Sep 4, 2025

UNTP Technical WG

Attachments UNTP Technical WG
UNTP Technical WG - 2025/09/04 17:42 ACST - Notes by Gemini
Meeting records Recording

Summary

Jo Spencer, Adrienna Zsakay, and Harley Thomas discussed the UNP and AATP implementation, including the challenge of decentralized access control, the need to align with existing standards, and user onboarding for technical implementers. They also deliberated on the year-end goals, which include achieving a version 7 spec for the working group, focusing on the identity resolver, decentralized access control, verifiable credentials profile, and verification rules. Jo Spencer would reach out to Marcus Sabadello and Alex Tweedale regarding DID resolvers, and Harley Thomas would prepare and share AATP content, including technical diagrams and "explain like I'm five" versions, on the Slack channel.

Details

- **Introductions and Backgrounds** Jo Spencer introduced themself as co-founder of Suzu, an advisory consultant firm specializing in digital trust, with a background in technical architecture, design, and payment systems, including work as Chief Architect for A\&Z Bank and building payment systems worldwide. Adrienna Zsakay introduced themself as located in Perth, WA, with 30 years experience in Asia, including running a food company in South Korea and working in food regulation in Thailand, where they built a large database of Asian food regulations. They also mentioned setting up Circular Economy Asia after moving to Malaysia and focusing on skills training, supply chains, and secondary raw materials. Harley Thomas introduced themself as the CTO at Trust Providence, focusing on supply chain traceability and sustainability data capture,

and leading the tech working group for UNP, emphasizing interoperability over mega-platforms or blockchain solutions.

- **AI and LLM Differentiation** Adrienna Zsakay expressed discomfort with bundling all AI and LLM (Large Language Model) applications together, arguing that they are distinct. They highlighted practical AI applications, such as reducing elephant deaths on Indian rail systems, contrasting them with LLMs that they believe provide "nonsense" for business plans.
- **UNP and AATP Implementation** Harley Thomas shared Trust Providence's experience with the UNP (Universal Network Protocol) and AATP (Australian Agriculture Traceability Protocol), noting that they adopted supply chain standards like GS1 and EPCIS for interoperability. They consider the UNP crucial for solving complex traceability problems, particularly in Australian agriculture, and see their role in the tech working group as vital for defining fit-for-purpose protocols.
- **Terms of Reference Review** Harley Thomas confirmed that both Jo Spencer and Adrienna Zsakay had reviewed the terms of reference on GitLab and had no questions or comments.
- **Decentralized Access Control Challenges** Harley Thomas identified decentralized access control as a significant blocking issue for the supply chain working group, particularly concerning how to present different subsets of data to various buyers without issuing multiple digital product passports (DPPs). Adrienna Zsakay, involved in the user access rights group in Surpass 2, noted they have grappled with this issue for a year and do not believe issuing different DPPs for different user groups is the solution. They suggested Harley Thomas consult with the Surpass 2 techies who have expertise in this area and shared that the JTC24 draft standard for user access rights might be beneficial.
- **Alignment with Existing Standards** Harley Thomas noted that feedback from Vladimir, connected to Surpass 2, suggests aligning with existing standards like GS1 EPCIS, rather than creating new ones. They expressed interest in reviewing current access control standards to align wherever possible. Adrienna Zsakay offered to send Harley Thomas a copy of the JTC24 user access rights draft standard, emphasizing that it is a draft and not for public distribution.
- **User Onboarding for Technical Implementers** Harley Thomas highlighted the difficulty for solution providers, such as farm management system developers, in approaching the UNP and AATP due to the complexity of schemas and

standards. They emphasized the need to generate artifacts and self-onboarding guides to facilitate practical use by existing systems.

