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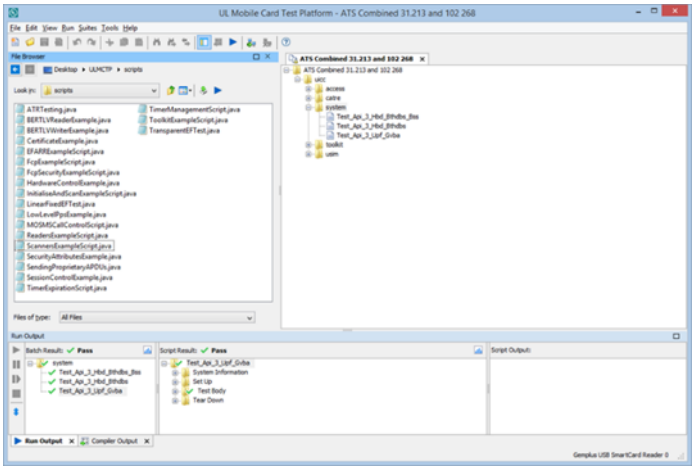
UL MOBILE CARD TEST PLATFORM

Who is it for?
UL Mobile Card Test Platform is the most advanced test tool for any UICC, eUICC, USIM, and SIM application developer or tester that wants to have a stable environment in which repeatable tests can be performed.

Why do you need it?
With UL Mobile Card Test Platform, you can test your UICC, eUICC, USIM or SIM under development by simulating a mobile phone or M2M device. The simulation's behavior can be controlled and predicted. UL Mobile Card Test Platform enables you to check whether a card responds as specified and expected in all possible scenarios before releasing it.

What is inside?
The UL Mobile Card Test Platform offers you a means to simulate a mobile phone or a GSMA Subscription Manager and M2M device. It enables writing test scripts, running these scripts and creating clear and concise test certificates to provide a reliable audit trail.

UL also offers UL Mobile Card Test Suites. These off-the-shelf, stand-alone card test suites are an efficient way of validating a card against the relevant 3GPP specifications. Apart from that UL offers the UL Remote Android Reader, which is an Android application that allows UICC card content or eUICC profiles to be read and verified when the UICC card or eUICC is inaccessible or physically embedded in the device.



Key benefits

- Powerful and flexible scripting abilities
- Off-the shelf, fully automated test suites
- Quickly reject or accepts new cards
- Batch scripts to streamline testing
- Use with UL Mobile Spy for fast debugging
- Easy-to-Use Interface
- Ability to share exported test certificates with other interested parties using free UL Mobile Log Viewer
- Support for eUICC profile management and testing via SCP03, SCP80 and SCP81

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Specifications

Supported features

- User-friendly GUI to write, compile and run scripts
- Real time view of file system (Select, Read, Update)
- The file system or I/O stream (translated or un-translated)
- Easy-to-read certificates that can be saved and shared
- Convenient reports and details of the last run test
- To develop your own test scripts and test suites, UL Mobile Card Test Platform supports these Application Programming Interfaces (API):
  - 3G API
  - GSM API
  - SWP API
  - GlobalPlatform API

APIs (application Programming Interface)

- Comprehensive APIs written in JavaTM.
- Even suitable for those with limited scripting experience.
- Incorporates a simple Integrated Development Environment (IDE) that can be linked to your favored IDE.

JAVA Scripting API

The scripting API includes methods for:

- All 3GPP TS 31.102 3GPP 31.111 and ETSI 102 221 commands
- All 3GPP TS 51.011, 3GPP TS 51.014 and ETSI 102 221 commands
- GlobalPlatform v2.2 including support for:
  - SCP02 and SCP03
  - AES and ECC authorization tokens
  - RSA variant 2 authorization tokens
  - DAP signatures
- Analyzing responses
- Verifying status words
- Recording test results
- Supports SWP/HCI

Industry specifications supported

ETSI TS

- 102 221, “Smart Cards; UICC-Terminal Interface; Physical and Logical Characteristics”
- 102 223, “Smart Cards; Card Application Toolkit”

