Performance Test Report

For

Execution of

Kernel key manager service APIs – 200 users –Run3

Date: 3 Jun 2020

Author: Anand Babaleshwar

Summary

This report presents the observations and findings of the load test conducted for a load of 200 concurrent users on key manager sign and signature validate API's of kernel key manager services

The objective of this load test was to observe and record the behavior of the application when users are calling key manager sign and signature validate API's of Crypto signature service API's

Below are the scenario details:

Script/Report Name	Kernel Key Manager service
Run Date	3-Jun-2020
Period	12:06 to 13:08 AM (UTC)
Number of concurrent users	50 to 75 to 200
Ramp up	Refer pic of **Concurrent users Ramp up pattern shown below**
Run Duration	1.1 hours
Ramp down	1 min

Concurrent users Ramp up pattern:
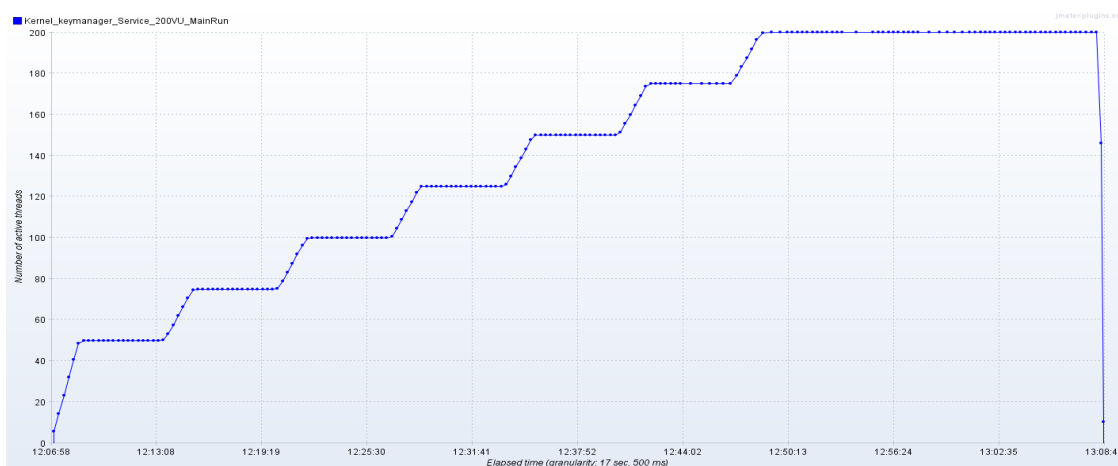
The transaction response times observed were as below:

Label	# Samples	Average (ms)	90% Line (ms)	Min (ms)	Max (ms)	Error %	Throughput (sec)
TR_kernel_sign	312453	475	637	10	30156	63.82%	84.26413
TR_kernel_validate_sign	113044	474	809	19	30133	0.33%	39.57353

Performance Test Execution Details

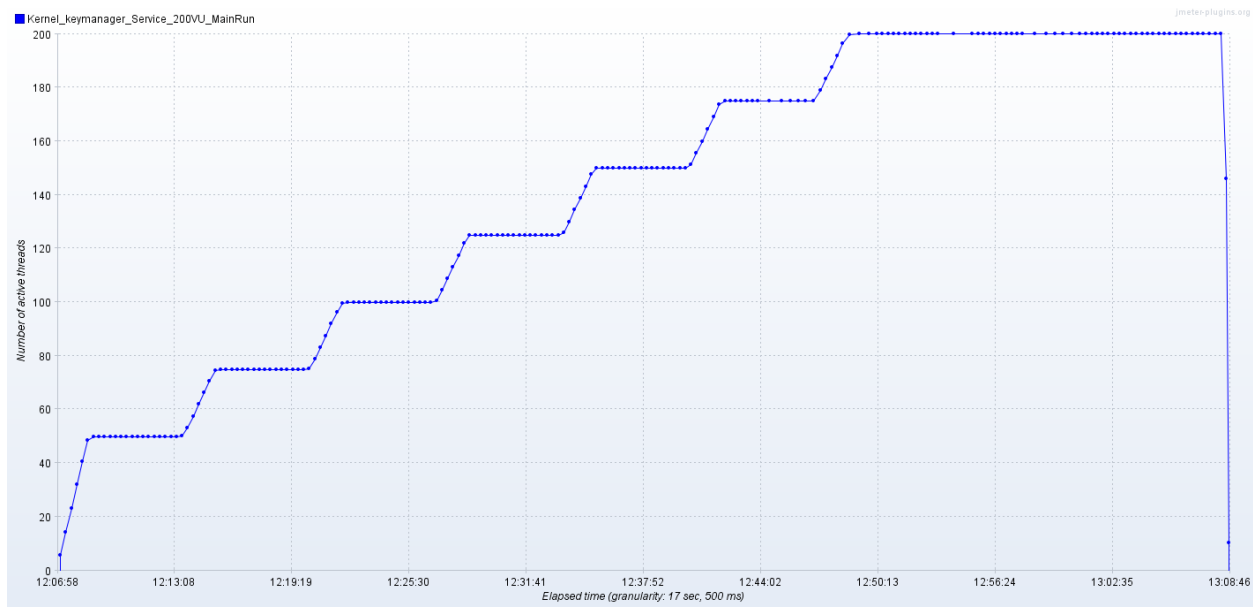Both APIs transactions average response times were less than 3sec mentioned below:

