



## **Enabler Test Report Device Management V1.1.1**

OMA Test Fest(June 2003)

Version 09-Jul-2003

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Open Mobile Alliance  
OMA-Enabler\_Test\_Report-DM-111-20030709

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# 1. Scope

This report describes the results from the testing carried out at OMA Test Fest(June 2003) concerning Device Management enabler version 1.1.1.

## 2. References

### 2.1 Normative References

[OMAIOPPROC]	OMA Interoperability Policy and Process, <a href="http://www.openmobilealliance.org/">http://www.openmobilealliance.org/</a>
[DM111EICS]	Device Management version 1.1.1 Enabler Implementation Conformance Statement (EICS), <a href="http://www.openmobilealliance.org/">http://www.openmobilealliance.org/</a>
[ERELD]	OMA Device Management version 1.1.1 Enabler Release Definition
[DM111_SPEC]	OMA Device Management version 1.1.1 specifications
[EPTR]	Enabler Product Test Report
[ETP]	Enabler Test Report
[ETS]	Device Management version 1.1.1 Test Cases, OMA-IOP-2003-0053R1-DMSYNC-IOPTestCases_DM111, 16-05-2003

### 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

None.

### 3.3 Abbreviations

DM	Device Management
DSDM	Data Synchronization Device Management
EICS	Enabler Implementation Conformance Statement
EPTR	Enabler Product Test Report
ETP	Enabler Test Plan
ETS	Enabler Test Specification
OMA	Open Mobile Alliance
PR	Problem Report
SCTS	Synchronization Conformance Test Suite

## 4. Summary

This report gives details of the testing carried out during the OMA Test Fest(June 2003) for Device Management version 1.1.1.

The report is compiled on behalf of OMA by The NCC Group.

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.

<b>Date:</b>	June 24 <sup>th</sup> , June 25 <sup>th</sup> , June 26 <sup>th</sup> 2003
<b>Location:</b>	Tampere, Finland
<b>Enabler:</b>	Device Management v1.1.1
<b>Process:</b>	OMA Interoperability Policy and Process [OMAIOPPROC]
<b>Type of Testing</b>	Interoperability Testing
<b>Products tested:</b>	Client-to-Server
<b>Test Plan:</b>	Device Management Version 1.1.1 Enabler Test Plan [ETP]
<b>Test Specification:</b>	Device Management Enabler Test Specification [ETS]
<b>Test Tool:</b>	SCTS 3.1.1
<b>Test Code:</b>	None
<b>Type of Test event:</b>	Test Fest
<b>Participants:</b>	IBM Nokia Openwave Systems
<b>Number of Client Products:</b>	4
<b>Participating Technology Providers for clients:</b>	IBM Motorola Nokia Symbian
<b>Number of Server Products:</b>	3
<b>Participating Technology Providers for servers:</b>	IBM Nokia Openwave Systems
<b>Number of test sessions completed:</b>	10



## 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 that successfully has been passed.
- Number of failed: Used in the summary to indicate how many of the total test cases that has failed.
- Number of N/A: Used in the summary to indicate how many of the total test cases 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 test cases 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 test cases 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.

<b>Test Section:</b>	<b>Total number of TCs:</b>	<b>Number of test sessions:</b>	<b>Number of Passed:</b>	<b>Number of Failed:</b>	<b>Number of N/A:</b>	<b>Number of OT:</b>	<b>Number of INC:</b>
Client to Server TCs	26	10	122	6	112	18	1
Total	26	10	122	6	112	18	1

## 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 specific test case has been successfully passed.
- **No. of failed(F):** Used to indicate how many times the specific test case has failed.
- **No. of OT(O):** Used in the summary to indicate how many of the total test cases that has not be run due to no time to run the test case.
- **No. of INC(I):** Used in the summary to indicate how many of the total test cases 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.
- **PR:** Used to indicate if any PRs (Problem Reports) have been issued during testing.

If the specific implementation due to e.g. no support for an optional feature has not run a specific test case the test case should be marked with N/A in the “No. of runs” column.

Test Case:	Test Case Description:	R	P	F	O	I	PR:	Note:
Test Case #1	Client Authentication - Basic	10	9	0	0	1	Yes	Observation 003
Test Case #2	Client Authentication – MD5	10	10	0	0	0		
Test Case #3	Server Authentication – MD5	7	7	0	0	0	Yes	Observation 005 Observation 006
Test Case #4	Get on Leaf Node	10	10	0	0	0		
Test Case #5	Get on non-existent Node	10	10	0	0	0		
Test Case #6	Get on Interior Node	10	10	0	0	0		
Test Case #7	Get on Inaccessible Leaf Node	10	10	0	0	0		
Test Case #8	Replace on Permanent Leaf Node	10	9	1	0	0	Yes	Observation 004
Test Case #9	ACL Property	10	10	0	0	0		
Test Case #10	Connection Failure during DM session	10	10	0	0	0		
Test Case #11	Server Authentication - Basic	4	4	0	0	0	Yes	Observation 005
Test Case #12	Client Authentication - HMAC	6	3	2	1	0	Yes	Observation 007
Test Case #13	Server Authentication – HMAC	5	1	2	2	0	Yes	Observation 005
Test Case #14	Large Object/Multiple Commands	7	5	0	2	0		
Test Case #15	Notification Initiated Session	1	0	0	1	0		
Test Case #16	Bootstrap	1	0	0	1	0		
Test Case #17	UI Alert – Display	3	1	1	1	0		Fail due to IOP issues.

