# **KaNest®**



# **Transactional Testing**

The KaNest® simulator offers capabilities to perform and automate all tests of a transactional system to validate the conformance with specifications, an application protocol, standards of performance, business requirements or regulations.

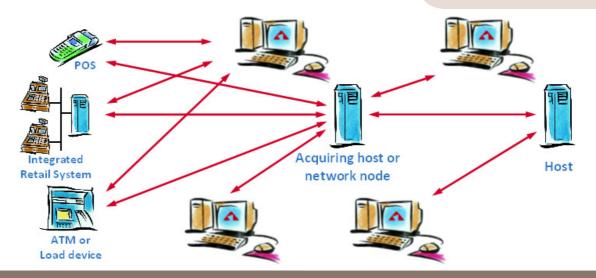
KaNest® addresses all test purposes:

- unit tests;
- functional validation;
- · regression testing;
- stress and load testing;
- test automation;
- production system monitoring.

KaNest® is your best partner to test, evaluate and certify Terminals, Hosts, Switches or Networks, as well as Mobiles.

# Key features

- Test automation
- Replay of message flow
- Any transactional protocol (TLV, ISO 8583, XML...)
- Multiple simulation channels
- Full cryptography
- Messages initiated from real cards
- Remote control
- Interface with HP Quality Center software
- Interface with Test Designer<sup>™</sup> from Smartesting
- Running tests from an Internet navigator (KaNest®-Web)



## **Galitt Advantage**

KaNest® is recognized as the state-of-the-art simulator for functional testing:

- KaNest® is used by designers, payment systems and card schemes to validate POS, hosts, interfaces to networks.
- KaNest® may simulate any kind of protocol to test a wide set of transactional systems, including stock exchanges and betting systems. Protocols can be directly created and modified by users.
- KaNest® may perform load and stress testing from a single PC, such as the simulation of 6,000 ATMs or the production of a flow of 900 payment transactions per second.
- The same KaNest® simulator can be set up to perfect the monitoring of production hosts.



### **TEST SUITES**

- Responder Hosts for Acquirers E2E testing (Level 3) (American Express, DISCOVER, Diners, MasterCard, Visa...) confirmed by Visa qualified by DISCOVER and Diners
- DISCOVER and Diners for Issuers and Acquirers
   qualified by DISCOVER and Diners
- CBAE, CBcom, CB2A...
- OSCar for Acquirers
- qualified Phase 1 & 2GlobalPlatform TEE
- qualified by GlobalPlatform
   GlobalPlatform OMAPI (Open Mobile API) qualified by GlobalPlatform
- GlobalPlatform SEAC Device qualified by GlobalPlatform



## Some KaNest® FEATURES

### Repository edition

The KN-E module generates or updates a Repository to implement protocol specifications and create new control and simulation capabilities.

## Test as a Service (TaaS)

KaNest®-Web is a Web server enabling the user to execute Test Suites from the Cloud.

## Remote control

The KN-D module provides an API allowing any Windows™ application to launch test scripts and collect selected results from the simulator. A fully automated test platform can thus be created.

### LOAD & STRESS TESTING

#### **TURBO Mode**

This mode consists in using a specific KaNest® communication driver for a given protocol. This driver generates a huge throughput of messages per second based on real data.

## KaNest®-Director

It can drive many KaNest® independently to generate heavy loads on the System Under Test (SUT) and check its behaviour. The load can be adjusted to reproduce the real world.

## KaNest® UTILITIES

# Centralized management of licenses

KaNest®-DSS gives the capability to centrally manage licenses, KaNest® databases as well as users:

- license sharing;
- management of user rights;
- KaNest® database sharing and management;
- broadcasting of KaNest® software updates.

### **Test automation**

KaNest®-Supervisor is dedicated to centrally drive and supervise all interactions with the System Under Test.
KaNest®-Supervisor enables to fully automate a test campaign without manual management.

# INTEGRATION WITH EXTERNAL TOOLS

Optionally combined with KaNest®-Supervisor, the integration of KaNest® with other tools from the market leads an unequalled testing automation.

## **HP Quality Center (ALM)**

This module enables to drive KaNest® from HP Quality Center software. KaNest® workspaces for acceptance processes can also be updated with data from HP Quality Center software.

## **Test Designer™ (Smartesting)**

KaNest® Test Scripts can be generated from Test Designer $^{\text{TM}}$  in accordance with the requirements built from the modeling of the system to be tested.

# **Technical specifications**

#### **Tested Functions**

Protocol application layers for:

- POS, Integrated retail systems
- ATMs
- · Acquiring and Issuer hosts
- Switches and Network nodes
- Transaction processors

#### **Communications**

- Web-Services
- TCP/IP
- PSTN (modems)
- Null Modem (RS232 cable)
- X25
- SSL
- RFC 1086
- M/Q Series

#### **Formats**

- ISO 8583 bitmaps
- TLV (Tag Length Value) Fields
- Fixed and delimited fields
- XML

# **Repositories (Protocols)**

- Networks: ISO 8583, CBAE, Base I & SMS, MAS & MDS, AEGNS, DCI, DISCOVER, Trionis, Berlin Group, BASE24, CUP, LINK, BIM, SID...
- ATM: NDC+, D912, Logigab, Diego, GAB-D, COX, DIAS...
- POS: CB2A, C-TAP, SPDH, Hypercom, APACS, PRICE, proprietary...
- XML: EPAS, IFX, OSCar
- Mobile: GlobalPlatform TEE APIs
- Private implementations

## **Hardware Configuration**

Single PC (4 GHz or above)

- Windows™ 7 SP1
- Windows<sup>™</sup> 8
- 32 bit or 64 bit