



# ASTREX FOR ISSUERS

ASTREX is a comprehensive, end-to-end card payment simulation platform which runs on a standard Windows PC.

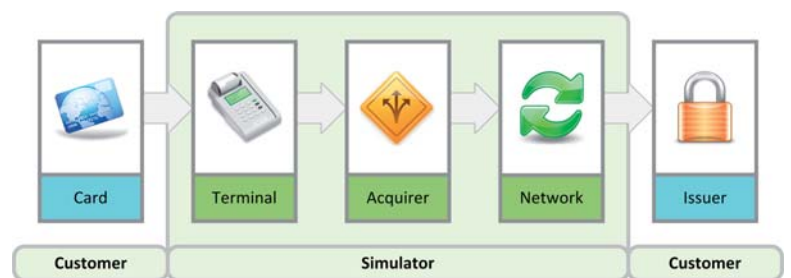
ASTREX provides you with an holistic view of your payment environment, and helps you to create an exhaustive testing regime which can be implemented easily and rapidly.

ASTREX allows you to implement an integrated, repeatable test strategy for your issuing host which includes cardholder scenarios from both real and virtual cards, as well as any POS or ATM device.

## Issuer Testing

Your issuing host is one of the most critical components in your organization. You need to ensure that it fully supports rapidly evolving payment products and services, while maintaining multiple levels of card, network and scheme compliance.

A comprehensive test strategy helps you to publish your releases sooner, and to a higher quality, ensuring that you can maintain your market advantage. ASTREX creates and sustains this testing strategy.



### Testing Requirements

- Test pre-production plastics against your issuer host
- Validate host cryptography without cards or terminals
- Test your plastics in any simulated terminal with our fully-configurable EMV kernel
- Test end-to-end transactions without terminals, networks or processing partners
- Carry out system and network stress tests
- Do all of this from a single PC!

## Benefits

- » **Speed!** ASTREX uses a production-switch architecture which provides you with the speed and performance of a real-time transaction processing system.
- » **Flexibility!** ASTREX decouples protocols from test cases, allowing you to run the same test cases over multiple interfaces.
- » **Up to date!** ASTREX is always up to date with the latest network and scheme compliance requirements.
- » **Modular!** ASTREX supports multiple interfaces simultaneously, allowing you to emulate the most complex acquiring configurations with ease.

## Features

ASTREX simulates every component in a card payment network, starting from the card and terminal up through to the merchant, acquirer, network and issuer.

It provides you with a comprehensive testing environment that can be leveraged throughout your product and project lifecycle, from development through to test, certification and ongoing support.

With unparalleled audit and diagnostic output capability, analysis of the most complex problems can be carried out with ease, accelerating your support and development response times

By allowing you to develop a regression database, ASTREX can help you define a framework of transactions which comprehensively exercises the reliability and resilience of your issuer and payment network.

In addition to positive testing, ASTREX also lets you perform a wide range of negative and boundary condition testing.

And for when things heat up, ASTREX can emulate the traffic from tens or hundreds or thousands of POS and ATM devices, allowing you to ensure that your network stays up when it's earning you the most.

## Acquirer Systems

Founded in 1997, Acquirer Systems provides leading-edge software, services and consultancy encompassing all areas of payments processing. We operate from board-level decision-making and recommendation, through to system development, testing, implementation and roll-out.

With experience in over twenty countries worldwide, our products, services and consultancy cover the following areas:

- » Payment systems testing and certification
- » Staff training and development strategies
- » Evaluation of secure payment technologies
- » Advice on reducing transaction processing charges
- » Development and execution of system stress tests
- » Management of payment systems
- » Outsourcing of payment testing and certification services
- » Acquiring and issuing host system analysis

In any areas related to the testing, capture and processing of electronic payments, Acquirer Systems can help you to run your business more effectively.

» [www.acquirer.com](http://www.acquirer.com)

## Frequently Asked Questions

### Do you support Triple DES?

**Yes!** We support both single and triple DES with single and double-length keys.

### And online PIN and MAC'ing?

**Yes!** We support a variety of common online PIN block formats, as well as all of the common MAC algorithms.

### And EMV?

**Yes!** We support EMV data in Data Element 55 and in the third bitmap, where that's possible. We can also emulate transactions from Visa VSDC, MasterCard M/Chip, American Express Sparky and JCB cards.

### What about ISO 8583?

**Yes!** We currently support around twenty different ISO 8583 formats, ranging from common ones such as those from Visa, MasterCard and American Express, through to private implementations for specific customers. Contact us for details and we'll be happy to talk you through what we have.

### Can I use real cards?

**Yes!** ASTREX has its own EMV level-two kernel which can emulate both contact and contactless devices.

### Do I need additional hardware?

**No!** ASTREX can emulate the transaction processing capabilities of any card payment terminal, and does not need to connect to a HSM or other security device.

### How do I connect up?

The simulator supports TCP/IP and regular modems and serial communications devices, and we can deliver any protocol over any transport. Where it's appropriate we also support multiple connections and round-robin delivery. We've designed the software to be easy to install and configure, so that from a standing start at a clean PC, we can usually deliver our first transaction in under thirty minutes.

### Can I stress test my host?

**Yes!** Depending on the protocol and the content, we can deliver transactions at up to 150 TPS per simulator node, each transaction containing unique cryptographic content. On the issuer side, we can authorize transactions at speeds of up to 100 TPS.

### What standards do you support?

We support Visa's VSDC and Wave, together with MasterCard's M/Chip and PayPass programs.

## Contact Details

For further information, please contact:

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