

QA Validation: Performance Testing

The Challenge

The client's clinical application was a core element of its IT landscape, but it was not effectively responding to the needs of users. Initial tests showed that performance degradation was occurring because the expected scenario completion rates were not being met. In fact, the response times for critical transactions were as high as 60 seconds.

The client set aggressive timelines for improvements in this area, but it lacked the expertise and time needed to find a sustainable resolution.

Our Approach

We first conducted a thorough analysis with realistic SLAs and workload patterns. The emids team then performed a combination of tests (atomic, load and goal-based stress tests) for normal (current production) loads and worst-case (growth-based future) loads.

Initial benchmark tests showed that the application usually reached its breaking point at 10 percent of the expected production load. After conclusively identifying the bottleneck, the team developed automated test and database scripts to simulate real-time scenarios, fine-tuning the application to meet expected levels of performance.

Value Addition for the Customer

- Completed performance testing for the entire application within the stipulated time frame, allowing the client access to additional, exclusive offshore engineering services for other applications
- Application performance improved to withstand 300 percent of the expected load
- Response times came down from 60 seconds to less than 2 seconds
- Successful Go-Live was achieved across more than 220 facilities
- Over six months post Go-Live, no performance issues were reported by end users

Provider Capability

QA Validation

Customer Profile

A long-term care center with over 200 facilities across North America, offering skilled nursing, long-term care, inpatient and outpatient short-term rehabilitation, post-acute short-term rehabilitation and post-operative recovery services

Services and Solutions Rendered

Performance testing on clinical applications from inception to closure, reducing load times and increasing efficiencies