# Performance Test Report

# For

# Execution of

# Masterdata locations – 1200 users

Date: 22 April 2020

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## Summary

This report presents the observations and findings of the load test conducted for a load of 1200 users on masterdata locations API.

The objective of this load test was to observe and record behavior of the application when user load is increased from 500 to 1200. Test was stopped at 1200 users level due to errors. Errors were appearing due to failing authentication (authtoken validation) requests.

Below are the scenario details:

| Script/Report Name | Masterdata location API |
|---|---|
| Run Date | 22-April-2020 |
| Period | 03:23 UTC to 04:30 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:

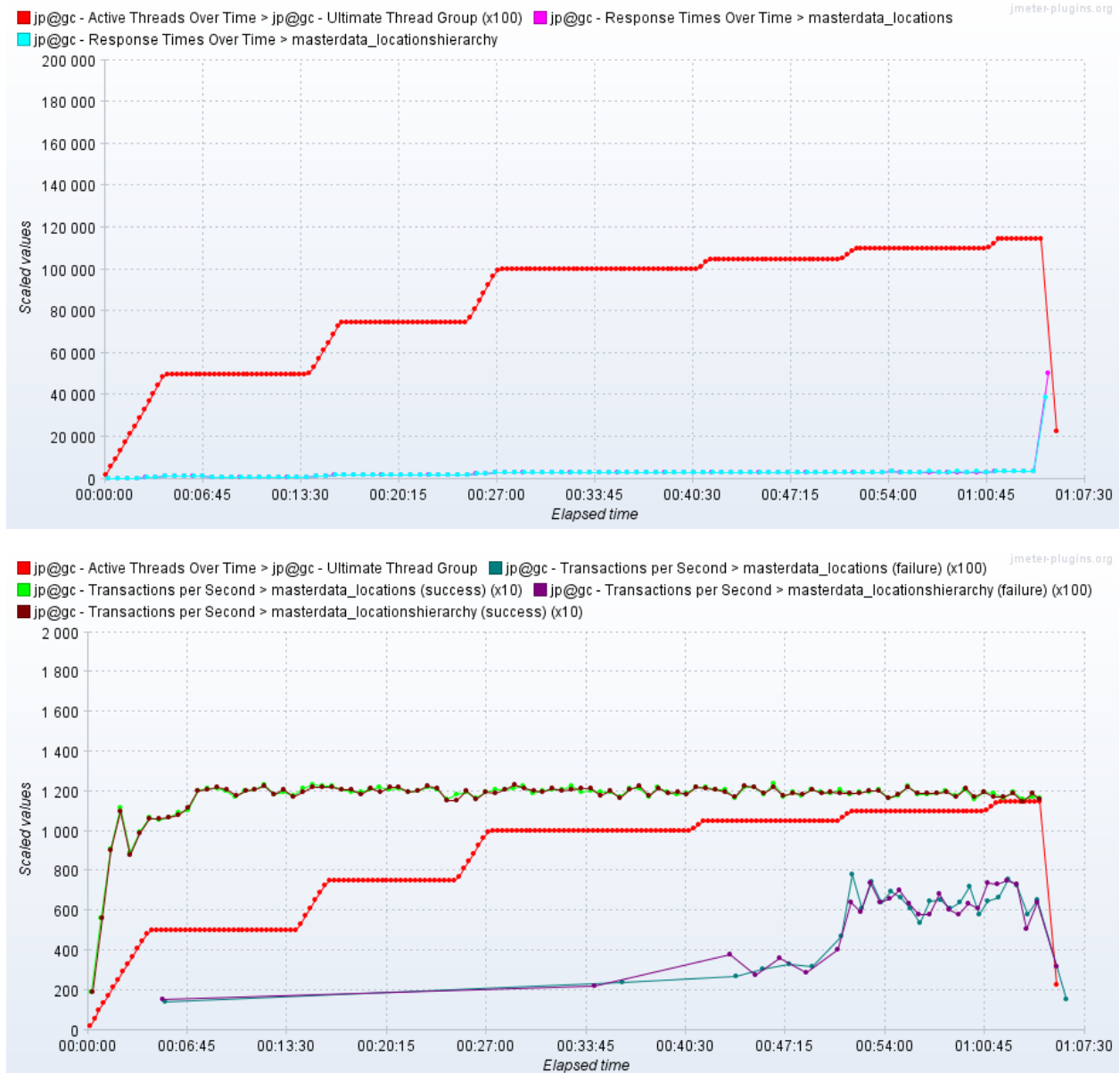| Label | # Samples | Average(ms) | 90% Line(ms) | Min(ms) | Max(ms) | Error % | Throughput |
|---|---|---|---|---|---|---|---|
| TR_masterdata_locations | 460293 | 2618 | 3838 | 8 | 180491 | 1.30% | 113.6515 |
| TR_masterdata_locations _hierarchy | 459680 | 2616 | 3840 | 8 | 181242 | 1.29% | 114.516 |

## Performance Test Execution Details

We have executed JMeter script for kernel masterdata location service, which has transactions mentioned in the above table.

Average response time of the APIs is 2618 ms with error rate above 1 %. Some errors have appeared due to failing authentication requests.

**Response Time and TPS Graph:**





As seen in the graph, response time of the APIs is approx 1200 ms  when 500 users are active, then response time touches 3560 ms when 1200 users are active.

Throughput (TPS) of the APIs approxes 480 when 500 users are active and stays almost at same level with increasing user load. Error rate increases when number of active users reaches 1050 due to increase in failing requests.
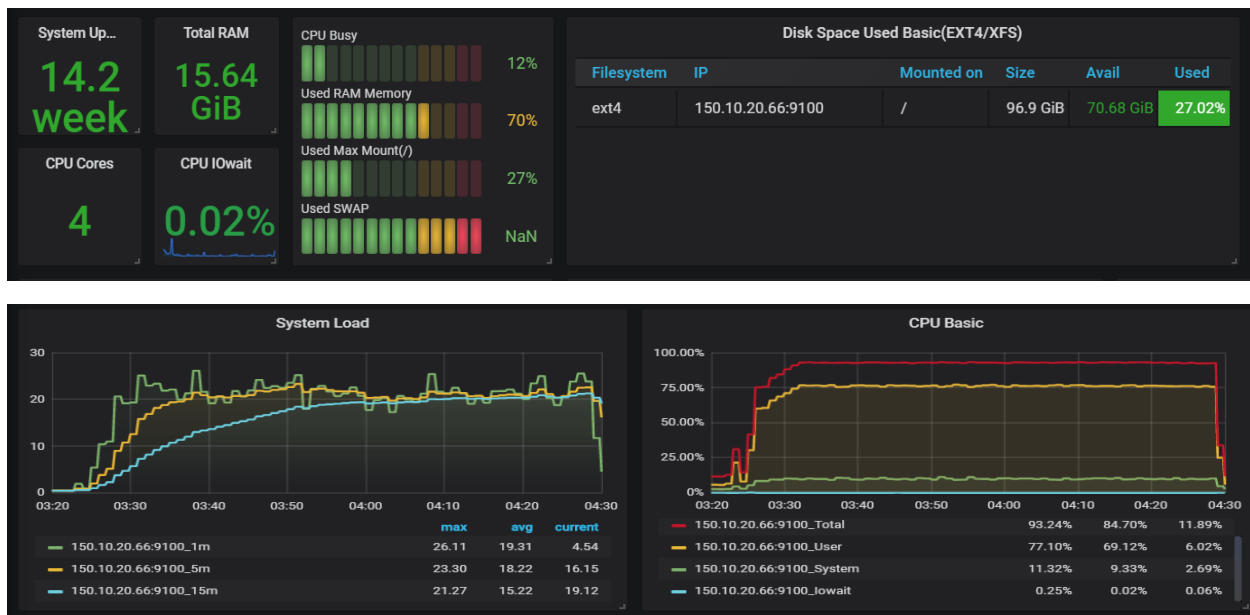
Think time used is 1 sec (1000 ms).
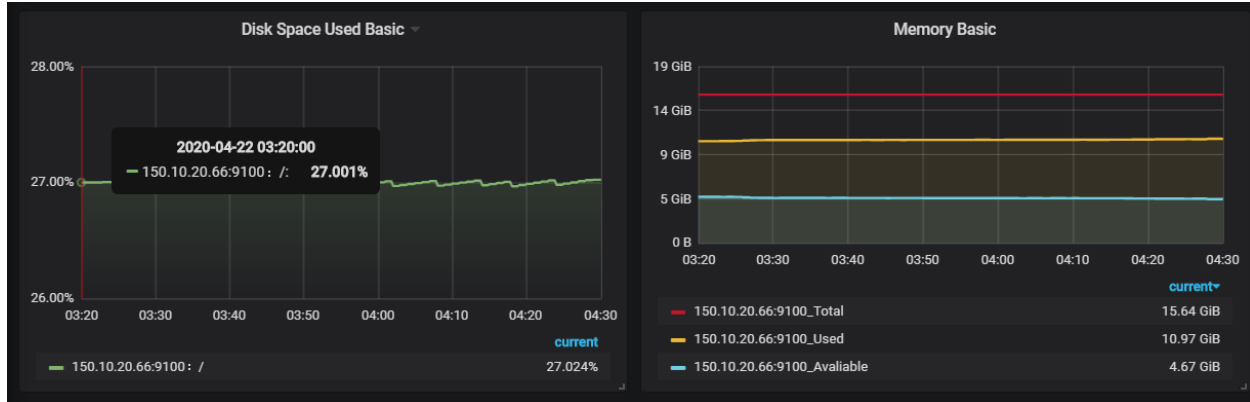
## Resource Usage Pattern:

