Blockchain PSIG Call Notes

*September 12, 2019*

# Attendees

* Nelson IOTA
* Allen L. Brown, Jr., Deixis, PBC
* Rob Nehmer Oakland University
* Karen
* Nick Jackrabbit
* Mike Bennett IOTA
* Andrej Ruckij Monetha
* Ian Stavros Jackrabbit
* Rencher, Robert J Boeing

# Meeting Notes

*Today’s meeting was a presentation and demonstration from Monetha.*

*Comments below are comments ad discussion, questions etc. during that presentation.*

## Monetha

Focus is on ownership of data.

Solution is Blockchain based but may be used outside of that. Enable data owner to control their information.

See multi layer model.

Ethereum based; expanding to others.

Worked with Darmstadt Uni – mathematically proven.

### Usage

See also PDF of usage scenarios

#### Personal data

Control of data is with person or company themselves.

Has an Information Wallet

#### Multi-party:

Shared source of truth

#### eCommerce

Addresses the trust problem.

## Monetha Q&A

### Asset v Coin

Anonymous v known?

**What we store:** Data structure flexible, based on smart contract. Any Key Value as per data provider.

Alt for centralized properties registry example. Would have properties ID that stores information from multiple sources.

Build info wallet with track record of the whole interactions of the thing with the parties etc. Then the owner of the building has that information. Can sell that info for a fee.

eCommerce – merchant build reputation profile. Verify – can’t artificially generate the stars / feedback etc.

### Storage

Uses Ethereum, store facts according to their way. Can store more as IPFS. SC stores link to the IPFS. Quantum can be stored in JSON or other formats.

Want to look into standards to make it easier to work in these areas, and integrate more with other solutions. On our roadmap

Positive on standards e.g. W3C / RDF

### Potential Standards

Scenario: I have the info, someone wants to request that. Need a convenient way to learn about the metadata that is stored, before I initiate the request.

Someone who controls the profile from the multi data sources, I want to request that but as encrypted I do not know what I would request and pay for.

Our thinking: have flexible underlying structure

See facts Provider Registry, on the GitHub readme

Q: Ontology / schema for that metadata?

A: Think so

See SSI – Evernym and others; sovrin

– standard for ability to authorize SSI – there is a std for that.

But ability to manage more info – combined from other sources. Need more concepts.

Insurance, lending overlap – exchange info

Q: Would it help if OMG doing this?

A: Yes.

Talking to banks e.g. non-compliant bank users.

Banks in Lithuania interested in that. Have different data structures.

SBRM model – reporting. Do something comparable for metadata and data exchange.

Reporting also an issue they are looking at, for the metadata.

Standardized way to define the metadata for what we are storing.

Longer term vision – platform perfect to monetize info of a data owner in whatever vertical.

So ontology.

Also APIs?

Agree what a passport is (ontology); what fields I have. Now create one – what operations do I need to have on that. What data do I need to do eval, what data I provide about me?

See Passport Factory graphic on GitHub

Github.com/monetha/reputation-contracts/

Different vertical – transformed by different logics.

Want to go beyond EVM based ledgers (Ethereum, Hyperledger)

## Summary

Monetha uses the Blockchain as part of solution not the problem being addressed.

Want to eliminate the Blockchain and take an IPFS-developed ‘Linked(?) Peer to Peer’.

Store info on the IPFS. Use non EVM ledger to store the fact of the data exchange.

### Data market – IOTA etc.

AR: Different bus consortiums would run own permissioned ledgers to handle own challenges and transparency Qs. Integrate beyond those infrastructures. Need to use something different to exchange this info. See AWS when they started to collect IoT info from different sensors. Central server, send thru Kinesis. If there is a smart home replicate the whole solution within that home and aggregate sensor info and transform and then send to central server, for aggregated views from all the sensors. Else too much.

## Existing Applicable Standards

* BPMN
* DDS QoService stds
* Registries
* Existing ontologies and gaps therein

# Annex: Chat Log

*Includes comments from participants during the Monetha presentation.*

*(inter-personal messages removed)*

**Nick (to Everyone)**: 1:18 PM: So we are using assets rather than coins

**Nick (to Everyone)**: 1:24 PM: RDF is suggested byMike

**Nick (to Everyone)**: 1:28 PM: Metadata Standards?

**Nick (to Everyone)**: 1:28 PM: Data that describes the data that is stored in the blockchain

**Nick (to Everyone)**: 1:30 PM: So it looks like there is a metadata and an API

**Nick (to Everyone)**: 1:30 PM: correct?

**Allen L. Brown, Jr., Deixis, PBC (to Everyone)**: 1:45 PM: An alternative to an ontology is the W3C's forthcoming verifiable credentials data model.

**Nick (to Everyone)**: 1:46 PM: Sound's like we need a briefing on verifiable credentials data model

**Allen L. Brown, Jr., Deixis, PBC (to Everyone)**: 1:46 PM: I could probably get the editor, Manu Sporny, to present it.

**Allen L. Brown, Jr., Deixis, PBC (to Everyone)**: 1:47 PM: https://www.w3.org/TR/vc-data-model/

**Nick (to Everyone)**: 1:48 PM: Peer-to-peer secure messaging is an excellent place to look at Secure DDS

**Nick (to Everyone)**: 2:01 PM: Which people wanted to attend the Portland Meetup

**Nelson (to Everyone)**: 2:02 PM: Beyond QoS we can look at contingency plans so the device can self evaluate and heal itself