1. TR_kernel_sign -0.475 sec
2. TR_kernel_validate_sign -0.474 sec

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

Transactions	Error %
TR_kernel_sign	63.82%
TR_kernel_validate_sign	0.33%

Sandbox prepod Environment : we are using sandbox preprod environment
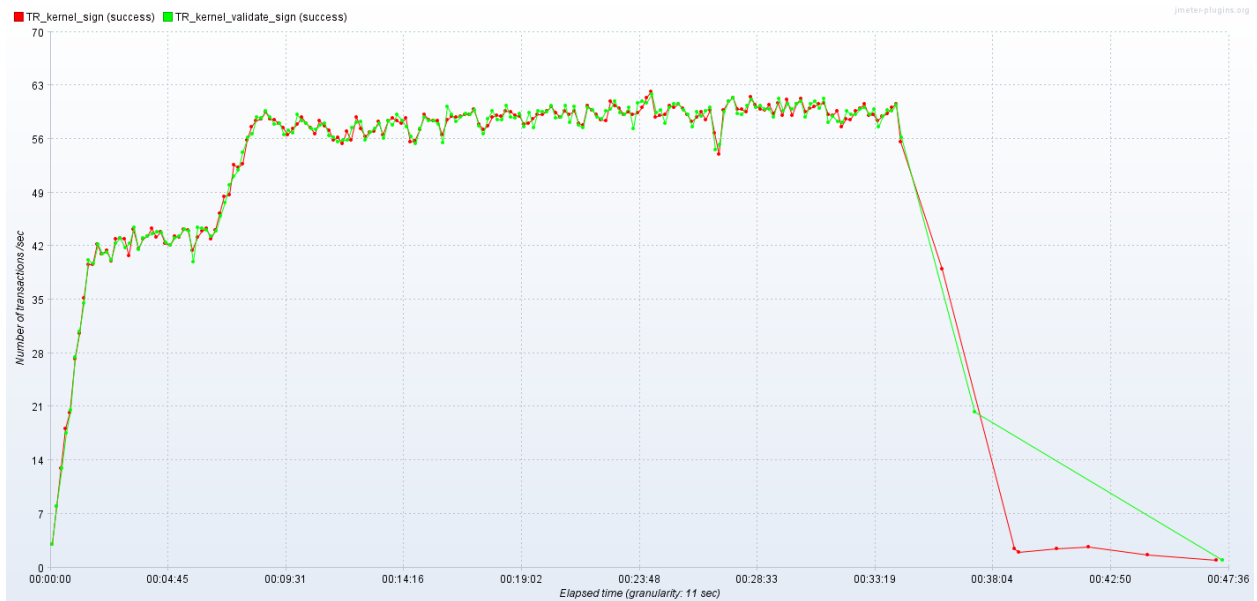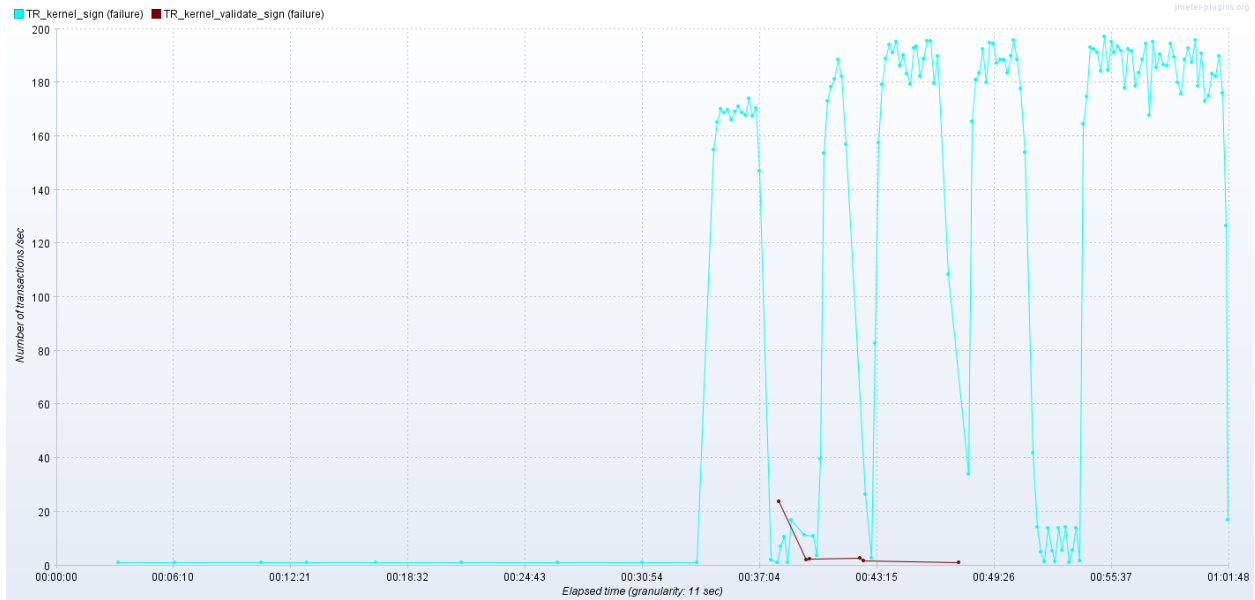
Active threads over Time:

