

What Is Auditor?

Auditor is a (U)SIM card validation tool used for testing the (U)SIM card against an XML profile definition. Auditor can be used to validate (U)SIM, ISIM, and more. (U)SIM profiles always have human input which means that there is always the possibility of human error, on top of the risk of personalisation time errors. Auditor is used as a validation step in between personalisation and production.

The tests are split into 5 sections:

- The file system tests include file presence checks, as well as access condition and file content validation.
- All 5 of the GSM standard security codes commands are tested by Auditor; Verify CHV, Change CHV, DisableCHV, Enable CHV, Unblock CHV.
- A sample applet is loaded and deleted from the card via OTA commands using 16 different SPIs to test RAM permissions on the card.
- The file content for each file is updated via OTA commands using 16 different SPIs to test RFM permissions on the card.
- The remaining memory is calculated from the card and is verified against the XML profile definition to ensure that the card has the required amount of space left post-personalisation.
- The endurance of the SIM card is tested by continuously running an APDU script which simulates a day's usage.

Why Use Auditor?

Auditor is used to cut out costly production errors. Auditor catches errors in the (U)SIM card personalisation and presents these in a user-friendly manner so that the issues can be swiftly fixed and re-validated before the card is sent for production.

If those personalisation errors are not caught before production, the produced (U)SIM cards may be impossible to fix even over-the-air (e.g. if the cards cannot authenticate to the network). In this case, the cards need to be fully re-personalised or replaced which can be time-consuming and very expensive. In any case, such issues have a dramatic impact on the image of your company as a trustworthy (U)SIM card supplier.

Advantages

- Auditor is extensive in testing the (U)SIM card. Every file and security code within the profile definition is tested thoroughly to ensure they are production-ready.
- Auditor is fast. On average it takes only 5-10 minutes to perform a full set of tests.
- Auditor is tested on a large range of cards meaning it is reliable for use on almost all cards on the market.
- Auditor is very simple to use, with all the complexity automatically performed by the tool.
- The time and cost of running these tests is minimal in comparison to fixing issues post-production.

- The profile definition is created to reflect how the card should be set-up (this process can be sped up by links to tools such as Profile Editor and Explorer).
- The profile definition and the security output file are provided to the tool.
- The user selects which tests they wish to perform and runs the automated tests.
- Auditor produces both XML and an excel report to show the results of every test.

OTA RAM Test Report

[illegible]

Microsoft Excel - WorkingPaper Case - Thu 14 Feb 2013

WorkingPaper - Subcontract Case

	FILE ID	RESULT	PRESENT	ACCESS CONDITIONS	AC ACTUAL	AC EXPECTED	CONTENT
1	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 1
2	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 2
3	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 3
4	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 4
5	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 5
6	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 6
7	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 7
8	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 8
9	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 9
10	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 10
11	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 11
12	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 12
13	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 13
14	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 14
15	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 15
16	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 16
17	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 17
18	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 18
19	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 19
20	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 20
21	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 21
22	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 22
23	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 23
24	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 24
25	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 25
26	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 26
27	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 27
28	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 28
29	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 29
30	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 30
31	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 31
32	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 32
33	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 33
34	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 34
35	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 35
36	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 36
37	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 37
38	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 38
39	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 39
40	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 40
41	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 41
42	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 42
43	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 43
44	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 44
45	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 45
46	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 46
47	FF_EUR_197007001	OK	OK	OK	ADN1	ADN1	Access 47
48							