

Enabler Test Report DRM v1.0

OMA TestFest (Feb 2006) Version 7-Feb-2006

Open Mobile Alliance OMA-Enabler_Test_Report-DRM-10-20060207

This document is considered confidential and may not be disclosed in any manner to any non-member of the Open Mobile Alliance[™], unless there has been prior explicit Board approval.

This document is a work in process and is not an approved Open Mobile Alliance[™] specification. This document is subject to revision or removal without notice. No part of this document may be used to claim conformance or interoperability with the Open Mobile Alliance specifications.

© 2005 Open Mobile Alliance Ltd. All Rights Reserved. Terms and conditions of use are available from the Open Mobile Alliance[™] Web site (<u>http://www.openmobilealliance.org/copyright.html</u>)

© 2005 Open Mobile Alliance Ltd. All rights reserved.

Terms and conditions of use are available from the Open Mobile Alliance[™] Web site at <u>http://www.openmobilealliance.org/copyright.html</u>.

You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. You may not use this document in any other manner without the prior written permission of the Open Mobile AllianceTM. The Open Mobile Alliance authorises you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services offered by you.

The Open Mobile AllianceTM assumes no responsibility for errors or omissions in this document. In no event shall the Open Mobile Alliance be liable for any special, indirect or consequential damages or any damages whatsoever arising out of or in connection with the use of this information.

This document is not an Open Mobile Alliance[™] specification, is not endorsed by the Open Mobile Alliance and is informative only. This document is subject to revision or removal without notice. No part of this document may be used to claim conformance or interoperability with the Open Mobile Alliance specifications.

Open Mobile Alliance[™] members have agreed to use reasonable endeavors to disclose in a timely manner to the Open Mobile Alliance the existence of all intellectual property rights (IPR's) essential to the present document. However, the members do not have an obligation to conduct IPR searches. The information received by the members is publicly available to members and non-members of the Open Mobile Alliance and may be found on the "OMA IPR Declarations" list at <u>http://www.openmobilealliance.org/ipr.html</u>. Essential IPR is available for license on the basis set out in the schedule to the Open Mobile Alliance Application Form.

No representations or warranties (whether express or implied) are made by the Open Mobile AllianceTM or any Open Mobile Alliance member or its affiliates regarding any of the IPR's represented on this "OMA IPR Declarations" list, including, but not limited to the accuracy, completeness, validity or relevance of the information or whether or not such rights are essential or non-essential.

This document is available online in PDF format at http://www.openmobilealliance.org/.

Known problems associated with this document are published at http://www.openmobilealliance.org/.

Comments regarding this document can be submitted to the Open Mobile Alliance[™] in the manner published at <u>http://www.openmobilealliance.org/documents.html</u>

Contents

1. SCOPE	4
2. REFERENCES	5
2.1 NORMATIVE REFERENCES	5
2.2 INFORMATIVE REFERENCES	5
3. TERMINOLOGY AND CONVI	NTIONS6
3.1 CONVENTIONS	
3.2 DEFINITIONS	6
3.3 ABBREVIATIONS	
4. SUMMARY	
	9
5.1 DOCUMENTATION	9
5.2 TEST CASE STATISTICS	
5.2.1 Test Case Summary	
5.2.2 Test Case List	
6. CONFIRMATION	
APPENDIX A. CHANGE HISTO	RY (INFORMATIVE)15

1. Scope

This report describes the results from the testing carried out at OMA TestFest12 January 2006 concerning DRM enabler version 1.0.

2. References

2.1 Normative References

[OMAIOPPROC]	OMA Interoperability Policy and Process, <u>http://www.openmobilealliance.org/</u>
[DRMEICS]	Enabler Implementation Conformance Statement, OMA DRM 1.0 Enabler Release, Draft
	Version 09-Sep-2003, http://www.openmobilealliance.org/
[ERELD]	"Enabler Release Definition for DRM Version 1.0" Open Mobile Alliance .
	OMA-ERELD-DRM-v1_0. URL:http://www.openmobilealliance.org/
[DRM]	OMA DRM 1.0 specifications
[EPTR]	Enabler Product Test Report
[ETP]	Enabler Test Plan
[ETS]	Enabler Test Specification for DRM 1.0 Approved Version 1.0, 09-Sep-2003

2.2 Informative References

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

Asset	Content governed by rights. See DRM content.
Combined delivery	Delivery of the rights object and content together in a single message. See DRM
Composite object	message. A DCF that contains one or more DCFs by means of inclusion e.g. DRM messages, zip files.
Content	A DCF
DRM Agent	A mobile device consuming DRM content.
DRM agent	A user agent in the device that enforces the rights and controls the consumption of DRM content on the device.
DRM content	Content that is consumed according to a set of rights. DRM content may be in encrypted DRM Content Format or in plaintext delivered inside a DRM message
DRM message	A message containing a DCF and an optional rights object. DCFs received inside a DRM message must not leave the device. The optional rights object defines additional consumption rules for the DCF.
Forward-lock	A special case of combined delivery method where the DRM message includes only the DCF and not a rights object at all. A set of default rights applies for the DCF.
DCF	A digital resource e.g. a ringing tone, a screen saver, a Java game or a composite object.
Media type	A MIME media type.
Rights	Permissions and constraints defining under which circumstances access is granted to DRM content.
Rights issuer	An entity who issues rights objects.
Rights object	An instance of rights
Separate delivery	Delivery of the rights object and content via separate transports.
Superdistribution	A mechanism that (1) allows the end user to redistribute the encrypted DRM content to other end users through potentially insecure channels and (2) enables the receipients to obtain initial rights for the superdistributed DRM content.

