

## CASE STUDY

# A Fortune Truck Manufacturer Improves Application Performance and Quality

### About the Company

The company is a Fortune 500 leading truck maker in the US. It manufactures and sells commercial and military trucks, buses, diesel engines, recreational vehicles, as well as provides service parts for trucks and trailers across the globe through a network of 100 dealers worldwide.

### The Challenge

The company facilitated 'make-to-order' custom truck configuration based on customer's requirements. Processing a customer's request required interaction between two applications. One of the applications maintained product's configuration information, while the other maintained engineering rules and international standards.

The system was meant to enable customers to choose parts configurations and check whether they adhered to engineering rules and international standards. These data-driven applications were integrated with a number of other functional applications. Ensuring data accuracy and data flow consistency across these applications were of supreme concern as it had a direct impact on the client's business.

Each product had several rules, and a minor defect would affect downstream applications, thus affecting the entire business. For every minor bug, the entire modules and applications would be tested consuming a lot of time and effort. These changes had their impact whenever the business went through process overhaul.

These applications contained mission critical data, ensuring data accuracy across production lines to have zero production downtime was of paramount concern. Lastly, validating the performance at different levels of loads was also critical to achieve optimum performance.

### Trigent's Approach

Trigent team of experts' used test case modularity framework and prepared independent test scripts at a modular level to test the components. This modularity of test case scenarios accommodated faster changes in business functionality, reduced complexity and reduced time by optimizing the test case scenarios. A set of automated test suites were created to keep the quality at optimum level and ensure quality code for each major module release. Trigent's solution also enabled the

## CASE STUDY

applications to increase its user load capacity. The team performed load testing to assess loads at different load scenarios.

### Benefits

- ❑ Modularizing the testing framework helped improved component performance
- ❑ Automated performance test suite helped save time and reduced time to market
- ❑ Faster performance on more than 200 users load
- ❑ Improved data flow and accuracy across the applications