

AllSeen Alliance

TSC Minutes

April 15, 2014

6:00pm PST

via WebEx

TSC Participants:

Daeyoung Kim (LGE)

Greg Burns (QCE)

Hiroshi Yahata (Panasonic)

Jean-Francois (Jeff) Remy (Technicolor)

Marc Alexander (LIFX)

Mathew Martineau (QCE)

Milton Wang (Haier)

Telis Kaleas (QCE)

Tolly Smith (Silicon Image)

Toru Ueda (Sharp)

Not in attendance:

Joshua Hershberg (QCE)

Ryan Li (TP-LINK)

Also Participating were: Art Lancaster (Affinegy), Brad Kemp (x), Brett Preston (The Linux Foundation), Chris Kavas (QCE), Danny Lousberg, Dominique Chanet, Ilya Dmitrichecko, Joe Huffman (LF), Nikhil Dabhade (QCE), Takeshi Matsushita (Sharp)

Brett Preston agreed to take minutes.

Antitrust Compliance Notice

Greg reminded the TSC of its antitrust compliance notice.

Greg introduced the Agenda for the meeting:

- Approve minutes from last call
- Infrastructure Repository
 - For information only
- Data-driven API Proposal
 - Presentation from Technicolor
- Wireshark protocol dissector for the AllJoyn framework
 - Brief description and pointers for download

Approve minutes from the last call

Greg called for a motion to approve the minutes from the last meeting. Moved, seconded, than unanimously approved by TSC.

Infrastructure Repository

- For information only

Greg introduced the first topic, in which Mathew would be speaking about setting up an infrastructure repository with the purpose being awareness, and no vote being tied to it.

Mathew described how in order to set up the Jenkins automation, we need a place to put various scripts and configuration files. It will be the tools and infrastructure for the committee, still under ISC license. Essentially, planning to create an infrastructure/automation.git repository.

Greg brought up that the other benefit to this being that it makes it a lot easier for collaboration.

Greg put out request for those who have expertise with GIT, Gerrit, JIRA, or Jenkins, we could use additional hands on setting up/managing infrastructure.

Data-driven API Proposal

- Presentation from Technicolor

Greg introduced Dominique Chanet, who would be providing an overview of the data-driven API proposal that was submitted to the TSC just over a week ago, providing opportunity to ask questions.

Greg noted that per the TSC charter, we will be voting on this to either approve/reject proposal for the WG next week, so now is the time to get familiar with proposal.

Dominique began with a summary of the proposal, which is to raise the conceptual level of the API. Dominique noted that currently we have a large number of API concepts, and a goal of this proposal would be to reduce the number of API concepts that you need to know, which will reduce the learning curve for developers.

Dominique described how we would accomplish over a number of steps. First step would be to install one approach for discovery and session setup. Second would be to introduce data-oriented, public subscribe paradigm. Third would be to extend the expressiveness of type system, so that the interfaces that are designed in AllJoyn are more self-described than they are today. Finally, Technicolor would like to leverage code generator tooling, to enable developers to more quickly write an AllJoyn application.

Greg added that there has been lots of discussion on the Core WG mailing list regarding extension to the type system, to make the interfaces more self-describing.

For those interested in following discussion further, it was recommended to subscribe to the Core WG mailing list.

Dominique presented an architecture diagram of what he sees is a classic AllJoyn application looks like today. At the bottom you have the AllJoyn Core, which has to interact with numerous concepts in order to build your application, which contains both business as well as communication logic. What Technicolor proposes to do is to incorporate all, or at least most of the communication logic, inside the proposed data-driven API, which would result in exposure of a very limited number of API concepts to your business logic and your application.

Dominique transitioned from the “what Technicolor wants to do” to the “why” behind it. Main driver for Technicolor is that they feel that a lot of IoT’s potential value lies in devices that respond intelligently to their surroundings. Components needed include a data-driven approach, as well as understandable, accessible, and ubiquitous data, where the more inputs you have, the better.

