



# the PARAGON *Edge*

## Precision Testing for ePayment Reliability

### Summer 2008

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## LynxGate Solutions and Paragon Upgrade ATM Configuration Solution for Credit Unions

Twenty five years ago, when the CAT (Controller for Automated Teller) suite of in-house ATM management solutions was introduced to clients of Fiserv's XP core solution, there was no easy way for credit unions to develop and modify ATM screens. As a result, ATM screens were text-based and very basic. When Drew Foley, now director of Fiserv's LynxGate Solutions group that delivers CAT, learned about Paragon's ATM configuration tool ConfigBuilder, he recognized its potential to make it easy for credit unions to enhance their ATM screens. With Drew's vision, the LynxGate team collaborated with Paragon to create a version of ConfigBuilder specifically tailored to the CAT customer base of 240 credit unions.

Since 2002, more than 85 CAT customers have used Paragon's ConfigBuilder LE to easily customize their ATM screens and choose their transaction set from simplified menus (requiring no knowledge of ATM states). Now Paragon and Fiserv have again collaborated on an enhanced ATM configuration tool, ConfigBuilder LX. Paragon's ConfigBuilder LX offers CAT customers more advanced ATM functionality with enhanced graphic support, the addition of language banks, support for deposit automation with check display, and additional transaction support.



"How the cardholder is presented information at the ATM is an important aspect of their interaction with their credit union," says Drew Foley, director of business development at LynxGate Solutions. "ConfigBuilder LX gives our clients the means to offer greater sophistication at the ATM and enhance their members' ATM experience."

"To have survived and thrived for 25 years in the rapidly changing technology world is a testament to the quality and success of both the Fiserv XP and LynxGate Solutions groups," says Kathy Cameron, Director of Strategic Accounts for Paragon Application Systems. "We congratulate this Fiserv team on 25 years of ATM solutions leadership and are proud of our ongoing partnership."



Another *Fiserv* Connection

## President's Message



We have an interesting variety of articles in this issue of the newsletter, four of which I'd like to briefly touch on here.

The short piece on network mandates reflects what we sometimes refer to as a "blocking and tackling" activity. Implementing periodic mandates from the various networks and card associations is not

typically considered to be one of the more "glamorous" services we offer, but that makes it no less important. In addition, the tight deadlines we always face make mandates one of our more challenging activities. We have to analyze the spec and implement it into our products in time to be useful to your developers - frequently several months before the mandate takes effect. And the entire process isn't helped by the fact that there are usually multiple iterations of any single mandate. A lot of work, but an activity that is very important to many of our customers.

Knet's licensing of our EMV software is one of a number of EMV implementation projects we've

participated in over the past few years. Having successfully used our products for several years, it was natural for them to turn to us for assistance during their EMV implementation. Our EMV knowledge and product functionality were just what they were looking for.

The scrap recycling article certainly demonstrates an application of our products that caught us by surprise. When I first glanced at the headline in the newsletter draft and saw the words "recycling" and "ATMs", I thought the ATMs themselves were being recycled. That didn't sound right, so I looked at the headline again. This time it occurred to me that perhaps it was referring to ATMs that somehow accepted recycled household items. That didn't seem right either, so I then read the entire article and it became clear. What a great use of ATMs and Paragon products!

The new "Industry Insight" articles on our web site leverage Paragon staff expertise to address various testing topics. One of Paragon's strengths is that we've worked with customers around the globe and have seen what works (and what doesn't). Check out our updated web site for new articles.

Gary Kirk  
President

## Paragon Supports Latest Network Mandates

At Paragon, we know it's important to stay current with changes in the ePayment industry so we can provide our customers with reliable solutions. That's why we regularly update our FASTest QA and regression testing software to support network mandates. Paragon recently incorporated full mandate support for the latest MasterCard, Visa, PULSE, Discover and STAR mandates in our FASTest simulators.

