

ITS TEST AUTOMATION PLATFORM (ITAP)

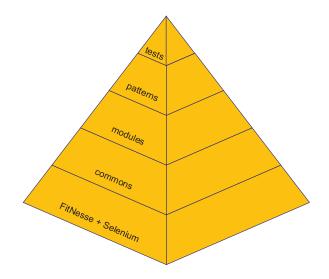
WELCOME TO ITAP

The *ITS Test Automation Platform* (ITAP) redefines how automated functional tests (AFTs) are created and maintained for a more efficient and cost-effective testing process.

Utilizing ITAP, insurance organizations can intuitively segregate the intricacies of the test automation from the test information, producing seamless results and enabling the reuse of common modules across a wide spectrum of test scenarios for the system under test (SUT).

OUR TECHNOLOGY

Available as a cloud service, ITAP dramatically accelerates development and eases maintenance when a system change affects a large portion of the test suite.



Layered Pyramid—this key architectural feature maximizes reuse by splitting AFTs into the layers shown above and described below.

<u>Benefit</u>: Reduces the demand for testing resources, allows broader test coverage earlier in the development lifecycle, and increases the quality of the final system in production.

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FitNesse + Selenium—ITAP is built on top of a mature, open source, testing technology stack. *FitNesse* is a popular, general purpose, wiki-based testing framework that provides the underlying plumbing" for ITAP. *Selenium* is the industry standard, web browser automation framework. It is used by FitNesse to control the browser on ITAP's behalf.

<u>Benefit</u>: Clients incur no third-party licensing costs and can be confident that ITAP is built on a solid foundation that will support them now and in the future.

The Commons Layer—includes common base functionality as well as other functionality common to specific vendor-based insurance systems.

<u>Benefit</u>: Eliminates the idiosyncrasies and limitations of the underlying frameworks (Selenium and FitNesse). With much of the underlying work already complete at inception, ITAP implementation projects have a lower cost and faster delivery than most test automation projects.

The Module Layer—comprised of simple and highly reusable client modules that automatically create insurance items (quotes, policies, claims, etc.) and perform tasks (run batch jobs, apply cash, generate reports, etc.). Modules contain predefined input defaults that can be overwritten with data from the test layer.

<u>Benefit</u>: Modules provide the building blocks that minimize the effort to maintain an AFT suite as the SUT changes with each new release.

The Pattern Layer—connects all the other layers together to produce a cohesive AFT suite. Client patterns pull data from the test layer, call modules and other patterns, and use commands from the common layer.

<u>Benefit</u>: Patterns allow AFTs to be as simple and easy to understand as possible. This increases test quality and coverage while lowering initial and ongoing costs.

The Test Layer—defines the expected results and input data that is relevant to the test case. Input data required to run the AFT that does not impact the verification of actual vs. expected results is defaulted within the modules.

<u>Benefit</u>: Because tests are remarkably simple and readable, they can easily be written, reviewed, and revised by different users involved in the QA process without having to understand the underlying layers.

ITAP Studio—an Excel-based development platform that allows non-technical users the ability to develop and maintain AFTs without the need for tedious scripting.

Benefit: ITAP Studio allows new, less experienced resources the ability to quickly become productive.

Builders—Excel-based utilities that automatically build insurance items (quotes, claims, applications, policies, etc.) at the click of a button with item characteristics (coverages, limits, deductibles, locations, etc.) that can be varied as desired by the user.

<u>Benefit</u>: Builders eliminate the cost and time associated with manual entry in a variety of scenarios including:

 Manual Testing—provides a quick start to manual testing by automating the setup needed to meet the entrance requirements for the manual test cases. For example, it can be used to populate the testing environment with a standard set of policies needed for billing and claim testing after the database is cleared in preparation for a new release.

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- 2. Training—provides a repeatable process to prepare the training environment with a set of quotes/policies needed for end-user training classes.
- 3. Manual data entry—provides an automated solution for initiating a repetitive manual data entry process. For example, it can be used to populate the production environment with the basic policy level information of renewal policies from legacy systems for small books of business where the effort to develop a full-scale, automated, data migration solution is not cost effective.

Document Compare—validates document output by comparing any document generated by the system (new business packages, invoices, correspondence, etc.) to a "template" that represents the expected output. Areas of the document that are expected to change with each test run can be easily excluded from the comparison.

<u>Benefit</u>: Eliminates the error prone and time-consuming need to manually compare generated documents with reference documents.

Security—ITAP performs all testing via the insurance system user interface. This means that ITAP never exposes any vulnerabilities beyond those exposed by the system itself and has absolutely no access to underlying data sources. Furthermore, all ITAP test artifacts and test data resides on ITS-provided, ITAP workstations. These workstations, as well as the ITAP server, are Amazon Web Service-based and adhere to AWS best practices, including the use of IAMs, IP restricted access, and multi-factor authentication.

<u>Benefit</u>: ITAP provides a highly secure environment in which to develop, maintain, and run AFT suites.

Version Control Framework (VCF)—*version control* is a critical—and frequently ignored—aspect of any development platform, especially for platforms like ITAP that are built for collaboration. Version control for AFTs is particularly challenging because the versions of both the system being tested and the AFTs themselves must be tracked. ITAP includes a secure, GitHub-based, *Version Control Framework* (VCF) that dramatically simplifies the backup, merging, sharing, release, and reversion of all ITAP artifacts.

<u>Benefit</u>: The VCF allows ITAP users to safely and easily save, merge, share, release, and revert their work; greatly mitigating the sometime costly effects of human and system error in a collaborative environment.

OUR SERVICES

Dedicated Insurance Focus—ITS exists to serve the insurance industry and is staffed with seasoned insurance professionals. Understanding the insurance business is critical to the development of comprehensive and relevant test suites.

<u>Benefit</u>: Insurance Expertise = Meaningful Tests + Comprehensive Coverage.

Proven Process—ITAP teams are small, experienced, and laser focused. Our implementation process ensures clients are well trained and backed up with a comprehensive regression test plan.

<u>Benefit</u>: With small, elite teams and a proven, transparent process, ITS delivers the highest utility, highest quality automated test suites as cost effectively as possible.

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Ongoing Support and Upgrades—ITS continues to advance the platform with upgrades that are available to all ITAP subscribers.

<u>Benefit</u>: Support is just a phone call away with service plans available to train your staff or outsource the ongoing development and execution process.

ABOUT INSURANCE TECHNOLOGY SERVICES (ITS)

Based in Dallas, Texas, ITS is an insurance consulting and services firm specializing in the design, implementation, and utilization of technology to optimize critical business processes and achieve exceptional results. ITS serves P&C insurance organizations of all sizes across the country. ITS provides system implementation support (including project management, business analysis, forms design, system development, testing, and legacy data conversion), process improvement services (including PMO establishment, quality assurance, and production support), and change management services (including end-user training, organizational change planning, and business process reengineering), as well as proprietary insurance platforms for automated functional testing and data migration. ITS helps insurance organizations manage and reduce risk by deploying agile teams with exceptional insurance and technical expertise to streamline implementations and boost the capabilities of existing IT staff.

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