



**OMA Test Cases - Virtual TestFest, 22 - 30 March 2021**

**Consolidated VTF V1.1 Results 3 Clients / 3 Servers**

Attending Companies
AVSystem - <a href="http://www.avsystem.com/">http://www.avsystem.com/</a>
IoTerop - <a href="https://ioterop.com/">https://ioterop.com/</a>
6D Technologies - <a href="https://www.6dtech.co.in/">https://www.6dtech.co.in/</a>
Paradox Engineering - <a href="https://pdxeng.ch">pdxeng.ch</a>
Pelion - <a href="https://pelion.com/">https://pelion.com/</a>

Answer Options	Pass	Fail	Incon-clusive	Not Applicable	Out of Time	Response Count
<b>Bootstrap Interface</b>						
LightweightM2M-1.1-int-0 Client Initiated Bootstrap	4	0	0	2	1	7
LightweightM2M-1.1-int-Client Initiated Bootstrap Full (PSK)	3	0	0	3	1	7
LightweightM2M-1.1-int-2 Client Initiated Bootstrap Full (Cert)	2	0	0	4	1	7
LightweightM2M-1.1-int-3 Simple Bootstrap from Smartcard	0	0	0	6	1	7
LightweightM2M-1.1-int-4 Bootstrap Delete	4	0	0	2	1	7
LightweightM2M-1.1-int-5 Server Initiated Bootstrap	4	0	0	2	1	7
LightweightM2M-1.1-int-6 Bootstrap Sequence	4	0	0	2	1	7
LightweightM2M-1.1-int-7 Fallback to bootstrap	4	0	0	2	1	7
LightweightM2M-1.1-int-8 Bootstrap Read	2	0	0	4	1	7
LightweightM2M-1.1-int-9 Bootstrap and Configuration Consistency	2	0	0	4	1	7
<b>Registration Interface</b>						
LightweightM2M-1.1-int-101 - Initial Registration	7	0	0	0	0	7
LightweightM2M-1.1-int-102 - Registration Update	7	0	0	0	0	7
LightweightM2M-1.1-int-103 - Deregistration	6	0	1	0	0	7
LightweightM2M-1.1-int-104 - Registration Update Trigger	7	0	0	0	0	7
LightweightM2M-1.1-int-105 - Discarded Register Update	5	0	0	2	0	7
LightweightM2M-1.1-int-106 - TCP Binding	2	0	0	5	0	7
LightweightM2M-1.1-int-107 - Extending the lifetime of a registration	7	0	0	0	0	7
LightweightM2M-1.1-int-108 - Turn on Queue Mode	4	0	0	3	0	7
LightweightM2M-1.1-int-109 - Behavior in Queue Mode	4	0	0	3	0	7
<b>Device management &amp; Service Enablement Interface</b>						
LightweightM2M-1.1-int-201 - Querying basic information in Plain Text format	7	0	0	0	0	7
LightweightM2M-1.1-int-203 - Querying basic information in TLV format	7	0	0	0	0	7
LightweightM2M-1.1-int-204 - Querying basic information in JSON format	7	0	0	0	0	7
LightweightM2M-1.1-int-205 - Setting basic information in Plain Text format	7	0	0	0	0	7
LightweightM2M-1.1-int-211 - Querying basic information in CBOR format	7	0	0	0	0	7
LightweightM2M-1.1-int-212 - Setting basic information in CBOR format	7	0	0	0	0	7
LightweightM2M-1.1-int-215 - Setting basic information in TLV format	7	0	0	0	0	7
LightweightM2M-1.1-int-220 - Setting basic information in JSON format	2	1	1	3	0	7
LightweightM2M-1.1-int-221 - Attempt to perform operations on Security Object (ID: 0)	5	1	0	1	0	7
LightweightM2M-1.1-int-222 - Read on Object	7	0	0	0	0	7
LightweightM2M-1.1-int-223 - Read on Object Instance	7	0	0	0	0	7

