



a Clear2Pay company

# INQ® End-to-End Mobile Platform

## 3GPP Sim and Sim Api Test Suites

### Description

The main concern when testing SIM cards is quality assurance. To avoid replacement costs, operator or vendor must be ensured that the smartcards are of high quality - before the start of distribution and installation.

To test cards, the SIM Test configuration of Integri's Mobile End-to-End Platform is a very versatile solution. Using a smartcard reader, the test tool is connected to the smartcard to be tested. The tester can test interactively, by selecting one of the request APDU templates, modifying it and sending it to the card reader.

Tests can also be automated in test scripts, covering all possible valid and invalid requests. The user can easily build a number of tests, to test the different instructions, the personalisation, the error handling, etc. A comprehensive log allows to trace and analyse transactions between the tool and the smartcard.

Test results are stored in a database, allowing comparing different test runs during non-regression testing, to make reports, etc. A number of international test specifications have been published within 3GPP, to test the conformance of SIM, USIM and SIM API to the 3GPP standards.


Test Suites, developed according to these standards, are available off-the-shelf from Integri. The test suite organization follows the outline of the standards, such that it is easy to check the correspondence.

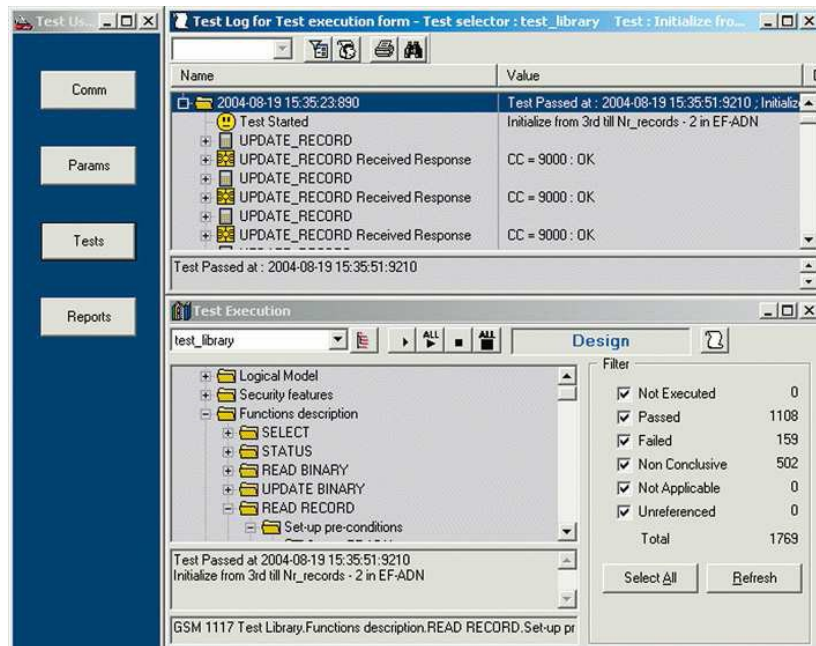
The SIM Test Suites mainly intend to test the APDU command set and the file structure. The SIM API Test Suites rather concentrate on how the SIM toolkit can receive Java applets over the air and test the cryptography.

### Highlights

- Indispensable for debugging and quality assurance of SIM cards
- Tests can be executed interactively or in an automated way
- Test Suites are available for all relevant 3GPP standards. Test scripts are available in source code.
- User can easily modify or add test scripts.
- Comprehensive log, containing the full details of completed transactions
- Easy non-regression testing with the possibility to analyze the differences between different test runs

Out of the box testing





## Technical specifications

### SIM Testing:

- 3GPP TS 51.017 (Release 4) SIM Test Suite
- 3GPP TS 31.122 (Release 7) USIM Conformance Test Suite

### SIM API Testing:

- 3GPP TS 31.048 (Release 5) STK Security Test Suite
- 3GPP TS 11.13 (Release 98 and 99) SIM API Test Suite
- 3GPP TS 51.013 (Release 4 and 5) SIM API Test Suite

## Product Family

Requires the INQ End-to-End Mobile Platform – SIM Testing Configuration.

Requires a Micropross STAR or PC/SC compliant card reader.

The tool can be usefully extended with following utilities:

- Integri Level 2 Player
- Integri Smartcard-Terminal Logger

[www.integri.com](http://www.integri.com)



**Integri**

a Clear2Pay company

Integri is a wholly owned, autonomous business unit of Clear2Pay, an international financial technology company focused on delivering globally applicable solutions for secure, timely electronic payments. Clear2Pay operates from 13 international offices and currently employs over 400 staff.

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