



Enabler Test Report

Secure Removable Media (SRM) v1.0

OMA TestFest (September 2008)
Version 08th October 2008

Open Mobile Alliance
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1. Scope

This report describes the results from the testing carried out at OMA TestFest-25 (September 2008) concerning the Secure Removable Media Version 1.0 Enabler.

2. References

2.1 Normative References

- [IOPPROC] “OMA Interoperability Policy and Process”, Version 1.7, Open Mobile Alliance™, OMA-ORG-IOP_Process-V1_7, OMA-ORG-IOP_Process-V1_7-20080825-D
[URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [RFC2119] “Key words for use in RFCs to Indicate Requirement Levels”, S. Bradner, March 1997,
[URL: http://www.ietf.org/rfc/rfc2119.txt](http://www.ietf.org/rfc/rfc2119.txt)
- [ERELD] Enabler Release Definition for Secure Removable Media, OMA-ERELD-SRM-V1_0-20080128-C, <http://www.openmobilealliance.org/>
- [SRM_SPEC] Enabler Release Package for Secure Removable Media, OMA-ERP-SRM-V1_0-20080128-C,
<http://www.openmobilealliance.org/>
- [EVP] Enabler Validation Plan for Secure Removable Media,
OMA-EVP-SRM-V1_0-20080403-D, <http://www.openmobilealliance.org/>
- [ETS] Enabler Test Specification for Secure Removable Media (Interoperability),
OMA-ETS-SRM-V1_0-20080328-D, <http://www.openmobilealliance.org/>
- [SRM_EICS] Enabler Implementation Conformance Statements, OMA-EICS-SRM_Client-V1_0-20080331-A, OMA-EICS-SRM_Server_SrmAgent-V1_0-20080331-A and OMA-EICS-SRM_Server_RI-V1_0-20080331-A; [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)

2.2 Informative References

- [OMADICT] Dictionary for OMA Specification, OMA-Dictionary
<http://www.openmobilealliance.org/>
- [OMAADDRM] <http://www.openmobilealliance.org/>

3. Terminology and Conventions

3.1 Conventions

This is an informative document, i.e. the document does not intend to contain normative statements.

3.2 Definitions

TestFest	Multi-lateral interoperability testing event
Trusted Zone	An OMA staff function to provide a neutral confidential information and results collection service to OMA Members. The Trusted Zone is responsible for all reports resulting from an OMA Test Event and to ensure that all general reports cannot attributed to any one individual participating company

3.3 Abbreviations

EICS	Enabler Implementation Conformance Statement
ERELED	Enabler Release Definition
ERP	Enabler Release Package
EVP	Enabler Validation Plan
ETS	Enabler Test Specification
INC	Inconclusive
N/A	Not Applicable
OMA	Open Mobile Alliance
OT	Out of Time
PR	Problem Report
RI Server	Rights Issuer Server
SRM	Secure Removable Media
TC	Test Case

4. Summary

This report gives details of the testing carried out during the OMA TestFest-25 (September 2008) for Secure Removable Media (SRM) v1.0.

The report is compiled on behalf of OMA by the OMA Trusted Zone.

The work and reporting has followed the OMA IOP processes and policies [IOPPROC].

5. Test Details

5.1 Documentation

This chapter lists the details of the enabler and any documentation, tools or test suites used to prove the enabler.

Date:	5 th to 12 th September 2008
Location:	Helsinki, Finland
Enabler:	Secure Removable Media v1.0
Process:	OMA Interoperability Policy and Process [OMAIOPPROC]
Type of Testing	Interoperability Testing
Products tested:	DRM Agent to SRM Agent, DRM Agent to Rights Issuer Server
Test Guidelines:	SRM Enabler Validation Plan - OMA-EVP-SRM-V1_0-20080403-D [EVP]
Test Specification:	SRM Enabler Test Specification - OMA-ETS-SRM-V1_0-20080328-D [ETS]
Test Tool:	None
Test Code:	None
Type of Test event:	TestFest
Participants:	Matsushita Electric Industrial Co.,Ltd.(Panasonic) <i>plus 3 other participants</i>
Number of Client Implementations:	3
Participating Technology Providers for clients:	<i>3 Client participants</i>
Implementation IDs for each client:	<i>3 Implementations</i>
Number of Server Implementations:	1
Participating Technology Providers for SRM Agent:	Matsushita Electric Industrial Co.,Ltd.(Panasonic)
Implementation IDs for each SRM Agent:	Advanced Security SD Card
Number of RI Server Implementations:	0
Participating Technology Providers for RI Servers:	0
Implementation IDs for each RI Server:	0
Number of test sessions completed:	3

