

CASE STUDY

360 Degree Testing for a Global E-Payment Solutions Company

About the Company

The company headquartered in Florida, is a real-time global payment solution that enables customers to securely make online purchases from merchants worldwide and pay directly through their local bank account in their currency of choice.

The Challenge

The company's e-payment solution enables customers to perform online transaction anywhere in the world using its payment gateway. For a company whose target segment spans worldwide, it was imperative to provide secure, reliable and accurate e-payment services. As the system supported a large number of banks, countries, currencies and languages, any instance of error during a transaction would cost millions in lost reputation and customer goodwill.

Additionally due to frequent configuration updates, it was challenging to test ever changing configurations. It was necessary to ensure that the application maintain an optimum level of performance.

Security was a major concern as the solution was driven through a token, and any database hack could lead to misuse of these tokens.

Trigent's Approach

Our team extrapolated and documented test requirements based on a training session conducted by the customer.

- ❑ All the possible configurations were collected and using test design techniques more than 1000 test cases were prepared.
- ❑ Test cases were executed, and all the bugs were analyzed and reported. The team discovered that many of the configurations were not functional. After executing all the test cases the overall code coverage was measured to be 80%
- ❑ The team also analyzed the maximum load that could be supported by the application.
- ❑ Trigent used Grinder tool to execute performance testing and measure response times for more than 5000 concurrent users.
- ❑ Trigent used WebSecurify & NetSparker for security testing to ensure their site was secure and less prone to security threats.
- ❑ Localization testing was performed to test the application's performance amidst combinations of country specific parameters and language settings.

Highlights

- ✓ 1000+ test cases were developed
- ✓ Ensured 80% code coverage
- ✓ Grinder for performance testing at 5000 user load
- ✓ WebSecurify & NetSparker for security testing
- ✓ Localization testing to validate application's performance at different languages and country's settings

CASE STUDY

Benefits

- ❑ Documentation helped client know more about the application and testing scope
- ❑ Performance testing helped the client understand the application's load and take measures to improve performance
- ❑ Improved quality of the application and made it less vulnerable to security threats
- ❑ Increased customer confidence in the quality of the product