OMA LwM2M V1.1 Test Results - SVE-41, 10 - 13 June 2024, Raleigh, NC, USA

Client V1.1 Teams: *Itron*
Server V1.1 Teams: *IoTerop, 6D Technologies, One (1) Server implementations*

OMA-ETS-LightweightM2M-V1_1-20190912-D.pdf

	Pass	Fail	Inconclusive	Not Applicable	Out of Time	Totals
Bootstrap Interface: [0-99]						
LightweightM2M-1.1-int-0 – Client Initiated Bootstrap	2	0	0	0	0	2
LightweightM2M-1.1-int-1 – Client Initiated Bootstrap Full (PSK)	2	0	0	0	0	2
LightweightM2M-1.1-int-2 – Client Initiated Bootstrap Full (Cert)	1	0	0	1	0	2
LightweightM2M-1.1-int-3 – Simple Bootstrap from Smartcard	1	0	0	1	0	2
LightweightM2M-1.1-int-4 - Bootstrap Delete	1	0	0	1	0	2
LightweightM2M-1.1-int-5 - Server Initiated Bootstrap	1	0	0	1	0	2
LightweightM2M-1.1-int-6 - Bootstrap Sequence	2	0	0	0	0	2
LightweightM2M-1.1-int-7 - Fallback to bootstrap	2	0	0	0	0	2
LightweightM2M-1.1-int-8 - Bootstrap Read	1	0	0	1	0	2
LightweightM2M-1.1-int-9 - Bootstrap and Configuration Consistency	1	0	0	1	0	2
LightweightM2M-1.1-int-10 -- Client Initiated Bootstrap Full (EST)	2	0	0	0	0	2
Registration Interface [100-199]						
LightweightM2M-1.1-int-101 – Initial Registration	2	0	0	0	0	2
LightweightM2M-1.1-int-102 – Registration Update	2	0	0	0	0	2
LightweightM2M-1.1-int-103 – Deregistration	2	0	0	0	0	2
LightweightM2M-1.1-int-104 – Registration Update Trigger	2	0	0	0	0	2
LightweightM2M-1.1-int-105 - Discarded Register Update	2	0	0	0	0	2
LightweightM2M-1.1-int-106 – TCP Binding	0	0	0	2	0	2
LightweightM2M-1.1-int-107 – Extending the lifetime of a registration	2	0	0	0	0	2
LightweightM2M-1.1-int-108 – Turn on Queue Mode	2	0	0	0	0	2
LightweightM2M-1.1-int-109 – Behavior in Queue Mode	2	0	0	0	0	2
Device management & Service Enablement Interface [200-299]						
LightweightM2M-1.1-int-201 – Querying basic information in Plain Text format	1	0	0	1	0	2
LightweightM2M-1.1-int-203 – Querying basic information in TLV format	1	0	0	1	0	2
LightweightM2M-1.1-int-204 – Querying basic information in JSON format	1	0	0	1	0	2
LightweightM2M-1.1-int-205 – Setting basic information in Plain Text format	1	0	0	1	0	2
LightweightM2M-1.1-int-211 – Querying basic information in CBOR format	2	0	0	0	0	2
LightweightM2M-1.1-int-212 – Setting basic information in CBOR format	2	0	0	0	0	2
LightweightM2M-1.1-int-215 – Setting basic information in TLV format	1	0	0	1	0	2
LightweightM2M-1.1-int-220 – Setting basic information in JSON format	0	0	0	2	0	2
LightweightM2M-1.1-int-221 – Attempt to perform operations on Security Object (ID: 0)	2	0	0	0	0	2
LightweightM2M-1.1-int-222 – Read on Object	2	0	0	0	0	2
LightweightM2M-1.1-int-223 – Read on Object Instance	2	0	0	0	0	2
LightweightM2M-1.1-int-224 – Read on Resource	2	0	0	0	0	2
LightweightM2M-1.1-int-225 – Read on Resource Instance	2	0	0	0	0	2
LightweightM2M-1.1-int-226 – Write (Partial Update) on Object Instance	2	0	0	0	0	2
LightweightM2M-1.1-int-227 – Write (replace) on Resource	2	0	0	0	0	2
LightweightM2M-1.1-int-228 – Write on Resource Instance	2	0	0	0	0	2
LightweightM2M-1.1-int-229 – Read-Composite Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-230 – Write-Composite Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-231 – Querying basic information in SenML JSON format	1	0	0	1	0	2
LightweightM2M-1.1-int-232 – Querying basic information in SenML CBOR format	2	0	0	0	0	2
LightweightM2M-1.1-int-233 – Setting basic information in SenML CBOR format	2	0	0	0	0	2
LightweightM2M-1.1-int-234 – Setting basic information in SenML JSON format	0	0	0	2	0	2
LightweightM2M-1.1-int-235 – Read-Composite Operation on root path	0	0	0	2	0	2
LightweightM2M-1.1-int-236 – Read-Composite - Partial Presence	2	0	0	0	0	2
LightweightM2M-1.1-int-237 – Read on Object without specifying Content-Type	2	0	0	0	0	2
LightweightM2M-1.1-int-241 – Executable Resource: Rebooting the device	1	1	0	0	0	2

