2023 InCommon Community Trust & Assurance Board Accomplishments

Introduction

The theme for this year's InCommon Community Trust and Assurance Board (CTAB) work was "beyond baseline expectations." After shepherding two rounds of Baseline Expectations for InCommon participants in the past four years, CTAB concluded that a further round of "everyone must meet" requirements applying to all participants is too limiting. While many participants will benefit from additional measures to enhance and scale up assurance, the federation needs to be sensitive to the diversity in our community by supporting and encouraging the adoption of more nuanced and specific identity access management practices.

CTAB divided its work plan into two six-month cycles **[2023-WorkPlan]**. In the first cycle, CTAB members lead the effort to develop the InCommon community response to the draft NIST Special Bulletin 800-63 rev 4, Digital Identity Guidelines **[800-63-4]**. CTAB also developed recommendations describing the operational needs to track and maintain participants' ongoing adherence to Baseline Expectations **[Operationalizing-BE]**. CTAB members contributed substantially to the recently released REFEDS Assurance Framework v2.0 and REFEDS MFA Profile v1.2. The SIRTFI Working Group also planned the second "tabletop" exercise for responding to security incidents.

In the second cycle, Implementation work for Operationalizing Baseline in Federation Manager and other tooling began, and phase one of this implementation rolled out in December 2023. Further, CTAB initiated a working arc called "Framing the Future of Federation Maturity." The goal is to develop those nuanced and specific measures to raise the federation's value and trustworthiness. This work informed our participation in InCommon Futures 2, a much broader effort that will continue into 2024.

The following sections discuss our specific progress in these areas -- what we accomplished and what we hope to see done in the future.

Work Items - 2023

2023 SIRTFI Exercise

The SIRTFI Work Group planned and conducted InCommon's second annual community Cybersecurity Cooperation Exercise. Fourteen InCommon participant organizations, joined

by the Australian Access Federation (AAF) and the Research and Education Advanced Network New Zealand (REANNZ), conducted the exercise in November 2023.

Post-exercise feedback was positive, with a consistent desire to do more of this again. The bottom line recommendation is to recharter the SEPWG for 2024 to evolve the learning activities and continue to give member organizations a chance to practice using the SIRTFI framework.

Report: http://doi.org/10.26869/TI.173.1 **[SIRTFI-Exercise]**

NIST 800-63 Rev 4 Consultation - Review and Feedback

NIST released the 4th revision of the NIST Special Bulletin 800-63: Digital Identity Guidelines for public consultation at the end of 2022. At the start of 2023, CTAB led the InCommon community effort to review the NIST Guideline and submitted formal feedback on behalf of the InCommon community.

Feedback to NIST: InCommon feedback on sp800-63-4-suite-ipd **[800-63-4]**

Clarity on BE Enforcements / Operationalizing Baseline

InCommon Baseline Expectations (BE) marked a milestone in furthering trust and assurance within the InCommon Federation. For the first time, organizations were able and expected to self-assert trustworthy operational practices for their federated entities. Nonetheless, assertions of this sort, however accurate and well-meaning when they are made, are prone to becoming stale over time.

Recognizing that InCommon needs to continue to help organizations maintain the accuracy of their assertions, CTAB created the Operationalizing Baseline Expectations Working Group (OBEWG) to consult with InCommon's Operations to develop guidelines and general methodologies for monitoring BE assertions for InCommon participants. The InCommon Steering Committee endorsed the group's report in early Summer 2023.

Further, InCommon Operations introduced the first set of Operationalizing BE enhancements to the Federation Manager in December 2023, and work continues.

Report: Operationalizing Baseline Expectations Working Group - Summary Report
[Operationalizing-BE]

Framing the Next Chapter of Federation Maturity

Baseline Expectations for Trust in Federations (Baseline Expectations; BE) has been an important mechanism to sustain and grow federation trust. As InCommon approached the 5th anniversary of Baseline Expectations, CTAB embarked on its next leg of the BE journey: reflecting on the accomplishments, and importantly, what we can do differently to accelerate/improve trust, interoperability, and value in the Federation.

Among the BE deployment observations, we learned that:

- Our community responds to calls for improved trust, security, and interoperability.
- Many need clearer, more precise guidance: "please tell me what I need to do and how"
- Participant representatives aren't necessarily technologists anymore: they rely on solution providers. Asking operators to translate/relay technical change needs to solution providers doesn't scale well.

While BE continues to be an integral part of sustaining Federation trust, it's "all or nothing" compliance approach takes time (too much time), and can only address the minimum common elements of trust and interoperability. We need ways to address trust and interoperability needs applicable to the majority in federation communities. We need clearer and more defined descriptions of "the right way to do x" in the Federation so that our stakeholders can build "federation readiness" into their longer-range planning roadmap.

Providing a helpful "maturity roadmap" for participants and solution providers to build toward can be a good way to answer the question: "What do I need to do to be compatible with InCommon?"

Truly successful, seamless integration in InCommon requires effort in multiple areas. Do we know what those are? Do we have a way to guide our community in the direction we are heading so that they can plan? Do we provide enough helpful guidance so that newcomers can learn and measure success in their work (and not reinvent the wheel in a vacuum)?

This topic is broad and deep. We are not going to solve all of it in one go. I am proposing that CTAB convenes a group to examine, at a high level, the dimensions of federation interoperation and recommend actions to drill down into important ones for subsequent work.

Providing a helpful "maturity roadmap" for participants and solution providers to build toward can be a good way to answer the question: "What do I need to do to be compatible with InCommon?"

CTAB members engaged in multiple in-meeting and offline discussions exploring several areas where such a "roadmap" adds value. One area in particular that generated significant interest was a renewed focus on clarifying authorization support using attributes such as affiliation, entitlement, etc. This need to clarify authorization support details extends beyond big research / multilateral integration use cases. After all, Federation success depends on consistent, quality institution-level ("intramural") IAM practices as well. The roadmap InCommon presents needs to account for these institution-level needs as well.

In Fall 2023, the InCommon Steering Committee broadened its effort to develop the InCommon Futures 2.0 Report by January 2024. CTAB members actively participated in that process and contributed many of these discussions toward that report.

References

[2023-WorkPlan] InCommon Community Trust and Assurance Board 2023 Work Plan, https://spaces.at.internet2.edu/display/ctab/ctab-2023-work-plan

[800-63-4] InCommon Feedback on NIST Special Bulletin 800-63 Rev 4; the content of this document was submitted to NIST's public comment process for NIST 800-63 Rev 4: https://docs.google.com/spreadsheets/d/1KbBJ7iUXrQJ_1huA4nzrtSi9eWz-hBPkcyJNRRwrgi8/edit#gid=1801691681

[Operationalizing-BE] CTAB Operationalizing Baseline Expectations Working Group Summary Report, https://spaces.at.internet2.edu/display/ctab/2023-operationalizing-be-wg-summary-report

[SIRTFI-Exercise] SIRTFI Exercise Working Group End of 2023 Report, http://doi.org/10.26869/TI.173.1 ; (Google Doc version): https://docs.google.com/document/d/1jng-1DnSp3sMjW1ctP1OdO5ZkarWlMgoELcjZNI2Gls/edit