



Enabler Test Report Device Management v1.2

OMA TestFest (January 2008)
Version 1st February 2008

Open Mobile Alliance
OMA-EnablerTestReport-TestFest-22-Jan2008-DM-1_2-20080201

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1. Scope

This report describes the results from the testing carried out at OMA TestFest-22 (January 2008) concerning the Device Management Version 1.2 Enabler.

2. References

2.1 Normative References

- [IOPPROC] “OMA Interoperability Policy and Process”, Version 1.3, Open Mobile Alliance™, OMA-ORG-IOP_Process-V1_3, [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 Device Management”, OMA-ERELD-DM-V1_2_20070209-A, [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [ERP] “Enabler Release Package”, OMA-ERP-DM-V1_2-20070209-A, [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [ETG] “Enabler Test Guidelines”, OMA-ETG-DM-V1_2-20061019-A, [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [ETS] “Enabler Test Specification”, OMA-ETS-DM_INT-V1_2-20070717-C, [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [EICS] “Enabler Implementation Conformance Statement”, OMA DM 1.2, OMA-EICS-DM-Client-V1_2-20060727-A, <http://www.openmobilealliance.org/>
“Enabler Implementation Conformance Statement”, OMA DM 1.2, OMA-EICS-DM-Server-V1_2-20060727-A, <http://www.openmobilealliance.org/>

2.2 Informative References

- [OMADICT] Dictionary for OMA Specification, OMA-Dictionary <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

SCTS	SyncML Conformance Test Suite.
Test Case	A Test Case is an individual test used to verify the conformance of the Test Object to a particular mandatory feature of the protocol. A 4-digit number identifies Test Cases where the first two digits denote the Test Group ID.
Test Group	A Test Group is a collection of Test Cases, which are executed, in a single SyncML session in SCTS conformance test tool.
Test Object	The implementation under test is referred to as the Test Object. In this document, the Client.
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
<Node>	Path from the root to the interior node that is configured to the SCTS before the testing is done (e.g.. './SyncML/DMAcc' or './DevDetail'). Test case is driven to this configured interior node. The <Node> can be different between different Test Cases.
<Leaf> or <Leaf#n>	Leaf node(s) that is configured to the SCTS before the testing is done (e.g.. 'SwV' and/or 'Name'). Test case is driven to this configured interior node. The <Leaf> can be different between different Test Cases.

3.3 Abbreviations

DM	Device Management
DSDM	Data Synchronization Device Management
EICS	Enabler Implementation Conformance Statement
ERELED	Enabler Release Definition
ERP	Enabler Release Package
ETG	Enabler Test Guidelines
ETS	Enabler Test Specification
INC	Inconclusive
N/A	Not Applicable
OMA	Open Mobile Alliance
OT	Out of Time

PR Problem Report
SCTS SncML Conformance Test Suite
TC Test Case

4. Summary

This report gives details of the testing carried out during the OMA TestFest-22 (January 2008) for Device Management (DM) v1.2.

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 [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:	18 th to 25 th January 2008
Location:	Montréal, Canada
Enabler:	DM v1.2
Process:	OMA Interoperability Policy and Process [OMAIOPPROC]
Type of Testing	Interoperability Testing
Products tested:	Client-to-server
Test Guidelines:	DM 1.2 Enabler Validation Plan [EVP] OMA-ETG-DM-V1_2-20071207-A
Test Specification:	DM 1.2 Enabler Test Specification [ETS]: OMA-ETS-DM-V1_2-20070717-C
Test Tool:	None
Test Code:	None
Type of Test event:	TestFest
Participants:	4 clients
Number of Client Implementations:	3
Participating Technology Providers for clients:	3 companies
Implementation IDs for each client:	3 Implementations
Number of Server Implementations:	1
Participating Technology Providers for servers:	1 company
Implementation IDs for each server:	1 implementation
Number of test sessions completed:	7

