Mindtree

Performance Test Report

For

Execution of

Kernel Cryptomanager – 1200 users

Date: 03 April 2020

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Summary

This report presents the observations and findings of the load test conducted for a maximum load of 1200 users accessing kernel crypromanager-service

The objective of this load test was to observe and record behavior of the application when users have been ramped up from 500 to 1200 in steps of. Objective is to observe maximum throughput and respose time of the APIs at that throughput.

Below are the scenario details:

Script/Report Name	Kernel Crypto Service – encrypt decrypt API
Run Date	03 – April - 2020
Period	09:24 UTC to 10:43 UTC
Number of concurrent users	500 to 1200
Ramp up	01 users per second
Run Duration	-
Ramp down	NA

The transaction response times observed were as below:

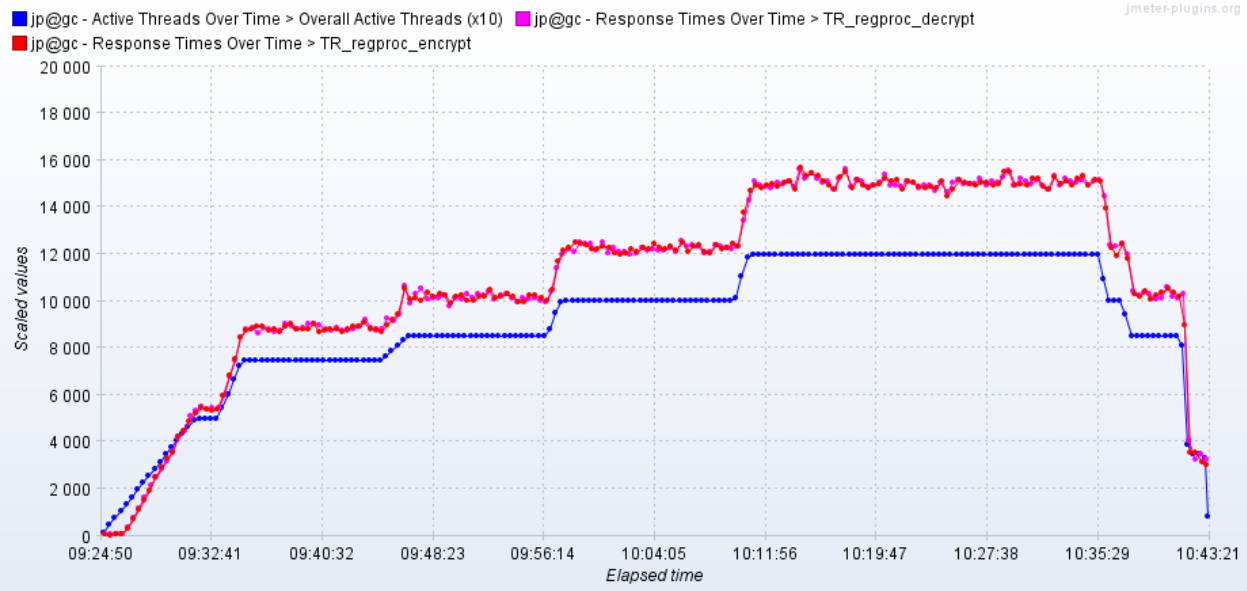
Label	# Samples	Average(ms)	90% Line(ms)	Min(ms)	Max(ms)	Error %	Throughput
TR_regproc_encrypt	169580	11070	16544	40	40798	0.00%	36.01315
TR_regproc_decrypt	169011	11097	16582	48	44652	0.00%	35.90379

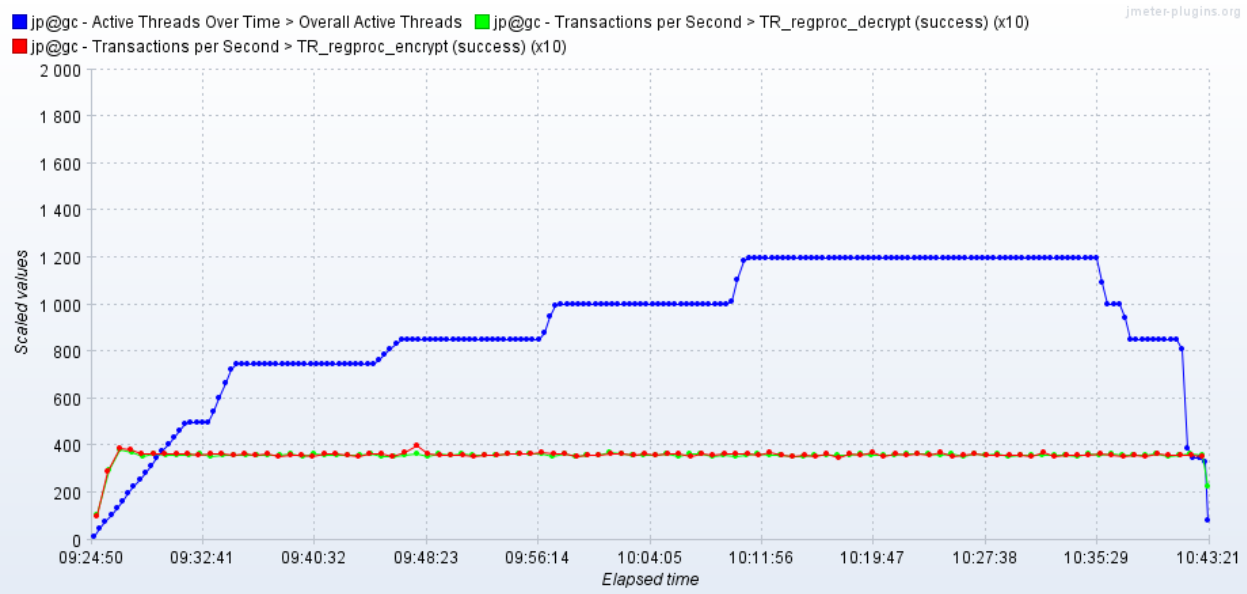
Performance Test Execution Details

We have executed JMeter script for kernel cryptomanager encrypt, decrypt service, which has transactions mentioned in the above table.

Average response time of UIN generation request is 11.0 seconds.

Response Time and TPS Graph:





Throughput (TPS) of the APIs remains at ~40 for users from 400 to 1200.

Resource Usage Pattern:

Resource usage metrics has been collected for cryptomanager cluster and keymanager using Prometheus and Grafana, as seen in the below graphs:

Cryptomanager Cluster:

Number of cores : 4

Total Available RAM: 16 GB

Keymanager VM:

Number of cores: 2

Total Available RAM: 04 GB