

Card Simulator

KaNest®-ICC

With KaNest®-ICC, Galitt provides a card simulator to check the compliance of card acceptance systems (“Level 2 and Level 3 testing”) based on ISO 7816 (smart card) & ISO 14443 (contactless card) standards.

KaNest®-ICC and its Test Suites are used to debug, evaluate and/or validate the acceptance devices:

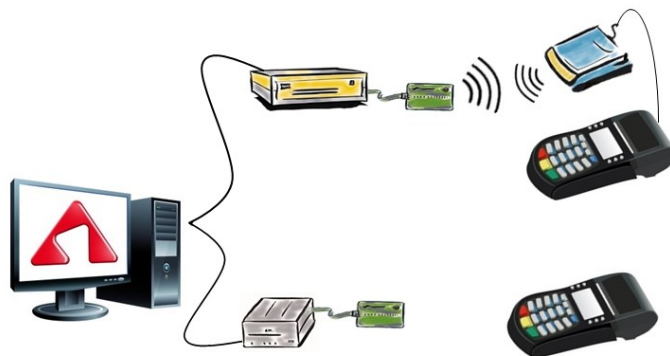
- POS terminal;
- ATMs;
- ...

based on card standards (EMV, Entry Point, Mastercard Contactless, VCPS, D-PAS, AEIPS, Expresspay...).

KaNest®-ICC gives the ability to perform End-to-End integration testing (“Level 3 testing”) when combined with KaNest®, the Host Simulator from Galitt.

KEY FEATURES

- Simulator of smart cards and contactless cards
- Full multi-application simulation
- Off-the-shelf recognized Test Suites
- Automatic mechanism for test selection
- Automated diagnoses
- Easy settings
- Flexible and fast analysis of test results
- Spy function
- Automation capabilities & remote control
- Option to be combined with a Host Simulator
- Easy to use in End-to-End integration testing



GALITT ADVANTAGE

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

- KaNest®-ICC EMV Level 2 Terminal Test Suites are qualified by EMVCo and used by EMVCo accredited laboratories for evaluating EMV compliant devices.
- Numerous KaNest®-ICC Test Suites have been “confirmed” or “qualified” by payment schemes (American Express, Discover® Global Network, Mastercard, Visa, JCB, nexo...) as “capable of supporting the Test Cases” they have defined.
- The Tester View allows test automation and time saving. It provides several results views ranging from an overall summary of the test campaign to an in-depth analysis of the transaction flow.
- Tests can be performed through a physical probe or through a virtual probe to ease debugging and regression testing; testing execution can be thus fully automated.



LEVEL 2 TEST SUITES

American Express

- Expresspay v3 et v4 **qualified**

Discover® Global Network

- D-PAS Contactless **qualified**

EMVCo

- EMV Level 2 **qualified**
- EMV Entry Point Level 2 **qualified**
- Kernel 2 (Mastercard) **qualified**
- Kernel 3 (Visa) **confirmed**
- Kernel 3 for Online ODA (Visa)
- Kernel 4 (American Express) **qualified**
- Kernel 6 (DGN)

INTERAC

- Interac Contacts & Interac For US KaSYS Canada has been **approved** by INTERAC as a test tool vendor

Mastercard

- Contactless v3 **qualified**

nexo

- nexo POI **qualified**

Visa

- MSD & qVSDC (VCPS 2.1.x) **confirmed**
- VCPS 2.2x **confirmed**
- VCPS 2.2x ART **confirmed**
- VOQOS **confirmed**

KaNest®-ICC

- KaNest®-ICC simulates nominal and unexpected behavior of contact and contactless cards for testing any card acceptance system and verifying the conformance.
- The simulator relies on the ICC-S module simulating ISO 7816 smart cards (T=0 or T=1 protocol) or ISO 14443 contactless cards (Type A or B).

AUTOMATION

Tests are automated through an easy-to-use interface ("Tester View") or performed in a step-by-step mode ("Engineering View").

All Test Suites include an automatic test selection as well as logging and reporting features.

LEVEL 3 TESTING

EMV® L3 Testing Platform : KaNest®-L3 solution

- L3 Card Simulator **qualified**
- L3 test Tool **qualified**
- L3 TSE development ongoing

Legacy Level 3 E2E Test Suites

American Express

- AEIPS E2E **qualified**
- Expresspay E2E **qualified**
- Contactless Pre-tap

Discover® Global Network

- DN E2E (D-PAS Contact & Contactless, including US extensions) **qualified**
- PULSE E2E **qualified**
- DCI E2E (D-PAS Contact & Contactless) **qualified**

Mastercard

- M-TIP
- M-TIP US Maestro Contact
- PayPass™ M-TIP Subset 6
- PayPass™ M-TIP Subset 8
- M-TIP US Maestro Contactless
- Mastercard Fleet AFD **all qualified**

nexo

- nexo POI **qualified**

UPI

- UPI QuickPass Level 3

Visa

- ADVT (including US and Fleet extensions) **confirmed**
- CDET (including US extensions) **confirmed**

OPTIONS

- Card-terminal dialog spying combined with a probe device. **Reading and capture of physical cards** combined with a card reader (ICC-A module).
- Creation of virtual test card sets (ICC-I module) by keying card data or capturing cards.
- Edition of rules and formats used to simulate card-terminal exchanges (ICC-E module).
- Remote driving of the simulator and automation through a Windows™ application (ICC-D module).
- Integration with HPE ALM

TECHNICAL SPECIFICATIONS

Tested Functions

- Application layer ("Level 2 & 3") for
- Contact and contactless acceptance devices
- Multi-applications

Probes

- Simcos® 2 (Galitt)**
- For contact only
- Supporting T=0 and T=1
- NomadLAB (KEOLABS)**
- For contact & contactless
- Supporting T=0 and T=1
- Supporting Type A and B
- X-CORE T Series (SMARTWARE)**
- For contact & contactless
- Supporting T=0 and T=1
- Supporting Type A and B
- ContactLAB (KEOLABS)**
- For contact Single Wire Protocol (SWP) only
- Virtual TCP/IP probe**

Repositories

- EMV
- VIS VSDC
- M/Chip
- AEIPS
- Expressway
- TCI
- D-PAS
- nexo
- CB-EMV
- INTERAC
- VCPS 2.1.x et 2.2x
- Mastercard Contactless

Hardware Configuration

- Monitor SXGA (1280x1024)
- 4 GB RAM (recommended)
- At least available 4 GB on the diver
- A USB port to connect the license key (dongle)

Operating System Configuration

- Windows™ 7 32 bits SP1
- Windows™ 7 64 bits SP1
- Windows™ Server 2008 R2
- Windows™ 8
- Windows™ Server 2012
- Windows™ 10 64bits