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:
Client to Server TCs	4	37	80	7	59	1	1	148
Client to Smartcard TCs (Bootstrap)	3	3	0	1	6	0	2	9
Total	7	40	80	8	65	1	3	157

Table 1. 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 DM v1.2 Enabler TestFest taken from OMA-ETS-DM-V1_2-20070717-C

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
DeviceManagement-v1.2-int-001	Purpose of this verification is to show compliance with MD-5 client authentication.	4	3	0	0	1	3		
DeviceManagement-v1.2-int-002	Purpose of this verification is to show compliance with MD-5 server authentication.	4	4	0	0	0	3		
DeviceManagement-v1.2-int-003	Purpose of this verification is to show compliance with the GET command on a leaf node.	4	4	0	0	0	3		
DeviceManagement-v1.2-int-004	Purpose of this verification is to show compliance with the GET command on a node that doesn't exist.	4	4	0	0	0	3		
DeviceManagement-v1.2-int-005	Purpose of this verification is to show compliance with the GET command on an interior node.	4	4	0	0	0	3		
DeviceManagement-v1.2-int-006	Purpose of this verification is to show compliance with the GET on an inaccessible leaf node.	4	4	0	0	0	3		

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
DeviceManagement-v1.2-int-007	Purpose of this verification is to show compliance with REPLACE on permanent leaf node.	4	4	0	0	0	3		
DeviceManagement-v1.2-int-008	Purpose of this verification is to show compliance with management node ACL behaviour.	4	2	2	0	0	3		
DeviceManagement-v1.2-int-009	Purpose of this verification is to show compliance with the error handling when connection failure occurs during the SyncML DM session.	4	4	0	0	0	3	0049	Note001
DeviceManagement-v1.2-int-010	Purpose of this verification is to show compliance with HMAC client authentication.	1	1	0	0	0	3		
DeviceManagement-v1.2-int-011	Purpose of this verification is to show compliance with HMAC server authentication.	1	1	0	0	0	3		
DeviceManagement-v1.2-int-012	Purpose of this verification is to show compliance with the large object/multiple commands.	4	1	3	0	0	3		
DeviceManagement-v1.2-int-013	Purpose of this verification is to show compliance with notification initiated session.	2	2	0	0	0	3		
DeviceManagement-v1.2-int-014	Purpose of this verification is to show compliance with Server Initiated bootstrap using Client Provisioning Profile.	2	2	0	0	0	3		
DeviceManagement-v1.2-int-015	Purpose of this test is to check that a Device Management client supports bootstrap from the Smart Card using the Client Provisioning profile	2	0	1	0	1	4		
DeviceManagement-v1.2-int-016	Purpose of this test is to check that a Device Management client supports bootstrap from the Smart Card using the Device Management Profile and WBXML encoded TNDIS objects for the bootstrap information	0	0	0	0	0	4		

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
DeviceManagement -v1.2-int-017	Purpose of this test is to check that a Client removes from the DM tree the account information for a DM Server previously bootstrapped from the Smart Card when that information is no longer present in the Smart Card	1	0	0	0	1	4		
DeviceManagement -v1.2-int-018	Purpose of this test is to check that a DM client supports server initiated bootstrap using the DM profile, WBXML encoded TNDIS objects and the Inbox, under transport neutral security when the transport method used does not have appropriate security. NETWORKID is used.	0	0	0	0	0	3		
DeviceManagement -v1.2-int-019	Purpose of this test is to check that a DM client supports server initiated bootstrap using the DM profile WBXML encoded TNDIS objects and the Inbox under transport neutral security when the transport method used does not have appropriate security. USERPIN is used.	0	0	0	0	0	3		
DeviceManagement -v1.2-int-020	Purpose of this test is to check that a DM client supports server initiated bootstrap using the DM profile, WBXML encoded TNDIS objects and the Inbox, under transport neutral security when the transport method used does not have appropriate security. USERPIN_NETWORKID is used.	0	0	0	0	0	3		
DeviceManagement -v1.2-int-021	Purpose of this verification is to show compliance with UI Display Alert.	4	4	0	0	0	3		
DeviceManagement -v1.2-int-022	Purpose of this verification is to show compliance with UI Confirmation Alert.	4	4	0	0	0	3		
DeviceManagement -v1.2-int-023	Purpose of this verification is to show compliance with UI Text Input Alert.	4	4	0	0	0	3		
DeviceManagement -v1.2-int-024	Purpose of this verification is to show compliance with UI Single Choice Alert.	4	4	0	0	0	3		