Greg commented that a data-driven approach is one approach, and that while it is certainly applicable to some use cases, he wouldn’t qualify it as a need. Greg also clarified that this proposal would co-exist with existing AllJoyn API’s, and not serve as a replacement.

Dominique provided additional information around data-driven approach, where peers are discovered based on the data they offer, as well as the ability to discover peers based on the interfaces they implement.

Greg clarified that we have already moved away from name-based discovery.

Technicolor also noted the want to introduce the ability to define interfaces as data-oriented instead of service-oriented.

Greg and Dominique agreed that while this can be done today, the goal is to make the process easier.

Dominique expanded upon having understandable data, where data is only useful if one can make sense of it.

Greg noted that the C&C WG is focused on insuring that standardized data models are used and deployed.

It was recommended that those who have thoughts on this topic participate in the C&C WG.

Dominique expanded upon having accessible data, where data is only useful if one can access it.

Finally, Dominique expanded upon having ubiquitous data, where devices become more useful if they have more data available as input. The goal being that simplified API can lower barrier to entry.

Dominique presented the practical approach, with information around release 14.06, which should include extensions to type system, marshaling improvements for C/C++, and prototype of data-driven API. For release 14.10, Technicolor hopes to have data-driven API, extensions to the type system, as well as extensive documentation.

Greg brought up the idea for training sessions as well.

Greg asked question around marshaling improvements for C/C++, and if Technicolor was coordinating with Todd Malsbary, the maintainer for this. Dominique noted they were not talking with Todd yet.

Greg reminded everyone that voting on this proposal is scheduled for the next TSC call. If there are any questions, please send to the TSC mailing list.

Wireshark Plugin for the AllJoyn Protocol

Greg introduced Joe Huffman to speak about the Wireshark plugin for the AllJoyn protocol.

Joe introduced Wireshark as a protocol network analysis tool. He emphasized how powerful it is in looking at the data that AllJoyn sends over the network. Josh noted that code has been added to the wireshark tool that recognizes the AllJoyn protocol and then displays it in a human readable form. It is now showing up in their current builds. Joe encouraged all to go to [wireshark.org](https://www.wireshark.org), click on develop tab, then latest builds, one can get a version of Wireshark that has the AllJoyn code in it. Developmental release is also expected shortly, potentially today – April 15.

Joe shared a sample output, showing all the information available.

Joe discussed the ability to set up filters, where you can filter out only the data you're interested in.

Joe then introduced how you are able to do flow graphs, under the statistics menu.

Telis raised the question around whether the data on the flow graph was on real time or post processing. Joe clarified that it can be done either way.

Greg and Telis agreed that this could be very valuable for the C&C WG

Joe reminded all that because this is a Wireshark project, any bugs should be reported directly to Wireshark, through <https://bugs.wireshark.org/bugzilla/>

Joe polled for questions from the group.

Marc Alexander noted that they have been using Wireshark extensively and this will be a great advantage to have. Marc noted that for those who plan to use Wireshark, if you search for promiscuous mode, there is a selection of supported Ethernet/Wi-Fi adapters that will allow it to capture all packets on the network, and not just the ones going through that particular interface.

Greg announced a question that came through the chat window, around if instructions/tutorials have been added, and clarified that because it has just been released, we haven't done anything yet. However, Joe will be doing a tutorial in the future.

Additional items

Greg let group know that we will be creating a repository to hold sample code for the upcoming HackFest.

Greg also made note that we will be starting to see a number of smaller projects coming on-line, including a clock service. For now, we are just working to find best location to fit projects within. Does it go within an existing WG, such as Base services, or do we need to potentially create a new WG?

Greg presented request for volunteer to step forward to take a leadership role to help define these home-automation type use cases.

Greg opened the floor to any other comments/questions, and let group know that if they have anything to add to next week's TSC agenda, to send email to the TSC group. No questions were presented.

Greg closed call.