

The Original Software Group

Business Driven Quality

The Dynamic Approach for Delivering Application Quality



Original Software

Your business needs its IT team to rapidly deliver new applications and enhancements that will provide tangible business benefit and enhance every aspect of the value proposition. That is a demanding objective to achieve given the finite resources available to IT and the ever-increasing complexity of applications, infrastructure, and supported devices.

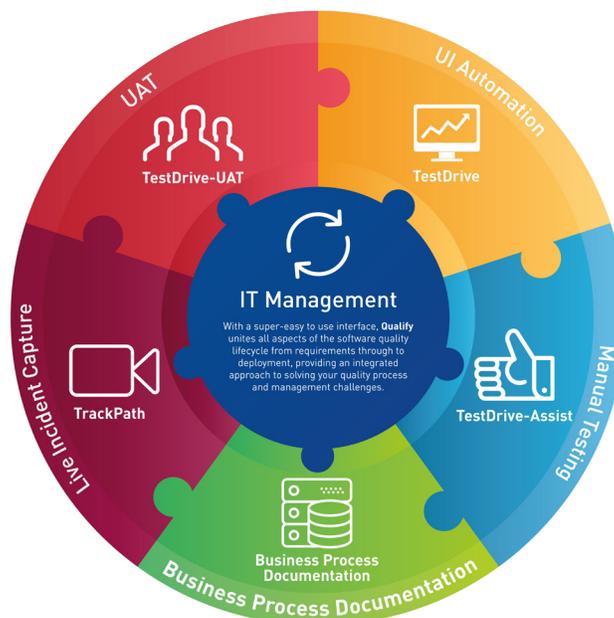
Implicit within this objective is the expectation that the new or upgraded applications will perform in line with the business requirements. Equally that they will not expose the business to an unacceptable level of risk through their implementations.

The objective poses additional challenges depending on how the application is acquired. If it is a custom development, then it is easier to place quality gates throughout the entire development lifecycle but this is balanced by the higher level of defects expected in a custom development. In contrast, most major applications are purchased or consumed in the cloud. Here you can expect a lower level of defects but you can only put quality gates in place in the final stages of a project, once the application is available to you.

Industry analysts such as Gartner and Forrester encourage IT teams 'to shift quality left', towards the developers where the cost of correcting a defect is much lower. While this is a logical approach it ignores the fact that for purchased or consumed business applications shifting left simply is not possible. Moreover, these applications are owned by the business and the burden of risk management and quality implementations falls on the business. Original Software focuses on business-driven quality and our products are designed to embrace the widest possible audience including those whose skills lie in their business knowledge rather than technology. Equally our holistic view of quality embraces every aspect from quality management, testing and test data through to documentation and training materials.

Upgrade - Patch - Implement - Migrate

Which **one** is more important to you?



- ✓ On Time
- ✓ On Budget
- ✓ Working Perfectly

Or have it **all** with Original Software Solutions!

Innovation is in our DNA at Original Software. Our intuitive technology has redefined the breadth, speed, and power that you can expect from your investment in application quality. This innovation has led to patented and market-defining solutions that have pioneered Test Data Creation and Management, Code-Free UI Automation, and User Acceptance Testing.

Empowering All Your Stakeholders

The design of the solution helps customers build an ‘application quality eco-system’ that extends beyond just the QA team, reaching all the relevant stakeholders within your business. We enable everyone involved in the delivery of IT projects to participate in the quality process - from the business analyst to the business user and from the developer to the tester. Management executives are fully empowered by having instant visibility of projects underway.

Quality That is Truly Code-Free

Code-driven test automation tools regularly become shelf-ware due to the burden of script maintenance and the reliance on specialist skills. Testers need to focus on using their subject matter expertise to test the application. Building a second code base makes little sense so we have created a solution that provides all the power but without requiring a single line of code. This approach empowers all users, however they contribute to the quality process, to define and execute their tests, directly tackling the automation specialist bottleneck. Not only is our technology easy to use, but your quality process is accelerated because automated scripts are far quicker to create and maintain, achieving faster delivery of business-critical projects.

Comprehensive Quality

Quality needs to be addressed at all layers of the business application. Our solution suite enables you to check every element of your application - from the visual layer, through the underlying services and into the database.

Managing Test Data

Data drives the quality process and as such cannot be ignored. Our test data management solution enables you to build a compact test environment from production data quickly and in a data privacy compliant manner, to avoid legal and security risks. It also manages the state of that data so that it is synchronized with your test scripts, enabling swift recovery and shortening test cycles.

