Project Update

March 2015

Ian Craggs – icraggs@uk.ibm.com
Project Overview

• MQTT client libraries
  - Java client, Android service
  - C for Linux/Windows
  - Embedded C/C++
  - Python
  - .Net
  - JavaScript, Lua, Go

• MQTT tools
  - “Conformance” tests
  - Various GUIs including Eclipse view
Project Overview

- MQTT-SN client libraries and tools
  - Embedded C/C++
  - IBM Zurich contributions
    - Java Gateway (to MQTT)
    - Java client
Project Stats

• 3087 downloads in last year
  – but no Maven repos or alternative methods
  – Embedded Client only available in source

• 26 contributors in last year
  – New committer Paolo Patierno for .Net client
  – 3 new committers in consideration

• 201 bugs opened – 186 closed
  – Includes those raised as features

• Mailing list
  – 1205 messages/131 posters
Project Stats

- Permanent incubator sub-project created
  - components
    - Lua client
    - mqtt-spy viewing tool
    - Go MQTT-SN tools
    - Python MQTT-SN tools
  - to encourage
    - new committers
    - experimental projects and ideas
Project Plan

- Graduated in June 2014
  - 1.1 release in January 2015
  - 1.2 planned simultaneously with Mars
- Ongoing work
  - MQTT Test Suite under development
  - Embedded client libraries for MQTT
  - MQTT-SN embedded clients, gateway and tools
- New
  - "offline buffering" and automatic reconnect for mainstream clients
Project Plan

• Surrounding improvements
  – Website
  – Documentation
  – Tutorials
    • Videos, etc
Project Plan - Future

- I am assuming the MQTT specification will evolve over the next couple of years. Would it make sense to start an incubator to try out some new ideas for the spec? Developers could contribute code that implements these ideas and this would help the MQTT TC in the evolution of the spec. (Ian Skerrett)

- I'd like to see a focus on creating tools to test/debug/deploy MQTT apps. Tools like MQTTLens I think will be critical to the adoption of MQTT. Could Paho be home to them? (Ian Skerrett)

- I think the MQTT embedded security story could be greatly improved (Julien Vermillard) TLS and DTLS examples

- Device Management over MQTT (lots of people)
Key Challenges

- Java client ownership

- How to organize releases
  - Paho components are developed independently

- How to get GitHub-hosted projects contributed
  - Node.js
  - Ruby
  - both wanted to use GitHub issues
Collaboration Opportunities

Embedded work is mostly just myself

• As is the MQTT conformance testing
• Java and Android client
  – packaging, documentation, new function
• Device management over MQTT (LWM2M)
• Actively Soliciting Contributions for
  – PHP client
  – Ruby client
  – Node.js client