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# UL MOBILE eUICC PROFILE TESTER



## Who is it for?

UL Mobile eUICC Profile Tester is a tool for testing and managing embedded SIM (eUICC) profiles. It is the perfect tool for anyone in the GSMA M2M and Consumer industry who wants to test eUICC profile management and verify the resultant SIM profiles without the need for a Subscription Manager, Device or Mobile Network.

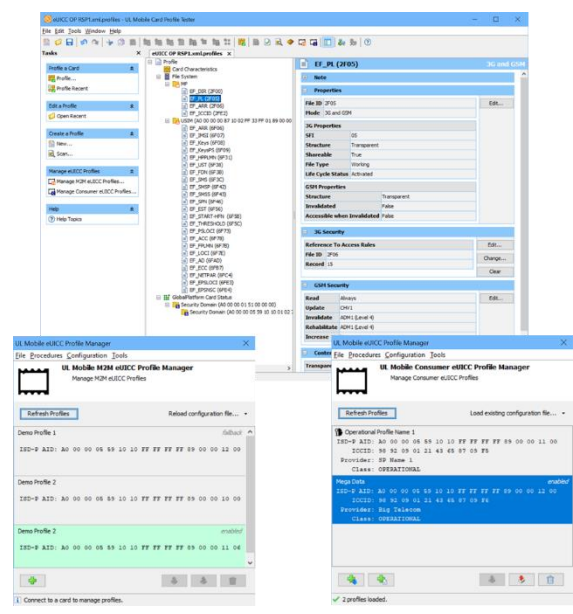
## Why do you need it?

UL Mobile eUICC Profile Tester can test the complete eUICC profile management lifecycle. It allows you to create a card profile from scratch, load profiles onto an eUICC, enable profiles and delete profiles. It includes a simple wizard interface for performing profile tasks. This allows you to manage and test profiles without the need to develop any test scripts.

## What is inside?

UL Mobile eUICC Profile Tester provides you with a platform for performing the following features:

- **Remote Profile Lifecycle Management:** loading, enabling, disabling & deleting profiles via secure channels SCP03, SCP03t, SCP80 & SCP81.
- **Simulation of GSMA's M2M and Consumer Architecture:** Subscription Manager – Data Preparation (SM-DP), Subscription Manager – Secure Routing (SM-SR), SM-DP+ and LPA.
- **Profile Verification:** read and verify enabled profiles on an eUICC from UL XML or ASN.1 and generate detailed reports highlighting any profile issues.



## Key benefits

- Remote eUICC profile management
- Simulating GSMA subscription model architecture
- Support for multiple secure interfaces to communicate with and test the eUICC via SCP02, SCP03, SCP03t, SCP80 and SCP81
- Support for SIMalliance Interoperable Format
- Support for GSMA M2M ES5, ES6 & ES8 and Consumer ES10x, ES6 and ES8+ interfaces
- Testing installed and enabled SIM profiles using UL XML proprietary and SIMalliance ASN.1 formats
- Provides an LPA Simulator for downloading profiles from a real SM-DP+

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## Specifications

### OTA Interface and Protocol Support

- ETSI TS 102 225 & 3GPP 31.115 for SMS notification and profile management
- ETSI TS 102 226 for profile management
- ETSI TS 102 223 for low level BIP support of profile management
- IETF Transport Layer Security Protocol v1.2 for LPAAd-SM-DP+ communication

### Multiple Secure Channel support

- Simulation of the GSMA Architecture for M2M and Consumer eUICCs to send data via secure channels to the eUICC:
  - M2M
    - SCP80 via ES5 interface
    - GlobalPlatform Amendment B SCP81 via ES5 interface
    - SCP03 and SCP03t via ES8 interface
  - Consumer
    - TLS via ES9+ interface
    - SCP03t via ES8+ interface
- GlobalPlatform SCP02 for profile verification

### SIMAlliance Interoperable Profile Format

- Full support of SIMAlliance 'eUICC Profile Package: Interoperability Functional Requirements specification'
- Verification of ASN.1 syntax against different SIMAlliance eUICC Profile Package versions

### GSMA Architecture Simulation

- Combined simulation of GSMA M2M Subscription Manager – Data Preparation (SM-DP) and Subscription Manager – Secure Routing (SM-SR)
- Simulation of ISO, 3GPP and ETSI compliant device
- Simulation of GSMA Consumer Subscription Manager – Data Preparation+ (SM-DP+)
- Simulation of GSMA Consumer device and Local Profile Assistant device (LPAAd)

### Profile Management Procedures

- M2M
  - Profile Download and Installation, Profile Enabling, Profile Disabling, Profile and ISD-P Deletion, Master Delete & Default Notification (SMS and HTTPS)
- Consumer
  - Remote Provisioning, Local Profile Management, Local eUICC Management, eUICC Initialization & Notifications

### Profile Verification

- Profile verification using UL XML proprietary input format and SIMAlliance ASN.1 input formats
- Generation of ISO7816 C-APDUs based on input profiles and analysis of the R-APDUs to determine and verify if the SIM profile is loaded as expected
- Detailed reports highlighting profile differences; file presence, file contents, File Control Parameters (FCP), Security Domain presence and verification of SCP keysets
- Support for 3GPP Release 15 including 5G updates to the file system
- Powerful SIM profile conformance to ETSI and 3GPP specifications; ETSI 102 221, 3GPP 31.102 and 3GPP 31.103

### UL Remote Android Reader

UL Remote Android Reader 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. It acts as a proxy for sending commands from the UL Mobile eUICC Profile Tester 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) and can be purchased as an additional companion tool.

## Hardware

UL Mobile eUICC Profile Tester runs in combination with different types of test hardware depending on your testing requirements – either PC/SC reader, Micropross MP65 or Micropross TC3.



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

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