Client

Client is a \$7.7 billion company with 25,000 employees in 175 countries. It is a global leader in food safety and security, facility hygiene, and product protection.

Challenge

Existing test automation was too fragile and could not handle the constant enhancements and updates made to the SAP system. Creating an automation test suite that could perform validation in an end-to-end manner and could span across SAP and external systems, was critical. But the client needed outside expertise.

Solution

Engaged Zenergy Technologies to develop an advanced test automation framework. The automation needed to provide significant return on investment by facilitating re-use, minimizing maintenance, and promoting ease-ofuse.

Highlights

- Zenergy helped the client significantly improve the robustness of their test automation suite through advanced automation techniques that allowed it to scale and become more easily maintained.
- Confidence in the automation suite significantly increased, providing higher ROI. Additional groups, including the infrastructure teams, began to request automation runs to shake out issues in new environments and releases in numerous countries.
- Zenergy's advanced framework also validated incoming and outgoing feeds to verify data integrity between SAP and external systems.
- Through implementation of the advanced automation techniques, Zenergy was able to reduce SAP test data preparation by 80%.

Technologies

• Platform: Windows, SAP including MM, SD, FI, and CO Modules, DB2

Zenergy case studies

Summary

Client management had engaged numerous consultants and companies to assist with test automation but had never established the advanced level of automated testing they desired and believed possible. Management needed an advanced solution that would be relatively easy to maintain and would scale with their organization as it grew through multinational acquisitions.

Through an extensive search the client identified and engaged Zenergy Technologies as an industry-recognized leader in advanced test automation solutions. The client wanted a solution that would not only reduce maintenance and improve scaling, but also work across enterprise functions in an end-to-end manner so the system would be tested similar to how it was used by employees every day.

With significant experience in SAP automation, Zenergy's automation team quickly assessed the client's complex needs including challenges around test data preparation, data feeds, and testing SAP on a global level. Zenergy's automation architect developed an advanced automation solution that used a modular/keyword hybrid approach to significantly decrease the time spent on script and object maintenance. The approach also allowed the client to easily expand the automation suite through single points of developed a test data solution that queried the SAP database and used automation to create the critical test data. Finally, Zenergy created sets of scripts that reset and cleaned SAP transactions and data, which allowed for continuous execution with minimal manual intervention.

Results

Increased Confidence in Automation --- Automation use is increasing throughout the organization after Zenergy implemented advanced automation techniques. The infrastructure group is now using automation as well to shake out issues in new environments.

Improved Data Integrity ---- Zenergy's automation framework validates data integrity and file feed formats before the data load process. The framework also ensures data loads correctly by verifying within databases and through the GUI front end.

Improved Data Preparation --- Zenergy developed automation that creates test data on the fly, reducing the client's data prep efforts for SAP testing by 80%.

Automation Executes End-to-End --- Automation now better simulates how client employees interact with SAP in everyday use.

"The confidence in our automation suite has skyrocketed so not only do we detect significant issues when rolling out new countries, our infrastructure teams have started requesting automation runs to shake out issues in new environments they set up. And before Zenergy refined our automation, we'd lose a day trying to pinpoint root causes after automation runs. Now we have advanced reporting that is near instantaneous, showing us why particular systems failed." – Quality Assurance Manager

