

Performance Test Report

For

Execution of

Kernel Audit Manager API – 200 users

Date: 20 April 2020

Author: Gaurav Sharan

Summary

This report presents the observations and findings of the load test conducted for a load of 200 users on kernel audit service API.

The objective of this load test was to observe and record behavior of the application when user load is increased from 50 to 200 in steps of 25.



Below are the scenario details:

Script/Report Name	Kernel Audit Manager				
Run Date	20-April-2020				
Period	13:41 UTC to 14:25 UTC				
Number of concurrent users	50 to 200				
Ramp up	01 users per second				
Run Duration	70 minutes including ramp up and ramp down				
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_kernel_audit-service	637012	100	217	9	7777	44.44%	147.8328

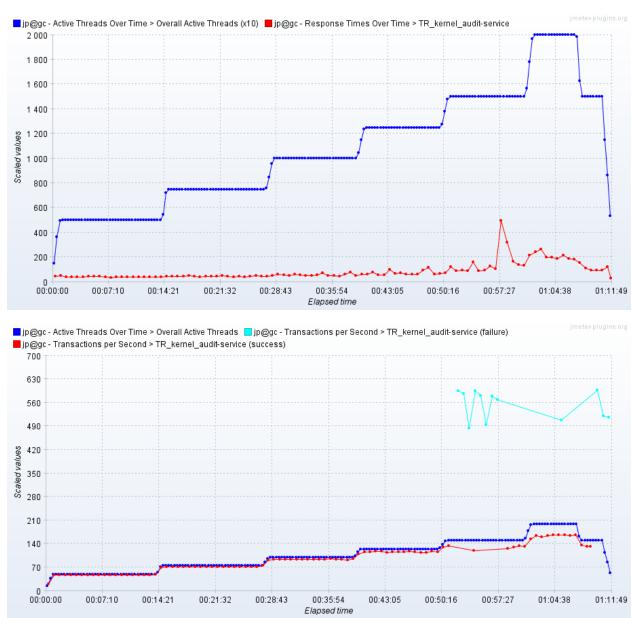
Performance Test Execution Details

We have executed JMeter script for kernel audit-manager service, which has transactions mentioned in the above table.

Average response time of the APIs is 100 ms with above 40% error rate. Some errors have appeared due to failing authentication requests and limited memory in the corresponding kubernetes cluster. Audit manager service pod used to crash multiple times due to error related to memory pressure.



Response Time and TPS Graph:



As seen in the graph, response time of the APIs is below 200 ms for users till 125 and it exceeds 200 ms when 150 and 200 users are there.

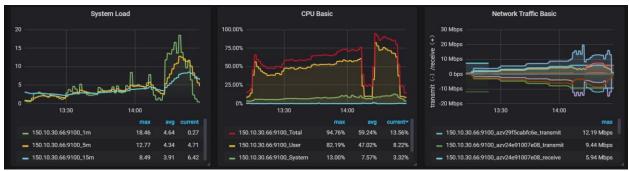


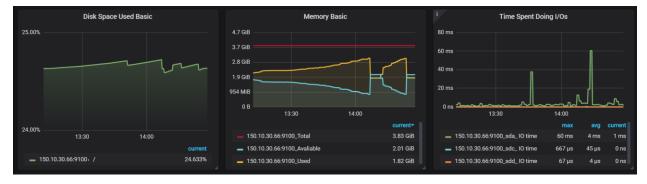
Throughput (TPS) of the APIs approxes 130 when 125 users are active. Error rate increases when number of active users reaches 150 due to increase in failing requests. Think time used is 1 sec (1000 ms).

Resource Usage Pattern:

Audit Service cluster resource usage:









Audit DB resource usage:

