CASE STUDY - CRYTPO CURRENCY

About Client:

Our client application is aims to make a more connected financial world making digital payments accessible to everyone while integrating the idea of 'crypto utility' and 'financial independence' for its users in a safe and digital environment.

Application will provide the Currency and Banking services like.

- Login
- Bank Account (Get bank details, Create Bank account, create UPI, update bank account etc.)
- Deposit and Withdrawal transaction details
- Fixed deposit
- Card Management
- KYC
- Currency Details
- Load Details
- Rewards details
- Logout

Goal:

The essential goal of Shravas Technologies team:

To provide, Load/Breakpoint testing of API service using calls with and without JWT session token reference for their application.

Key Challenges:

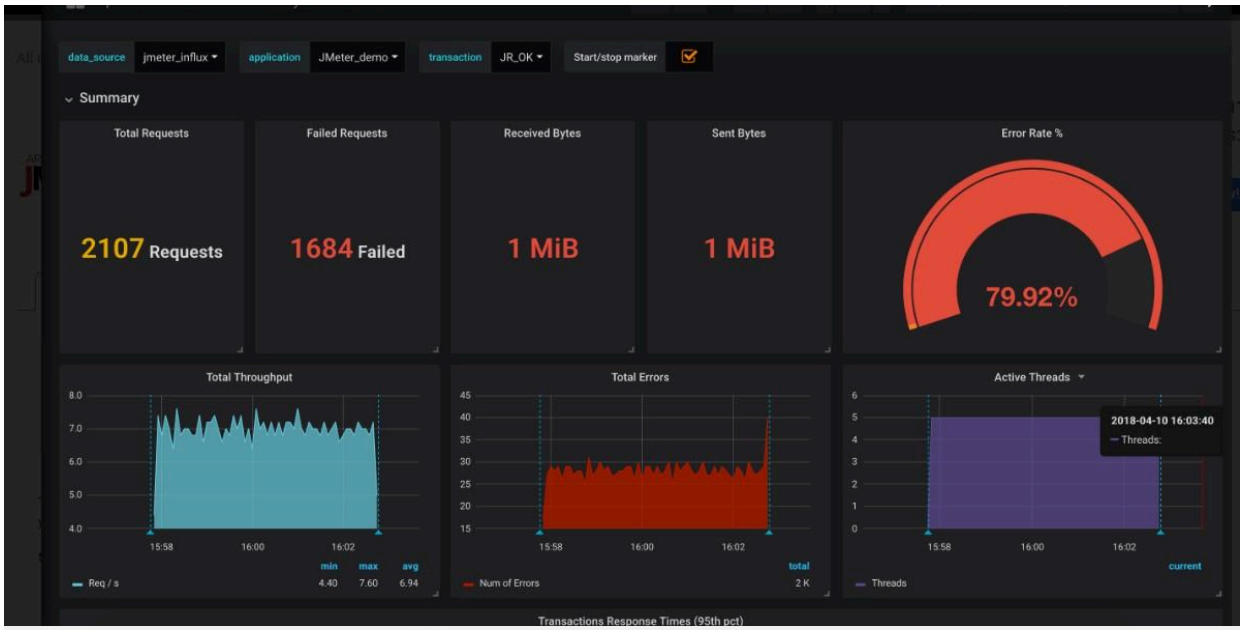
1. Client was expecting to support 100k+ concurrent user's access to the site (Web & Mobile Aps).
2. Integrate Real-time graphical dashboard to visualize the exercise.
3. Build the load testing setup on Linux (Ubuntu) CLI terminals to minimize the setup cost.
4. Integrate Real-time graphical dashboard to visualize the exercise.

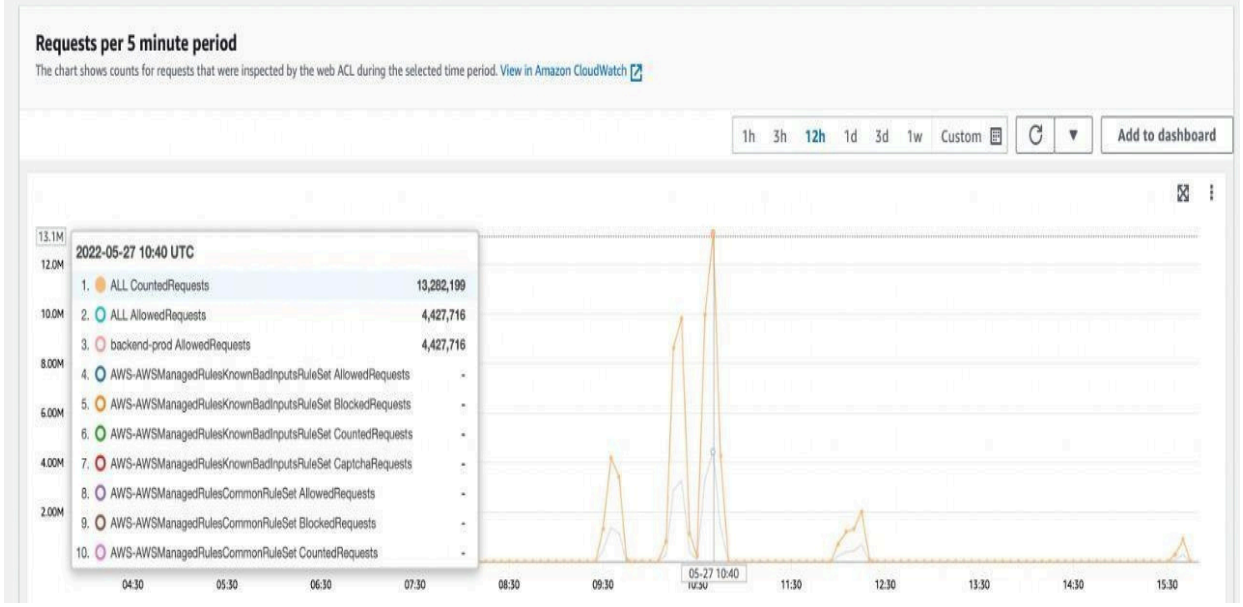
How Shravas Technologies Helped:

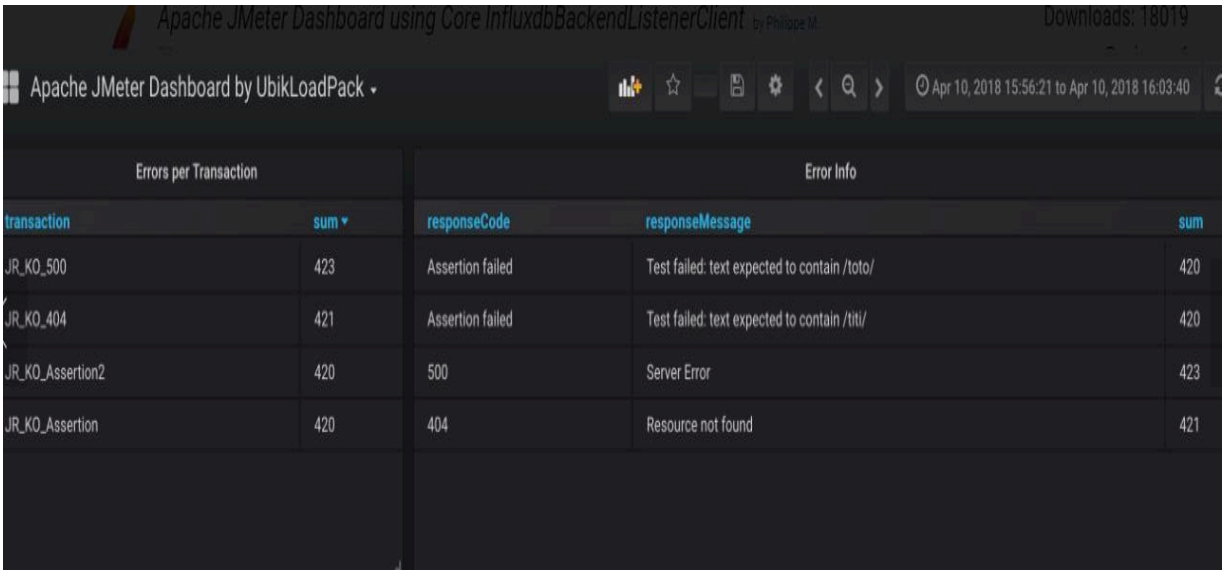
1. JMeter - One Master and Four Slave Systems. After optimizing the Java memory consumption, we could generate 40k concurrent sessions from each slave system there by achieving 160k concurrent sessions as a whole.
2. InfluxDB (v1.8) + Grafana – Installed and configured both on separate Linux Terminal.
3. Detailed logs from JMeter were sent to Influx DB and we could visualize the execution at real-time on Grafana Dashboard.
4. Project Duration includes 4-5 iterations of Load testing execution after fine tuning, fixes from client's DevOps team.

QA Flow and Architecture implemented:

Test Results:







Performance Parameters:

Parameter Name	Description
Response Time Median	The time taken to successfully complete a request Median is a number which divides the samples into two equal halves. Half of the samples are smaller than the median, and half are larger.
Min(millisecond)	Min value represent the Minimum Response Time, it is the shortest time for the samples with the same label.
Max(milliseconds)	Max value represents the Maximum Response Time, it is the longest time for the samples with the same label
Error %	Percent of requests with errors.
Throughput	Throughput is calculated as requests/unit of time. The time is calculated from the start of the first sample to the end of the last sample.
90% Line	It is the value below which 90 Percent of the samples falls. The remaining samples too at least as long as the value
95% Line	It is the value under which 95 Percent of the samples falls. The rest samples took at least as long as the value.
99% Line	It is the value under which 99 Percent of the samples falls. The rest samples took at least as long as the value.

Corporate office address:
Shravas Technologies India Pvt. Ltd

#321, 2nd Floor, 5th Cross, 5th Block, Banashankari 3rd Stage, Bengaluru - 560 084 Karnataka, India.

Phone: +91 80 2679 4564, 8888-800-400 Email Address: info@shravas.com Website: www.shravas.com