2021 Q1 Hyperledger Aries

Project

Hyperledger Aries

NOTE: The previous report was submitted 20 days ago, so this report is largely the same as that one. As such, updates from that report are indicated by **bold and green**.

Project Health

Project health is strong, getting stronger, and the community is thriving. There are a number of significant projects going on within and outside of Hyperledger related to Aries, and continuous progress is being made across the community.

Questions/Issues for the TSC

Given the nature of Hyperledger Aries as a set of protocols and a set of implementations of those protocols versus a releasable artifact, how do we declare Aries as "active" vs. the current "incubation"? A newcomer arriving at Hyperledger knowing about Indy and Aries might see the "incubation" status and shy away, even though Aries builds on Indy and it has numerous production deployments? IMHO, Aries is production ready, but there has been little discussion about changing the status, and it's not clear how the Hyperledger definition should apply to this type of project.

RESOLVED: The Aries community has a draft "Request to Exit Incubation" and expects to provide it to the TSC for consideration in the next few days.

A second question relates to the fact that a core element of Aries is the protocols defined in the Aries RFCs repo. Does the TSC have an opinion on whether Hyperledger Aries is the right, safe location for those protocols?

RESOLVED: We are discussing this within the community. We appreciate the views put forth by the TSC about this question.

Releases

There are three major Frameworks in Aries – Aries Cloud Agent Python (ACA-Py), Aries Framework Go (AFGo) and Aries Framework .NET (AFD), with a fourth (aries-vcx) being extracted from Indy into Aries. All are active, with ACA-Py and AFGo releasing regularly:

- ACA-Py had 11 releases in 2020
- Aries Framework Go has 5 releases in 2020

There are (at least) 14 active repos in Aries (per the metrics below – although I think there might be a couple of others...to be verified), including the major (and several less mature) frameworks, conformance and interoperability test suites, and several tools and utilities. Added in early 2021 is an Aries-level secure storage component that replaces a comparable component in the indy-sdk and is available for use across frameworks. It is the first "shared component" in Aries, with more expected in the next year.

Overall Activity in the Past Quarter

Per the Aries Activity Dashboard for the last quarter of 2020, Aries codebases had 708 commits in 506 PRs from 44 contributors.

Community participation is extremely active in rocketchat channels, community calls, and repo PR reviews and issues. Email lists are less frequently used.

Coordination with the DIF DIDComm working group is healthy, with regular reports being shared.

Project work in main repos is healthy and active.

Current Plans

- **Change the status of the Hyperledger Aries project to "Active".**
- Aries Interop Profile (AIP) 1.0 was accepted by the community in January 2020 and has been successful in enabling multiple Aries deployments to interoperate – especially ACA-Py (enterprise) and AFD (enterprise and mobile) deployments.
- AIP 2.0 is in draft at the Aries Working Group and is expected to be completed in ~~January~~ **February** 2021. AFGo skipped past AIP 1.0 and it is expected that with AIP 2.0 we will achieve interoperability across all major frameworks, which is great for the entire community.
- Work is now active to extend Aries beyond support just Indy ledgers and Indy AnonCred verifiable credentials to supporting other ledgers and other verifiable credential formats – most notably BBS+ signatures, supporting ZKPs and selective disclosure.
    - AFGo chose not to use Indy as the underlying ledger or verifiable credential model (although contributors have added that), so the other frameworks so the Aries protocols have implementations that other frameworks can follow.
    - **Aries Cloud Agent Python contributors SICPA and Indicio announced plans to immediately begin development to add multi-ledger support to ACA-Py.**

Maintainer Diversity

Aries is a multi-codebase effort, and each codebase has its own set of maintainers. The diversity of maintainers closely matches contributors, with notes below. Cross framework collaboration is increasing. For example, work is happening on interop testing capabilities across the Python, Go, .NET and JavaScript frameworks.

As interest in verifiable credentials has increased with COVID-19 use cases (proof of testing, proof of immunization and mobile medical workforces), interest and attendance has increased, as have deployments of Aries-based implementations.

Contributor Diversity

In addition to the code contribution statistics (above), here are a few indicators of our current diversity:

- We hold two community calls on Wednesdays: weekly at noon Pacific to cover US and Pacific contributors, and biweekly at 7am Pacific to cover US and European contributors.
- Call attendance for each is typically in the 15-20 range.
- Most organizations have only one attendee; it is rare for more than 3 to attend from the same organization.
- Cross codebase interoperability efforts indicate cross-organization cooperation.

Additional Information

We look forward to submitting to the TSC the Aries "Request to Exit Incubation" document Real Soon Now. We hope it can be addressed quickly.

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