ETSI TS for SWP

- ETSI TS 102 613: “Smart Cards; UICC - Contactless Front-end (CLF) Interface; Part 1: Physical and data link layer characteristics”
- ETSI TS 102 622: “Smart Cards; UICC - Contactless Front-end (CLF) Interface; Host Controller Interface (HCI)”

3GPP TS for GSM

- 51.011, “Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) Interface”
- 51.014, “Specification of the SIM Application Toolkit for the Subscriber Identity Module - Mobile Equipment (SIM-ME) Interface”

3GPP TS for 3G

- 31.101, “UICC-Terminal Inter-face; Physical and Logical Characteristics”
- 31.102, “Characteristics of the Universal Subscriber Identity Module (USIM) Application”

GlobalPlatform

- GlobalPlatform Card Specification v2.2
- GlobalPlatform Card Specification v2.2 – Amendment C “Contactless Services”
- GlobalPlatform Card Specification v2.2 – Amendment D “Secure Channel Protocol 03”
- GlobalPlatform Card Specification v2.2 – Amendment E “Security Upgrade for Card Content Management”

Hardware

UL Mobile Card Test Platform runs in combination with different types of high-end hardware depending on your testing requirements – either PC/SC reader, Micropross MP65 or Micropross TC3.

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Additional products

31.122 Test Suite (3G)

Verifies if a USIM is in accordance with the 3GPP 31.122 test specification, i.e. *Subscriber Identity Module (USIM) Conformance Test Specification*.

This test suite covers:

- Logical and timing level
- Transmission protocols
- Application and file structure
- Security features
- Commands and responses
- File content

31.048 Test Suite (3G)

Contains the test cases defined in *3GPP TS 31.048 sections 5.1-5.3 - Security and 5.4 - remote file management for SIM*.

This test suite covers:

- Security
- Remote file management for SIM

31.213 Test Suite (3G)

Contains the test cases defined in *3GPP TS 31.213 Test specification for (U)SIM; Application Programming Interface (API) for Java Card™* and *ETSI TS 102 268 Test specification for UICC Application Programming Interface (API) for Java Card™*.

This test suite covers:

- uicc.usim.access package
- uicc.usim.toolkit package
- (U)SAT Framework
- uicc.access package
- uicc.toolkit package
- uicc.access.fileadministration
- uicc.system
- CAT runtime environment

31.048 Test Suite (GSM)

Contains the test cases defined in *3GPP TS 31.048 sections 5.1-5.3 - Security and 5.5 - remote file management for USIM*.

This test suite covers:

- Security
- Remote file management for USIM

51.013 Test Suite (GSM)

Contains the test cases defined in *ETSI Test Specification 51.013, Test Specification for Subscriber Identity Module (SIM) Application Programming Interface (API) for Java Card*.

This test suite covers:

- sim.access package
- sim.toolkit package
- SIM Toolkit framework

51.017 Test Suite (GSM)

Contains the test cases that are developed using the most recent version of the 3GPP specification document 51.017: *Subscriber Identity Module (SIM) Test Specification*.

This test suite covers:

- Logical and timing level
- Transmission protocols
- Application and file structure
- Security features
- Commands and responses
- File content

UL Remote Android Reader

UL Remote Android Reader allows remote card content testing for physically inaccessible SIMs, UICCs, embedded Secure Elements (eSE) and eUICCs. It is an Android application that acts as a proxy for sending commands from the UL Card Test Platform running on the test PC, to the UL Remote Android Reader installed on the Android device. It runs on all versions of Android above v4.4 (KitKat).

UL Mobile Log Viewer

UL Mobile Log Viewer is used to view exported test certificates. Using UL Mobile Log Viewer, people who do not have UL Mobile Card Test Platform can still review test certificates.

UL Mobile Log Viewer is free to use and can be downloaded from http://ul-ts.com/downloads/.

For your sales enquiries, please contact us at imsecurity@ul.com, visit ims.ul.com, or contact one of our resellers.