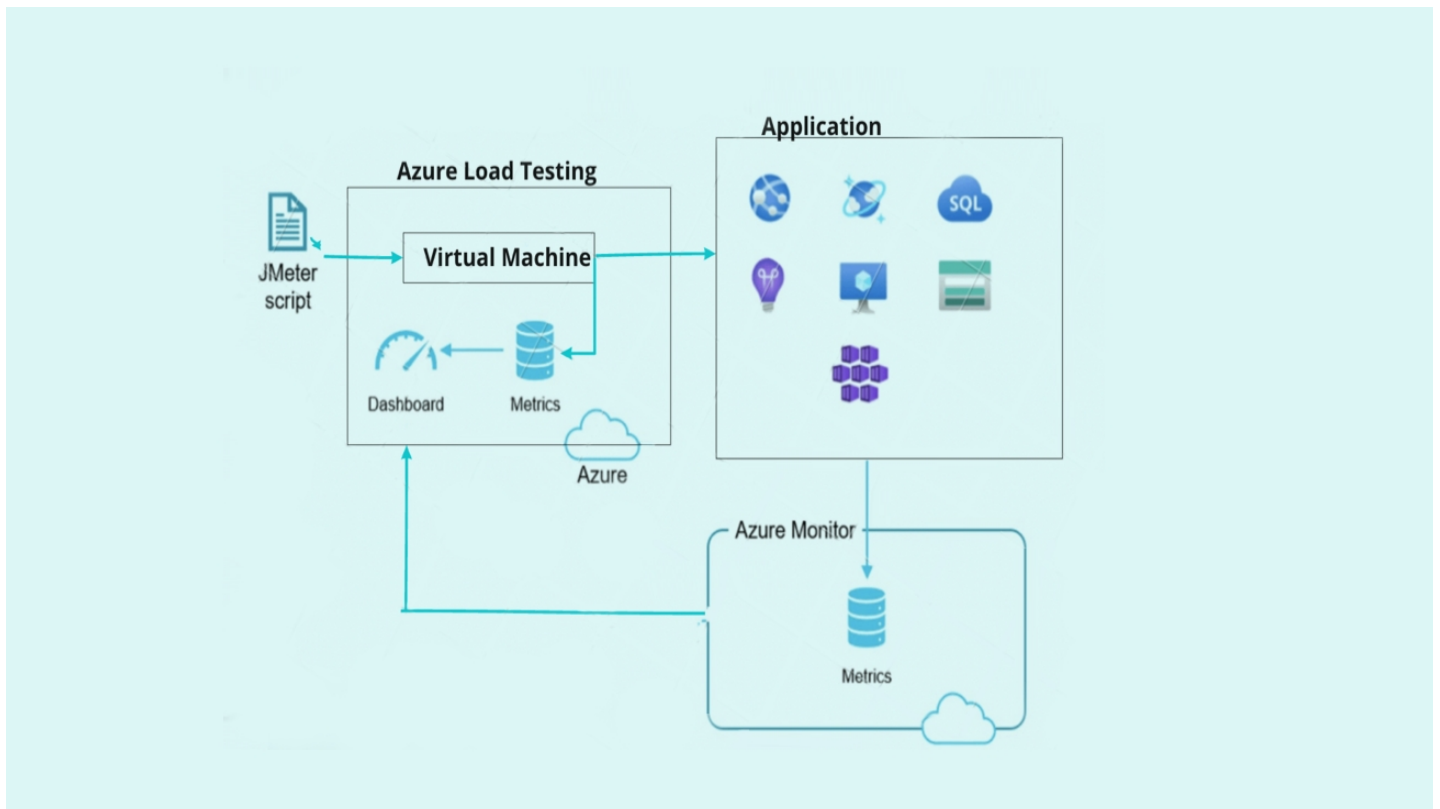


Performance Testing of Accounting & Practice Management Product



A leading SaaS provider for the professional services industry with more than 100,000 users worldwide benefits from the most complete product portfolio in the industry, including practice management and case management solutions, tailored cloud options, document automation, and payment processing.

The Challenges

The number of Client active users is increasing 2x times every year. Every day they are getting escalations from the end users regarding the performance of the site. Their site is not responding and sometimes it takes more than 2 minutes just to load the page.

- Untested front-end user experience
- Lack of Performance trend analysis across releases
- Inefficient test monitoring
- High efforts required to set up performance testing infra
- Out of 320+ Most frequently used API, 50+ API response time is more than 20 sec
- Missing Continuous Delivery Pipeline

Quarks Solution

Quarks developed Hybrid Performance framework using open-source tool JMeter, Graphana, Influx ,DB etc.

Hybrid Performance Framework

Quarks provided end-to-end performance testing in an Agile environment, utilizing only open source tools

- Implemented Azure pipeline for load testing
- Automated 350+ API and tracked Live performance results in Graphana dashboards and Monitored CPU/Memory/Network/ Database Metrics in New relic
- Performed different Load tests (Load, Stress, Capacity, Client side)
- Compare Performance benchmark results across different releases

Quarks innovative solutions helped:

- Achieving response time of API from 20 sec to < 500 msec to 2sec
- Early detection of performance defects by ~80% by Shift-left approach
- Have the ability to both horizontally and vertically scale all of our resources (services, databases, and so on) on an increase in demand.
- Client site uptime on average has been well over 99% over the past year.