Response Time Graph
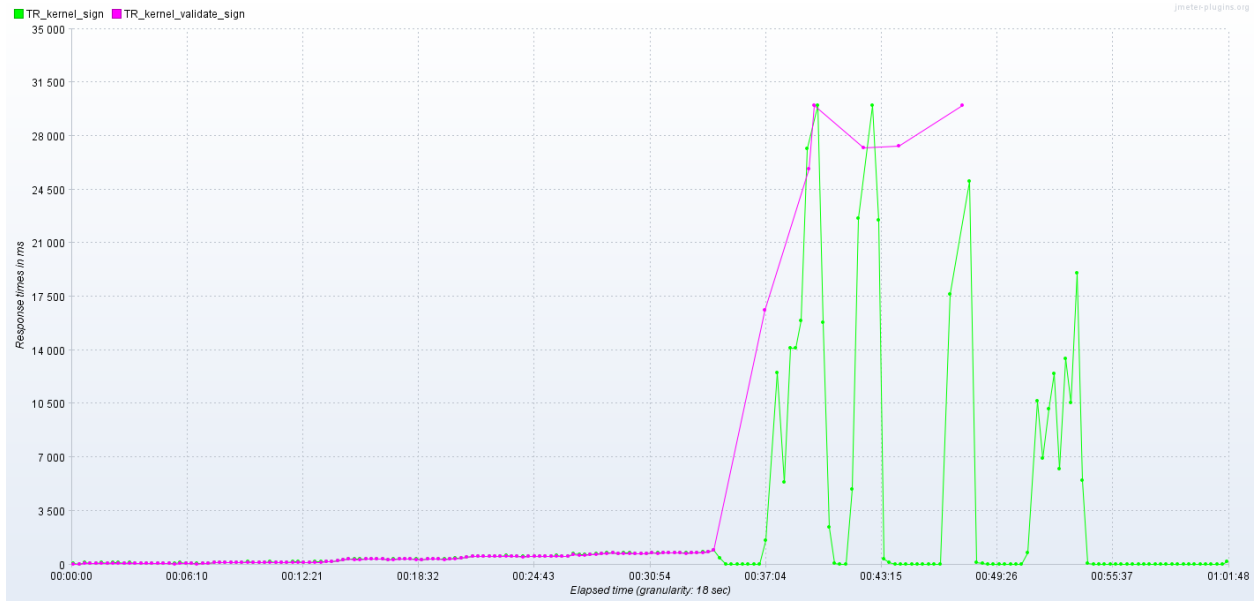
Transactions per second: (success) max TPS achieved for both was 62/sec
