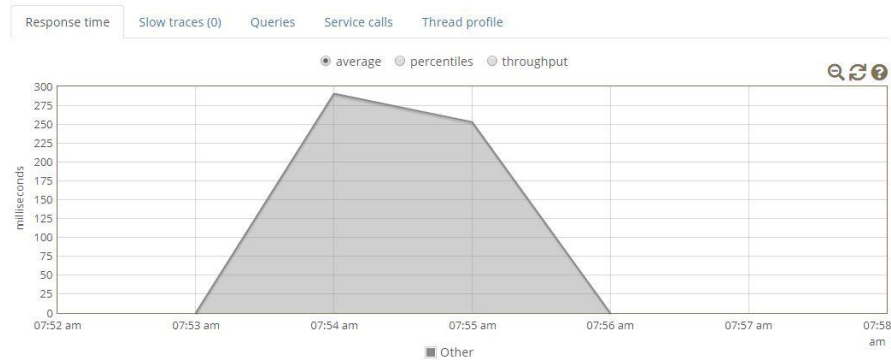


## Response Time Graph: 10 users - 10packets





## Glowroot Traces for 10 users 10 packets:



Response time   Slow traces (0)   **Queries**   Service calls   Thread profile

	Total time ▼ (ms)	Total count	Avg time (ms)	Avg rows
<code>select distinct registrati0_.id as id1_3_, registrati0_.applicant_type as applican1_0_,...</code>	54.2	23	2.4	0.04
<code>select distinct syncregist0_.id as id1_3_, syncregist0_.cr_dtimes as cr_dtime1_1_, sync...</code>	16.8	10	1.7	1.0
<code>insert into regprc.registration_transaction (cr_dtimes, cr_by, del_dtimes, is_deleted, ...</code>	13.9	10	1.4	1.0
<code>select transactio0_.id as id1_3_0_, transactio0_.cr_dtimes as cr_dtime1_2_0_, transacti...</code>	13.8	10	1.4	0
<code>select registrati0_.id as id1_3_0_, registrati0_.applicant_type as applican1_0_0_, regi...</code>	12.1	10	1.2	0
<code>insert into regprc.registration (applicant_type, cr_dtimes, cr_by, del_dtimes, is_activ...</code>	10.7	10	1.1	1.0

Response time   Slow traces (0)   Queries   **Service calls**   Thread profile

	Total time ▼ (ms)	Total count	Avg time (ms)
POST https://preprod.mosip.io/v1/authmanager/authenticate/clientidsecretkey	688.6	30	23.0
POST https://preprod.mosip.io/v1/signature/sign	307.3	10	30.7
POST https://preprod.mosip.io/v1/auditmanager/audits	290.3	20	14.5
POST https://preprod.mosip.io/v1/authmanager/authorize/validateToken	158.3	10	15.8

**Below are the scenario details for 10 users 50 packets:**

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

**Excel report with transaction details attached :**

Here is the attached excel sheet where time taken in each stage is calculated for all packets.

