

Performance Test Summary Report

Test Details:

- As per NFR-01 current test was executed with 5 VUsers
- As per NFR-02 current test was executed to Ramp Up 1 user every 1 second till the total of 5 VUsers
- As per NFR-03 current test was executed only for one minute to achieve 10 API calls per min

System Under Test Details:

- Release Version
- Environment Name
- Data profile

Test Execution Details:

- Execution Date & Time: 2/25/23, 11:43 PM
- Execution Duration: 1 minute
- Steady State: 1 minute

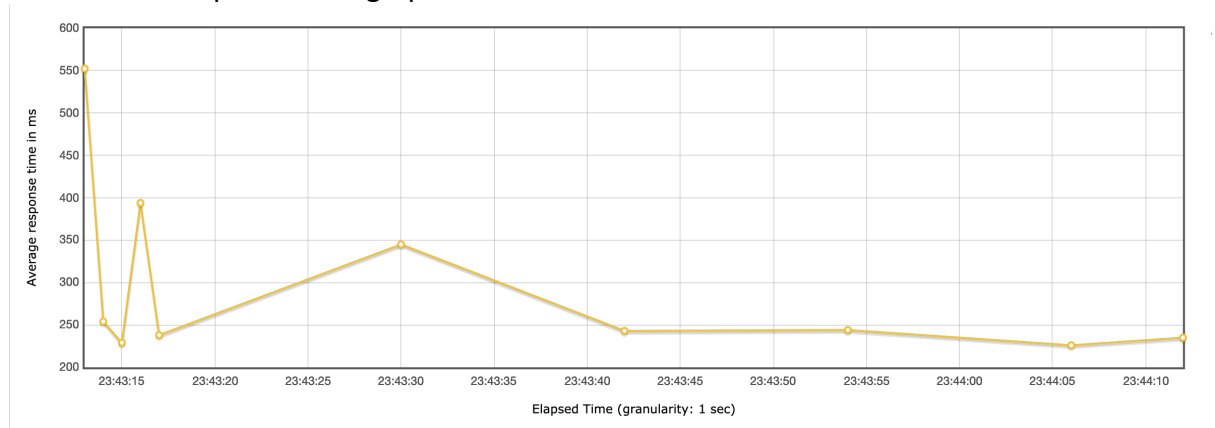
Observations:

- Below is response time summary:

Transcation Name / API Name	Response Time (ms)				Pass	Fail
	Min	Avg	Max	90 Percent		
GET - CategoriesDetailsById	226	316	778	394	10	1

- 90 percent is **394 ms** which under the defined SLA of 500 ms, as per NFR-04.
- 1 transaction got failed because it has returned "CanRelist": false
Failed request API call:
<https://api.tmsandbox.co.nz/v1/Categories/6331/Details.json?catalogue=false>
We can ignore the above failure as it is due to response assertion failure and the service/API failure.

- Below is the response time graph



- Also, response time could improve a little if this test would have carried out from the same Geo location as the server or will improve much more or will give realistic number for API performance, if the system under test and the VM being used to carry out the test is on the same Network/same VPC without any network latency.

As we could see from the below trace test that there too many hops between my system and the server and each hop is contributing to some amount of network lag

```
pratgupt@pratgupt01-mac Desktop % traceroute -I api.tmsandbox.co.nz
traceroute: Warning: api.tmsandbox.co.nz has multiple addresses; using 151.101.66.132
traceroute to api.tmsandbox.co.nz (151.101.66.132), 64 hops max, 72 byte packets
 1 192.168.1.1 (192.168.1.1)  2.490 ms  2.138 ms  5.354 ms
 2  abts-north-static-236.220.160.122.airtelbroadband.in (122.160.220.236)  10.059 ms  3.913 ms  3.818 ms
 3  125.17.145.29 (125.17.145.29)  4.620 ms  6.329 ms  4.875 ms
 4  116.119.42.184 (116.119.42.184)  9.137 ms  11.379 ms  13.850 ms
 5  167.82.128.102 (167.82.128.102)  6.499 ms  5.576 ms  6.772 ms
 6  151.101.66.132 (151.101.66.132)  10.262 ms  5.271 ms  5.490 ms
```

Below highlighted are some details/some best practices we should follow while preparing Performance test summary report.

- We should attach system resources metrics like CPU & memory usage for the system under test and point any discrepancies observed like if CPU/Memory usage was high
- Also monitor all the services/application under test for any failures or restarts and report accordingly
- Also, for the load test being carried over multiple release we should plot a trend graph against response time for the API calls to establish/understand the pattern. For e.g. like below:

