Quality Control

Client Background:

The client is a leading provider of Linux-based server, desktop and Windows-Linux cross-platform systems management tools.

The Challenge:

One of the company's newest products is a set of Add-on Modules for a leading Information Technology Service Management application (ITSM). These modules extend the functionality of the ITSM and enable it to monitor and manage various business critical applications running on multiple platforms.

Since the product dealt with consolidating information from multiple platforms, the scope and range of testing was very exhaustive, hence the client faced certain challenges:

- **Inability to meet the quality requirements of the product within the project deadline:** Given that the product covered a number of different platforms and a number of different applications the testing requirement was very large. It was impossible for the client to fulfill this requirement internally without pushing out the planned deadline by more than a year.
- **Lack of skilled professionals required to complete the task:** The extensive functionality of the product caused the QA task at hand to become exceedingly complex. Highly skilled and specialized QA professionals were required to understand all the subtle nuances of the product and test them both functionally and technically.

Besides this, the client also needed a feature by feature analysis and comparison of its product with other leading products in the space.

We was enlisted to fulfill all of the above needs.

The Solution:

We founded an offshore testing strategy for the client within their development model that went beyond black box testing. Solution Highlights Include:

Test Automation:
Test Automation was achieved by making use of several open source stress tools such as Sysbench and ab2 to simulate the production environment. Metrics were generated using shell/SQL scripts. VMWare snapshots were used exhaustively to move between different sets of environments. Test Automation increased efficiencies and was essential in achieving on time completion of project.

Feature Analysis:

A competitive analysis was done with top of the line competing products to make sure the metrics/features provided by the client were at par with what the market already had. A bulk of the QA team was comprised of system administrators who not only validated the product but also verified its feature functionality. The QA engineers in this case were ITIL certified and provided valuable feedback to the client on best practices in the field.

Complete set of Test Cases covered: We skilled professionals broke down the complex task and created comprehensive Test Requirements and Test Plan documents – which were updated throughout the life cycle of the product. More than 100 test cases per component were generated to cover all the aspects of the product, including functionality and User Interfaces. Special real-life scenarios specific to applications were also covered to ensure production level testing.

Benefits:

The planning and testing strategies used by we ensured timely delivery of a quality product to the client. The product was very competitive based on the functionality that it provided in comparison to the other leading products in the field. The client was able to successfully deliver the product without hiring a single QA engineer onsite. we also able to work with the client within the agile development model which required constant communication between the developers and testers. This usually can prove to be quite challenging in the outsourced environment. However our QA professionals were able to overcome this challenge through constant communication and managing flexible working hours. This enabled the client to save valuable time and to stay within budget while delivery a world class product.