Hyperledger Aries

Infrastructure for blockchain-rooted, peer-to-peer interactions. It provides a shared, reusable, interoperable tool kit designed for initiatives and solutions focused on creating, transmitting and storing verifiable digital credentials.

Hyperledger Aries is infrastructure for blockchain-rooted, peer-to-peer interactions. It includes a shared cryptographic wallet (the secure storage tech, not a UI) for blockchain clients as well as a communications protocol for allowing off-ledger interaction between those clients. This project consumes the cryptographic support provided by Hyperledger Ursa, to provide secure secret management and decentralized key management functionality.

Key Characteristics

- A blockchain interface layer (known as a resolver) for creating and signing blockchain transactions
- A cryptographic wallet that can be used for secure storage of cryptographic secrets and other information (the secure storage tech, not a UI) used to build blockchain clients
- An encrypted messaging system for allowing off-ledger interaction between those clients using multiple transport protocols.
- An implementation of ZKP-capable W3C verifiable credentials using the ZKP primitives found in Ursa.
- An implementation of the Decentralized Key Management System (DKMS) specification currently being incubated in Hyperledger Indy.
- A mechanism to build higher-level protocols and API-like use cases based on the secure messaging functionality described earlier.

Documentation

Project Management

JIRA issues:

- https://jira.hyperledger.org/browse/aries

Repositories

https://github.com/hyperledger/aries
https://github.com/hyperledger/aries-rfcs
https://github.com/hyperledger/aries-cloudagent-python
https://github.com/hyperledger/aries-staticagent-python
https://github.com/hyperledger/aries-framework-go

All Aries repositories - https://github.com/hyperledger?utf8=%E2%9C%93&q=aries&type=&language=

Communication

Mailing List

- https://lists.hyperledger.org/g/aries

Chat (for questions and ephemeral discussions)

- #aries
Meetings

Aries Working Group

People who want to learn about or contribute to Aries should join this call. This does not replace our asynchronous collaboration, but should help us keep everyone up-to-date and moving together.

Discussion items: upcoming releases, current PRs, work that will generate future PRs, architecture changes that will impact downstream teams, project standards, best practices, design, etc.

For call details and agendas, see: Aries Working Group

Calendars

- Hyperledger Calendar of Public Meetings

History

- Proposed by Nathan George
- Approved by the TSC on 2019-05-02