Collis Test Tools

Collis EMV Personalization Validation Tool

Who is it for?

Collis EMV Personalization Validation Tool (Collis EMV PVT) is the most thorough and comprehensive test tool for Issuers, Card Personalization Bureaus and Card Manufacturers that want to validate the personalization of their contact/contactless payment cards and mobile payment applications.

Why do you need it?

Collis EMV PVT assists you in testing your EMV payment products according to mandatory card personalization regulations from the major payment associations.

With just one click of a button, you can store, validate, retrieve, and examine all personalization data of EMV smart card applications such as chip, magnetic stripe, embossing data, asymmetric keys and PIN.

With Collis EMV PVT, you easily check the correctness of the personalization of any EMV card application according to the latest (test) specifications from EMVCo, MasterCard, Visa, JCB, Discover, Union Pay and others.

What is inside?

The Explorer functionality lets you view all personalization data on your EMV Card and provides detailed explanation.

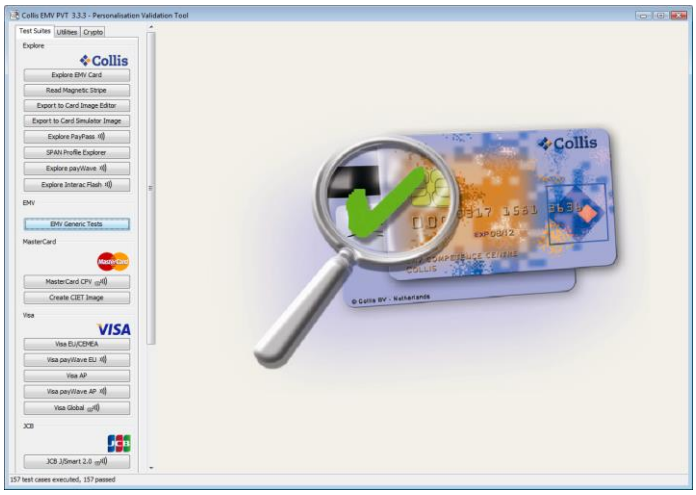
The Validation functionality checks the correctness of you card application personalization and provides full, readable reports including explanations of errors and observations found. Collis EMV PVT validates card personalization profiles for all major payment schemes:

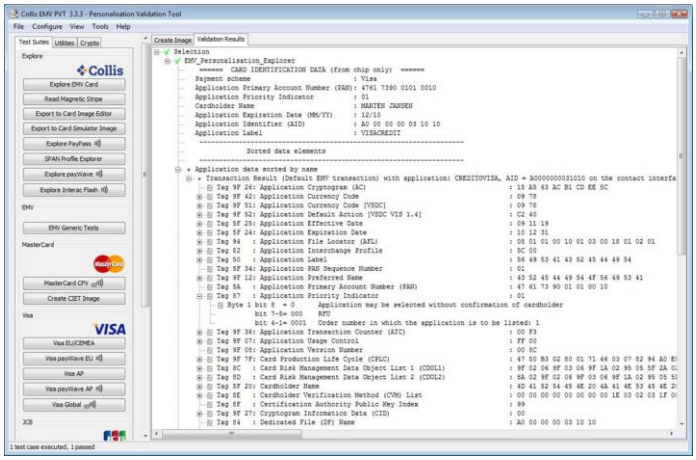
- MasterCard CPV
- Visa
- JCB
- Discover & Diners Club
- American Express
- UnionPay

The tool has been developed in close cooperation with VISA, MasterCard and JCB. It is officially confirmed and used by Visa and JCB. It is also the first tool officially qualified as a MasterCard Card Personalization Validation (CPV) Testing Tool to prepare the formal certification.

Special modules available are:

- Collis Utilities and Cryptography Module
- Domestic validation modules, e.g. SPAN, Interac Flash





Key benefits

- Fully covered and up-to-date with relevant test specifications
- Supporting MasterCard CPV, Visa payWave, JCB J/Smart, Discover, Diners, UnionPay and more
- Browse through all EMV data elements with explanation
- Simplifying quality control in personalization

Collis EMV PVT

Specifications

Validation modules available:

- CPV module for MasterCard (incl. Maestro, Cirrus, *PayPass* and CAP)
- VISA validation module (incl. Credit, Debit, DPA, VPAY, payWave for EU and Visa Global Test Specification for other regions)
- JCB validation module (incl. J/Smart, J/Speedy)
- Discover and Diners validation module
- UnionPay validation module
- Domestic validation modules; SPAN, Interac Flash

Collis EMV PVT supports validation of card profiles generated using MasterCard's M/Chip Advance Profile Generator.

Collis EMV PVT's **Core module includes**:

- AC, MAC, and ENC keys check using plain text test keys
- SDA / DDA and fDDA Offline
- EMV Generic and Template Checking
- Data Authentication

The optional **Utilities and Cryptography module** includes:

- AC, MAC, ENC keys check using HSM coupling for production keys
- Offline Data Authentication (SDA /DDA/CDA)
- MasterCard *PayPass*™ / Visa payWave checksum and cryptogram checking (dCVV /CVC3)
- CVV / CVC checking

Security and Audit Logging:

- Data Security Configuration options, including: PAN Masking in test suites, Do not store Card Images
- User Access Control: PVT Administrator and PVT Users
- Generate Audit Log option: the tool logs all tests performed in a separate CSV-formatted file for the purpose of tracing your test run history

Test specifications supported:

Collis EMV PVT is continuously kept up to date with the latest test specifications from the payment schemes. If the test specification you are looking for is not listed here yet, the Collis EMV PVT's latest release may very well cover it already. Please contact us for additional information at info@ul-ts.com.

- Collis - Generic tests specified by UL
  - EMV Generic Test Specification, v2.7 based on EMV Integrated Circuit Card Specifications for Payment Systems, version 4.3, November 2011
- MasterCard
  - MasterCard CPV: Personalization Validation Tool Requirements v7.2
- Visa
  - Visa US: U.S. Personalization Validation Requirements, v1.0, January 2014
  - Visa Europe: Visa Europe Addendum to GPR, v1.2
  - Visa Global: Visa Global Test Suite v2.1.1
- JCB
  - JCB J/Smart 2.0: JCB J/Smart Test Cases for Contact ver. 0.2, JCB J/Smart Test Cases for Contactless ver. 0.2
- Discover
  - D-PAS Chip Card Personalization Validation Rules, Version 1.0, March 2010
- American Express - Tests specified by UL
  - American Express Test Specification, v1.0
- UnionPay - Tests specified by UL
  - UnionPay Test Specification, v1.0

Hardware

- PC/SC Contact and Contactless Chip Reader
- MagTek Intellistripe 350 Card Reader (for reading both MagStripe and chip)

Technical Support

To ensure that you can effectively use the tool and gain the maximum benefits, UL offers for tools a Service Contract that gives you access to our Technical Support services. Our experienced technical team is available to provide support, advice and guidance.

The following services are covered

- New releases
- Helpdesk support
- Bug fixes
- Instant hardware replacement

You can access these services through the MyCollis service site at www.mycollis.com.

Collis and Aspects test tools are developed by UL's Transaction Security division. For your sales enquiries, please contact us at info@ul-ts.com, visit www.ul-ts.com, or contact one of our resellers.