



Issued January 2019

# UL CLOUD-BASED PAYMENTS FUNCTIONAL TEST SUITES

## Who is it for?

UL Cloud-based Payment Functional Test Suites are a complete set of test suites for mobile payment application developers, card issuers, test labs and anyone that wants to test payment card implementations based on HCE and cloud-based specifications from the major payment schemes.

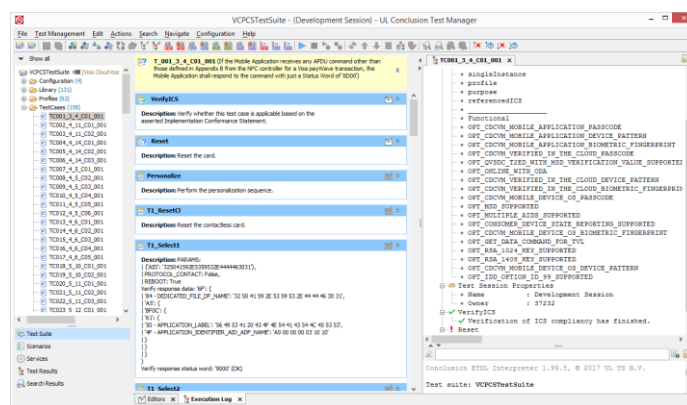
## Why do you need it?

The UL Cloud-based Payment Functional Test Suites are the perfect tool for testing your payment applications implemented as a mobile device application against payment scheme specifications. The test suites help you in pre-certification and, if allowed by the payment schemes, can be used for self-certification purposes.

## What is inside?

At present, the payment schemes develop cloud-based payment product specifications according to their specific business requirements and targeted markets. For this reason, each payment scheme separately publishes their specifications and implements certification procedures.

UL offers test suites to test the compliance of your cloud-based payment applications based on the Visa, Mastercard, Discover and American Express specifications.



## Key benefits

- Suitable for pre-certification and self-certification (when allowed by the schemes)
- Fully automated test execution
- Clear and easily understandable issue reporting
- Qualified and up-to-date with the latest payment scheme specifications
- Backed by UL's extensive expertise in payment and mobile compliance test tools
- Ensure high level of compliance and interoperability
- Integrated with state-of-the-art UL Conclusion Test Manager

# UL CLOUD-BASED PAYMENTS FUNCTIONAL TEST SUITES

## Specifications

### UL American Express HCE Functional Test Suite

- Officially qualified by American Express.
- Coverage of American Express' specifications for Expresspay Mobile HCE applications to obtain global interoperability for mobile payment applications.
- Testing of an Expresspay Mobile HCE application installed on an NFC-enabled mobile device using a contactless reader.
- Detailed analysis of all APDU-level communication with interpretation of the data elements involved.
- Pre-certification of your Expresspay Mobile HCE application to prepare for approval by American Express.
- Used by accredited laboratories to perform functional certification of cloud-based payment solutions.

### UL Cloud-based Payments Functional Test Suite for Mastercard MCBP

- An official Mastercard qualified MPA Test Tool, suitable for MPA self-testing by issuers.
- Coverage of Mastercard's specifications for MasterCard Cloud-based Payments to obtain global interoperability for mobile payment applications.
- Testing of a Mastercard Cloud-based Payments compatible application installed on an NFC-enabled mobile device using a contactless reader.
- Includes testing for Transaction Performance measurement.
- Detailed analysis of all APDU-level communication with interpretation of the data elements involved.
- Pre-certification of your Mastercard mobile payment application to prepare for approval by Mastercard.

### UL Discover Cloud-based Functional Test Suite

- Officially qualified by Discover.
- Coverage of Discover's specifications for Discover Cloud Payment (DCP) applications to obtain global interoperability for mobile payment applications
- Testing of a DCP application installed on an NFC-enabled mobile device using a contactless reader
- Detailed analysis of all APDU-level communication with interpretation of the data elements involved.
- Pre-certification of your Discover Cloud Payment application to prepare for approval by Discover
- Used by accredited laboratories to perform functional certification of cloud-based payment solutions.

### UL Visa Cloud-based Functional Test Suite

- Formally validated by Visa.
- Coverage of Visa's test plan for VCPCS to obtain global interoperability for mobile payment applications.
- Testing of a VCPCS compatible application installed on an NFC-enabled mobile device using a contactless reader.
- Different personalization options:
  - o Proprietary JSON based personalization sequence as defined by the Visa test plan.
  - o Specification of a batch file triggering your own personalization sequence.
  - o Proprietary personalization of the system under test (SUT) before execution of every test case.
- Detailed analysis of all APDU-level communication with interpretation of the data elements involved.
- Pre-certification of your Visa payWave payment application to prepare for approval by Visa International.

## UL Conclusion Test Manager

The UL Cloud-based Payment Functional Test Suites run on UL Conclusion Test Manager (CTM). CTM is a user-friendly test management application consisting of a test engine with the ability to create and send messages in many variations via (several) interfaces to the system under test. A cutting-edge test management system to manage the test process providing flexibility in configuring the test execution and reporting results.



For your sales enquiries, please contact us at [insecurity@ul.com](mailto:insecurity@ul.com), visit [ims.ul.com](http://ims.ul.com), or contact one of our resellers.

All rights reserved. It is not allowed to multiply, electronically save or publish (parts of) this document, in any form or manner (electronically, mechanically, photocopy etc.) without written approval in advance from UL. UL, the UL logo and the UL certification mark are trademarks of UL LLC © 2019