Test Case #18	UI Alert – Confirmation	4	2	0	2	0		
Test Case #19	UI Alert – Text Input	1	0	0	1	0		
Test Case #20	UI Alert – Single Choice	1	0	0	1	0		
Test Case #21	Alert – Multiple Choice	1	0	0	1	0		
Test Case #22	Get Subtree Structure Without Data	3	2	0	1	0		
Test Case #23	Get Subtree Structure With Data	1	0	0	1	0		
Test Case #24	Create new Application Settings	4	3	0	1	0		
Test Case #25	Modify the Application Settings	4	3	0	1	0		
Test Case #26	Delete the Application Settings	4	3	0	1	0		

### 5.2.3 Observations

<b>Observation: 001</b>	
Document:	Device Management version 1.1.1 Test Cases, OMA-IOP-2003-0053R1-DMSYNC-IOPTestCases_DM111, 16-05-2003
Section:	Section [ 6. SyncML Device Management - Manual Test cases]
Comment:	<p>All the test cases are missing the following fields from the test specifications:</p> <ul style="list-style-type: none"> <li>{Test Case ID}</li> <li>{Test Object}</li> <li>{Specification reference}</li> <li>{SCR Reference}</li> <li>{Tool}</li> <li>{Test code}</li> <li>{Pre-Conditions}</li> </ul> <p>These are defined in the ETS template. Because the {SCR Reference} for each test case is missing, it was not possible for the Trusted Zone to derive the test sets to be included in the Test Session Results form prior to the Test Fest.</p>
Recommendation	The DevMan 1.1.1 ETS is updated to include the test specification fields defined by the template. Same updates will be needed for 1.1.2 docs

<b>Observation: 002</b>	
Document:	Test Session Report
Section:	4.3.2 Test Case List
Comment:	<p>The following two process improvements were suggested for the Device Management Test session report:</p> <ul style="list-style-type: none"> <li>• Mandatory test cases should be clearly identified in the test session report.</li> <li>• For optional test cases, inclusion of a column indicating if the client or server does not support the feature would prove useful to the participants</li> </ul>

	of the Test Fest.
Recommendation	-

<b>Observation: 003</b>	
Test Case(s):	Test Case #1
Comment:	<p>For the Client Authentication test cases for DMv1.1.1, it is assumed that there is a UI in the Client to force the challenge. This however is outside the scope of the specifications and implementation specification.</p> <p>There should be a pre-condition in the test cases stipulating that the test case is mandatory if there is a UI to force the challenge.</p> <p>There does not necessarily need to be a UI but the client developer must be able to set the client to challenge. This is one area of the testing where the SCR states MUST or SHOULD and we are trying to test that the implementation handles the request. OMA DM needs to discuss the best way to test these credential situations.</p>
Recommendation:	Re-examine the test case and include a pre-condition if required.

<b>Observation: 004</b>	
Test Case(s):	Test Case #8
Comment:	It was suggested that there is an ambiguity in the specification for handling empty meta data. If a node meta format is character (chr) and there is no data on a Get, should the format returned = null and Empty <Date/> or should the format remain chr withEmpty <Data/>?
Recommendation	Clarification needed from the WG.

<b>Observation: 005</b>	
Test Case(s):	Test Case#3 Test Case#11 Test Case#13
Comment:	<p>Similar to Observation 003 for Client Authentication, it is assumed when conducting Server Authentication that there is a UI in the client to manually change the authentication settings.</p> <p>There should be a pre-condition in the test cases stipulating that the test case is mandatory if there is a UI to force the challenge.</p>
Recommendation	Re-examine the test case and include a pre-condition if required.

<b>Observation: 006</b>	
Test Case(s):	Test Case#3
Comment:	Clarification is needed on the Type and Format of the Nonce before the b64 encoding.

	Nonce and NextNonce is passed as b64 encoded binary always but DDF states chr and text/plain - This is confusing
Recommendation	Clarification needed from the WG.


<b>Observation: 007</b>	
Test Case(s):	Test Case#12
Comment:	Clarification is needed on whether the Status for the SyncHdr could contain 212 or only 200. More description needed on HMAC Status code for SyncHdr (200) and Next Nonce usage (new nonce every msg)
Recommendation	Clarification needed from the WG.

<b>Observation: 008</b>	
Document:	SyncML Representation Protocol V1.1.1
Section:	4.1 SyncML Package and Messages
Comment:	The second paragraph states "A SyncML Message is a well-formed, but not necessarily valid, XML document." <ul style="list-style-type: none"> <li>• Why is this true?</li> <li>• Does this mean that elements can appear out of order? For instance, in an &lt;Item&gt;, can &lt;Data&gt; appear before &lt;Meta&gt;? In &lt;Meta&gt;, can &lt;Type&gt; appear before &lt;Format&gt;?</li> </ul>
Recommendation	- Clarification needed from the WG.

## 6. Confirmation

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

\_\_\_\_\_

Stephen Higgins - DSDM Trusted Zone

## Appendix A. Change History

(Informative)

Type of Change	Date	Section	Description