

## OASIS MQTT Technical Committee

Minutes of the TC meeting held on Thursday 25th February 2016

*Teleconference meeting*

### **Attendees:**

Senthil Nathan Balasubramaniam  
Andrew Banks  
Ken Borgendale  
Ed Briggs  
Raphael Cohn  
Richard Coppen  
William Cox  
Ian Craggs  
Paul Fremantle  
Rahul Gupta  
David Horton  
Nicholas O'Leary  
Brian Raymor  
Andrew Schofield

### **Agenda:**

- Roll Call
- Welcome new TC members
- Approve Agenda
- Approve minutes from last meeting > [https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57431/MOTT\\_Jan2016\\_Workshop\\_minutes\\_29012016.odt](https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57431/MOTT_Jan2016_Workshop_minutes_29012016.odt) <
- Voting Rights update
- Reminder: Poll for dates April / May 2016 face-to-face session > <https://www.oasis-open.org/apps/org/workgroup/mqtt/ballot.php?id=2910> <
- Update from Secretary (Geoff Brown)
- January 2016 MQTT Face-to-Face meeting update
- Recharter - big ideas overview & update (Brian Raymor, Ken Borgendale)
- Review results: poll for dates of next face-to-face session
- AOB
- Confirm date & time of next MQTT TC meeting
- Call for late joiners
- Close

**Richard Coppen** completes the Roll Call

**\*Reminder** Please use the 'raise hand' feature in the SOAP hub session (also useful during the 'call for late joiners') Please

try to remember to say your name before you speak; this helps in preparing the minutes

**Richard Coppen** presents agenda to TC - no objections, TC approve.

**Minutes from last TC meeting** > [https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57431/MOTT\\_Jan2016\\_Workshop\\_minutes\\_29012016.odt](https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57431/MOTT_Jan2016_Workshop_minutes_29012016.odt) < No objections. TC approve.

**Voting Rights update:** following meeting 29.01.2016  
Sarah Cooper group role has been changed to Voting Member  
Steve Upton LoA

**\*Current roster** (with voting status) > <https://www.oasis-open.org/apps/org/workgroup/mqtt/members/roster.php> <

**\*Reminder:** Poll for dates April / May 2016 face-to-face session > <https://www.oasis-open.org/apps/org/workgroup/mqtt/ballot.php?id=2910> < **Note**, poll closes at 11:30 EST so we can conclude during this meeting.

#### **Update to TC**

Richard informs TC that Geoff Brown has made the decision to resign as Secretary of the MQTT TC and Chair of the MQTT Security Sub-Committee. In addition the M2Mi team will withdraw from OASIS MQTT TC activities shortly.

Message from Geoff:

*M2Mi feels that it is healthy to allow others to participate as Secretary rather than M2Mi continuously serve in the role as default... It's been fun, however I consider the spec where it needs to be and thus our input and support it no longer needed.*

Richard thanks the M2Mi team for the hard work, commitment and enthusiasm in delivering MQTT 3.1.1 at OASIS and in helping to achieve ISO/IEC recognition.

**Richard:** The TC will need to elect a new secretary, nominations welcome.

#### **January 2016 MQTT Face-to-Face meeting update**

> <https://www.oasis-open.org/apps/org/workgroup/mqtt/email/archives/201601/msg00047.html> <

Ordered Jira issues > [https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/56864/MOTT\\_TC\\_orderedJirasFromPoll.pdf](https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/56864/MOTT_TC_orderedJirasFromPoll.pdf) <

**Jira updates & review:** <https://issues.oasis-open.org/browse/MOTT-256>

**Andrew Banks** introduces MQTT-256 (Metadata): <https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57624/MOTT>

**Ken Borgendale's Jira update:** The discussion at the face to face in Hursley was that we would either use an id=value set or flag,values representation. There was split opinion on this. Within the scope of either of these I would propose an encoding of the metadata which is upward compatible for producers and allows the metadata to be easily skipped if the only desire is to parse the payload. The metadata is an optional field in the variable header, and if it exists has a two byte length field followed by a 0xFF byte. Within this metadata extension we could use either an id=value set or a flag,values representation. If there is no metadata extension, the publish would look exactly as it does in V3.1.1. This representation gives 0 extra bytes when not using metadata, and no change to producers who do not use metadata.

