

#MQTT V5.0 is an approved OASIS Committee Specification

Submitted by cesign on Wed, 2018-01-03 19:08

Type:

TC Administration announcements

OASIS is pleased to announce the publication of MQTT Version 5.0 CS01 by the members of the MQTT TC.

MQTT is a Client Server publish/subscribe messaging transport protocol. It is light weight, open, simple, and designed to be easy to implement. These characteristics make it ideal for use in many situations, including constrained environments such as for communication in Machine to Machine (M2M) and Internet of Things (IoT) contexts where a small code footprint is required and/or network bandwidth is at a premium.

The protocol runs over TCP/IP, or over other network protocols that provide ordered, lossless, bi-directional connections. Its features include:

- Use of the publish/subscribe message pattern which provides one-to-many message distribution and decoupling of applications.
- A messaging transport that is agnostic to the content of the payload.
- Three qualities of service for message delivery:
 - * "At most once", where messages are delivered according to the best efforts of the operating environment. Message loss can occur. This level could be used, for example, with ambient sensor data where it does not matter if an individual reading is lost as the next one will be published soon after.
 - * "At least once", where messages are assured to arrive but duplicates can occur.
 - * "Exactly once", where messages are assured to arrive exactly once. This level could be used, for example, with billing systems where duplicate or lost messages could lead to incorrect charges being applied.
- A small transport overhead and protocol exchanges minimized to reduce network traffic.
- A mechanism to notify interested parties when an abnormal disconnection occurs.

This is an OASIS deliverable, completed and approved by the TC and fully ready for testing and implementation.

The prose specifications and related files are available here:

MQTT Version 5.0
Committee Specification 01

25 December 2017

Editable source (Authoritative):

<http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.docx> [1]

HTML:

<http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.html> [2]

PDF:

<http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.pdf> [3]

Distribution ZIP file

For your convenience, OASIS provides a complete package of the prose specification and related files in a ZIP distribution file. You can download the ZIP file here:

<http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.zip> [4]

Members of the MQTT TC [1] approved this specification by Special Majority Vote. The specification had been released for public review as required by the TC Process [2]. The vote to approve as a Committee Specification passed [3], and the document is now available online in the OASIS Library as referenced above.

Our congratulations to the TC on achieving this milestone and our thanks to the reviewers who provided feedback on the specification drafts to help improve the quality of the work.

===== Additional references:

[1] OASIS Message Queuing Telemetry Transport (MQTT) TC

<https://www.oasis-open.org/committees/mqtt/> [5]

[2] Public reviews:

- 30-day public review, 10 August 2017:

<https://lists.oasis-open.org/archives/members/201708/msg00004.html> [6]

- Comment resolution log:

<http://docs.oasis-open.org/mqtt/mqtt/v5.0/csprd01/mqtt-v5.0-csprd01-comm...> [7]

- 15-day public review, 17 November 2017:

<https://lists.oasis-open.org/archives/members/201711/msg00005.html> [8]

- Comment resolution log:

<http://docs.oasis-open.org/mqtt/mqtt/v5.0/csprd02/mqtt-v5.0-csprd02-comm...> [9]

[3] Approval ballot:

<https://www.oasis-open.org/committees/ballot.php?id=3156> [10]

Associated TC:

Message Queuing Telemetry Transport (MQTT)

Deadline:

Wed, 2018-01-03 - Sat, 2018-02-03

Links:

- [1] <http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.docx>
- [2] <http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.html>
- [3] <http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.pdf>
- [4] <http://docs.oasis-open.org/mqtt/mqtt/v5.0/cs01/mqtt-v5.0-cs01.zip>
- [5] <https://www.oasis-open.org/committees/mqtt/>
- [6] <https://lists.oasis-open.org/archives/members/201708/msg00004.html>
- [7] <http://docs.oasis-open.org/mqtt/mqtt/v5.0/csprd01/mqtt-v5.0-csprd01-comment-resolution-log.doc>
- [8] <https://lists.oasis-open.org/archives/members/201711/msg00005.html>
- [9] <http://docs.oasis-open.org/mqtt/mqtt/v5.0/csprd02/mqtt-v5.0-csprd02-comment-resolution-log.docx>
- [10] <https://www.oasis-open.org/committees/ballot.php?id=3156>