LightweightM2M-1.1-int-223 – Read on Object Instance	7	0	0	0	0	7
LightweightM2M-1.1-int-224 – Read on Resource	7	0	0	0	0	7
LightweightM2M-1.1-int-225 – Read on Resource Instance	6	1	0	0	0	7
LightweightM2M-1.1-int-226 – Write (Partial Update) on Object Instance	7	0	0	0	0	7
LightweightM2M-1.1-int-227 – Write (replace) on Resource	7	0	0	0	0	7
LightweightM2M-1.1-int-228 – Write on Resource Instance	7	0	0	0	0	7
LightweightM2M-1.1-int-229 – Read-Composite Operation	5	1	0	1	0	7
LightweightM2M-1.1-int-230 – Write-Composite Operation	6	1	0	0	0	7
LightweightM2M-1.1-int-231 – Querying basic information in SenML JSON format	7	0	0	0	0	7
LightweightM2M-1.1-int-232 – Querying basic information in SenML CBOR format	7	0	0	0	0	7
LightweightM2M-1.1-int-233 – Setting basic information in SenML CBOR format	7	0	0	0	0	7
LightweightM2M-1.1-int-234 – Setting basic information in SenML JSON format	6	1	0	0	0	7
LightweightM2M-1.1-int-235 – Read-Composite Operation on root path	3	1	0	3	0	7
LightweightM2M-1.1-int-236 – Read-Composite - Partial Presence	4	0	0	2	0	6
LightweightM2M-1.1-int-237 – Read on Object without specifying Content-Type	6	0	0	1	0	7
LightweightM2M-1.1-int-241 – Executable Resource: Rebooting the device	7	0	0	0	0	7
LightweightM2M-1.1-int-256 – Write Operation Failure	7	0	0	0	0	7
LightweightM2M-1.1-int-257 – Write-Composite Operation	6	1	0	0	0	7
LightweightM2M-1.1-int-260 – Discover Command	5	1	0	1	0	7
LightweightM2M-1.1-int-261 – Write-Attribute Operation on a multiple resource	4	0	0	2	1	7
LightweightM2M-1.1-int-280 – Successful Read-Composite Operation	5	0	0	1	1	7
LightweightM2M-1.1-int-281 – Partially Successful Read-Composite Operation	4	0	0	2	1	7
<b>INFORMATION REPORTING INTERFACE</b>						
LightweightM2M-1.1-int-301 – Observation and Notification of parameter values	6	0	0	0	1	7
LightweightM2M-1.1-int-302 – Cancel Observations using Reset Operation	3	0	0	3	1	7
LightweightM2M-1.1-int-303 – Cancel observations using Observe with Cancel parameter	6	0	0	0	1	7
LightweightM2M-1.1-int-304 – Observe-Composite Operation	4	0	0	2	1	7
LightweightM2M-1.1-int-305 – Cancel Observation-Composite Operation	4	0	0	2	1	7
LightweightM2M-1.1-int-306 – Send Operation	6	0	0	0	1	7
LightweightM2M-1.1-int-307 – Muting Send	4	0	0	2	1	7
LightweightM2M-1.1-int-308 – Observe-Composite and Creating Object Instance	3	0	0	2	2	7
LightweightM2M-1.1-int-309 – Observe-Composite and Deleting Object Instance	3	0	0	2	2	7
LightweightM2M-1.1-int-310 – Observe-Composite and modification of parameter values	3	0	0	2	2	7
LightweightM2M-1.1-int-311 – Send command	4	0	0	1	2	7
<b>SECURITY</b>						
LightweightM2M-1.1-int-401 – UDP Channel Security – Pre-shared Key Mode	4	0	0	2	1	7
LightweightM2M-1.1-int-402 – UDP Channel Security – Certificate Mode	3	0	0	3	1	7
LightweightM2M-1.1-int-403 – UDP Channel Security – Certified Mode (Server Identify Verification Failure)	2	0	0	4	1	7
LightweightM2M-1.1-int-404 – TCP Channel Security – Certificate Mode	2	0	0	4	1	7
LightweightM2M-1.1-int-405 – OSCORE Security	0	0	0	6	1	7
<b>LWM2M SERVER (ID 3)</b>						
LightweightM2M-1.1-int-651 – Check Access to the Resources	5	0	0	0	2	7
LightweightM2M-1.1-int-652 – Querying the firmware version from the client	5	0	0	0	2	7
LightweightM2M-1.1-int-680 – Create Object Instance	3	0	0	2	2	7
LightweightM2M-1.1-int-685 – Delete Object Instance	5	0	0	0	2	7

