



# Star Quality - POS Verification Suite

## Highlights:

- ü Achieve results in less than 30 days
- ü Cut test cycles from weeks to days with automated testing
- ü Highly maintainable POS regression
- ü Add test cases without programming
- ü Leverage Star Quality POS and automated testing experience
- ü Easy to integrate with credit authorization and other interfaces

## Flexible Engagements:

The Star Quality POS Verification Suite can be implemented in several ways depending on your specific operational requirements:

- On site services – Star Quality will replicate our full test environment and methodology at your facility including all the necessary tools and training for your staff to perform ongoing testing.
- Star Quality is now a Borland Testing Services Provider. The Testing Services Program offers enterprise-class testing services at a lower cost. Powered by Borland's industry-leading Silk products, our testing services deliver the results you want: expert advice and a fully tested and optimized application. Since there's no software purchase, you're investing in your application, not in a tool, saving time and money.



## About Star Quality:

Star Quality consultants have been in the business of Software QA and Automated Testing for over twenty-five years. Our founders held executive positions in leading software companies including test tool vendors. Our approach to software testing is based on many years of practical experience in diverse environments.

## Automated Testing for Retailers and POS Vendors

In order to increase sales and profitability, retailers are exploiting new technologies that strengthen the link with the consumer. This in turn has created new opportunities for POS vendors with feature enhancements being added at an ever quickening pace.

And yet because of the complex 'multi-vendor' nature of retail, POS software vendors and retailers alike face significant challenges in assuring these new features will not adversely impact critical store operations.

This creates a paradox where new, innovative solutions are desired by the retailer but delayed from deployment until thorough testing can be completed. Valuable time and profits can be lost.

Star Quality has developed a new approach that sidesteps these problems and provides a fast path for migration to new software releases and products. Innovation is no longer held hostage. Star Quality presumes that change and flexibility are not only possible, but essential to our customers' success.

By starting with 'flexibility' as a requirement, we have developed a toolset and methodology that leverages best practices and provides exceptional return on investment when automatically testing dynamic applications.

The TJX companies adopted the Star Quality approach and in six months...

- Reduced test cycle for Triversity POS software from 1 week to 1 day
- Achieved 80% automated coverage
- Usage test cases are being generated by actual cashiers



Office giant Staples exceed \$14 billion in revenue with 20% coming from their online sales (fiscal '04). Star Quality is used for quality assurance of in-store systems, online and back office systems.



that was easy.™

- Achieve 1 day test turnaround on Coalition based POS software testing
- Adopted the Star Quality approach for back office AS400 based apps (including supply chain and call center)
- Adopted the Star Quality methodology for Staples.com – 4<sup>th</sup> largest US online retailer supporting 75,000 online SKUs and 8 million monthly visits

The TJ Maxx, Marshalls, Home Goods and Staples logos are property of their respective owners

## POS Test Automation from Star Quality:

**Tools:** Our approach bypasses the pitfalls of recording and playback solutions by building "test scripts" automatically at execution time using test plans, function libraries and live data. This provides the greatest flexibility and maintainability of the test verification suite.

**Methodology:** By starting with an outline approach to test planning, we maximize reuse of high level test plans and reusable POS functions.

**Cashier Simulation:** Our libraries simulate actual cashier operation of the cash register in an intuitive, easy to maintain manner. This includes customer transactions such as the entry of items, tender, Store Value Cards, discounts and layaway. It also includes non-customer transactions such as cash drawer loans, petty cash, totals and closings. This approach allows testers to build automated tests without programming.

**Store Server and Back Office Integration:** The system can also verify POS interaction with store servers and back office systems. Actual register transactions are verified against the Electronic Journal for accuracy. The verification system can pull PLU / SKU data directly from a live database. The system can be configured to work with internal or external credit authorization modules and services.

**Cross Platform Flexibility:** The Star Quality Retail Verification Suite is designed to functionally test any Windows based POS systems.

**Risk Free Assessment:** Star Quality guarantees your POS system testing can be automated or your money back. For a \$5,000 assessment / pilot fee, Star Quality will port a portion of our test environment to your system and we will execute representative sample tests. This assessment / pilot will be completed within 15 business days from receipt of your system, or you will not be billed. Upon completion, we will provide the pilot results along with a proposal for comprehensive test automation.

### Star Quality Function Libraries:

Star Quality has created reusable functions to provide a highly customizable test environment without programming.

The Star Test function library includes over 150 general purpose functions for testing device, web, client / server and mainframe applications:

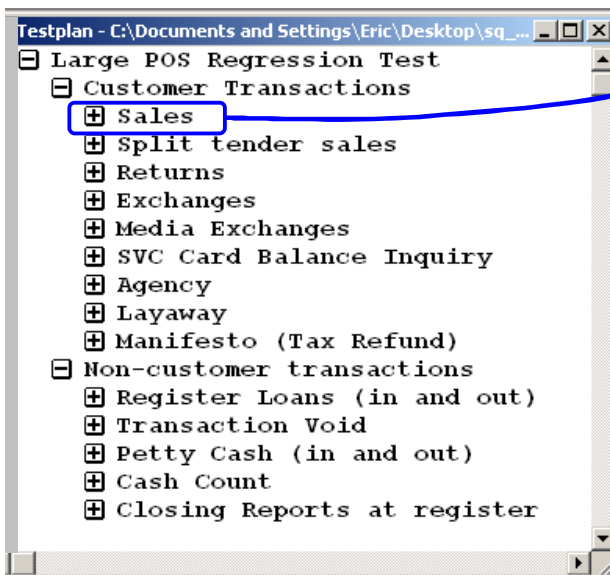
- User Simulation (data entry and navigation)
- Dynamic, data driven testing
- Advanced verification methods
- File and database interaction

The Retail Library includes over 40 functions specific to the verification of POS / cashier operations including:

- Create sales (items, quantities and prices)
- Manage exchanges
- Apply discounts (line item and transaction)
- Tenders (cash, credit, SVCs, etc.)
- Layaway (creation and payments)
- Returns (with and without receipt)
- Cash drawer loans
- Petty cash

### "Best Practices" Begins with Outline Based Test Plans

Star Quality leverages outline based test plans to assure comprehensive test coverage. The example below displays general POS transaction categories on the left. The expanded view on the right shows the various tender types that must be tested. The test plans are highly customizable to specific customer deployments and are independent of underlying POS hardware and software.



Expand (+) for more details, collapse (-) for summary view

- [-] Regular Sale
  - [+] Cash
  - [+] Credit Card
  - [+] Check
  - [+] Gift Certificate
  - [+] Merchandise Credit
  - [+] Travlrs Checks
  - [+] CitiBank Giftcard
  - [+] SVC (Store Value Card)
  - [+] Line item discount
  - [+] Transaction discount
  - [+] Line item allowance
  - [+] Transaction allowance
- [+] Tax Exempt Sale

### Advantages of Outline Test Planning

- Platform independent / reusable - what systems you use may change but what you need to test will not.
- Provides a summary of coverage without needing to read and understand the entire document
- Results in a more comprehensive set of tests that are easily understood by retail staff.
- Easy to plan and prioritize test automation efforts

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