2023-03-22 TSPTF Meeting Notes

Meeting Date & Time

22 Mar 2023 This Task Force meets three out of every four Wednesdays (the fourth Wednesday is the Technology Stack WG plenary meeting). There are two meetings each Wednesday to serve different time zones:

- NA/EU meeting: 08:00-09:00 PT / 16:00-17:00 UTC
- APAC meeting: 18:00-19:00 PT / 02:00-03:00 UTC

See the Calendar of ToIP Meetings for exact meeting dates, times and Zoom links.

Zoom Meeting Recordings

- NA/EU Meeting: https://zoom.us/rec/share/_Rf0dGbj4M34vY2736n2ZJXe5hMS0gAshpq0QnvbZy0lCYOLOe-99Bx4Oii-caS4. uRj5aPAm6oWFMFsj
- APAC Meeting: https://zoom.us/rec/share/B0r0TgWH6L1DEYNpOjSOr39Y-hPVnaKyjRy3yepcjH074qC0Zjo4NOBy5HJ30B_ VbmPu3iaaem4Gcyx

Attendees

NA/EU:

- Drummond Reed
- Daniel Hardman
- Wenjing Chu
- Samuel Smith
- Darrell O'Donnell
- Alex Andrei
- Antti Kettunen
- Clare Nelson
- Daniel Bachenheimer
- Judith Fleenor
- Lance Byrd
- Mathieu Glaude
- Michal Pietrus
- Neil Thomson
- Rodolfo Miranda
- sankarshan
- Scott Perry
- Scott Whitmire Steve McCown
- Steven Milstein
- Subhasis Ojha
- P A Subrahmanyam
- Viky Manaila
- Vladimir Simjanoski

APAC:

- Drummond Reed
- Dima Postnikov
- Eric Drury
- Jo Spencer
- Wenjing Chu Samuel Smith
- Alex Tweeddale
- Daniel Bachenheimer Michael Herman

Agenda Items and Notes (including all relevant links)

3 m in	Start recording Welcome & antitrus t notice New member introducti ons Agenda review	Le ads	 Antitrust Policy Notice: Attendees are reminded to adhere to the meeting agenda and not participate in activities prohibited under antitrust and competition laws. Only members of ToIP who have signed the necessary agreements are permitted to participate in this activity beyond an observer role. New Members:
2 m in	Review of previous action items	Le ads	 ✓ ACTION: Drummond Reed to start a GitHub discussion on the question of TSP Workshops and also add it to the agenda for our March 22 meeting. One — see this Github discussion. ✓ ACTION: Drummond Reed to send an email to the Technology Stack WG mailing list and post to the ToIP Slack with a Last Call for Proposals.
5 m ins	LAST CALL FOR PROPOSALS & prep for TSP Workshops	Dr um mo nd Re ed	After today's Proposal #3 Part B from Wenjing Chu, we need to know if there are any other proposals in our proposal stage. If so, please speak up now. Secondly, Neil Thomson and others have suggested that as we move into our consolidation stage, we are going to need one or more "Special TSP Workshops" of at least 2-3 hour duration. See this Github discussion thread that Drummond started on this topic. Please post a reply with your preferences. We hope to begin scheduling these in April — and possibly hold a hybrid in-person/virtual workshop during Internet Identity Workshop (April 18-21). APAC: Jo Spencer asked if "the end of the proposal stage" will mean that we won't continue looking at other protocols. Drummond said that Wenjing's presentation today will address part of that. Michael Herman observed that each of the four proposals take a different approach to describing their vision and proposed design for the TSP — like describing four animals that all have four legs but are not the same animal (Jo Spencer said "camels and dromedaries as well as horses and zebras"). He pointed to this new Github discussion thread he started that asks questions about how we will proceed with the consolidation phase. Wenjing suggested that his presentation may partially answer Michael's question.
4 0 m ins	Proposal #3 Part B: Wenjing Chu	W enj ing Chu	Wenjing will present Part B of his Proposal #3. A handful of screenshots from his presentation are shown below. Here is the link to the Zoom recording of Wenjing's presentation in the NA/EU meeting. Here is the link to the Zoom recording of Wenjing's presentation in the APAC meeting. Here is the link to the existing discussion thread for Proposal #3.