**Nick O'Leary** and **Ken Borgendale** raise concerns about keeping clients as upwardly compatible as possible. Ken has updated the jira to suggest an encoding strategy to allow existing client to publish with no meta-data

**Richard Coppen:** Connect, Publish and Conack are areas where we would like to add additional 'meta-data'

**Andrew Banks** suggests one byte of flags and 5 optional meta-data fields

**Ken Borgendale** prefers to 'future proof' and put in id,value pairs

Ken, Nick and Andy B continues the discussion...

Bill Cox, Paul Freemantle and Nick O'Leary discuss the challenge of big changes to the spec to add more meta-data later if we don't do it now

**Richard Coppen:** Please help capture the conversation in the soaphub!

Paul/Ian discuss the proposed user meta-data field - and the pros/cons of there being a single field

**Ian Craggs:** the thinking behind one user metadata field, as opposed to more, was that it could be formatted in any way the user wanted, with the simplest change to the MQTT protocol

**Raph Cohn:** this is a great discussion - how do we capture this well enough to support a charter change so that we can work on it

**William Cox:** typically one pulls the list of metadata and the "what do you do if you don't understand" out into a separate document (rather than revising an ISO/IEC standard). Requiring parsing metadata you don't understand may be different from the HTML header example - there you must scan and parse.

**Richard Coppen:** 18 mins to go - we need to wrap this up shortly. Raph's suggestion seems sensible to work this once we have a

charter change done

**Nick:** if we allow a single bag of bytes and allow the community to define it then we miss the opportunity to define it

**Raph:** need to distinguish between meta data that is part of the message flow and part of the application logic

**Raph:** also need to consider encryption/signing of messages - there may be parts of meta data that change at each hop; they would have an impact on any signing of the message

### **Recharter Big ideas**

**Brian Raymor:** introduces > <https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57616/Big%20Ideas%20for%20MQTT%20v5.pdf> <

Richard Coppen: provides link to set of Jira issues review at face-to-face session > [https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57430/Workshop\\_day1\\_JiraCoverage\\_reviewedAtJan1016F2F.odt](https://www.oasis-open.org/apps/org/workgroup/mqtt/download.php/57430/Workshop_day1_JiraCoverage_reviewedAtJan1016F2F.odt) <

**Brian:** would like to identify an owner for JIRA 255 - Authentication schemes - so we can drive progress on it outside of the TC calls

**William Cox:** From a charter perspective, good to embed a strong preference for compatibility (and not breaking existing). Viz. 3.1.1 charter language.

### **Review results: poll for dates of next face-to-face session**

I can attend a F2F TC session in Bellevue WA 11th Apr - 13th Apr in person (Comment Optional) 10 **24.39%**

I can attend a F2F TC session in Bellevue WA 11th Apr - 13th Apr via teleconference (Comment Optional) 5 **12.195%**

I can attend a F2F TC session in Bellevue WA 18th Apr - 20th Apr in person (Comment Optional) 10 **24.39%** 2016-02-25 @ 10:35 am EST

I can attend a F2F TC session in Bellevue WA 18th Apr - 20th Apr via teleconference (Comment Optional) 4 **9.756%**

I can attend a F2F TC session in Bellevue WA 16th May - 18th May in person (Comment Optional) 8 **19.512%** 2016-02-25 @ 10:35 am EST

I can attend a F2F TC session in Bellevue WA 16th May - 18th May via teleconference (Comment Optional) 3 **7.317%** I am unable to attend (Comment Optional) 1 **2.439%**

TC agree to go with Brian's recommendation for 11th Apr - 13th Apr (face-to-face and teleconference)

**Nick OLeary:** to get travel/expense approval I have to provide an estimate to cost... for which I'd need to know location etc. Can you send around some details of venue/suggested hotel anything to help on that front

**Richard Coppen:** TC members to confirm attendance with Brian over the next week.

**Next TC Call:** Richard to schedule for 10<sup>th</sup> March 2016

**AOB:**

Richard provides update on ISO/IEC 20922

**Late joiners:** None

**Close**