Table 1. Test Information

5.2 Test Case Statistics

5.2.1 Test Case Summary

This chapter gives an overview of the result for all test cases included in [ETS].

The following status is used in the tables below:

- Total number of TCs: Used in the summary to indicate how many test cases there are in total.
- Number of passed: Used in the summary to indicate how many of the total testcases that successfully has been passed.
- Number of failed: Used in the summary to indicate how many of the total testcases that has failed.
- Number of N/A: Used in the summary to indicate how many of the total testcases that has not be run due to that the implementation(s) do not support the functionality required to run this test case.
- Number of OT: Used in the summary to indicate how many of the total testcases that has not be run due to no time to run the test case.
- Number of INC: Used in the summary to indicate how many of the total testcases that has not been run due to that the functionality could not be tested due to an error in the implementation in another functionality that is required to run this test case.

Test Section:	Number of test sessions:	Total number of TCs:	Number of Passed:	Number of Failed:	Number of N/A:	Number of OT:	Number of INC:	Total:
DRM Agent (Client) to SRM Agent (Server) TCs	3	25	48	0	27	0	0	75
DRM Agent (Client) to SRM Issuer (RI Server)	0	1	0	0	3	0	0	0
Total	3	26	48	0	30	0	0	75

Table 2. Test Summary Table

5.2.2 Test Case List

This chapter lists the statistics for all all interoperability test cases included in [ETS].

The following status is used in the tables below:

- **Runs (R):** Used to indicate the total number of times the test case have been run ($R = P + F + I$).
- **Pass (P):** Used to indicate how many times the test case have been run and successfully passed.
- **Fail (F):** Used to indicate how many times the test cases have been run and failed (used when the failure reason is known).
- **Inconclusive (I):** Used to indicate how many times the test cases have been run and did not pass due to other nature than conclusive implementation or specification failure (e.g.: the failure reason cannot be clearly determined).
- **Not Applicable (N/A):** Used to indicate how many times the test cases have not be run due to lack of support for the required functionality to run this test case by one or more involved implementations.
- **Out of Time (O):** Used to indicate how many times the test cases have not been run due to lack of time.
- **Problem Report (PR):** Used to indicate how many PRs have been issued for the test case.
- **Note:** Used to indicate the cause of the Inconclusive or Failed results.

Tests for Secure Removable Media TestFest Taken From ETS OMA-ETS-SRM-V1_0-20080328-D

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
SRM-1.0-INT-001	To test that the DRM Agent and SRM Agent exchange information about each other with the SRM Hello message.	3	3	0	0	0	0		
SRM-1.0-INT-002	To test that DRM Agent and SRM Agent mutually authenticate with MAKE process comprised of the Authentication and Key Exchange messages.	3	3	0	0	0	0		
SRM-1.0-INT-003	To test that both DRM Agent and SRM Agent generate the key materials (Session Key and MAC Key) with the KDF (Key Derivation Function)	3	3	0	0	0	0		
SRM-1.0-INT-004	To test that both the DRM Agent and SRM Agent properly generate a new MAC key when transferring messages that require integrity protection.	3	3	0	0	0	0		