<b>LWM2M CONNECTIVITY MONITORING (ID 4)</b>						
LightweightM2M-1.1-int-701 - Querying the readable resources of object	3	0	0	3	1	7
LightweightM2M-1.1-int-710 - Basic Observation and notification on Connectivity Monitoring Object Resources	3	0	0	3	1	7
<b>FIRMWARE UPDATE OBJECT (ID 5)</b>						
LightweightM2M-1.1-int-751 - Querying the readable resources	3	0	0	3	1	7
LightweightM2M-1.1-int-755 - Setting the writable Resource Package	3	0	0	3	1	7
LightweightM2M-1.1-int-756 - Setting the writable Resource Package URI	3	0	0	3	1	7
LightweightM2M-1.1-int-760 -Basic Observation and notification on Firmware Update Object Resources	3	0	0	3	1	7
LightweightM2M-1.1-int-770 - Successful Firmware update (via COAP)	2	0	0	4	1	7
LightweightM2M-1.1-int-771 - Successful Firmware update (via alternative mechanism)	3	0	0	3	1	7
LightweightM2M-1.1-int-772 - Error Case 1: firmware installation without downloaded package	3	0	0	3	1	7
LightweightM2M-1.1-int-773 - Error Case 2: shortage of storage memory	3	0	0	3	1	7
LightweightM2M-1.1-int-774 - Error Case 3: out of memory	3	0	0	3	1	7
LightweightM2M-1.1-int-775 - Error Case 4: Connection lost during download (package URI)	3	0	0	3	1	7
LightweightM2M-1.1-int-776 - Error Case 5: Package Integrity check failure	3	0	0	3	1	7
LightweightM2M-1.1-int-777 - Error Case 6: unsupported package type	3	0	0	3	1	7
LightweightM2M-1.1-int-778 - Error Case 7: invalid URI (package URI)	3	0	0	3	1	7
LightweightM2M-1.1-int-779 - Error Case 8: Unsuccessful Firmware Update	3	0	0	3	1	7
<b>LOCATION OBJECT (ID 6)</b>						
LightweightM2M-1.1-int-801 - Querying the readable resources of object	5	0	0	0	2	7
LightweightM2M-1.1-int-810 - Basic Observation and notification on Location Object Instance	5	0	0	0	2	7
<b>CONNECTIVITY STATISTICS (ID 7)</b>						
LightweightM2M-1.1-int-901 - Querying a Data Collection from Connectivity Object Instance	3	0	0	3	1	7
LightweightM2M-1.1-int-905 - Setting the writable resources	3	0	0	3	1	7
LightweightM2M-1.1-int-910 - Basic Observation and notification on Connectivity Monitoring Object Instance	3	0	0	3	1	7
<b>Multi-Servers Context</b>						
LightweightM2M-1.1-int-950 - Multi-Servers Registration	3	0	0	3	1	7
LightweightM2M-1.1-int-951 - Multi-Servers & Attributes	3	0	0	3	1	7
<b>CELLULAR NETWORK CONNECTIVITY (ID 10)</b>						
LightweightM2M-1.1-int-1200 - Querying the readable resources of Object ID:10	3	0	0	3	1	7
LightweightM2M-1.1-int-1201 - Querying the readable resources of Object ID:10 in version 1.1	3	0	0	3	1	7
LightweightM2M-1.1-int-1202 - Setting the Power Saving Mode Resources of Object ID:10	2	0	0	4	1	7
LightweightM2M-1.1-int-1203 - Observation and notification on Object ID:10 related to Power Saving Mode Resources	2	0	0	4	1	7
LightweightM2M-1.1-int-1204 - Observation and notification on Object ID: 10 related to timers	2	0	0	4	1	7
<b>APN CONNECTION PROFILE (ID 11)</b>						
LightweightM2M-CONMGMT-1.1-int-1250 - APN configuration	3	0	0	3	1	7
<b>BEARER SELECTION (ID 13)</b>						
LightweightM2M-CONMGMT-1.1-int-1350 - Bearer Selection	1	0	0	5	1	7
<b>PORTFOLIO OBJECT (ID 16)</b>						
LightweightM2M-1.1-int-1630 - Create Portfolio Object Instance	4	0	0	1	2	7
LightweightM2M-1.1-int-1635 - Delete Portfolio Object Instance	4	0	0	1	2	7
<b>BinaryAppDataContainer Object (ID 19)</b>						
LightweightM2M-1.1-int-1900 - Observation and notification on Object ID: 19	3	0	0	3	1	7
LightweightM2M-1.1-int-1901 - Setting the writable Resource Data	3	0	0	3	1	7
<b>Event Log Object (ID 20)</b>						
LightweightM2M-1.1-int-2000 - Control the Log Function	3	0	0	3	1	7
LightweightM2M-1.1-int-2001 - Querying the readable resources	3	0	0	3	1	7
<b>Totals</b>	<b>454</b>	<b>9</b>	<b>2</b>	<b>202</b>	<b>81</b>	<b>748</b>

### Explanation of Test Cases Results

Test Case Result	Criteria
Pass	Both teams agree that the Test Case "Pass Criteria" has been met.
Fail	Both teams agreed that the Test Case "Pass Criteria" was not met.
Inconclusive	Teams are not in agreement of the Test result or the Test Case has not been run due to functionality not being tested as a result of an error in the implementation or other functionality that is required to run this Test Case.
Not Applicable	Test Case that has not been run due to one of the implementations does not support the functionality required to run this Test Case.
Out of Time	There was not enough time to test the Test Case.