

ASTREX

Overview of ASTREX

ASTREX provides the industry with a powerful testing platform. It can simulate numerous transaction types and components in the payments chain and provides the functions needed to validate the complete end-to-end production environment.

Whether you are an issuer, acquirer, merchant, terminal vendor or third-party payment service provider, a next-generation test and validation environment can help you get ahead of the competition.

Benefits

The twin market forces of continuous technology innovation and relentless consumer demand create a dynamic and ever-evolving payments landscape.

To maintain a consistent and positive customer experience, you must keep pace with an ever-increasing array of new technologies and standards.

You can make ASTREX the single test environment available to every participant in your product development life cycle.

ASTREX helps reduce implementation costs and delivery risks while improving card and payment product quality and boosting your speed to market.



Features

- Enterprise deployment – Simulate a complete, real-time end-to-end payment environment.
- High-performance architecture – Simultaneous processing of multiple transactions over multiple connections at production speeds.
- Protocol-independent design – Easy-to-use transaction builder to create test cases without scripts or coding expertise.
- Standards and compliance – Full card scheme road map support.
- Full transaction audit – Detailed transaction analysis and logging.

Key benefits

- **Replicate your production payments environment**
ASTREX emulates the complete end-to-end payment chain.
- **Build competitive advantage and reduce customer churn**
Getting your product to market faster may gain you a competitive advantage and create a positive experience for your customers.
- **Dramatically reduce implementation costs**
With ASTREX available at every stage of development, some customers have reported up to 80% fewer problems at go-live.
- **Get new products to your customers faster**
Some customers have reported a 20-fold increase in running test scenarios while cutting the overall testing schedule by half. Perform full system regression tests in hours instead of days.
- **Make every system change simpler**
With ASTREX in place as a real-time test environment, every system change becomes simpler, which may result in reduced cost and risk deploying new payment technologies, systems migrations and ongoing compliance.
- **Gain an accessible enterprise-wide environment**
Your entire product team and third-party integrators can work concurrently on a single test platform.

Specifications

Enterprise deployment

- A single platform available across your enterprise that replicates the entire merchant-acquirer-network-issuer chain.
- Familiar workspace and common interface for development, implementation and testing teams.
- Access for vendors and integrators.
- Deployable as an acquiring switch

High-performance architecture

- One of the fastest payment simulation engines on the market.
- Simultaneous processing of multiple transactions over multiple connections at production speeds.
- Concurrent multi-protocol processing.

Protocol-independent design

- Create test cases without scripts or coding expertise using standard transaction components.
- No need to know anything about message formats, data element definitions or encoding.
- Reuse the same test data to validate different payment protocols.
- Supports ISO 8583, XML, JSON and field-separated protocols in one setup.

Standards and compliance

- More than 100 international and domestic message protocols.
- Approved host simulator for terminal brand validation.
- Certified host simulator for Diners, Discover, Pulse, Visa; qualified host simulator for AMEX.
- Host simulator for self-certification with Master Card.
- Test host simulator for DNA, Interac and UPI.
- Full card scheme road map support.

Full transaction audit

- Detailed transaction analysis and logging.
- Test case validation and reporting.

Other functional specifications

- Support for EMV Level 3 processing, including M/Chip, VSDC, AEIPS, DPAS, CCD, UnionPay, JCB and Interac.
- HSM simulation.
- Terminal simulation – can take physical cards as input.
- Supports stress-testing.
- Supports clearing file generation and comparison.
- Full internal card management system.
- Capable for heavy loads.
- Checkpoints module – automatic validations for brand and in-house testing.

For more information, visit [UL.com/astrex](https://ul.com/astrex).



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