Top to Bottom, Deep and Wide

Original Software’s integrated solution suite is uniquely positioned to address all your application quality needs, and provides the ability to unite all aspects of your software quality lifecycle. The solution helps you manage the requirements, design, build, test planning and control, test execution, test environment and deployment from one central point that gives everyone involved a unified view of project status and avoids the release of an application that is not ready for use.



Qualify is our unique solution for Application Quality Management (AQM) that unites all aspects of the software quality lifecycle from requirements through to deployment, providing an integrated approach to solving your management challenges.

Uses

Qualify provides a complete platform for application quality management including fully configurable data stores, work flows, electronic signature, security, dashboards, and reporting. This common platform will ensure that every member of the team from management, through development and QA to end users can share in the quality process.

Desktop, Tablet & Phone

Qualify is available as a desktop application and as a web application optimized for desktop browsers and tablets. Note that some advanced capabilities are only available in the desktop version.

Multiple Methodologies

Qualify is shipped with several pre-defined applications models which can be used immediately or tuned to your needs. In addition, you can create your own applications that exactly reflect your processes and storage requirements. You can map agile, waterfall or hybrid methodologies which can be used concurrently to reflect the needs of legacy and new developments.

Information Portal

In addition to the data stored within Qualify it can display and link to data held within point solutions such as Microsoft TFS and JIRA to give a single integrated view of corporate data. That consolidated information can then be analyzed, graphed and reported.

Communication Backbone

Qualify enables you to create and manage your quality plans and as importantly acts as the communication backbone letting every team member share in the progress and status. In addition to the on-line access, automatic and manual alerts can be generated which are distributed via email.

Resource Management

Planning your medium and short-term resourcing needs can be complex but Qualify provides an accurate view of your work in progress, (optionally including time-sheet data), allocated tasks and forward projects – highlighting areas of potential contention and endangered dead-lines so that you can balance and reassign your resources depending on their availability and capacity.

Scheduling

A complete timeline representation of all allocated and unallocated work is provided where you can dynamically reallocate work between the available resources and review/action tasks where the target end date is endangered.

Work Flows

It is essential that key steps in your quality processes are controlled and can only be passed by the appropriate users. Qualify provides all this and more, enabling rules to be set as to the critical data that must be stored at each step in the process combined with a complete audit trail.

Electronic Signature

Embedded throughout Qualify is the ability to flag actions as requiring electronic signature. This includes steps in workflows but also extends to include the review of test results and marking whether they met the pass criteria.

Security

A complete role-based security model is included so you can control data access both to the type of data stored and to individual records within that data. The ability to enroll individual users within multiple roles enables you to reflect the flexibility inherent in all IT projects.

Dynamic Data Relationships

Qualify supports an infinite number of data stores so you can easily move from a test management system based on defects, tasks and tests to a wider implementation embracing other elements of your projects such as the Project Management or Help Desk. Soft and hard links can be created between any data stores to reflect and explore the relationships between the data.

Dashboards

Dynamic, interactive, real-time dashboards covering all the data stored within Qualify are available and can be augmented by user-defined charts, grids, and layouts.

Reporting

A number of pre-defined reports are included within the standard product, supported by a flexible report-writer that includes a fast-start layout driven from the user interface.

Data Import

Useful data will typically already exist either in spreadsheets or within an existing test management system. Qualify provides a rapid and powerful means to import that data into the application model you create.



Manual testing is an essential discipline and will remain so for the foreseeable future. However, it is also immensely labor intensive and inefficient, creating a bottleneck in the deployment of new applications while making effective regression tests almost impossible. TestDrive-Assist is our ground-breaking solution that delivers practical and immediate benefit while also enabling the transition from manual testing into automation.

Screen-shots & Actions

Every action, click, input that the user performs is captured with reference to the screen they are on, and the controls or objects on that screen. The user just operates as normal with new screens or pages automatically identified. Each is immediately and fully documented without any additional action by the user. You will never have to go back and reproduce a problem, it is already fully captured.

Mark Up Comments

At any time, the user can click on any captured screen, not just the current one, and highlight an area adding a comment. This might be to identify a problem, request a change or provide guidance notes for training materials.

