

## OMA LwM2M v1.0 - Test Results - Virtual SVE-40, 15-21 Nov 2023

Client v1.0 Teams: 2 Client implementations

Server v1.0 Teams: **Cumulocity**

[OMA-ETS-LightweightM2M-V1\\_0\\_2-20180815-A.zip](#)

	Pass	Fail	Inconclusive	Not Applicable	Out of Time	Totals
<b>Bootstrap Interface: [0-99]</b>						
LightweightM2M-1.0-int-0 – Client Initiated Bootstrap	1	0	0	1	0	2
LightweightM2M-1.0-int-1 – Client Initiated Bootstrap Full (PSK)	1	0	0	1	0	2
LightweightM2M-1.0-int-2 – Client Initiated Bootstrap Full (Cert) - FAILURE IS NOT RELATED TO THE SERVER.	0	1*	0	1	0	2
LightweightM2M-1.0-int-3 – Simple Bootstrap from Smartcard	0	0	0	2	0	2
<b>Registration Interface [100-199]</b>						
LightweightM2M-1.0-int-101 – Initial Registration	2	0	0	0	0	2
LightweightM2M-1.0-int-102 – Registration Update	2	0	0	0	0	2
LightweightM2M-1.0-int-103 – Deregistration	1	0	0	1	0	2
LightweightM2M-1.0-int-104 – Registration Update Trigger	2	0	0	0	0	2
<b>Device management &amp; Service Enablement Interface [200-299]</b>						
LightweightM2M-1.0-int-201 – Querying basic information in Plain Text format	2	0	0	0	0	2
LightweightM2M-1.0-int-203 – Querying basic information in TLV format	2	0	0	0	0	2
LightweightM2M-1.0-int-204 – Querying basic information in JSON format	1	0	0	1	0	2
LightweightM2M-1.0-int-205 – Setting basic information in Plain Text format	2	0	0	0	0	2
LightweightM2M-1.0-int-215 – Setting basic information in TLV format - FAILURE IS NOT RELATED TO THE SERVER.	1	1*	0	0	0	2
LightweightM2M-1.0-int-220 – Setting basic information in JSON format	1	0	0	1	0	2
LightweightM2M-1.0-int-241 – Executable Resource: Rebooting the device	2	0	0	0	0	2
LightweightM2M-1.0-int-260 – Discover Command	1	0	0	1	0	2
<b>Information Reporting Interface [300-399]</b>						
LightweightM2M-1.0-int-301 – Observation and Notification of parameter values	2	0	0	0	0	2
LightweightM2M-1.0-int-302 – Cancel Observations using Reset Operation	2	0	0	0	0	2
LightweightM2M-1.0-int-303 – Cancel Observations using Observe with Cancel parameter	2	0	0	0	0	2
<b>Security [400-499]</b>						
LightweightM2M-1.0-int-401 – UDP Channel Security – Pre-shared Key Mode	2	0	0	0	0	2
LightweightM2M-1.0-int-402 – UDP Channel Security – Certified Mode - FAILURE IS NOT RELATED TO THE SERVER.	0	1*	0	1	0	2
LightweightM2M-1.0-int-403 – UDP Channel Security – Certified Mode (Server Identify Verification Failure) FAILURE IS NOT RELATED TO THE SERVER.	0	1*	0	1	0	2
<b>LwM2M Device Object (ID 3) [650-699]</b>						
LightweightM2M-1.0-int-651 – Check Access to the Resources	2	0	0	0	0	2
LightweightM2M-1.0-int-652 – Querying the firmware version from the client	2	0	0	0	0	2
LightweightM2M-1.0-int-680 – Create Object Instance	2	0	0	0	0	2
LightweightM2M-1.0-int-685 – Delete Object Instance	2	0	0	0	0	2
<b>LwM2M Connectivity Monitoring (ID:4) [700-749].</b>						
LightweightM2M-1.0-int-701 – Querying the readable resources of object	1	0	1	0	0	2
LightweightM2M-1.0-int-710 – Basic Observation and notification on Connectivity Monitoring Object Resource	1	0	1	0	0	2
<b>Firmware Update Object (ID 5) [750-799]</b>						
LightweightM2M-1.0-int-751 – Querying the readable resources	2	0	0	0	0	2

