IQUEST

Roche Successfully Turns Workflow Simulation Software into a Powerful and Effective Sales Tool

> "iQuest has done an outstanding job with high competence and reliability, seamlessly blending their business know-how and delivery capabilities to meet our specific requirements.

Andreas Sauer
Project Manager, Roche Diagnostics

The Business Context

Regarded as a pioneer in healthcare, Roche creates innovative medicines and diagnostic tests that help millions of patients globally. The company's Diagnostics arm is a leading supplier of instrument systems, solutions, tests, and software for laboratories worldwide. Its modular analyser series are part of Roche's serum work area solutions, and are designed to optimise test executions in high workload laboratories.

After introducing a new generation of analysers to the modular product lineup, Roche Diagnostics needed a powerful workflow simulation application that could accurately reproduce lab tests and instrument configuration outside of a real laboratory. The software application would enable global sales and marketing teams to demonstrate the instrument's capabilities and features to potential customers and partners.

iQuest's 10-year-long partnership with Roche Diagnostics meant that we had a clear understanding of the business goals from the very beginning and were able to provide continuous support throughout the entire application lifecycle.

The Solution

Working closely with the client team, iQuest proposed a desktop application designed to import tests from multiple sources and provide input for the simulation process. This allows users to manipulate and edit imported tests, replicate tests and generate statistics regarding the simulation results.

Simulation input is extracted from real log files or from specific formats that capture the test description. The simulation can run on any of the permitted instrument configurations, with the desktop application assisting the end-user in

Designed with the user in mind, the application presents simulation results as charts, each containing detailed information about the instrument throughput, test distribution per module, and specific performance indicators.

The simulator integrates with the engine responsible for reproducing the tests and generating the raw results interpreted by the simulator. Developed by the instrument manufacturer, the engine provides an emulation of the real instrument. Each version of the simulator had to be integrated with a specific

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selecting a valid combination of modules to be assembled together into one instrument.

To ensure accurate test results are presented, the simulator loads tests by parsing real logs coming from the modular analyser instruments. End users can perform a set of operations in order to prepare the imported tests for simulation, anything from simple operations – such as test removal or replacement, to complex tasks – like test distribution in time and business specific grouping.

engine version which offers functionality for a defined set of modules.

As a result of continuous integration during the whole development process, iQuest ensured a high-quality of service and an automated build process, making the build release a matter of one-click. End-user acceptance testing was performed before each official release, with iQuest also providing functional, system, integration and performance testing.

Import　　　Edit　　　Simulate　　　Display Results

The Business Impact

With several versions of the simulator application distributed all over the world, Roche Diagnostics Global Marketing & Sales teams are now better equipped to showcase the potential of the company's new modular analysers to potential customers.
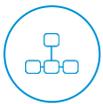
Key Benefits:

Agility

The application, eliminates the need for physical configurations, giving sales teams the freedom to successfully replicate real-life tests and instrument configurations in a non-laboratory environment.

Marketing Value

Sales consultants can advise clients and partners on the most appropriate configuration in order to reduce costs and increase response time.

Easy Data Interpretation

Chart display of test results (throughput, workload distribution, turn-around time etc.) enables and easier interpretation of simulation results.

Versatility

The simulator provides a complete set of module configurations, making it easy to present the instrument's capabilities under various setups.

> "We are very pleased with the way iQuest managed the requests, changes and releasing versions. The end-user feedback received during the trainings was very positive and the application usability is much appreciated.

Andreas Sauer

Project Manager, Roche Diagnostics

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About iQuest

iQuest is an independent, global IT services and solutions provider with more than 17 years of experience in delivering first-class software solutions to leading companies in Life Sciences, Telecom, Transportation, Financial Services, and Energy. iQuest provides a full range of software development services, integration services, and software products, all of which rely on the latest commerce, cloud, big data, and analytics platforms.

Headquartered in Frankfurt, Germany, iQuest benefits from a growing international presence, currently employing around 700 people, distributed across delivery centers in Romania, as well as local and affiliate offices across Europe, the US and Asia.

www.iquestgroup.com

About Roche Diagnostics

Founded in 1896, in Basel, Switzerland, Roche is a global leader in research-focused healthcare over 9 billion Swiss francs invested in research and development every year.

Roche is not only the world's largest biotech company with differentiated medicines in oncology, virology, inflammation, metabolism and CNS, but is also a world leader in in-vitro diagnostics, tissue-based cancer diagnostics and a pioneer in diabetes management. The company currently employs over 85,000 people, working across more than 150 contries.

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