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# 30-day Public Review for #MQTT Version 3.1.1

Submitted by cesign on Fri, 2014-01-10 14:56

**Type:**

Public Review

The OASIS Message Queuing Telemetry Transport (MQTT) TC [1] members have recently approved a Committee Specification Draft (CSD) and submitted this specification for 30-day public review:

MQTT Version 3.1.1

Committee Specification Draft 01 / Public Review Draft 01

12 December 2013

Specification Overview:

MQTT is a Client Server publish/subscribe messaging transport protocol. It is light weight, open, simple, and designed so as 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 may occur.
  - "Exactly once", where message 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.

TC Description:

The OASIS Message Queuing Telemetry Transport (MQTT) TC is developing a lightweight publish/subscribe reliable messaging transport protocol suitable for communication in M2M/IoT contexts where a small code footprint is required and/or network bandwidth is at a premium.

## Public Review Period:

The public review starts 13 January 2014 at 00:00 GMT and ends 11 February 2014 at 23:59 GMT.

This is an open invitation to comment. OASIS solicits feedback from potential users, developers and others, whether OASIS members or not, for the sake of improving the interoperability and quality of its technical work.

## URIs:

The prose specification document and related files are available here:

### Editable Source (Authoritative):

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.doc> [1]

### HTML:

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01....> [2]

### PDF:

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.pdf> [3]

### ZIP distribution file (complete):

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/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.zip> [4]

Additional information about the specification and the Message Queuing Telemetry Transport (MQTT) TC can be found at the TC's public home page:

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

Comments may be submitted to the TC by any person through the use of the OASIS TC Comment Facility which can be used by following the instructions on the TC's "Send A Comment" page, or directly at:

[https://www.oasis-open.org/committees/comments/index.php?wg\\_abbrev=mqtt](https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=mqtt) [6]

Comments submitted by TC non-members for this work and for other work of this TC are publicly archived and can be viewed at:

<https://lists.oasis-open.org/archives/mqtt-comment/> [7]

All comments submitted to OASIS are subject to the OASIS Feedback License, which ensures that the feedback you provide carries the same obligations at least as the obligations of the TC members. In connection with this public review of "MQTT Version 3.1.1", we call your attention to the OASIS IPR Policy [2] applicable especially [3] to the work of this technical committee. All members of the TC should be familiar with this document, which may create obligations regarding the disclosure and availability of a member's patent, copyright, trademark and license rights that read on an approved OASIS specification.

OASIS invites any persons who know of any such claims to disclose these if they may be essential to the implementation of the above specification, so that notice of them may be posted to the notice page for this TC's

work.

===== Additional references:

- [1] Message Queuing Telemetry Transport (MQTT) TC  
<https://www.oasis-open.org/committees/mqtt/> [5]
- [2] <http://www.oasis-open.org/who/intellectualproperty.php> [8]
- [3] <http://www.oasis-open.org/committees/mqtt/ipr.php> [9]  
<https://www.oasis-open.org/policies-guidelines/ipr#s10.3.1> [10]  
Non-Assertion Mode

**Associated TC:**

Message Queuing Telemetry Transport (MQTT)

**Deadline:**

Fri, 2014-01-10 - Tue, 2014-02-11

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**Links:**

- [1] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.doc>
- [2] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.html>
- [3] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.pdf>
- [4] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01.zip>
- [5] <https://www.oasis-open.org/committees/mqtt/>
- [6] [https://www.oasis-open.org/committees/comments/index.php?wg\\_abbrev=mqtt](https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=mqtt)
- [7] <https://lists.oasis-open.org/archives/mqtt-comment/>
- [8] <http://www.oasis-open.org/who/intellectualproperty.php>
- [9] <http://www.oasis-open.org/committees/mqtt/ipr.php>
- [10] <https://www.oasis-open.org/policies-guidelines/ipr#s10.3.1>