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
SRM-1.0-INT-005	To test that the DRM Agent and SRM Agent change to a different SAC	0	0	0	0	0	3		
SRM-1.0-INT-006	To test that DRM Agent reads an SRM's CRL information.	3	3	0	0	0	0		
SRM-1.0-INT-007	To test that DRM Agent replaces the current CRL in the SRM with the CRL in the Device.	3	3	0	0	0	0		
SRM-1.0-INT-008	To test that DRM Agent retrieves the CRL in the SRM.	3	3	0	0	0	0		
SRM-1.0-INT-009	To test that DRM Agent requests an SRM Agent to generate a nonce, and the SRM Agent returns the value.	0	0	0	0	0	3		
SRM-1.0-INT-010	To test that DRM Agent requests an SRM Agent to generate a nonce, and the SRM Agent returns the value.	0	0	0	0	0	3		
SRM-1.0-INT-011	To test that Rights are moved from a Device to an SRM	3	3	0	0	0	0		
SRM-1.0-INT-012	To test that Rights are moved from an SRM to a Device	3	3	0	0	0	0		
SRM-1.0-INT-013	To test that a Rights Object with a Move permission is generated and used correctly.	0	0	0	0	0	3		
SRM-1.0-INT-014	To test that the DRM Agent receives the REK of Rights from the SRM Agent and consumes the associated DRM Content	3	3	0	0	0	0		
SRM-1.0-INT-015	To test that the DRM Agent properly requests the SRM to update State Information in the SRM	3	3	0	0	0	0		
SRM-1.0-INT-016	To test that the DRM Agent reads a Handle list from the SRM	3	3	0	0	0	0		
SRM-1.0-INT-017	To test that the DRM Agent reads Rights Information including the Rights Meta Data, Rights Object Container, and State Information from the SRM	3	3	0	0	0	0		

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
SRM-1.0-INT-018	To test that the DRM Agent reads a List of Rights Information including the Rights Meta Data, Rights Object Container, and State Information from the SRM with the Rights Information List Query message.	0	0	0	0	0	3		
SRM-1.0-INT-019	To test that the DRM Agent removes a Handle from the SRM	3	3	0	0	0	0		
SRM-1.0-INT-020	To test that the DRM Agent enables Rights in the SRM with the Rights Enablement message.	3	3	0	0	0	0		
SRM-1.0-INT-021	To test that the DRM Agent removes Rights from the SRM	3	3	0	0	0	0		
SRM-1.0-INT-022	To test that the DRM Agent reads the WBXML Dynamic Code Pages from the SRM	0	0	0	0	0	3		
SRM-1.0-INT-023	To test that the DRM Agent stores an updated WBXML Dynamic Code Page on the SRM	0	0	0	0	0	3		
SRM-1.0-INT-024	To test that the DRM Agent stores a Rights Issuer certificate chain in the SRM	0	0	0	0	0	3		
SRM-1.0-INT-025	To test that the DRM Agent reads a Rights Issuer certificate chain from the SRM	0	0	0	0	0	3		
SRM-1.0-INT-026	To test that the DRM Agent removes a Rights Issuer certificate chain from the SRM	0	0	0	0	0	3		

Table 3. Test Case Counts

Notes:-

5.3 Problem Reports

During the activities for TestFest-25, the following problem reports were generated relating to the test materials and test process:

PR Number	Affecting	Description	Test Case reference / Specification reference
0001	OMA-TS-SRM-V1_0-20080128-C	Missing attribute name and value in WBXML Encoding table	-
0002	OMA-TS-SRM-V1_0-20080128-C	Namespace prefix for rights and signature tag	-
0003	OMA-TS-SRM-V1_0-20080128-C	Applying XC14N in roContainer	-
0004	OMA-TS-SRM-V1_0-20080128-C	Checking count of move permission	6.5 Movement of Rights from Device to SRM
0005	OMA-TS-DRM-REL-V2_0-20060303-A	How to handle unsupported permission in DRM Agent	5.4 Permission Model
0006	OMA-TS-SRM-V1_0-20080128-C	Excluding expired assetID in LAID field	-

Table 4. Problem Reports

Full details of the Problem Reports can be found at:

http://www.openmobilealliance.org/TestFests/Problem_Reporting.aspx

6. Confirmation

This signature states that the included information is true and valid.

A handwritten signature in black ink, appearing to read "OMA Trusted Zone", is positioned above a horizontal line.

OMA Trusted Zone

Appendix A. Change History (Informative)

Type of Change	Date	Section	Description
Initial Release	19 th September 2008	All	First Version from TestFest-25
	8 th October 2008	5.2	Modification to TC 013