Scripted or Exploratory

The test can be driven from a documented test script supplied by a test management solution such as Qualify. In this case the user is prompted with the test steps and they can pass or fail each as they are performed. If there is no detailed script, TestDrive-Assist is immensely valuable as it captures exactly what happened.

Quality Checks

If you wish, spelling can be checked and links on web applications tested automatically just by selecting these options. Exact performance data is captured providing accurate measurement of the user experience.

Content Capture

The data captured is not superficial, TestDrive-Assist understands all the objects on the screen and their content, whether visible or not, so the results are complete.

Integration & Automation

TestDrive-Assist can be driven from test tasks in Qualify, will link saved results and raise defects as required. It provides the building blocks for automation in TestDrive and when used in conjunction with TestBench it can show all database activity during a test.

Ease of Use

The solution is easy to learn and deploy. It saves testers, BAs, developers and users time and effort from the start.



When any of the TestDrive products are used to support testing, the result is a full audit trail which completely documents all the business use cases. For many companies a complete capture of these business processes is a unique and valuable asset which can help address multiple business challenges. Increasingly our customers are using TestDrive specifically for this purpose, completely outside the testing arena. During and after the capture process the user can enhance the content with comments and mark-ups (balloon text) to further explain and enhance the content.

Detailed Reports

Document the entire test or business process in clear English with automatic screen shots and annotated mark-ups while every user action is described in the manner that a user understands, free of technical jargon and based on our patented User Interface Annotation. This can be used to create process manuals, check methods and help with training.

Training Materials

The reports make a great training tool as produced by TestDrive. They are generated as Microsoft Word documents, so that it is easy to provide additional details to be added to create a complete training or business process manual.



Animations

An animation can be generated from any TestDrive result. Animations give a complete, active representation of what happened during the business process. These animations can be enhanced with credits, bubble text and custom descriptions of each action. The animations are held in a custom file format that is a fraction of the size of a full video file and a free animation viewer is included so they are easily and cheaply distributed.

Videos

TestDrive-UAT can also produce full video files of each test or captured business process. These videos are considerably larger than the animations but can be hosted in all locations that support standard industry video formats enabling you to create a complete video library for staff training and reference purposes.

Expedited Communication

The reports, animations and videos can all be used to facilitate communication with other parts of the company and with external vendors. These resources enable the recipient to rapidly understand the subject reported and removes any questions as to what occurred. As a result, unnecessary phone calls and emails are removed and the corrective action occurs much faster.

Test automation has the potential to radically improve productivity and reduce the reliance on manual testing. Traditional tools have failed to have an impact due to their complexity and inability to deal with the rate that applications change. TestDrive is our solution that specifically addresses these limitations to achieve rapid automation. It supports all browser, GUI and legacy applications, including SAP, HANA, Oracle EBS, M3, Microsoft Dynamics, IBM 3270/5250, and Force.com together with a wide range of mobile devices.

Code Free

TestDrive is at the vanguard of Code-Free test automation, setting the agenda since 1998. No programming skills or knowledge are required to use it, opening its applicability to the whole software delivery process. Script build is rapid and script maintenance is largely automatic, thus maximizing productivity. TestDrive is not a front-end tool to ease the creation of underlying script code, there is no code.

Full Content

TestDrive is configured to understand your applications automatically, getting the full content of each screen as it appears without the need to interrogate an item, click on it or write any code. This means that all the data is available to be tested, or used in processing.

Application Timing

TestDrive intuitively understands the state of the application and whether it is ready. It does this without the need for timing loops and means it plays the script input only when the application is ready, and not before, eliminating synchronization issues associated with other programmatic tools.

Technologies

TestDrive supports almost all modern technologies in the User Interface including HTML, Java Script, Ajax, Java, C++, C# as well as proprietary protocols and applications such as SAP, Oracle EBS, and IBM 3270/5250. It means you can create end to end regression tests with one solution across your whole application landscape.

Automatic Annotation

This patented capability means that TestDrive can think more like a person than a robot. It enables TestDrive to understand the business purpose of a field or control, rather than rely on its technical name as provided by a programmer. The text box used to capture the Customer Name might be described as 'TextBox3'. TestDrive looks at all the surrounding data on the screen to call it what the user would call it so that, if naming conventions change, the script is unaffected and what's more, can be easily read and understood.

Self-healing

This unique feature is enabled because of the design of TestDrive. It means TestDrive can handle many changes completely automatically and where user input is required, it is only to update the script with the discrete changes through an intuitive dialogue.