3.3 Abbreviations

aru	
CEK	Content Encryption Key
DCF	DRM Content Format
DRM	Digital Rights Management
HTTP	Hypertext Transfer Protocol
MIME	Multipurpose Internet Mail Extensions
OMA	Open Mobile Alliance
REL	Rights Expression Language
RI	Rights Issuer
RO	Rights Object
ROAP	Rights Object Acquisition Protocol
SCR	Static Conformance Requirement
WAP	Wireless Application Protocol
WSP	Wireless Session Protocol

4. Summary

This report gives details of the testing carried out during the OMA TestFest12 (January 2006) for Digital Rights Management(DRM) version 1.0.

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

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

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:	February 2006	
Date:		
Location:	Montréal, Canada	
Enabler:	DRM 1.0	
Process:	OMA Interoperability Policy and Process [OMAIOPPROC]	
Type of Testing	Interoperability Testing	
Products tested:	Client-to-server	
Test Plan:	DRM v1.0 Enabler Test Plan [ETP]	
Test Specification:	DRM v1.0 Enabler Test Specification [ETS]	
Test Tool:	None	
Test Code:	None	
Type of Test event:	TestFest	
Participants:	BenQ Mobile (two clients) plus 10ther participant	
Number of Client Products:	3	
Participating Technology Providers for clients:	BenQ Mobile (two clients) plus 1 other client	
Number of Server Products:	3	
Participating Technology Providers for servers:	Beep Science AS, CoreMedia, Viaccess SA Note:all servers were DRM 1.0	
Number of test sessions completed:	9	

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 test cases successfully passed.
- Number of failed: Used in the summary to indicate how many of the total test cases failed.
- Number of N/A: Used in the summary to indicate how many of the total test cases have not been run due to one of the implementations not supporting the functionality required to run this test case.
- **Number of OT:** Used in the summary to indicate how many of the total test cases have not been run due to no time to run the test case.
- **Number of INC:** Used in the summary to indicate how many of the total test cases have not been run due to functionality not being tested due to an error in the implementation or other 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:
Client to Server TCs	9	17	116	10	25	2	0	153
Total	9	17	116	10	25	2	0	153

5.2.2 Test Case List

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

The following status is used in the tables below:

- No. of runs(R): Used to indicate how many times the test cases have been run in total.
- No. of passed(P): Used to indicate how many times the test case has been run with successful result.
- No. of failed(F): Used to indicate how many times the test case has been run with failed result
- No. of OT(O): Used to indicate how many times the test case has not been run due to no time available.
- No. of INC(I): Used to indicate how many times the test case has not been run due to errors being found in other functionality required for running this test case.
- **PR:** Used to indicate if any PRs (Problem Reports) have been issued during testing.
- Note: Used to indicate the cause of Inconclusive or Fail verdicts.

Test Case:	Test Case Description:	R	Р	F	0	Ι	PR:	Note:
DRM-1.0-int-1	To test "Forward Lock" DRM functionality with "binary" encoding.	9	9	0	0	0	-	
DRM-1.0-int-2	To test "Forward Lock" DRM functionality with "base64" encoding.	9	8	1	0	0	-	
DRM-1.0-int-3	To test "Combined Delivery" functionality.	9	9	0	0	0	-	
DRM-1.0-int-4	To test the behaviour when the consuming device does not support "Combined Delivery" functionality.	0	0	0	0	0	-	
DRM-1.0-int-5	To test "Separate Delivery" functionality in case the DCF file indicates that the server intends to push the rights object separately. The DCF containing the content is not forward-locked.	9	8	1	0	0	-	
DRM-1.0-int-6	To test "Separate Delivery" functionality in case the DCF file indicates that the server intends to push the rights object separately. The DCF containing the content is forward-locked (i.e. wrapped inside a DRM message).	2	2	0	0	0	-	
DRM-1.0-int-7	To test "Superdistribution" functionality. The protected content is sent from one consuming device to another. The rights object is obtained by opening a browsing session to the rights issuing service.	9	9	0	0	0	-	

Test Case:	Test Case Description:	R	Р	F	0	Ι	PR:	Note:
DRM-1.0-int-8	To test "Superdistribution" functionality in case of an unknown MIME type. The consuming device uses the Content-Type field to determine whether the content is suitable for it.	9	7	2	0	0	-	
DRM-1.0-int-9	To test behaviour in the presence of several rights objects for one piece of content.	9	8	0	1	0	-	
DRM-1.0-int-10	To test behaviour in the presence of several rights objects for one piece of content.	9	7	1	1	0	-	
DRM-1.0-int-11	To test <display> and <print> permissions for image files.</print></display>	9	9	0	0	0	-	
DRM-1.0-int-12	To test <play> permission for a sound file.</play>	9	8	1	0	0	-	
DRM-1.0-int-13	To test <count> constraint for a media object file.</count>	9	9	0	0	0	-	
DRM-1.0-int-14	To test <datetime> constraint for a media object file.</datetime>	9	8	1	0	0	-	
DRM-1.0-int-15	To test <interval> constraint for a media object file.</interval>	9	9	0	0	0	-	
DRM-1.0-int-16	To test the effect of having multiple constraints.	9	6	3	0	0	-	
DRM-1.0-int-17	To test Interval and Datetime constraints with a mobile that does not have a time source (i.e. a situation where the constraint is not understood and cannot be enforced).	0	0	0	0	0	-	

5.2.3 Problem Reports

During the activities for TestFest12, the following problem reports were generated relating to the test materials and test process:

None PR raised to DRM 1.0 during the Test Fest.

Full details of the Problem Reports can be found at: <u>http://www.opengroup.org:8000/OMA-PR/</u>

6. Confirmation

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

blen ME

OMA Trusted Zone

Appendix A. Change History

(Informative)

Type of Change	Date	Section	Description