

Performance Test Report

For

Execution of

Kernel key manager service APIs - 100 users -Run2

Date: 2 Jun 2020

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Summary

This report presents the observations and findings of the load test conducted for a load of 100 concurrent users on key manager sign and signature validate API's of Crypto signature service

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	2-Jun-2020			
Period	12:22 to 13:24 AM (UTC)			
Number of concurrent users	50 to 75 to 100			
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:

	#	Average	90% Line	Min	Max		Throughput
Label	" Samples	Average (ms)	(ms)	(ms)	(ms)	Error %	Throughput (sec)
TR_kernel_sign	247233	150	231	27	31154	0.26%	66.51062
TR_kernel_validate_sign	246584	90	200	17	17188	0.01%	68.11314



Performance Test Execution Details

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

- 1. TR_kernel_sign -0.150 sec
- 2. TR_kernel_validate_sign -0.090 sec

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

Transactions	Error %		
TR_kernel_sign	0.26%		
TR_kernel_validate_sign	0.01%		

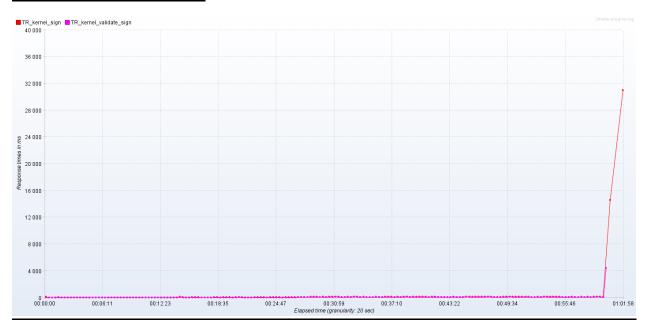
Sandbox prepod Environment: we are using sandbox preprod environment

Active threads over Time:





Response Time Graph

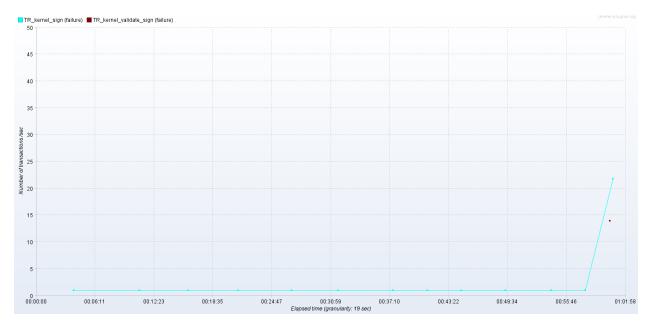


Transactions per second: (success) max TPS achieved for both was 85/sec



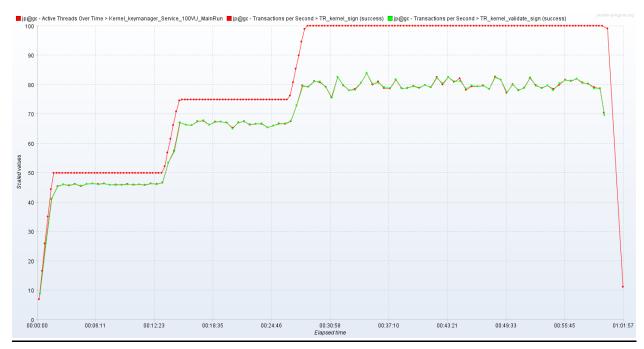


Transactions per second: (failure)



Active threads vs response times over time:

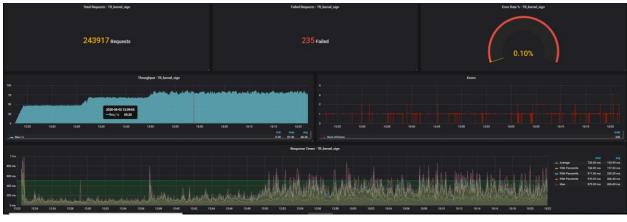


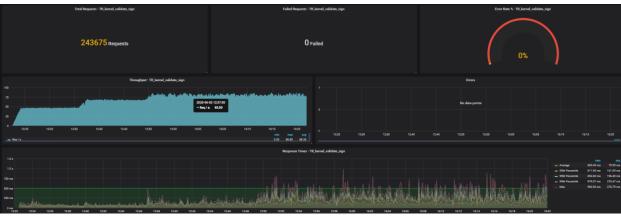


JMeter graph:









Conclusion and Next Steps:

When we ramp with slow rate of users from 50 to 75 to 100 there were no issues observed even for 100 concurrent users and max TPS achieved was around 85/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