Modular Play Lists

TestDrive scripts are executed via playlists combining several scripts or other playlists if required for a fully modular approach. The checking, external data, environment, and the flow are contained in the playlist rather than the script so that one script can be used for multiple purposes, minimizing maintenance, and maximizing re-use. Playlists can also be called from other applications such as CI build servers to perform immediate regression testing. They can also be scheduled with the load distributed across multiple devices whether physical or virtual.

Automatic Error Recovery

When the unexpected happens, TestDrive enables you to define what happens next so the test can carry on if possible.

Data Driven and Logic

Again, without any programming skills, users can elevate simple scripts into data-driven tests simply by linking spreadsheet columns to inputs and/or expected results. You can also define data to be captured from the screen to be checked or drive decision logic in the script path, and then either store that data or result, or reference it in a subsequent script. Hence you can perform a test to raise multiple orders in an ecommerce site, store and check the order values, capture the order numbers, use the order numbers in the back-end warehouse system to dispatch and check the customers' balances in a separate CRM.

Automated Tests

Some aspects of the application can be selected for validation just by selecting a single option. For example: Spelling, broken links (web only), response times, and compare to a defined base line.

Specific Tests

Specific checks can be set up in several ways, for example: Checking against a known expected value, a supplied variable value, or another value derived from the application. But you can also use PowerShell to create reusable functions beyond those supplied as standard to perform calculations as part of the test or even check a value in a database table.

Ease of Use

Because TestDrive does so much for the user through an intuitive interface, it is robust, easier to learn and maximizes productivity. Screenshots are captured automatically during the test and when looking at the results are 'interactive' so you click on the image to see the properties of that component.

Reporting

Results are stored in detail with clear information which can be viewed on line or in PDF format which is helpful if you need to pass to a third party.

Interfaces

TestDrive integrates tightly with the other Original Software solutions, Qualify, TestDrive-Assist, TestBench and Content Analytics. In addition, it can be called by and communicate with third party test management products such as HP Quality Center.

UAT is an essential part of the process of delivering stable, effective software, and involves putting your program through real-world testing to ensure it can cope with all scenarios. It's the last stage in delivering a new piece of software or an update, and is essential to ensure everything is working properly before release. In effect, you are ensuring that the software supports your business and it is fit for purpose.

Designed for Business Users

Intuitive, simple UI requires little support or training. Users can be up and running in a couple of minutes.

All Applications, All Browsers

TestDrive-UAT will capture all actions and diagnostics that a user carries out in any of the monitored applications, providing accurate details of the test, actions and any defects discovered.

Clutter Free

TestDrive-UAT is much more intelligent than a screen recorder and focuses on what is important and removes clutter from the test results. It also means that users are not worried about extraneous content such as emails being captured while they are testing the ERP or website.

Every Screen, Every Input

A full audit trail is essential to facilitate the rapid correction of discovered defects and TestDrive-UAT provides this with no effort. Gone is the need to take screenshots or notes about what you were doing or what appeared on the screen.

Performance Checks

An application which performs poorly will be a major source of user frustration and the hardware state behind such bottlenecks is automatically captured.

Data Masking

UAT will be performed over realistic data which may contain information that cannot be shared with a wider audience. Passwords are automatically masked and the user can choose to hide other details.

Screen Mark-ups

Emails and screenshots are replaced with a complete test result which can be enhanced with user mark-ups of each screen. This means the user or tester can add their own comments to the current screen, or retrospectively to previous screens to help explain a situation.

One Test, Three Paybacks

In addition to speeding defect resolution, a test result can be used to create training materials and to document existing business processes. These can be produced in Microsoft Word, PDF, video and animation formats.

Databases are key corporate assets and their accuracy must be verified as part of any application quality process. TestBench is our solution that uniquely addresses the validation of all database effects and the creation of cut-down, representative test data to reduce test times and data footprints. Data confidentiality is addressed and the unique user-managed data roll-back capability reduces environment downtime, improving testing productivity and accuracy.

Extract with Integrity

TestBench analyses the relationship between tables in a data environment to ensure that full referential integrity of the data is maintained when an extract is performed. This ensures a usable, working data environment for testing.

Selection and Sampling

Data selection for an extraction is defined by selection and sampling criteria. While selection is standard, sampling extracts data based on combinations of data values, with two or more data elements being used as the criteria for sampling. Sampling enables the creation of test data environments that are small while ensuring all relevant data scenarios are included.