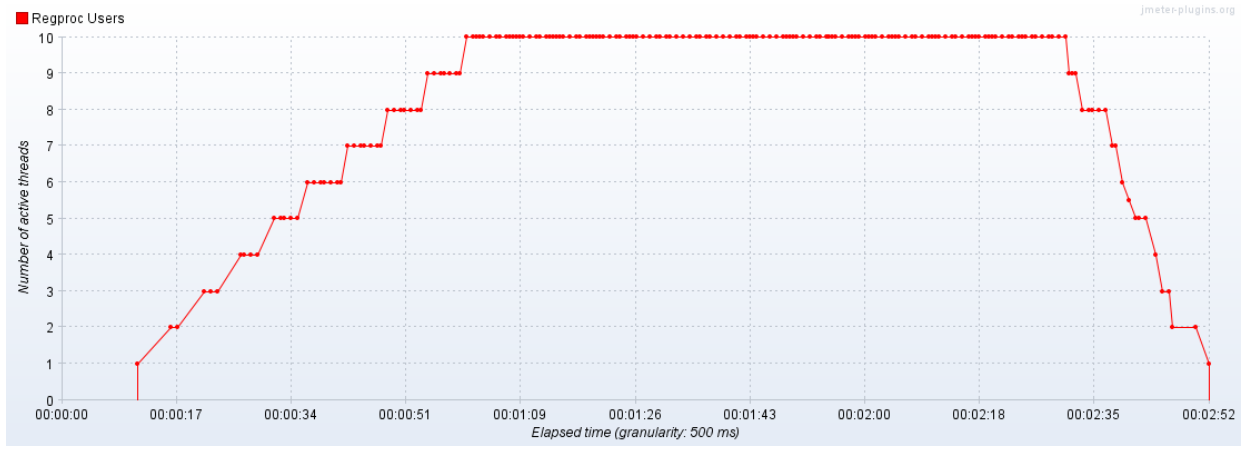


TransactionTime.xls  
x

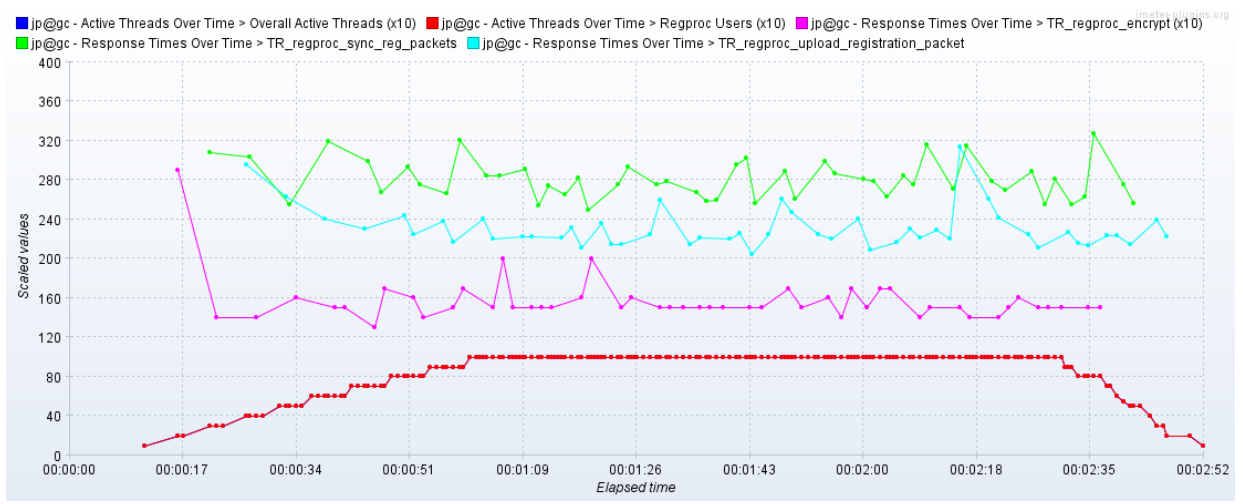
---



## Active Threads Over Time : 10 users - 50packets



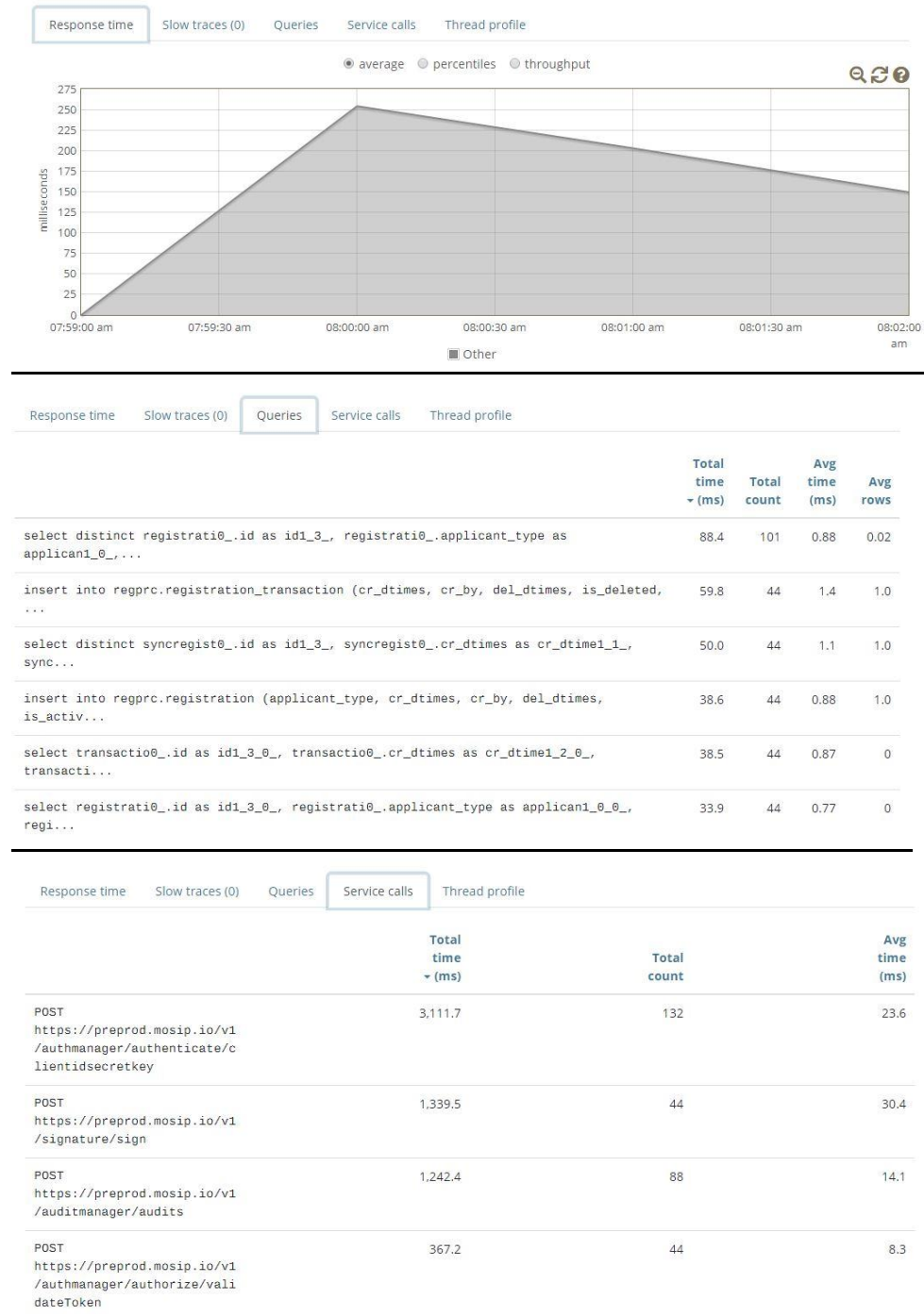
## Response Time Graph: 10 users - 50packets







## Glowroot Traces for 10 users 50 packets:



**Below are the scenario details for 10 users 100 packets:**

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

**Excel report with transaction details attached :**

Here is the attached excel sheet where time taken in each stage is calculated for all packets.