***Masterdata Service cluster resource usage:***

Average system load – 19.31 ( 4 cores)

Average CPU usage –  84.7%

Memory used – 10.97 GB / 15.64 GB

**Disk Space Used Basic**

2020-04-22 03:20:00
— 150.10.20.66:9100 : /: **27.001%**

| | current |
| --- | --- |
| — 150.10.20.66:9100 : / | 27.024% |

**Memory Basic**

| | current |
| --- | --- |
| — 150.10.20.66:9100_Total | 15.64 GiB |
| — 150.10.20.66:9100_Used | 10.97 GiB |
| — 150.10.20.66:9100_Avaliable | 4.67 GiB |

## _Master DB resource usage:_

Average system load – 0.0285

Average CPU usage – 4.10 %

Memory used – 735.96 MB / 3.84 GB



| Syste... | Total R... | CPU Busy | | | |
| --- | --- | --- | --- | --- | --- |
| **2.0 day** | **3.84 GiB** | | | | 1.1% |
| | | Used RAM Memory | | | 19% |
| CPU C... | CPU I... | Used Max Mount(/) | | | 12% |
| **2** | **0%** | Used SWAP | | | 0% |

**Disk Space Used Basic(EXT4/XFS)**

| Filesystem | IP | Mounted on | Size ▲ | Avail | Used |
| --- | --- | --- | --- | --- | --- |
| xfs | | /boot | MiB | MiB | 25.4 |
| ext4 | localhost:9100 | /mnt/resource | 7.7 GiB | 5.30 GiB | 26.2 |
| xfs | localhost:9100 | / | 31.5 GiB | 27.61 GiB | 12.3 |

**System Load**

| | max | avg | current |
| --- | --- | --- | --- |
| — localhost:9100_1m | 0.1900 | 0.0285 | 0.0100 |
| — localhost:9100_5m | 0.0900 | 0.0302 | 0.0300 |
| — localhost:9100_15m | 0.0600 | 0.0505 | 0.0500 |

**CPU Basic**

| | max | avg | current |
| --- | --- | --- | --- |
| — localhost:9100_Total | 4.80% | 4.10% | 1.10% |
| — localhost:9100_User | 3.00% | 2.31% | 0.50% |
| — localhost:9100_System | 1.00% | 0.65% | 0.30% |

**Disk Space Used Basic**

| | current |
|---|---|
| localhost:9100：/boot | 25.469% |
| localhost:9100：/ | 12.334% |
| localhost:9100：/mnt/resource | 26.265% |

**Memory Basic**

| | current▼ |
|---|---|
| localhost:9100_Total | 3.84 GiB |
| localhost:9100_Avaliable | 3.12 GiB |
| localhost:9100_Used | 735.96 MiB |