Scrambling for Privacy

Compliance with data privacy legislation requires that live data is not available in test environments and that individuals cannot be identified. TestBench provides scrambling routines that enable effective obfuscation and de-identification, synchronizing the changes across the database to ensure consistent scrambling of values.

Data Protection

The TestBench Environment component provides the ability to deploy a Checkpoint and Rollback strategy for a test data environment. A checkpoint can be set to define a 'point-in-time' marker to enable TestBench to 'remember' the state of the data. A rollback will return the data to the state it was when a specified checkpoint was set. Re-tests can start immediately.

Database Effects

TestBench reports all the Inserts, Updates and Deletes that occur in a test data environment when a test is performed. Details of the operations are captured and, in the case of an update, the before and after status of the data is shown. This provides an understanding of the data part of an application function and aids in the verification of the data changes.

Data Rules

A data rule applies a set of rules to a database effect and provides notification of any variance. Essentially data rules are automated testing for database effects. Our support for database effects and rules uniquely tests the database activity enabling true end-to-end testing.

Result Comparison

Database effects from two runs of the same test scenario are compared. Differences in the tables affected, the number of operations on a table and differences in individual data elements are reported. When used with TestBench Data Protection, this feature provides the ability to understand the differences between two versions of the same process.

Meeting your objective to improve application quality not only requires the appropriate technology, but also calls for commitment from management and those who will use the solution. Most importantly it requires a realistic and structured approach to the project. Process changes and technology adoption need to be carried out in a way that does not adversely affect day to day operations. The implementation and adoption of the solution needs to be considered in the context of current position, workloads, resources, skills, priorities, business initiatives, goals and return on investment.

Original Software prefers to adopt an approach to implementation based around our “Crawl, Walk, Run” methodology. This proven approach identifies areas of quick win and easy adoption, in line with your key objectives, so that real gains are made early on. The savings and improvements made here provide the momentum and capacity to tackle the tougher aspects of automation in a phased approach.

Crawl Then Walk Before You Run

Very often planning and management, manual testing, and database management can provide early wins in the ‘Crawl’ phase. Moving into the ‘Walk’ phase enables automation to be addressed, initiating regression testing and leveraging re-use from manual test efforts. Finally, when you are ready to ‘Run’, quality can become wider and deeper, including more phases of testing, such as validation down into the database and automated regression testing.

Succeed in Your Application Quality Strategy

Implementation consists of far more than product installation and some training. To achieve success requires the optimum combination of analysis, planning, project management, training, workshops and support. Having developed a strategy with you that will ensure the successful adoption of an automated approach, we also deliver education in a combination of classroom exercises and practical workshops, using your data and test applications. This will leave you with a set of test packs that you can continue to work with and develop over time.

Once all education and workshops are complete, we will come back at an agreed date to conduct a post-implementation clinic, to check on progress, address any issues and refine the use of the solution you have invested in. Going forward, many clients find great benefit in having periodic visits from one of our consultants to help with the on-going learning process.

Team Augmentation

The initial weeks for any new quality initiative are vital to ensure that all team members feel confident and rapidly feel they are gaining real benefits. What can help is to augment your own team with one or more people who are fully trained and experienced in the use of our products and can guide you through the choices to gain the maximum from your investments. We can provide these additional resources and we will discuss with you the appropriate mix of skills given the capabilities of your own team.



Contact Original Software and accelerate your application quality process today!

“Original Software has broken the mold in application quality. Not only do we drive down the cost and time of each project, but our dynamic solution empowers all stakeholders to be more effective, delivering a proven ROI in months and a lower TCO for customers.”

Colin Armitage, CEO, Original Software

About Original Software

With a world class record of innovation, Original Software offers a solution focused completely on the goal of effective quality management. By embracing the full spectrum of Application Quality Management across a wide range of applications and environments, the company partners with customers and helps make quality a business imperative. The solution includes a quality management platform, manual testing, full test automation and test data management, all delivered with the control of business risk, cost, time and resources in mind.

More than 500 organizations operating in over 30 countries use Original Software solutions. Current users range from major multi-nationals to small software development shops, encompassing a wide range of industries, sectors and sizes. We are proud of our partnerships with the likes of Barnes and Noble, Bimbo Bakeries, Costco, Helzberg Diamonds, Macerich, ViaSat, Office Depot, Macmillan Cancer Support and many others.

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