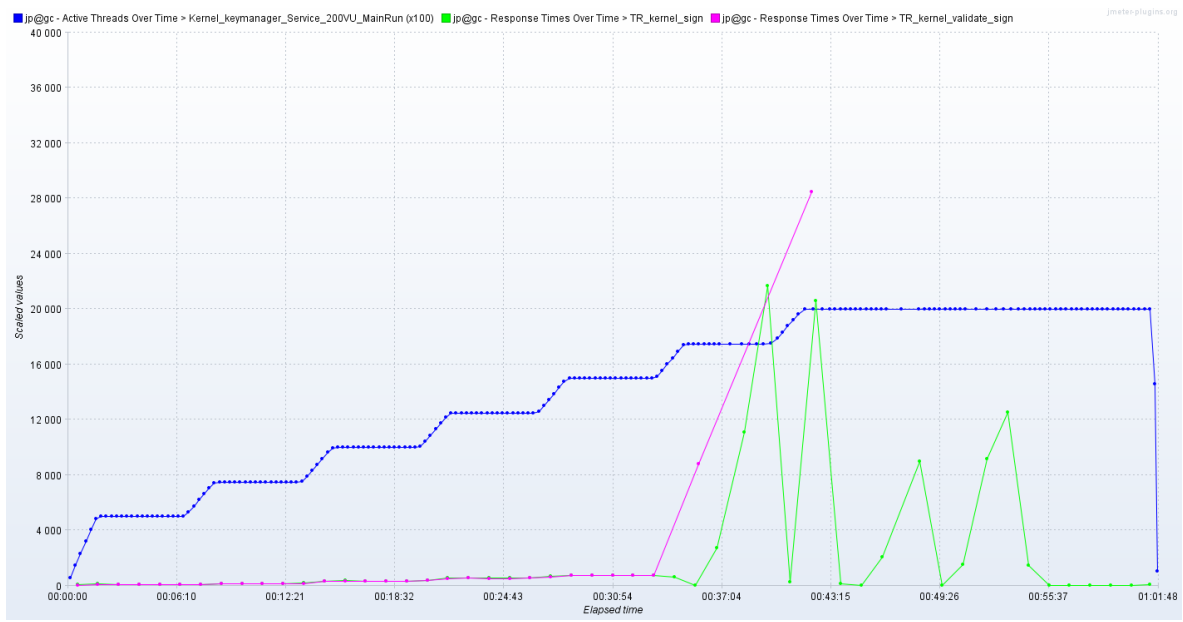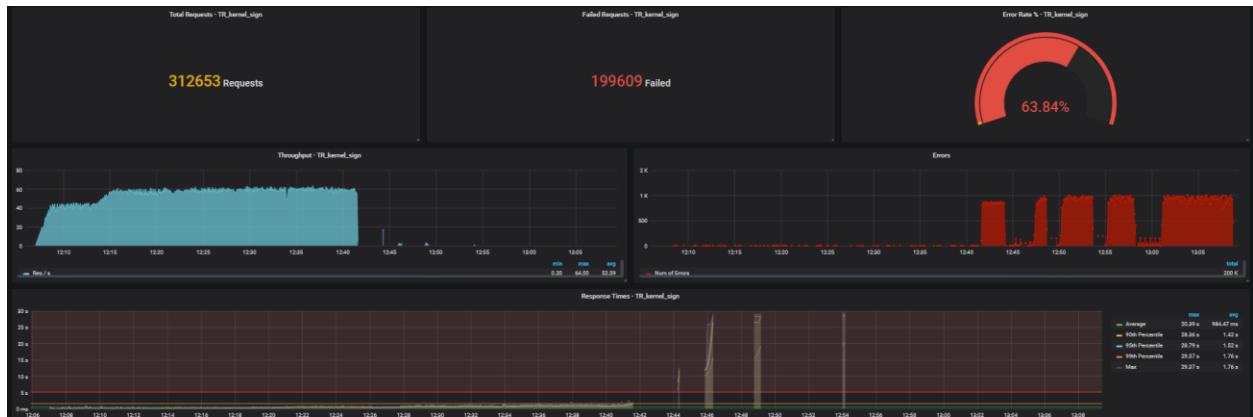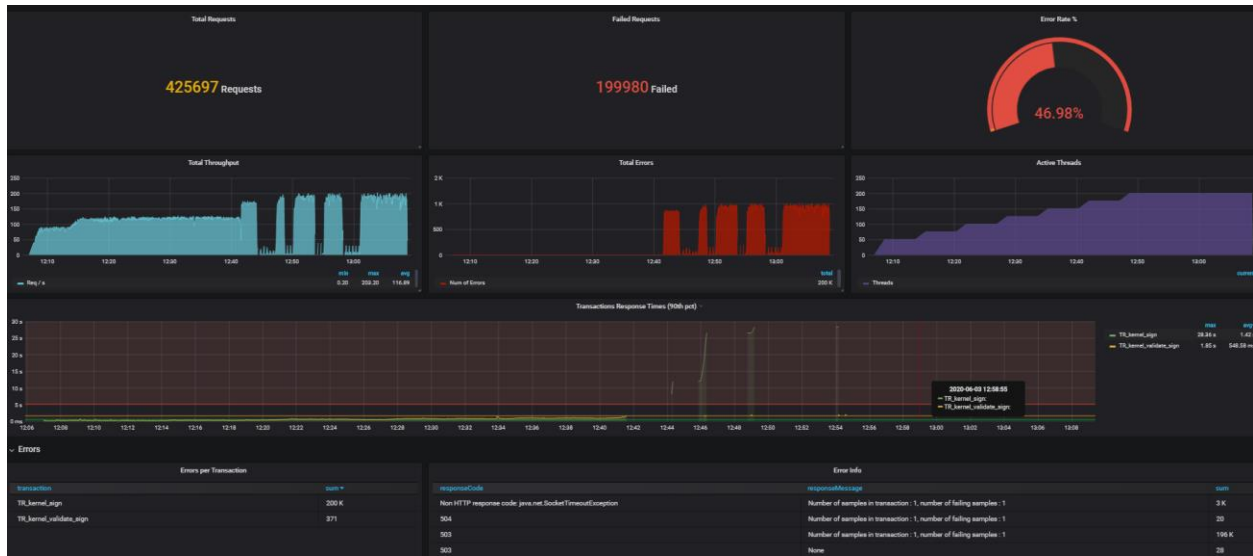
Transactions per second: (failure)

