

High Performance Knowledge Graph Model-Based QA Software for Insurance Carriers

Change the way quality is delivered.

The insurance industry is undergoing considerable change with pressure to catch up with digitization of the value chain to meet evolving business requirements. Digitization enables rapid development of new products that meet the needs of the business and the expectations for simplicity. The critical objective IT organizations need to achieve is to provide secure, final products with no “*quality-related Day 2 Issues*”.

The challenge Carriers face in delivering the highest quality product launches, on time, is that the insurance process flow has numerous variant choices, often with millions of permutations that all need to be tested. Existing manual or test automation approaches cannot scale to 100 percent coverage, are hard-coded stepwise to the interface, and consume excessive FTE-hours, all of which slow down the agile pipeline.

In today's digital world, failure to deliver quality products has expensive consequences from the exponential exposure of defect leakage, compared to that of the past. To eliminate the exposure, insurance carriers need a quality engineering software product that is a strategic enabler, to help them meet the necessary business outcomes. Introducing QMT.

Improve Product Launches.

QMT's high-throughput, knowledge graph model-based approach enables shift-left allowing the entire QA cycle to be reduced to a few hours instead of weeks or months. By using a high-performance knowledge graph of the business logic, which provides a deep understanding of the relationships, QMT discovers all defects early, delivering the level of quality needed to meet product launch dates.

Model Complex Policy Life Cycles

QMT enables the complete business process flow of the insurance policy life cycle to be built within a visual, interconnected model. Abstracting the business processes simplifies change management and readily supports making changes to an application under test, by only requiring an update to the affected nodes in the model. Updated test cases are generated automatically, consequently, only what has changed needs to be tested, which reduces time and eliminates human error.

By testing the end-to-end process of life insurance systems, and the integrations between them, carriers can drive quality into product launches and eliminate embarrassing errors experienced by distributors and customers post-launch.

Full Coverage at a Fraction of the Cost.

QMT features full, end-to-end test coverage combined with automated test case and data generation, providing a codeless method to testing business logic and workflow. The model automates the generation of all test cases by traversing the knowledge graph model which produces all possible permutations of the business logic. Test cases are then executed in an automation framework and the results reported. QMT is simple to use and manage allowing model development to be done by QA team members or a new group of business users and non-developers, who understand the business flow. Using a knowledge graph model removes manual testing, human error and extends visibility of QA for new products to well-informed, technical business analysts.

“QMT transformed the way testing is completed, coverage is achieved, and the business partners with IT. This groundbreaking approach has improved quality, reduced cost, and improved our responsiveness to the business.”

- Life Insurance Customer, IT Director

Life Insurance Customer Results

30x increase in automated test coverage vs. traditional manual testing methods

80% reduction in FTE demand for QA capabilities due to increasing the level of automation

Shift from approximately 2,500 manual person-hours to 30 hours of automated testing runtime at a lower economic rate

Eliminate Quality-Related Day 2 Issues.

QMT drastically reduces test cycle times via powerful variance analysis that detects and only tests changes since the last execution. QMT enables IT executives to get more value from the dollars they're already spending and reach full test coverage eliminating quality-related Day 2 Issues, or to choose to deploy fewer people to maintain existing coverage.

Eliminate Embarrassing Errors Experienced by Distributors and Customers Post-Launch

Collaborate and Build Models Faster.

Collaboration enables team members to simultaneously edit projects, models and objects, eliminating manual controls, "last saved" race conditions and human errors, maintaining compliance and control in the environment.

Shift Left, *All the Way*.

By dramatically reducing test cycle execution time, from weeks or months to hours, QMT enables earlier and more frequent testing in the agile development process. QMT was designed to interoperate with in-place systems and integrate into CI/CD processes and automation systems like Jenkins and Jira.

Test ACORD® XML103 Data Submissions.

QMT verifies NB/UW electronic data submissions from e-applications, in the ACORD® XML103 format, as input into underwriting and case management systems. This ensures the data integrity of the different possibilities and permutations versus expected results which eliminates NIGO rates altogether.

Secure and Control the Environment.

QMT implements security for a controlled environment that supports SOC2 attestation and HIPPA compliance with access controls and a secured model relational database which reduces risk and exposure to the carrier.

Validate Correspondence.

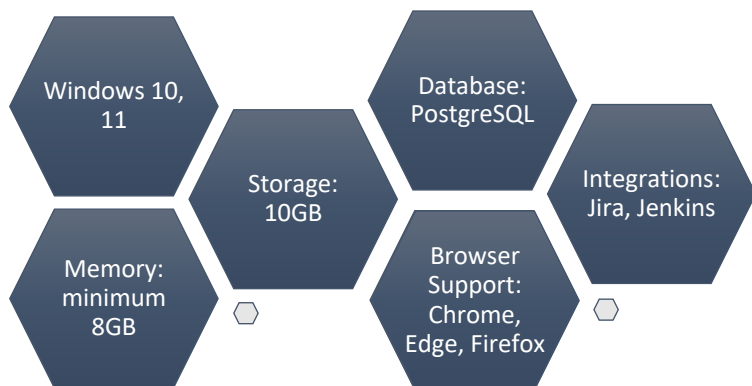
QMT checks the content, layout and the automation of all electronic documentation delivery, including e-signature, first payment requests and issued policies, verifying that cycle time and cost management are maintained.

Extend the Architecture.

QMT's extensible architecture provides a library of common function calls to support testing of the full ecosystem and the integrations between them, including underwriting, policy status, issuance and claims. Also supported is the direct integration of carriers' existing testing function calls into a model node, speeding test time by up to 4x.

What we do	What others do
We model business logic, requirements and flow	<ul style="list-style-type: none">• Some hire QA contractors to manually test, or build automation.• Some model step-wise test steps.• Build and manage code and scripts
Full test coverage	<ul style="list-style-type: none">• Manual testing cannot get close to full• Other software approaches won't map all permutations• No one else validates the business logic
Changes to workflow or systems code only requires updating the model	<ul style="list-style-type: none">• Manually rewrite code or automation scripts
We test the entire NB/UW process including XML103 and correspondence	<ul style="list-style-type: none">• Test "low-hanging fruit"• Only follow the most common path
Only test changes since last execution	<ul style="list-style-type: none">• Re-test more than just changes
Enable collaboration to build models faster	<ul style="list-style-type: none">• Limit access to models or objects• Manually split up code writing

SPECIFICATIONS:



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