Card associations and processors regularly make modifications to their ePayment processing requirements to increase efficiencies in transaction processing. These can

include changes in specific transactions, adding new field values for existing bits, adding new subfields for existing fields and more. All of these modifications require testing.

Customers save time and money by verifying that they've made the appropriate changes off-line using Paragon's FASTest simulator before they conduct on-line testing with the network. Paragon supports mandates for a variety of networks around the world.

## Paragon Software Eases EMV Migration for Knet, Kuwait

To combat financial transaction fraud, many countries worldwide are adopting the EMV (Europay, MasterCard Visa) standard for Integrated Chip Cards. EMV chip cards

store financial data on a secured chip versus on the magnetic stripe. Chip cards are hard to duplicate and contain specific secure information that can't be read from the card.



Knet has used Paragon's FASTest for automated QA and regression testing since 2005. To confirm the accuracy of their EMV transactions, Knet recently licensed EMV support for FASTest. FASTest with EMV support enables Knet to validate that they are mapping the correct EMV tags, and that the cryptograms and EMV fields that are being sent are legitimate. Knet is able to create an unlimited number of virtual EMV cards, or soft cards, for testing with FASTest. Soft cards give Knet the ability to test scenarios that would block a physical EMV card.

"Member banks count on Knet to provide reliable, error free financial transaction processing," says Ms. Haifa Al-Ali, Manager of Application Development for Knet. "Paragon has provided reliable, easy-to-use testing solutions that have enabled us to improve quality and reduce our development time."

"We are delighted that Knet is able to rely on Paragon solutions to confirm the reliability of their transaction processing," says Doug Daggett, Regional Sales Director for Paragon Application Systems. "We appreciate our long-term partnership with Knet and look forward to assisting additional switches and financial institutions in the Middle East with their EMV challenges."

## Transact Payment Systems Updates Scrap Recycling Center ATMs with Paragon

With the high prices for commodities, people are turning scrap metal items into cash. If you go to a scrap recycling center, chances are good that you'll receive a ticket with a barcode for your metal and use an ATM with a bar code reader to receive payment for your goods. ATMs enable the scrap recycling centers to provide automated payments that are secure and don't rely on a cashier. Since 1998, Transact Payment Systems Inc has provided scrap recycling centers with touch screen yard management, ATMs for automated cash payments, video camera security and transaction imaging. Transact relies on Paragon's ConfigBuilder to quickly and easily develop ATM configurations with graphics and audio that are customized for specific scrap recycling centers.

"We just made major changes in our ATM configurations and Paragon provided the training and services to quickly get the new loads up and running," says Ken Gruber, President of Transact. "Our customers like the slick look of the new graphics on their ATMs and we appreciate being able to easily modify the graphics for each new customer."

"I really enjoyed working with Transact Payment Systems on this unique application for ATMs," says Cathy Gardner, Product Support Manager of Paragon Application Systems. "Most people don't expect to see ATMs in a scrap recycling center. To see them with graphics and an easy to use application for receiving payment is an added benefit for customers."



## Testing 101: Paragon Industry Insight Articles

You've heard it said that "Information is Power". That's certainly true in the rapidly changing world of ePayments. The question is: where do you get information that can help you do your job better?

Paragon has developed a series of articles designed to help you better understand how to address ePayment testing challenges. Summaries of the first three articles are listed below. To read the full articles, go to [www.paragonedge.com](http://www.paragonedge.com) and click on Industry Insights. Check our web site periodically for links to new articles and let us know what you think! Send any comments or ideas on topics that you'd like us to address to [marketing@paragonedge.com](mailto:marketing@paragonedge.com).

### ***Managing Financial Network Mandate Testing***

An old adage says "Nothing is certain but death and taxes," but for testers in the financial industry, network mandates are just as inevitable—however, they need not be as unwelcome. Careful planning can make creating test plans for network mandates more efficient and less stressful.

