Source: Fraunhofer FOKUS

Title: Initial proposal for two NWI in MTS TST

1. Test Specification for CoAP
2. Test specification for MQTT

IoT devices and solutions heavily use the transport protocols CoAP and MQTT. However, there are no test specifications available that cover an overall test suite structure and catalog of test purposes. We propose to develop systematically such documents as a reference base for both client side test campaigns and server side test campaigns addressing the conformance regarding these protocols. In addition, the test specification should also take into account fundamental tests for security and performance issues.

Test specifications shall make use of the ETSI notation TDL-TO as defined in ETSI ES 203 119-4 V1.2.1 (2016-09). Initial work is available from the Eclipse open source project IoT-Testware:

* <https://github.com/eclipse/iottestware/tree/master/docs/CoAP/Conformance>
* <https://github.com/eclipse/iottestware/tree/master/docs/MQTT/Conformance>

References:

* CoAP, <https://tools.ietf.org/html/rfc7252>
* MQTT, <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/mqtt-v3.1.1.html>
* TDL-TO, <http://www.etsi.org/deliver/etsi_es/203100_203199/20311904/01.02.01_60/es_20311904v010201p.pdf>
* Eclipse IoT-Testware, <https://projects.eclipse.org/projects/technology.iottestware>