

CASE STUDY

Performance Testing Strategy for a Commercial Explosives Manufacturing Company using Tricentis NeoLoad



Client

A global leader in explosives manufacturing and blasting solutions, our client operates across more than 100 countries, serving the mining, quarrying, oil and gas, and construction sectors. With a workforce of over 11,500 professionals worldwide, the organization is recognized for its expertise in commercial explosives, ground support, and specialized chemical solutions.

Focused on building long-term customer partnerships, the company helps improve productivity while managing operational and safety risks. Backed by a strategically located global manufacturing and distribution network, it continues to invest in innovation, automation, digital transformation, and sustainability to drive operational excellence.

Market Dynamics

Global explosives manufacturers often face challenges integrating legacy systems with modern digital platforms while supporting complex, safety-critical operations across geographically distributed sites. Ensuring consistent system performance, accurate data analysis, and comprehensive database assessments is essential to optimize IT infrastructure and maintain operational continuity. As organizations modernize core enterprise systems, rigorous performance testing, environment benchmarking, and scalability validation become critical to ensuring seamless upgrades, data integrity, and reliable business operations with minimal disruption.



Challenges

Legacy system integration and modernization

The main business challenge was bridging the gap between outdated legacy systems and newer, more efficient technologies.

Scalability and performance testing

Ensuring the system's ability to handle large data loads and perform efficiently at scale was a critical challenge, especially during major upgrades.

Data integrity and reporting

Maintaining data integrity, conducting proper database analysis, and generating comprehensive reports with actionable insights are essential for informed decision-making and operational continuity

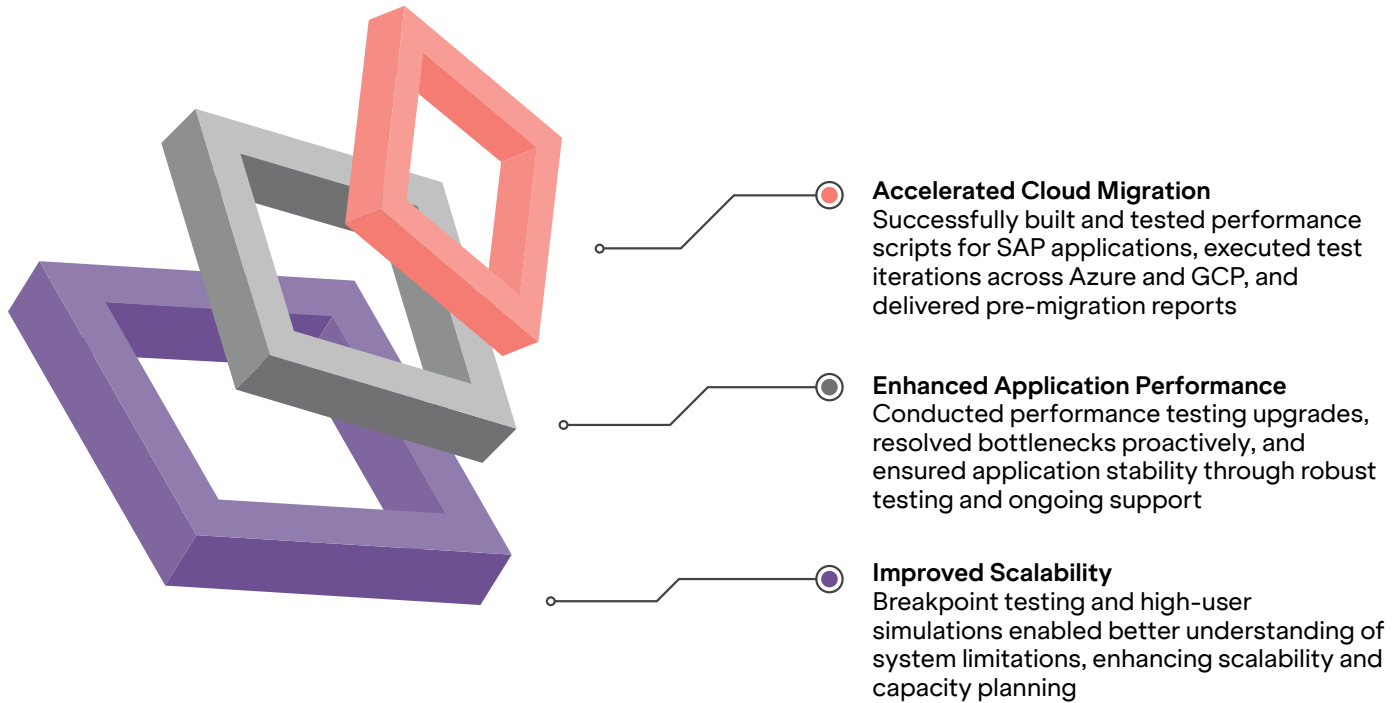
Solution

Utilizing Tricentis Neoload, we built and tested performance scripts for SAP GUI/Fiori applications, executing various performance tests to ensure system efficiency.

Here are the key highlights of the solution:

- **Implemented robust performance testing with Tricentis Neoload:** Leveraged Neoload to build and execute comprehensive performance scripts for SAPGUI/Fiori applications.
- **Conducted rigorous testing across environments:** Performed load, endurance, and breakpoint testing on both Azure and GCP environments, facilitating direct performance comparisons.
- **Delivered data-driven performance analysis:** Analyzed test results to identify improvements and optimization opportunities between pre- and post-migration environments.
- **Validated peak load capacity:** Successfully executed a 250-user load test, achieving comparable or improved response times for most transactions on GCP.
- **Ensured application stability under sustained load:** Demonstrated application resilience with a 4-hour soak test, maintaining acceptable CPU utilization and confirming no memory leaks.

Business Benefits



Conclusion

By implementing rigorous performance testing and scalability validation, LTM helped streamline a complex Oracle upgrade and cloud migration, ensuring a seamless transition with minimal risk. The data-driven performance insights not only enhanced system stability but also empowered the mining company with scalable, future-ready IT infrastructure.

With optimized SAP performance, improved reporting accuracy, and proactive issue resolution, the organization is now well-equipped to handle growing data demands while ensuring uninterrupted operations. This success story demonstrates how advanced testing strategies and cloud-driven innovation can unlock efficiency, resilience, and long-term value in the mining industry.

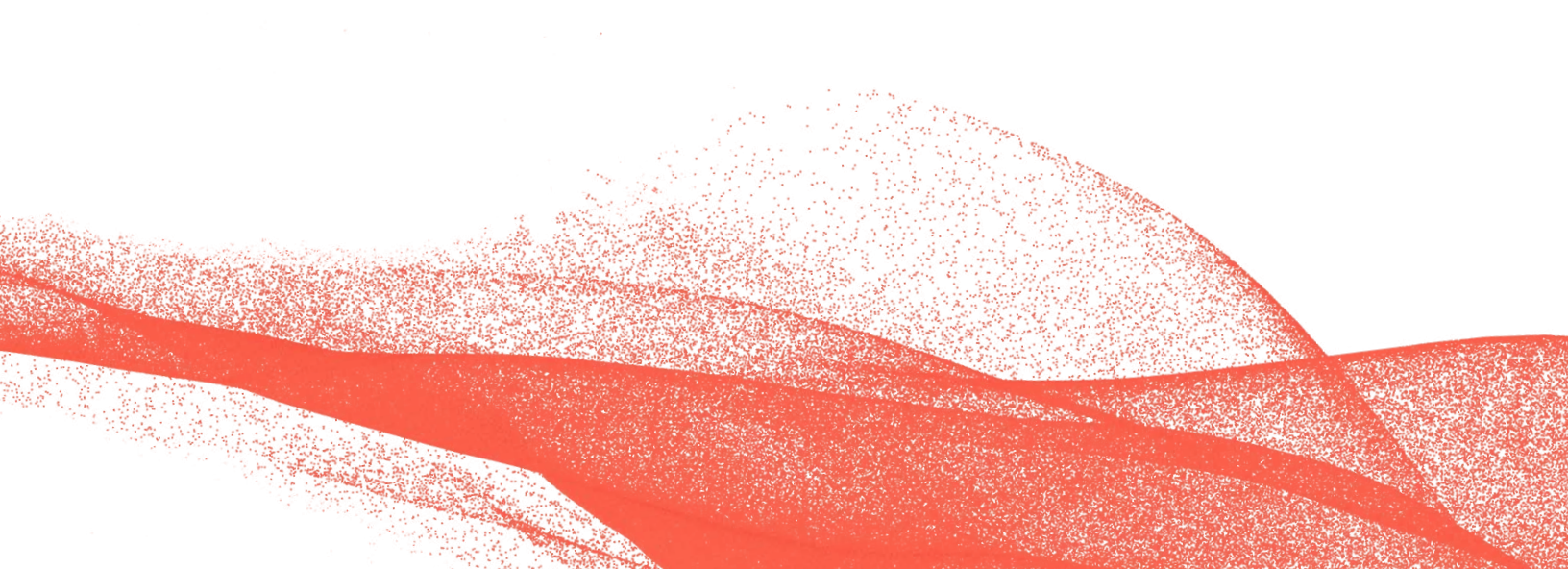


Internal Quote

Our team has demonstrated a strong partnership with the customer in test performance services, achieving significant milestones. We successfully built and tested business critical performance scripts in SAP GUI and Fiori applications, executed comprehensive test iterations for pre-migration Azure environments and post-migration to GCP environments, and delivered detailed execution reports and analysis. Notably, we proposed and implemented the NeoLoad performance tool.

Despite a very time-crunch schedule, we delivered the project on time. Our efforts have resulted in improved performance, reduced manual effort, and enhanced test cost-effectiveness. We are committed to continuing our collaboration to achieve their key objectives and drive further success.

Manish Sharma | Delivery Manager



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