

FASTest™ for ISO 8583

Perform ISO 8583 Issuer and Acquirer Testing Tailored to your Switch or Network

If you have attempted to certify with an EFT switch, send transactions through a credit or debit card processor, add a new POS device, or expand your host application; you have discovered the ISO 8583 standard is not a “standard” implementation. Transaction requirements include: specific message formats, with restrictions on valid field data; validating transactions for a variety of cardholders and account types; authorizing POS or ATM transactions received from your switch; or transmitting foreign transactions received at your own ATMs to your switch for remote authorization.

Conduct intelligent automated testing of devices and message exchanges—from your desk. Verify your system’s issuer and acquirer processing using off-the-shelf test messages, transactions, and scripts tailored specifically to your switch or network. Test transaction processing during business date cutovers, test valid and invalid data, override or validate field-level data, and verify the presence of required values and the absence of prohibited values in messages. Perform logons, dynamic key exchanges, and test any cardholder scenario. Easily share test cases using FASTest’s export/import utility.

Increase productivity by running tests automatically—night or day. Optionally, use FASTest to create scripted test groups and schedule them to run automatically—24/7. Receive an email of the test results or archive them for later viewing.

Easily customize tests, if needed. Make modifications at all levels from script contents to subfield data. Import transactions from your production system. Test the imported messages, or use them to quickly build transactions, scripts, and test groups.

Implement EMV with confidence. Conduct complete functional and regression testing of EMV with FASTest. Test with virtual EMV chip cards with visibility into internal chip data, including security keys.

Evaluate tests through immediate and optimized reporting of results and historical data. Immediately after each test, FASTest reports test results with error messages highlighted for easy identification.

FASTest provides:

- **Automated testing of issuer or acquirer processing from your desk.** Run scripted tests on your PC using full control of run-time options or optionally, configure FASTest to automatically run a scheduled test group—night or day—and receive an email of the results.
- **Flexibility to choose existing scripts or easily build customized scripts.** Off-the-shelf testing exists for over 90 specific formats, such as STAR, NYCE, Pulse, Visa, AMEX, MasterCard, (including biannual updates from the major networks)—but you can easily customize your tests if desired.
- **Ability to pre-certify with a switch or debit/credit card processor** by testing offline.
- **Comprehensive testing of all message types:** requests, replies, reversals, logons and logoffs, handshakes and key changes—even EMV chip cards.
- **Easy construction of test messages** using wizards to populate fields with valid data.
- **Increased test-building efficiency.** Import transactions from your production system.
- **Freedom from bitmap calculations** because FASTest calculates the bitmap dynamically at runtime.
- **Thorough reporting** of recent and historical test results.
- **Dynamic and intelligent responses to messages** using FASTest’s Auto Reply features.

Realistic, Comprehensive Transaction Testing

- Submit simulated transactions—indistinguishable from live transactions—to the partner application.
- Test all message types—even test EMV chip cards! Import test card data using a card reader or type card data into FASTest’s card database. Test EMV script processing with visibility into internal chip data.
- Validate each message processed during a test session. Messages containing invalid fields or values are highlighted for easy identification.
- Compare recent test results to previous test results. Review historical results in the persistent log.
- Dynamically manage encryption keys and encrypt PIN data—including full support of Triple DES encryption.
- Fully control each test with runtime options. Choose a specific card; run tests to completion or stop after a specified number of errors—select your preferences at test time.

Easy Test Construction

FASTest accelerates testing for the novice or expert. Testers can conduct uncomplicated automated testing from existing scripts, or easily build customized scripts of transactions—exercising even field-level control.

- Customize your test cases by:
 - Modifying the extensive tests distributed with FASTest.
 - Importing actual transactions from your production system.
 - Creating new tests by dragging-and-dropping predefined test components (fields, messages, transactions, scripts).
 - Opting to create scripted test groups that can be scheduled to run automatically—24/7—with email notification of results.
 - Entering complex data easily and accurately using Bit Wizards.
 - Using FASTest’s predefined tables of network-specific values to quickly enter valid field values such as processing codes.
- Easily “switch identities” as you test. Use tokens to represent values routinely required in messages (such as institution ID, terminal ID, etc.). FASTest dynamically replaces them during the test.

Powerful Auto-Reply Scripts and Tables

FASTest can simulate an issuer by interrogating the message and responding appropriately using Auto-Reply Scripts for intelligent, dynamic testing. Use FASTest’s script customization tools to build Auto Reply scripts that:

- Examine incoming messages (received from the partner application) or outgoing messages (to be sent to the partner application).
- Identify the message to be returned to the partner application.
- Set the value for various fields in messages using either literal values or values that were captured and stored from previous messages.

Prerequisites

Microsoft® Windows® 2000, 2003, XP, Vista, or Windows 7; 500 MHz processor (minimum), 700 MHz processor recommended; 50 MB hard drive disk space (minimum); 256 MB of RAM; appropriate communication with the partner application.

Notes:

- Paragon solutions are designed for installation on English-language versions of these operating systems only. Installation on non-English versions is not supported.
- Support for EMV chip cards and automated test scheduling is optional.
- Paragon offers more than 90 separately licensable formats of FASTest. These licenses do not offer the ability to create derivative formats. If you require that capability, contact Paragon for information about FASTest Professional Edition.

About Paragon Application Systems

Since 1994, Paragon has provided software testing solutions to simulate and test virtually any point in the transaction processing stream. Our high rate of repeat business reflects our expertise and commitment to customer service. We invite you to join the ranks of our satisfied customers.