- **GitLab as Single Source of Truth** Harley Thomas advocated for GitLab to be the single source of truth for all discussions, issues, and concerns related to the UNP, aiming to consolidate information from meetings, Slack, and email threads.
- **Year-End Goals and Focus Areas** Harley Thomas conveyed Steve's goal for the working group to achieve a version 7 spec before Christmas, which requires reviewing all open GitLab issues and merge requests. The key focus areas include the identity resolver, decentralized access control, verifiable credentials profile, and verification rules.
- **Verification Rules and Trust Graphs** Harley Thomas elaborated on the need for verification rules to interpret complex linked data, such as transparency graphs and digital product passports referencing emissions profiles. They discussed the idea of a standardized library of "shackle constraints" for different use cases to ensure data validity and meaning.
- **Expert Collaboration for Identity Resolver** Jo Spencer suggested involving Marcus Sabadello and Alex Tweedale from Checked, who are leaders in DID (Decentralized Identifier) resolvers, to bring practical expertise to the identity resolver section. Harley Thomas offered to reach out to Nicholas Carr, who leads the linked data working group in Australia, regarding verification rules.
- **Need for Architectural Framework** Jo Spencer proposed developing a logical architectural framework to define the componentry and protocols required for typical UNP implementations across multiple actors in a supply chain, moving beyond the current conceptual model. Harley Thomas agreed to start producing diagrams based on their AATP experience to help define the necessary components and protocols for a typical implementation.
- **Communication for Non-Technical Audiences** Adrienna Zsakay suggested creating a document to translate technical concepts for non-technical decision-makers to encourage broader adoption. They offered to compile this "explain like I'm five" type guide to clarify terms like "verifiable credentials" for adoption working groups. Jo Spencer supported this idea, reiterating the need to understand which components will be sourced from different providers in a common model for all implementations.

- **Two Versions of Diagrams** Harley Thomas agreed to create two sets of easy-to-interpret diagrams: one for technical audiences and another simplified version for business development and non-technical stakeholders, potentially using slide decks and Mermaid diagrams. Adrienna Zsakay offered to professionalize the slides using Adobe InDesign and share a circular economy glossary of terms to bridge language gaps.
- **Single vs. Multiple Digital Product Passports** The group discussed a chemical manufacturer's need to selectively share claims in a DPP with different customers. Harley Thomas questioned whether this requires issuing multiple DPPs or if a single DPP can manage access control for different claims. Adrienna Zsakay opposed the idea of multiple DPPs, citing EU regulations for user access types (consumer, government, circular economy actors) and past discussions in Surpass 2 that found technical solutions for managing access within a single DPP.
- **Digital Material Passport Discussion** Adrienna Zsakay introduced the concept of a "digital material passport" (DMP) as a distinct terminology for data packets within the supply chain, separate from the consumer-facing DPP, which is aligned with BASF's terminology and helps in understanding user access rights. Jo Spencer acknowledged the terminology distinction but was hesitant to completely segregate it from DPPs, suggesting it could be a subtype, and emphasized focusing on use cases driving requirements for selective information sharing.
- **Selective Disclosure in Verifiable Credentials** Jo Spencer mentioned SD-JWT as a method for selective disclosure within verifiable credentials, where specific fields are cryptographically signed, and access tokens control data access. They noted this model, used in EIDAS standards, allows controlling what consumers can access, although its appropriateness for the UNP model needs further consideration.
- **Data Collection and Regulation** Adrienna Zsakay highlighted the EU's view of DPPs as critical for data collection to improve resource management and identify weaknesses in recycling systems. They questioned whether other governments would adopt similar regulatory approaches or simply treat DPPs as digital labels.
- **Next Steps and Action Items** Harley Thomas would seek better framing of the use case from the supply chain group. Jo Spencer would reach out to Marcus Sabadello and Alex Tweedale regarding DID resolvers. Harley Thomas would

prepare and share AATP content, including technical diagrams and "explain like I'm five" versions, on the Slack channel.

Suggested next steps

- [ ] Adrienna Zsakay will send Harley Thomas a copy of the JTC24 user access right draft standard.
- [ ] Adrienna Zsakay will create a document to translate technical information for non-technical audiences, supporting the adoption group.
- [ ] Harley Thomas will share ATP content and various diagrams on the Slack channel.
- [ ] Jo Spencer will reach out to Marcus Sabadello and Alex Tweedale to involve them in the process.
- [ ] Harley Thomas will start producing a diagram for an architectural framework.