LightweightM2M-1.0-int-755 – Setting the writable Resource Package	1	0	0	1	0	2	
LightweightM2M-1.0-int-756 – Setting the writable Resource Package URI	1	0	0	1	0	2	
LightweightM2M-1.0-int-760 –Basic Observation and notification on Firmware Update Object Resources	1	0	0	1	0	2	
LightweightM2M-1.0-int-770 – Successful Firmware update (via COAP)	1	0	0	1	0	2	
LightweightM2M-1.0-int-771 – Successful Firmware update (via alternative mechanism)	1	0	0	1	0	2	
LightweightM2M-1.0-int-772 – Error Case 1: firmware installation without downloaded package	1	0	0	1	0	2	
LightweightM2M-1.0-int-773 – Error Case 2: shortage of storage memory	0	0	0	2	0	2	
LightweightM2M-1.0-int-774 – Error Case 3: out of memory	0	0	0	2	0	2	
LightweightM2M-1.0-int-775 – Error Case 4: Connection lost during download (package URI)	0	0	0	2	0	2	
LightweightM2M-1.0-int-776 – Error Case 5: Package Integrity check failure	0	0	0	2	0	2	
LightweightM2M-1.0-int-777 – Error Case 6: unsupported package type	0	0	0	2	0	2	
LightweightM2M-1.0-int-778 – Error Case 7: invalid URI (package URI)	0	0	0	2	0	2	
LightweightM2M-1.0-int-779 – Error Case 8: Unsuccessful Firmware Update	0	0	0	2	0	2	
<b>LwM2M Location Object (ID:6) [800-849]</b>							
LightweightM2M-1.0-int-801 – Querying the readable resources of object	2	0	0	0	0	2	
LightweightM2M-1.0-int-810 – Basic Observation and notification on Location Object Instance	2	0	0	0	0	2	
<b>Connectivity Statistics (ID 7) [900-949]</b>							
LightweightM2M-1.0-int-901 – Querying a Data Collection from Connectivity Object Instance	2	0	0	0	0	2	
LightweightM2M-1.0-int-905 – Setting the writable resources	2	0	0	0	0	2	
LightweightM2M-1.0-int-910 – Basic Observation and notification on Connectivity Monitoring Object Instance	2	0	0	0	0	2	
<b>MULTI-SERVERS CONTEXT [950-999]</b>							
LightweightM2M- 1.0 - int-950 - Multi-Servers Registration	1	0	0	1	0	2	
LightweightM2M- 1.0 - int-951 - Multi-Servers & Attributes	1	0	0	1	0	2	
<b>Cellular Network Connectivity ID:10 [1200-1249]</b>							
LightweightM2M-1.0-int-1200 – Querying the readable resources of Object ID:10	1	0	0	1	0	2	
LightweightM2M-1.0-int-1201 – Querying the readable resources of Object ID:10 in version 1.1	1	0	0	1	0	2	
LightweightM2M-1.0-int-1202 – Setting the Power Saving Mode Resources of Object ID:10 (version 1.1 only)	0	0	0	2	0	2	
LightweightM2M-1.0-int-1203 – Observation and notification on Object ID:0 related to Power Saving Mode Re	0	0	0	2	0	2	
LightweightM2M-1.0-int-1204 – Observation and notification on Object ID: 10 related to timers	1	0	0	1	0	2	
<b>APN connection profile ID:11 [1250-1299]</b>							
LightweightM2M-CONMGMT - 1.0-int - 1250 - APN Configuration	0	0	0	2	0	2	
<b>Bearer Selection ID:13 [1350-1399]</b>							
LightweightM2M-CONMGMT - 1.0-int-1350 - Bearer Selection	0	0	0	2	0	2	
<b>Portfolio Object (ID 16) [1600-1699]</b>							
LightweightM2M-1.0-int-1630 – Create Portfolio Object Instance	1	0	0	1	0	2	
LightweightM2M-1.0-int-1635 – Delete Portfolio Object Instance	1	0	0	1	0	2	
<b>BinaryAppDataContainer Object (ID 19) [1900-1999]</b>							
LightweightM2M-1.0-int-1900 – Observation and notification on Object ID 19	0	0	0	2	0	2	
LightweightM2M-1.0-int-1901 – Setting the writable Resource Data	0	0	0	2	0	2	
<b>Event Log Object (ID 20) [2000-2099]</b>							
LightweightM2M-1.0-int-2000 – Control the Log Function	0	0	0	2	0	2	
LightweightM2M-1.0-int-2001 – Querying the readable resources	0	0	0	2	0	2	
<b>FAILURES ARE NOT RELATED TO THE SERVER</b>	<b>Totals</b>	<b>64</b>	<b>4*</b>	<b>2</b>	<b>54</b>	<b>0</b>	<b>124</b>
<b>Problems Identified</b>							

APN test : unable to retrieve resource 10/0/11 with content format specified Bearer Test : not object 12/  
bad request to create and delete instance portfolio  
- object didnt provide with resource 13 14  
Not testing full firmware upgrade today.  
smnc issue - device reports as string for complete representation of smnc space  
incompatible dtls cipher suites  
215: device POST tlv parse issue

Explanation of Test Cases Results
<b>PASS:</b> Both teams agree that they Pass – Criteria has been met
<b>FAIL:</b> Both teams agree that they Fail – Criteria has not been met
<b>INCONCLUSIVE:</b> Teams are not in agreement of the Test result
<b>NOT APPLICABLE:</b> Test cannot be performed due to lack of support by either of the implementations
<b>OUT OF TIME:</b> There was not enough time to test the Test Case