Test Case						
LightweightM2M-1.1-int-256 – Write Operation Failure	2	0	0	0	0	2
LightweightM2M-1.1-int-257 – Write-Composite Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-260 – Discover Command	2	0	0	0	0	2
LightweightM2M-1.1-int-261 – Write-Attribute Operation on a multiple resource	1	0	0	1	0	2
LightweightM2M-1.1-int-280 – Successful Read-Composite Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-281 – Partially Successful Read-Composite Operation	2	0	0	0	0	2
Information Reporting Interface [300-399]						
LightweightM2M-1.1-int-301 – Observation and Notification of parameter values	2	0	0	0	0	2
LightweightM2M-1.1-int-302 – Cancel Observations using Reset Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-303 – Cancel observations using Observe with Cancel parameter	1	0	0	0	0	1
LightweightM2M-1.1-int-304 – Observe-Composite Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-305 – Cancel Observation-Composite Operation	2	0	0	0	0	2
LightweightM2M-1.1-int-306 – Send Operation	1	0	0	1	0	2
LightweightM2M-1.1-int-307 – Muting Send	1	0	0	1	0	2
LightweightM2M-1.1-int-308 – Observe-Composite and Creating Object Instance	1	0	0	1	0	2
LightweightM2M-1.1-int-309 – Observe-Composite and Deleting Object Instance	1	0	0	1	0	2
LightweightM2M-1.1-int-310 – Observe-Composite and modification of parameter values	2	0	0	0	0	2
LightweightM2M-1.1-int-311 – Send command	1	0	0	1	0	2
Security [400-499]						
LightweightM2M-1.1-int-401 – UDP Channel Security – Pre-shared Key Mode	2	0	0	0	0	2
LightweightM2M-1.1-int-402 – UDP Channel Security – Certificate Mode	0	0	0	2	0	2
LightweightM2M-1.1-int-403 – UDP Channel Security – Certified Mode (Server Identify Verification Failure)	1	0	0	1	0	2
LightweightM2M-1.1-int-404 – TCP Channel Security – Certificate Mode	0	0	0	2	0	2
LightweightM2M-1.1-int-405 – OSCORE Security	1	0	0	1	0	2
LightweightM2M-1.1-int-406 -- TCP Channel Security -- Pre-shared Key Mode	0	0	0	2	0	2
LwM2M Device Object (ID 3) [650-699]						
LightweightM2M-1.1-int-651 – Check Access to the Resources	2	0	0	0	0	2
LightweightM2M-1.1-int-652 – Querying the firmware version from the client	2	0	0	0	0	2
LightweightM2M-1.1-int-680 – Create Object Instance	1	0	0	1	0	2
LightweightM2M-1.1-int-685 – Delete Object Instance	1	0	0	1	0	2
LwM2M Connectivity Monitoring (ID:4) [700-749].						
LightweightM2M-1.1-int-701 – Querying the readable resources of object	2	0	0	0	0	2
LightweightM2M-1.1-int-710 – Basic Observation and notification on Connectivity Monitoring Object Resources	2	0	0	0	0	2
Firmware Update Object (ID 5) [750-799]						
LightweightM2M-1.1-int-751 – Querying the readable resources	2	0	0	0	0	2
LightweightM2M-1.1-int-755 – Setting the writable Resource Package	2	0	0	0	0	2
LightweightM2M-1.1-int-756 – Setting the writable Resource Package URI	2	0	0	0	0	2
LightweightM2M-1.1-int-760 –Basic Observation and notification on Firmware Update Object Resources	2	0	0	0	0	2
LightweightM2M-1.1-int-770 – Successful Firmware update (via COAP)	2	0	0	0	0	2
LightweightM2M-1.1-int-771 – Successful Firmware update (via alternative mechanism)	2	0	0	0	0	2
LightweightM2M-1.1-int-772 – Error Case 1: firmware installation without downloaded package	2	0	0	0	0	2
LightweightM2M-1.1-int-773 – Error Case 2: shortage of storage memory	2	0	0	0	0	2
LightweightM2M-1.1-int-774 – Error Case 3: out of memory	2	0	0	0	0	2
LightweightM2M-1.1-int-775 – Error Case 4: Connection lost during download (package URI)	2	0	0	0	0	2
LightweightM2M-1.1-int-776 – Error Case 5: Package Integrity check failure	2	0	0	0	0	2
LightweightM2M-1.1-int-777 – Error Case 6: unsupported package type	2	0	0	0	0	2
LightweightM2M-1.1-int-778 – Error Case 7: invalid URI (package URI)	2	0	0	0	0	2
LightweightM2M-1.1-int-779 – Error Case 8: Unsuccessful Firmware Update	2	0	0	0	0	2
LwM2M Location Object (ID:6) [800-849]						
LightweightM2M-1.1-int-801 – Querying the readable resources of object	0	0	0	2	0	2
LightweightM2M-1.1-int-810 – Basic Observation and notification on Location Object Instance	0	0	0	2	0	2
Connectivity Statistics (ID 7) [900-949]						
LightweightM2M-1.1-int-901 – Querying a Data Collection from Connectivity Object Instance	1	0	0	1	0	2
LightweightM2M-1.1-int-905 – Setting the writable resources	1	0	0	1	0	2
LightweightM2M-1.1-int-910 – Basic Observation and notification on Connectivity Monitoring Object Instance	1	0	0	1	0	2

