DLT WG Call Notes

*16 October 2018*

# Attendees

* Claudio Lima (telephone)
* Nick Stavros
* Pete Rivett
* Rob Nehmer
* Bobbin Teegarden

# Proof of Concept

Next step is looking for someone who can provide the expertise to demonstrate physical implementations derived from our concept models.

## News

JackRabbit and Harmonia received Phase II funding from DARPA. Have funding - may be available for the scripting described in last week's notes. If what we have is well-defined, can hire scripters for doing demos.

FIBO was one of the activities that was targeted in the original proposal. Were interested in ontology. Be able to do Smart Contracts using FIBO. Part of the funding can cover this PoC work.

2 year contract (realistically 1.5 – 1 ¾ years activity). Funding for their people to do demos and attend activities/meetings. Once we have a demo from this smaller group we have tasking for presenting to a larger group.

Harmonia build up a test environment to take code and move between different text environments. Government test environment for Blockchain, Tangle etc. This is for helping identify what needs to change from one environment to another.

NS: Invite Harmonia people who are doing the test bed, to this or another meeting. To determine what we expect to get from this test bed environment.

**Example:** moving from Ethereum to Blockchain, would expect to find differences, and a need for common API. Goal is to figure out how to do these things.

Also DARPA interested in private, secure social networking. Ian and Nick working on trying to work with Solid. Solid is a MIT based initiative to do the same kind of thing, have own private source funding; headed by the chap who did 'the WWW stuff'. Ruben Verborgh (University of Ghent) is heavily involved in this e.g. the Linked Data fragments stuff we have referenced in FIBO.

Would like to invite Ian to talk to OMG at some point. Trying to leverage security on an insecure network, as distinct from built in security. This was not anticipated by anyone. Trying to wedge in the security post hoc does not work. How to get rid of the 'spies in the middle' per Google et al.

### Next steps?

NS: Invite one of these meetings: Marc Abrams and John Black, from Harmonia, to present to this and then identify what a development team would do. They are building the test environment.

What we need to do is figure out how to go from conceptual model (ontology) to logical and physical data structures.

Also they don't know about reasoners. If we want to use ontologies to capture Smart Contracts - that a reasoning engine can use.

Reasoning - may be able to use this to deliver some of the functions that a SC would do. Want the software to base something off the reasoning rather than having someone code off those rules. Leverage the knowledge in the conceptual model.

### Process

We want to avoid the kind of thing that happens when a concept model gets ignored rather than maintained further down the line. The stuff that is captured in models lower down the stack does not get back into the concept model. Instead all new changes should come via changes to the (formally maintained) conceptual models.

Includes defining processes for how to handle change control e.g. bug reports (scope change versus implementation errors). Issue management process. Still needs to be thought about.

When we talk to Harmonia, we get them to build into the test environment the change control processes described above (Defect reports versus Change Requests i.e. scope change v bug).

This environment is targeted for government agencies to have playpen environments that are agnostic to the different test environments.

MB to do a review of their existing processes.

So...

What is the interface between what this WG does and what is the paid work from DARPA that is done by them.

**Next step:** Harmonia discussion as above.

### Include

Presentation on FIBO, SemTech, Reasoning;

Harmonia presentation on their vision and what they want to produce.

* This can be 30 Oct; subsequent 2 weeks. 30th would be ideal
* Invite MARS

## MARS

Do we know what MARS is bringing to this? They may also be interested in the PoC work as defined above.

* Domain: FDTF
* Middleware e.g. how you use ontologies in software = MARS

IOTA Submitters Meeting - will we invite MARS to that as well?

### How to invite MARS?

Char Wales is the maintainer of the MARS mailing list so we should ask her to put out the invite on this to that list.

### People Involved in MARS

Most MARS folks might not attend this meeting unless it is of interest. Want to convince them that distributed databases and DLT is of interest to them

Others involved e.g.

* Mike Abrams on IEF (Information Exchange Framework). A bunch of related standards.
* Robotics (may be interested in ontologies, reasoners).
* Claudio: Blockchain Engineering Council (BEC), in Houston Tx.
* Also chair of IEEE Blockchain Energy thing. Would like to help in any way possible. Work with energy / grid folks. Possible use cases e.g. in local grids. Opportunity for IEEE and OMG
* Duke Energy - also involved in MARS. Connect with them. CL can share initiatives on these things.
* Also in MARS: IIC - IIC Industrial Internet Consortium (all about the IIOT).

# ACTIONS

NS: confirm 30 Oct for Harmonia to present their thing

## Agenda for that call:

1. Get Harmonia to tell us what they are doing

2. Present on FIBO and conceptual model

3. Agree how to work together including business scope (IR Swaps versus other things)

## MARS Joint Calls

Meanwhile for shared calls with MARS. MB talk to Char about this. Draft an invite to MARS for the alternating FDTF / MARS joint calls.

So we notify MARS on the 2 alternating calls:

1. PoC

2. Standardization discussions (RFPs etc.).