### ***Playing the Numbers: Assigning EFT Testing Priorities***

No organization can test everything. So how do you make intelligent decisions about which tests to include in your EFT regression testing? How do you create a test plan that makes the most of your test resources? This article offers one approach to categorizing and prioritizing your regression testing of electronic payments.

### ***10 Steps Toward Better Black Box Testing***

Black box testing of financial transactions—that is, testing system input and output without examining the internal workings of the code—may seem mundane and simplistic to some people in your organization. However, when financial transaction testing focuses only on whether or not a product works "correctly" after a change is made, this testing has failed to address one of the most important aspects of black box testing: verifying that the change makes sense to your users.

## Paragon Product Update Webinar

This spring Paragon conducted a webinar to bring customers up to speed on several new developments in Paragon software and services. More than 80 customers attended the webinar and learned about:

- Paragon's new FileGen product which enables you to turn FASTest log files into batch files for settlement and more.
- More powerful scripting capabilities in FASTest to better track cardholder information including card balances.
- Web FASTest enhancements
- Support for Rear Balancing and enhanced Wincor support in ATMulator Plus
- Paragon's new software licensing keys designed to secure Paragon software.

Jim Perry, Vice President of Sales and Marketing, Cathy Gardner, Product Support Manager, and Eric Nicholson, Lead Engineer for Emerging Technologies presented the hour-long webinar. For a link to the presentation, e-mail [marketing@paragonedge.com](mailto:marketing@paragonedge.com).