MULTI-SERVERS CONTEXT [950-999]						
LightweightM2M-1.1-int-950 – Multi-Servers Registration	0	0	0	2	0	2
LightweightM2M-1.1-int-951 – Multi-Servers & Attributes	0	0	0	2	0	2
Cellular Network Connectivity ID:10 [1200-1249]						
LightweightM2M-1.1-int-1200 – Querying the readable resources of Object ID:10	2	0	0	0	0	2
LightweightM2M-1.1-int-1201 – Querying the readable resources of Object ID:10 in version 1.1	2	0	0	0	0	2
LightweightM2M-1.1-int-1202 – Setting the Power Saving Mode Resources of Object ID:10	1	0	0	1	0	2
LightweightM2M-1.1-int-1203 – Observation and notification on Object ID:10 related to Power Saving Mode Resources (version 1.1 or	1	0	0	1	0	2
LightweightM2M-1.1-int-1204 – Observation and notification on Object ID: 10 related to timers	2	0	0	0	0	2
APN connection profile ID:11 [1250-1299]						
LightweightM2M-CONMGMT-1.1-int-1250 – APN configuration	1	0	0	1	0	2
Bearer Selection ID:13 [1350-1399]						
LightweightM2M-CONMGMT-1.1-int-1350 –- Bearer Selection	0	0	0	2	0	2
Portfolio Object (ID 16) [1600-1699]						
LightweightM2M-1.1-int-1630 –- Create Portfolio Object Instance	0	0	0	2	0	2
LightweightM2M-1.1-int-1635 –- Delete Portfolio Object Instance	0	0	0	2	0	2
BinaryAppDataContainer Object (ID 19) [1900-1999]						
LightweightM2M-1.1-int-1900 –- Observation and notification on Object ID: 19	0	0	0	2	0	2
LightweightM2M-1.1-int-1901 –- Setting the writable Resource Data	0	0	0	2	0	2
Event Log Object (ID 20) [2000-2099]						
LightweightM2M-1.1-int-2000 –- Control the Log Function	0	0	0	2	0	2
LightweightM2M-1.1-int-2001 –- Querying the readable resources	0	0	0	2	0	2
Totals:	**152**	**1**	**0**	**64**	**0**	**217**

Comments collected from Test Sessions participants:

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