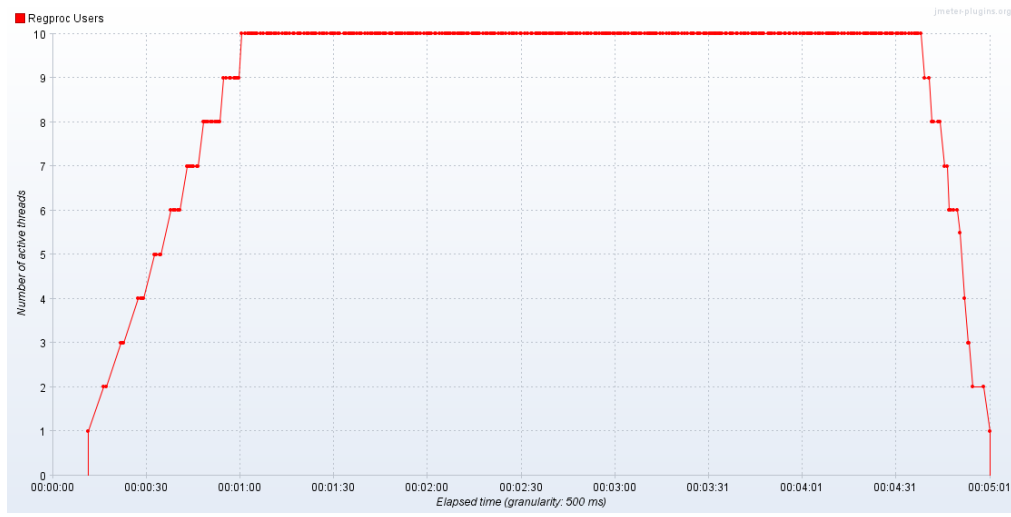


TransactionTime.xls

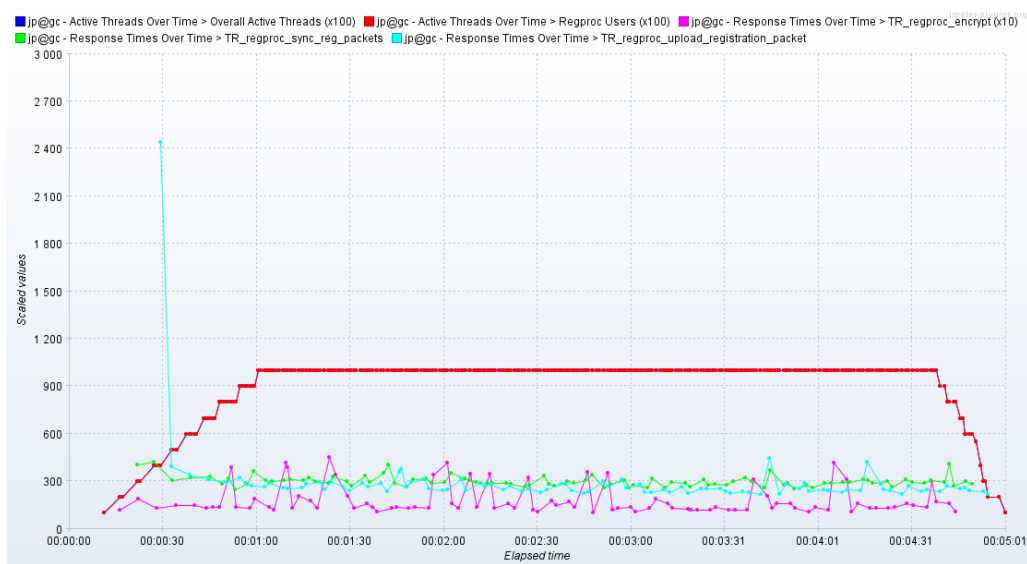
x



## Active Threads Over Time : 10 users - 100packets

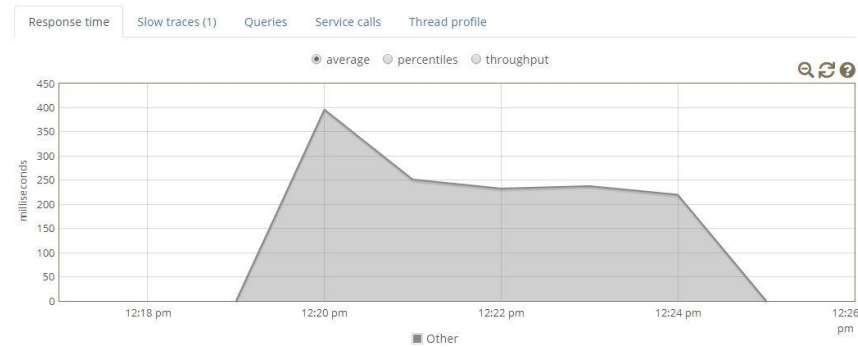


## Response Time Graph: 10 users - 100packets





## 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 rows
<code>select distinct registrati0_id as id1_3_, registrati0_applicant_type as applican1_0_...</code>	269.8	231	1.2	0.07
<code>insert into regprc.registration_transaction (cr_dtimes, cr_by, del_dtimes, is_deleted,...)</code>	147.5	100	1.5	1.0
<code>select distinct syncregisti0_id as id1_3_, syncregisti0_cr_dtimes as cr_dtime1_1_, syn...</code>	132.2	100	1.3	1.0
<code>insert into regprc.registration (applicant_type, cr_dtimes, cr_by, del_dtimes, is_acti...</code>	108.9	100	1.1	1.0
<code>select registrati0_id as id1_3_0_, registrati0_applicant_type as applican1_0_0_, reg...</code>	106.9	100	1.1	0
<code>select transactio0_id as id1_3_0_, transactio0_cr_dtimes as cr_dtime1_2_0_, transact...</code>	97.9	100	0.98	0

Response time   Slow traces (1)   Queries   **Service calls**   Thread profile

	Total time ▼ (ms)	Total count	Avg time (ms)
POST https://preprod.mospip.io/v1/authmanager/authenticate/c lientidsecretkey	8,003.4	300	26.7
POST https://preprod.mospip.io/v1/signature/sign	3,484.5	100	34.8
POST https://preprod.mospip.io/v1/auditmanager/audits	3,289.3	200	16.4
POST https://preprod.mospip.io/v1/authmanager/authorize/vali dateToken	976.8	100	9.8

**Below are the scenario details for 100 concurrent users:**

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

**Excel report with transaction details attached :**

Here is the attached excel sheet where time taken in each stage is calculated for all packets.

