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# 15-day Public Review for #MQTT 3.1.1 - ends 06 May

Submitted by cesign on Mon, 2014-04-21 14:32

**Type:**

Public Review

The OASIS Message Queuing Telemetry Transport (MQTT) TC members [1] have produced an updated Committee Specification Draft (CSD) and submitted this specification for 15-day public review:

MQTT Version 3.1.1

Committee Specification Draft 02 / Public Review Draft 02

10 April 2014

With the release we are testing a convenience option for submitting comments to the Technical Committee. Please see the details under "Public Review Period" below.

## 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 22 April 2014 at 00:00 GMT and ends 06 May 2014 at 23:59 GMT. The specification was previously submitted for public review [2]. This 15-day review is limited in scope to changes made from the previous review. Changes are highlighted in the diff-marked PDF file [3].

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.

With this public review, we are testing a new convenience feature for sending comments to the Technical Committee. The file

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02-...> [1]

contains the HTML version of the draft with a "[comment]" link next to each section heading. Clicking on this link will launch your email application and begin a message to [mqtt-comment@lists.oasis-open.org](mailto:mqtt-comment@lists.oasis-open.org) [2] with the specific section number and title in the subject line. (For example, "Public review comment for mqtt-v3.1.1-csprd02: 1.1 References") Simply enter your comment and click send.

You must be subscribed to the [mqtt-comment@lists.oasis-open.org](mailto:mqtt-comment@lists.oasis-open.org) [2] mailing list in order to send your comments. Instructions on how to subscribe can be found 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) [3].

Note that the Table of Contents doesn't work in this version and other internal document links may not work in this file. That is one of the items we need fix before making this capability more broadly available. Please feel free to let us know if you find this feature helpful. We plan to refine it and make it a part of our normal public review process.

#### URIs:

The prose specification document and related files are available here:

Editable source (Authoritative):

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02.doc> [4]

#### HTML:

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02....> [5]

#### PDF:

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02.pdf> [6]

ZIP distribution files (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/csprd02/mqtt-v3.1.1-csprd02.zip> [7]

Additional information about this specification and the MQTT TC may be found on the TC's public home page located at:

<http://www.oasis-open.org/committees/mqtt/> [8]

Comments may be submitted to the TC by any person through the use of the OASIS TC Comment Facility which can be accessed via the button labeled "Send A Comment" at the top of the TC public home page, or directly at:

[http://www.oasis-open.org/committees/comments/form.php?wg\\_abbrev=mqtt](http://www.oasis-open.org/committees/comments/form.php?wg_abbrev=mqtt) [9]

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

<http://lists.oasis-open.org/archives/mqtt-comment/> [10]

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 [4] applicable especially [5] 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] OASIS Message Queuing Telemetry Transport (MQTT) TC

<http://www.oasis-open.org/committees/mqtt/> [8]

[2] Previous public reviews:

30-day public review, 10 January 2014: <https://lists.oasis-open.org/archives/members/201401/msg00005.html>

[11]

- Comment resolution log: <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01-...> [12]

[3] Redlined DIFF file:

<http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02-...> [13]

[4] <http://www.oasis-open.org/policies-guidelines/ipr> [14]

[5] <http://www.oasis-open.org/committees/mqtt/ipr.php> [15]

<https://www.oasis-open.org/policies-guidelines/ipr#s10.3> [16]

Non-Assertion Mode

**Associated TC:**

Message Queuing Telemetry Transport (MQTT)

**Deadline:**

Tue, 2014-04-22 - Tue, 2014-05-06

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**Links:**

- [1] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02-COMMENT-TAGS.html>
- [2] <mailto:mqtt-comment@lists.oasis-open.org>
- [3] [https://www.oasis-open.org/committees/comments/index.php?wg\\_abbrev=mqtt](https://www.oasis-open.org/committees/comments/index.php?wg_abbrev=mqtt)
- [4] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02.doc>
- [5] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02.html>
- [6] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02.pdf>
- [7] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02.zip>
- [8] <http://www.oasis-open.org/committees/mqtt/>
- [9] [http://www.oasis-open.org/committees/comments/form.php?wg\\_abbrev=mqtt](http://www.oasis-open.org/committees/comments/form.php?wg_abbrev=mqtt)
- [10] <http://lists.oasis-open.org/archives/mqtt-comment/>
- [11] <https://lists.oasis-open.org/archives/members/201401/msg00005.html>
- [12] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd01/mqtt-v3.1.1-csprd01-comment-resolution-log.odt>
- [13] <http://docs.oasis-open.org/mqtt/mqtt/v3.1.1/csprd02/mqtt-v3.1.1-csprd02-diff.pdf>
- [14] <http://www.oasis-open.org/policies-guidelines/ipr>
- [15] <http://www.oasis-open.org/committees/mqtt/ipr.php>
- [16] <https://www.oasis-open.org/policies-guidelines/ipr#s10.3>