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
DeviceManagement -v1.2-int-025	Purpose of this verification is to show compliance with UI Multiple Choice Alert.	4	4	0	0	0	3		
DeviceManagement -v1.2-int-026	Purpose of this verification is to show compliance with the server reading subtree structure without data from part of the management tree.	2	2	0	0	0	3		
DeviceManagement -v1.2-int-027	Purpose of this verification is to show compliance with the server reading subtree structure and data from part of the management tree.	2	2	0	0	0	3		
DeviceManagement -v1.2-int-028	Purpose of this verification is to verify creation of new Application Setting in client using DM server	3	3	0	0	0	3		
DeviceManagement -v1.2-int-029	Purpose of this verification is to verify modification of Application Settings in client using DM server.	3	3	0	0	0	3		
DeviceManagement -v1.2-int-030	Purpose of this verification is to verify deletion of Application Settings in client using DM server.	3	3	0	0	0	3		
DeviceManagement -v1.2-int-031	Purpose of this test is to check that a DM client supports the Inbox object and that the information in the Inbox is correctly mapped onto the DM tree	1	0	1	0	0	3		
DeviceManagement -v1.2-int-032	Purpose of this test is to check that a Device Management client rejects Get operations from a DM server on the “./Inbox” node.	0	0	0	1	0	3		
DeviceManagement -v1.2-int-033	Purpose of this test is to verify backwards compatibility between a DM 1.2 server and a DM 1.1.2 client.	1	1	0	0	0	3		
DeviceManagement -v1.2-int-034	Purpose of this test case is to check if the Test Object supports implicit addition of parent interior nodes for an addition of a child node whose valid parent/parents does not exist in the DM Tree	2	1	1	0	0	3		

Test Case id:	Description:	Test Counts						PR:	Note:
		R	P	F	O	I	N/A		
DeviceManagement-v1.2-int-035	To check if the Test Object can handle a Get with 'list=TNDS'. DM Server issues a Get on './DevDetail?list=TNDS+ACL+Format+Value'	0	0	0	0	0	3		
DeviceManagement-v1.2-int-036	To check if the Test Object can handle the copy command, It would be followed by a Get command on both the URI	0	0	0	0	0	3		
DeviceManagement-v1.2-int-037	Purpose of this verification is to show capability of correlator use	1	1	0	0	0	3		
DeviceManagement-v1.2-int-038	Purpose of this verification is to show capability to add a serialized management object to the DM tree	0	0	0	0	0	3		
DeviceManagement-v1.2-int-039	Purpose of this verification is to test transport layer authentication using TLS 1.0	2	2	0	0	0	3		
DeviceManagement-v1.2-int-040	Purpose of this verification is to test transport layer authentication using SSL 3.0	2	2	0	0	0	3		

Table 2. Test Case Counts

Notes:-

001	Test case does not specify explicitly if first session is to be continued or if a second session should be started.
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5.3 Problem Reports

During the activities for TestFest-22, the following problem reports were generated relating to the test materials and test process:

PR Number	Affecting	Description	Test Case reference / Specification reference
0049	OMA-ETS-DM-V1_2-20070717-C	IOT test case #9 "error handling when connection failure occurs" needs clarification	DeviceManagement-v1.2-int-009

Full details of all 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 "John S. Smith", is positioned above a horizontal line.

OMA Trusted Zone

Appendix A. Change History (Informative)

Type of Change	Date	Section	Description
New Version	1st February 2008	All	First Version for TestFest-22