<u>Active threads vs response times over time:</u>

Proprietary and Confidential © MindTree Limited

JMeter graph:
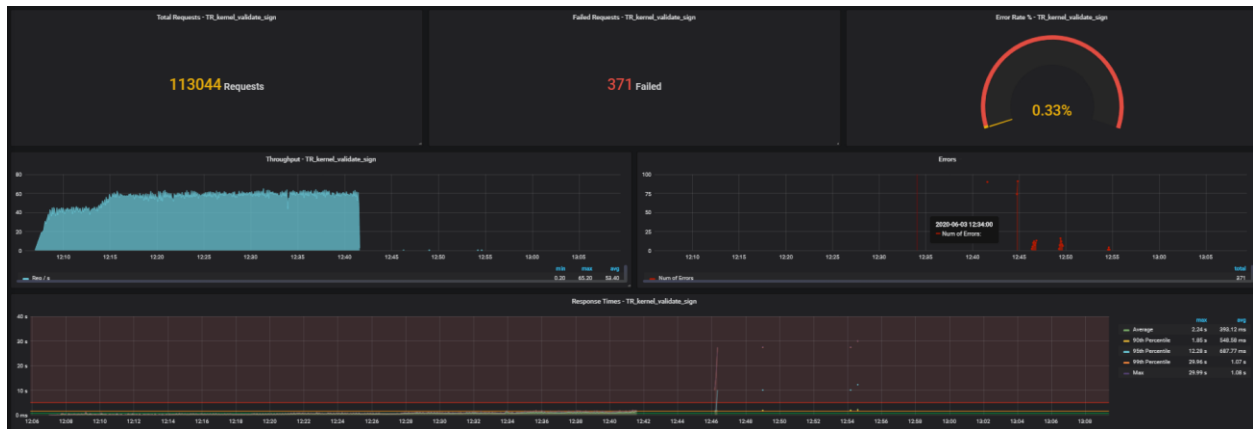
Conclusion and Next Steps:

When we ramp with slow rate of users to 150 observed huge count of errors for kernel_keymanager_sign requests and max TPS achieved was around 62/sec for both key manager sign and key manager validate sign API's

We need to retest these API's when we have installed the monitoring tools and high capacity preprod environment is setup