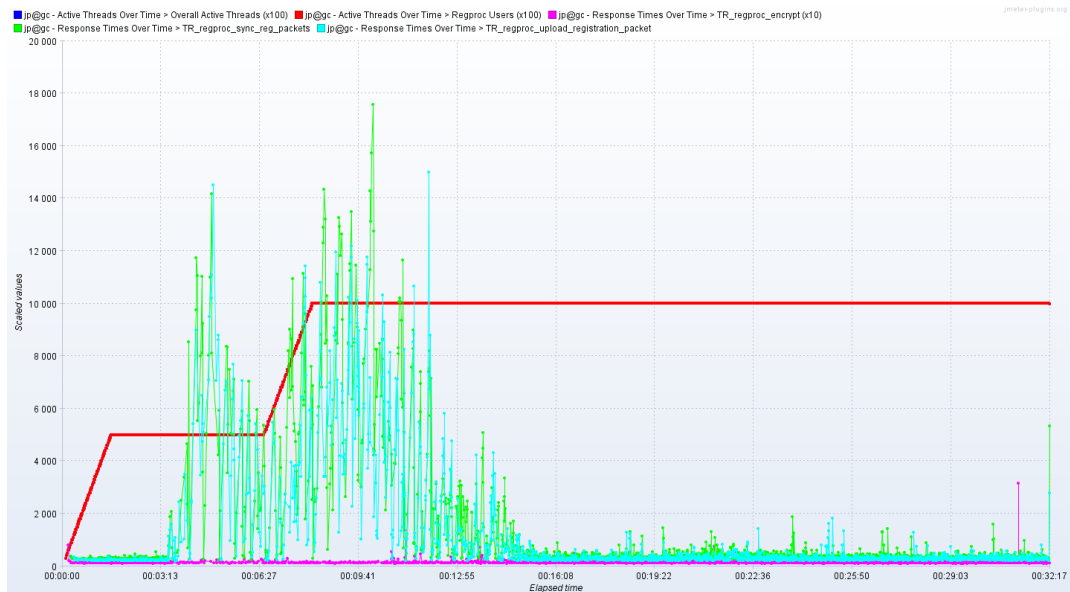




## Active Threads Over Time : 100 concurrent users:

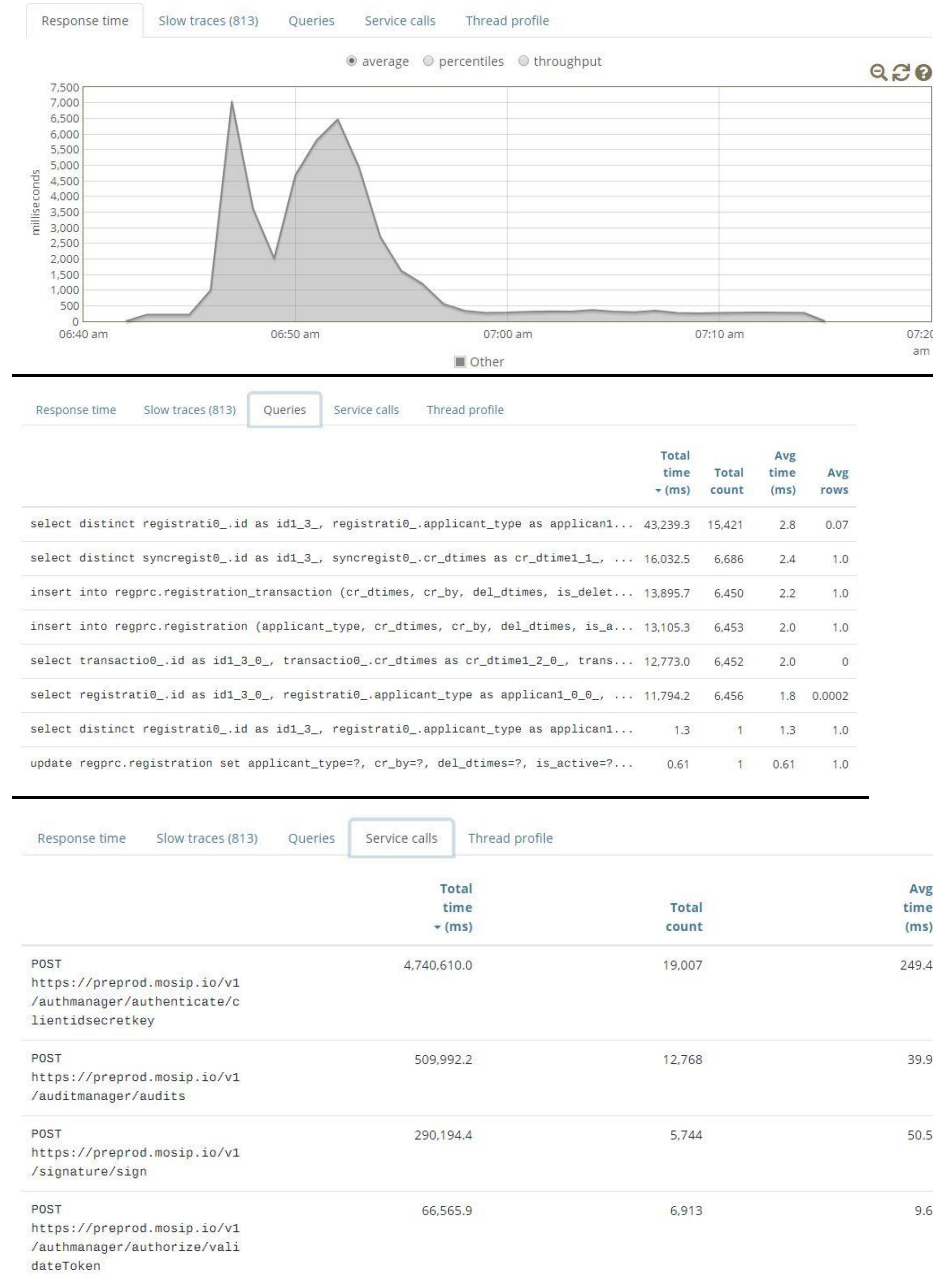


## Response Time Graph: 100 concurrent users:





## Glowroot Traces for 100 concurrent users:



## 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 perspective

### aks-agentpool-32091406-0 (VM 1)



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





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



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



### aks-agentpool-32091406-4 (VM 5):



### 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).