0 m ins	above		Daniel Hardman asked what Wenjing meant by "backwards compatibility" for ITDP. Wenjing clarified that all of his examples were about compatibility with legacy technologies with an eye to making adoption of ITDP as easy as possible. He does not mean that those technologies would not need any change at all. Wenjing explained that his examples of how ITDP could fit with existing protocols like Aries, KERI, DWN, and OIDC would all evolve
			evolutionary paths for those protocols. Clare asked about the mobile use case on slide 63 — would that include the mobile device? And how would that be implemented? • Wenjing gave an explanation of how the mobile device could speak existing protocols to supporting systems.
			Darrell O'Donnell: Are we looking for backwards compatibility now (compatible to what?) Or are we planning for backwards compatibility?
			Neil Thomson: "Observation - a large part of interop is likely to be on governance and verifiable authority (initially) vs technical compatibility. For example, OIDC provides a non-DID identifier that OIDC is prepared to provide a verifiable authority (signing of the identifier) to providing backing -> VID"
			APAC:
			Jo Spencer: MATTR have been providing an OIDC <-> decentralised solution bridge for a long time. https://mattr.global/resources/articles/introducing-oidc-credential-provider/
			Michael Herman: Slide 67- It appears the use of ITDP is limited to being a "systems interconnect" protocoland not a universal Trust Spanning Layer Protocol?
			Michael Herman: Slide 69 - don't we have to use or limit our designs to decentralized technologies and not have "black boxes" for wrapping centralized services?
			Drummond Reed: For interop with legacy technologies/trust systems, that "wrapping" is actually quite valuable.
			Samuel Smith asked whether the assumption of greater "liquidity" in terms of trusted connections may not lead to the positive "pressure" that Wenjing refers to, because systems are vulnerable by virtue of the weakest system they are connected to.
			 Wenjing replied that ITDP by itself may not be sufficient for higher levels of trust, just at a base layer that everyone using ITDP shares. Higher trust can be layered over with higher level protocols.
			Jo Spencer said that Wenjing's presentation made him think about the topic of synochronous, semi-synchronous, asynchronous, etc. and that that has not come up much in the proposals.
			 Wenjing felt that ITDP should be able to accommodate all of those communications patterns. And that we should study them all as we design it.
			We closed the call by talking about how to proceed with the consolidation phase.
			 Jo Spencer suggested the focus should be on alignment. Examining each of the proposals to see what is equivalent and what is not. Michael Herman suggests that alignment requires a set of categories for examining alignment. There was a suggestion that we begin the first TSP Workshop with a review of the ToIP Technology Architecture Specification V1.0 as the bedrock source of our requirements. If so, Wenjing Chu volunteered to lead that review. Drummond Reed suggested the following action item:
			ACTION: All TSPTF MEMBERS: Consider your suggestions for the best way to proceed with the consolidation phase and then to post your suggestion(s) to the relevant Github discussion thread (or start a new one if needed).
	Review decisions /action items Planning for next meeting	Le ads	Next week is the Technology Stack WG Plenary meeting, so our next meeting as a task force will be Wednesday April 5. The primary agenda item will be discussing TSP Workshops and how best to proceed with the consolidation stage.

Screenshots/Diagrams (numbered for reference in notes above)

1 Q&A on the

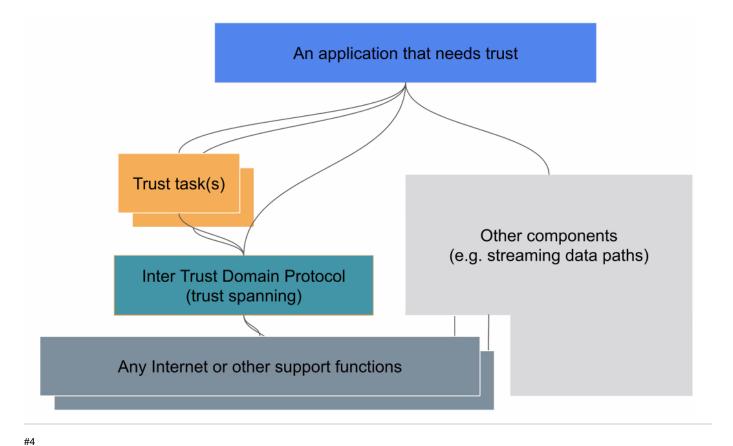
All NA/EU:

My proposal

- 1. A protocol should be understood under a Reference Architecture.
 - I will re-present a short overview of my Reference Architecture that was first presented at IIW April 2022 and then contributed to the TechArch TF.
- What is TSP, exactly?
- 3. Less is More what the TSP should and shouldn't include.
- 4. What the Protocol Specification defines
- 5. How various trust tasks can be built on top of ITDP (TSP)? How does ITDP relate to other protocols (forerunners)?
- 6. How lower layer Support Functions may implement what ITDP needs
- 7. Q&A

Part 2 is to cover these sections that I didn't have time to present in the first time.

Inter Trust Domain Protocol serves as the layer 2 protocol



Inter Trust Domain Protocol inter-connects trust domains with interoperability.

Interoperability provides "liquidity".

And "liquidity" provides "pressure" towards better trust featured solutions that applications need.

ITDP itself does not dictate which solution is better.

ITDP is that Inter-Connect protocol. Therefore, when I say what ITDP shouldn't do X or X is out of scope...

It doesn't mean X shouldn't be done or discussed.

It doesn't mean X is unimportant or uninteresting.

It doesn't mean X is not related.

It just means X should not be included in ITDP proper because it is not serving the goal of maximizing trustable connectivity or X is not minimally required.

#6

In summary, ITDP serves the role of TSP very well. I reach this conclusion by studying some of the common solutions we are familiar with in terms of its ability to support respective trust tasks in upper layer and interoperability through ITDP with endpoints outside of its designed trust domain.

ITDP has the minimum required foundational trust upon which other stronger or diverse types of trust tasks and applications can be built. It is minimum - because removing either of its two main requirements will break the above property.

#7

ITDP to Layer 1 Support Functions - Brief Summary

- Generic wallet interface
- Network transport
 - Transport independent
 - Communication pattern independent (e.g. does not require a separate protocol to support multicast, streaming etc.)
 - Message encoding independent
 - DWN-style cloud medium very well supported
- Can be extremely efficient to support Mobile, IoT/sensor and other battery powered devices
- Can be readily integrated into Metaverse/XR devices
- Can be readily integrated into virtual Cloud Native services
- Backward compatible
- Forward freedom

Decisions

• None.

Action Items

ACTION: All TSPTF MEMBERS: Consider your suggestions for the best way to proceed with the consolidation phase and then to post your suggestion(s) to the relevant Github discussion thread (or start a new one if needed).