

OASIS MQTT Technical Committee
Minutes for the meeting of Thursday, 3rd October 2013
Teleconference

Convener: Richard Coppen (IBM)

Attendance:

Attendees:

- Andrew Banks
- Arthur Barr
- William Bathurst
- Geoff Brown
- Raphael Cohn
- Sarah Cooper
- Richard Coppen
- Paul Duffy
- Rahul Gupta
- Wes Johnson
- Alex Kritikos
- Louis-P. Lamoureux
- David Locke
- Peter Niblett
- Arlen Nipper
- Julien Niset
- Nicholas O'Leary
- Pavan Reddy
- Andrew Schofield
- Allan Stockdill-Mander
- Steve Upton
- Shawn Xie

We have quorum.

Approve Agenda:

Agenda:

- Roll Call
- Approve Agenda
- Approve minutes from last meeting
- Voting Rights update
- Review JIRA issues
 - <https://tools.oasis-open.org/issues/browse/MQTT-27>
 - <https://tools.oasis-open.org/issues/browse/MQTT-60>
 - <https://tools.oasis-open.org/issues/browse/MQTT-82>
 - <https://tools.oasis-open.org/issues/browse/MQTT-55>
 - <https://tools.oasis-open.org/issues/browse/MQTT-78>
 - <https://tools.oasis-open.org/issues/browse/MQTT-51>
 - <https://tools.oasis-open.org/issues/browse/MQTT-52>
- Confirm date & time of next MQTT Security SC call: 08.10.2013
- Confirm date & time of next MQTT TC meeting: 10.10.2013
- AOB
- Call for late joiners
- Close

The agenda is approved.

Approve minutes form last meeting 26.09.2013:

Minutes approved.

Voting rights update (R. Coppen):

Following the last meeting (26.09.2013) :

- Success - Mr. Joe Speed group role has been changed to Member

Review of JIRA issues:

There are currently 17 issues in JIRA, with 7 of them in good shape and ready to be approved by the TC.

<https://tools.oasis-open.org/issues/browse/MQTT-27>

P. Niblett: The objective of the issue is to clarify several aspects of the DUP flag. In particular:

- It should not be propagated
- Add extra non-normative comment 2.2.2.1
- Reserve the DUP flag in PUBREL, SUBSCRIBE and UNSUBSCRIBE control packets.

The current proposal is to edit lines 340-343 (WD12) and change the non-normative comment in 2.2.2.1 (WD12 from lines 337).

Proposal approved by the TC.

Proposed R. Cohn, Seconded P. Niblett.

<https://tools.oasis-open.org/issues/browse/MQTT-60>

A. Stockdill-Mander: Relates to the use of zero-length topic levels, i.e. should *///some///over/slashed///topic/* be considered valid, invalid or the same as */some/over/slashed/topic/*.

The current Proposal is to change 4.5.1.1 (WD12 lines 1298-1301) to say that topic names and topic filters are used in their literal form and add "Topic level separators may appear adjacent in a Topic Filter or Topic Name to indicate a zero length topic level".

P. Niblett: Some existing implementations such as Mosquito will have to adapt their behavior. However, this is currently unclear and seems the right thing to do.

R. Cohn: Agrees that there is potential for some impact to existing implementations, but believes this to be minor.

Proposal approved by the TC.

Proposed A. Schofield, Seconded R. Cohn.

<https://tools.oasis-open.org/issues/browse/MQTT-82>

R. Coppen: Recently added issue to decide what the server must do when a client connects with a zero-byte client ID.

The proposal is that the server MUST process the connection as if it were a unique client if the Clean Session flag is set to 1. If Clean Session is set to 0, the server MUST respond to the CONNECT packet with a CONNACK return code 0x02 (Identifier rejected) and then terminate the TCP connection.

Proposal approved by the TC.

Proposed A. Stockdill-Mander, Seconded R. Cohn.

<https://tools.oasis-open.org/issues/browse/MQTT-55>

A. Banks: The issue clarifies what should happen if a client issues multiple connect calls on the same TCP connection.

The current proposal states that the Connect Packet MUST be the first packet sent from a client to the server. A client can only flow the Connect Packet once per TCP Session. The Server MUST process a second Connect Packet sent from a client as a protocol violation and disconnect the client.

Approved by the TC.

Proposed A. Banks, Seconded A. Stockdill-Mander.

<https://tools.oasis-open.org/issues/browse/MQTT-78>

A. Stockdill-Mander: Relates to the transport layer for MQTT. The current spec makes repeated reference to TCP while implementations might wish to use protocols above or below such as TLS or websockets. We should change references to TCP sessions to something more abstract.

R. Cohn: Suggests we add an appendix to list appropriate MQTT transports.

A. Banks: Suggests a non-normative comment.

A. Kritikos: Raises the concern that MQTT and MQTTS could be confused more easily as MQTT is usually considered to be for TCP network.

A. Stockdill-Mander and P. Niblett argue that the intention is to open scope for more reliable MQTT transports.

TC agrees to reassign as an edits issue for TCP Sessions to abstracted and for a non-normative list of suitable MQTT transports to be added by the editors.

Approved by the TC.

Proposed A. Banks, Seconded Rahul Gupta.

<https://tools.oasis-open.org/issues/browse/MQTT-51>

P. Niblett: This issue defines what the server should do if it experiences a transient condition such as a full queue.

Proposal: If the client or server encounters a transient error while processing an inbound packet it MUST disconnect the TCP connection which was used to send the packet. If a server detects a transient error it SHOULD NOT affect any other client.

Proposal approved by the TC.

Proposed A. Banks, Seconded N. O'Leary.

<https://tools.oasis-open.org/issues/browse/MQTT-52>

R. Coppen: Relates to the handling of permission problems, i.e. what a server should do if a client attempts to do something he is not allowed to. Current status in the spec is that the server flows a positive ACK and then does nothing. This makes it difficult for a client to realize his mistake. Proposal to add some clarity to the spec.

P. Niblett: 4 options:

1. Server continues to flow a positive ACK, nothing else
2. Server just disconnects the client
3. Server MAY flow a positive ACK and then disconnect
4. Server MUST flow a positive ACK and then disconnect
5. Allow implementors to experiment with \$SYS feedback

Discussion between several TC members after which the TC agrees to revise the proposal and bring it back to future TC call.

<https://tools.oasis-open.org/issues/browse/MQTT-83>

P. Niblett: Relates to the use of the flag Clean Session set to 0.

Proposal to add a non-normative comment to 3.1.2.3.1 to say "When a client connects with cleanSession = 0 it is requesting that the server maintain its MQTT session state after it disconnects. Clients should only connect with cleanSession = 0 if they intend to reconnect to the server at some later point in time. When a client has determined that it has no further use for the session it should do a final reconnect with cleanSession = 1."

Proposal accepted by the TC.

Proposed A. Banks, Seconded P. Niblett.

Confirm date & time of next TC meeting (R. Coppen):

Scheduled to October 10^d 2013.

Confirm date & time of next Security SC meeting (R. Coppen):

Scheduled to October 8th 2013.

Any Other business:

D. Locke: We should start raising future items. For example capture the issues we cannot solve and keep them for the next iteration of the spec.

Call for late joiners: 4 late joiners (N. O'Leary, P. Duffy, P. Reddy, D. Locke).

Close.