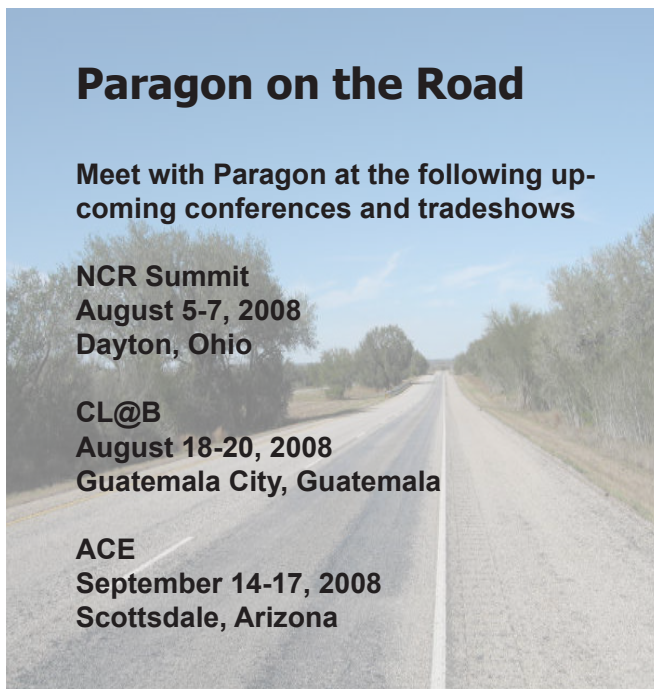
## Paragon on the Road

Meet with Paragon at the following upcoming conferences and tradeshows

NCR Summit  
August 5-7, 2008  
Dayton, Ohio

CL@B  
August 18-20, 2008  
Guatemala City, Guatemala

ACE  
September 14-17, 2008  
Scottsdale, Arizona

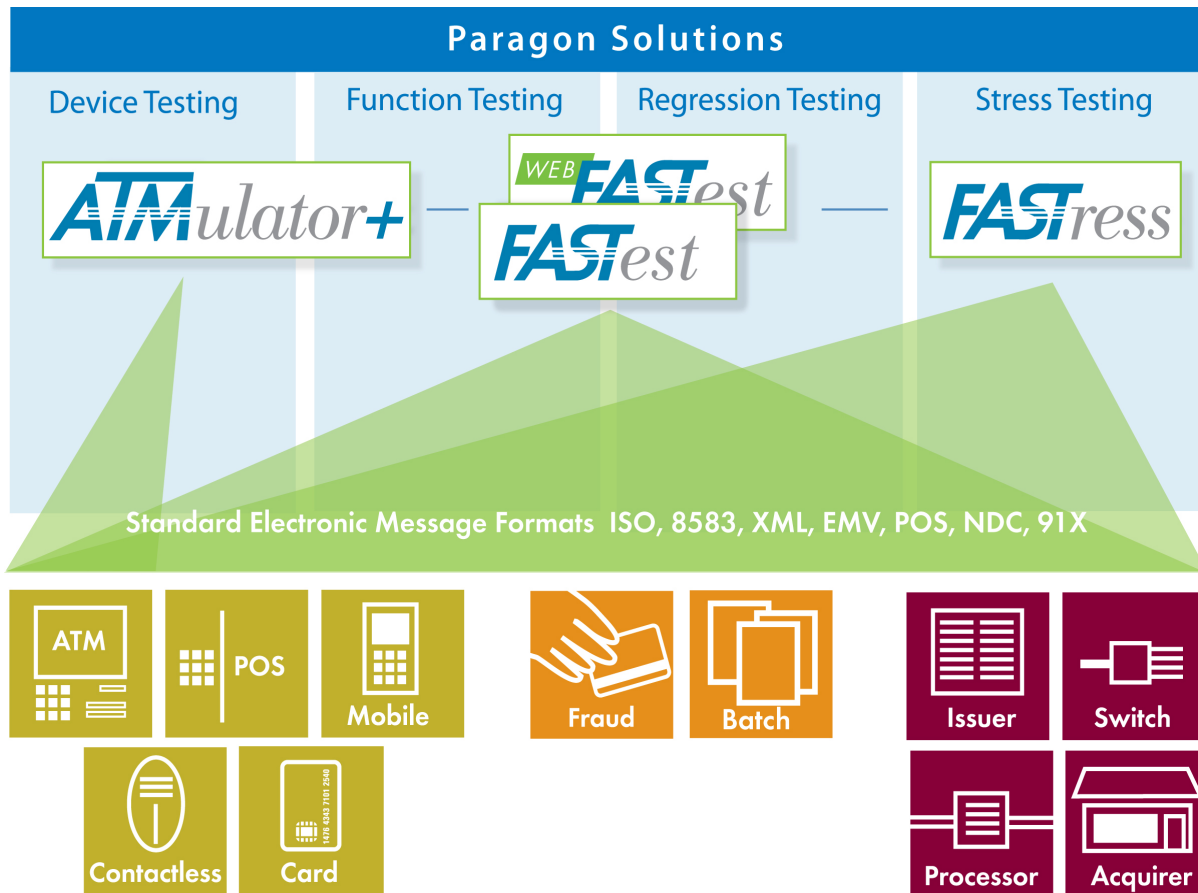


# What's

# NEW

## Paragon Web Site Updates and New Product Graphic

Interested in more information about testing? Would you like to know which Paragon products can help you solve business challenges? Check out our web site updates at [www.paragonedge.com](http://www.paragonedge.com) to view our new Industry Insight articles and interactive product graphic.



## Paragon Employees Enhance Testing Expertise

Four Paragon employees: Peggy Diedrich, Becky Dunn, Wynn Lam and Lynn Tjepkema; have earned their International Software Testing Qualifications Board (ISTQB) professional testing certification. Diedrich, Dunn, Lam and Tjepkema demonstrated proficiency based on internationally agreed upon standards for software testing.

Recognizing the need for international testing standards, the ISTQB was established in 2002 to develop and maintain a universally accepted testing qualification and accreditation program for software and system testing professionals. More than 38 countries are represented in the organization.

The ISTQB certification enhances Paragon's ability to bring proven, internationally recognized testing methodologies to customers and to develop targeted solutions that address their specific ePayment testing needs.

"It's extremely important that we continually upgrade our testing knowledge and skills in order to continue to provide comprehensive testing solutions to our customers," says Gary Kirk, President of Paragon Application Systems. "Formal certification from established organizations such as ISTQB is a key part of that process."