Hyperledger Fabric - Hyperledger Aries Integration to support Fabric as Blockchain ledger

Project Title	Hyperledger Fabric - Hyperledger Aries Integration to support Fabric as Blockchain ledger for Aries.
Status	COMPLETED
Difficulty	нідн

Description

Self - Soverign Identity application is an application by which you are able to keep your identity secured and at the same time also prove your identity to the verifier without revealing them. These applications are built using Hyperledger Aries, which depends on Indy as a Distributed Ledger and Ursa as a cryptography library.

Currently, the most used Blockchain platform is Hyperledger Fabric. And the businesses that are building solutions using Fabric want to have some sort of identity verification to be done in their platform.

This is the reason, why this project has come into existence. Once done it would enable Aries to interact with Fabric as a ledger, which would then enable SSI applications to be built on top of Fabric.

Additional Information

Fabric

Aries RFCs

Fabric SDK Node

Aries Framework Javascript

Learning Objectives

Hyperledger Fabric Architecture & SDK/API

Hyperledger Aries Javascript framework

VC/DID standard and Application

Expected Outcome

Fabric chaincode that consists of Domain Transactions that happen in Indy.

Wrapper in AFJ that interacts with Fabric.

Relation to Hyperledger

Fabric & Aries Integration will help to achieve Hyperledger project interoperability and adoption of Aries Libraries in other Hyperledger projects like fabric.

Education Level

Phd or Hyperledger working experience.

Skills

Hyperledger Fabric architecture and Hyperledger Aries

W3C - Verifiable credential and Decentralised Identifier standard/specification

Hyperledger Aries -Agent framework Understanding

Go/Javascript programming

Future plans

Build production grade Hyperledger Aries to support Hyepledger Fabric as Blockchain. This project could be merged with Hyperledger Aries SDK to support Fabric as ledger.

The chaincode can be submitted to Hyperledger Labs, where it can be maintained and developed further.

Support for revocation transactions is to be added.

Fabric and Indy wallet can be integrated into one.

Preferred Hours and Length of Internship

40 hrs week or 20 hrs week Part time.

Mentor(s) Names and Contact Info

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Mentee

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Project Results

Relevant Project repository:

https://github.com/HarshMultani/aries-fabric-wrapper

https://github.com/HarshMultani/aries-framework-javascript

Final Report



Fabric - Aries Presentation.pdf