

OByte Wallet Service & Client grant proposal

The OByte wallet backend service and frontend client library provide easy to use APIs and developer tools to secure, reliable, and scalable access OByte. They can be used as the infrastructure for OByte decentralized applications so the developers can focus on the features.

What?

What will be done, what are the deliverables

We are creating wallet service and client library to interact with OByte, called OWS and OWC respectively. OWS facilitates multisig HD wallets creation and operation through a simple and intuitive REST API. OWS can usually be installed within minutes and accommodates all the needed infrastructure for peers in a multisig wallet to communicate and operate with minimum server trust. OWC communicates with OWS using the REST API which can work in browser. All REST endpoints are wrapped as simple async methods. All relevant responses from OWS are checked independently by the peers. OWS can be seen as a light wallet vendor, or something like infura for Ethereum. Based on OWS and OWC, more applications can be built for OByte easily.

Why?

What problem it solves

Currently there is no easy-to-use light wallet vendor service for OByte application developers. The official library “obyte-hub” integrates all the DAG joints data with its clients’ wallet data. That is a bit hard for application developers who are not familiar with OByte. In the OWS, “obyte-hub” just acts as a blockchain explorer which is used to query and send transactions. OWS only stores the wallet data for its clients, such as wallet id, address, etc. Then, application developers can focus on their features by using the REST APIs

provided by OWS. By using OWC, developers can easily build OByte frontend applications that can communicate with OWS. We believe that OWS and OWC will help application developers and bring more users to OByte.

When?

Timeline and milestones with requested payment schedule in GB

May 1, 2019:

- Init OWS
- Add ability to authenticate clients to get access to OWS
- Add ability to create HD wallet and get wallet information
- Add ability to create and get wallet addresses
- Add ability to get wallet balance
- Add ability to get transaction history
- Add ability to create payment transaction with automatically adding inputs
- Add ability to publish and broadcast transaction

May 25, 2019

- Add ability to create Multisig shared wallet
- Add ability to join shared wallet for related clients
- Add ability to create, sign, reject and send transaction from shared wallet

Jun 10, 2019

- Add ability to scan active addresses
- Add ability to get the fiat exchange rate
- Add ability to send notifications for receiving assets and tx confirmation
- Create documentation

Jun 15, 2019

- **Public release of OWS v0.1**
- **Milestone 1, requested post-payment GB : \$4500 worth of GB**

July 1, 2019:

- Init OWC
- Add ability to access OWS with authentication
- Add ability to create HD wallet from random mnemonic
- Add ability to import HD wallet from mnemonic and extended private key

- Add ability to encrypt and export wallet
- Add ability to create and join multisig HD wallet
- Add ability to create and get wallet addresses
- Add ability to get wallet balance and transaction history
- Add ability to create, publish, sign, reject and broadcast payment transaction
- Add ability to get and save preferences
- Add ability to scan active addresses
- Add ability to get fiat exchange rate
- Add ability to subscribe notifications
- Create documentation

July 30, 2019

- **Public release of OWC v0.1**
- **Milestone 2, requested post-payment GB : \$3500 worth of GB**

Aug 1, 2019

- Init Command Line Interface Light Wallet using OWS and OWC
- Add ability to create, import and export HD wallet
- Add ability to create and join multisig HD wallet
- Add ability to get wallet status
- Add ability to create and get wallet addresses
- Add ability to get wallet balance and transaction history
- Add ability to create, publish, sign, reject and broadcast payment transaction

Aug 15, 2019

- **Public release of CLI Light Wallet v0.1**
- **Milestone 3, requested post-payment GB : \$1000 worth of GB**

After the third milestone we will commit a minimum of 16 hours per month for 3 months to do this:

- Maintain the library, fix potential new issues
- Implement most requested features
- Add ability to import wallet using extended public key
- Add ability to sign from air-gapped hardware wallet
- Add ability to create more types of transaction, such as text, data, profile, etc.

- Requested GB: \$500 worth of GB per month

Where?

The project is open source under MIT license and will be publicly available at these address on the release:

<https://github.com/guantau/ocore-wallet-service>,
<https://github.com/guantau/ocore-wallet-client>,<https://github.com/guantau/ocore-wallet>

Who?

Team members and their roles in the project and backgrounds

Alan Guan <https://github.com/guantau>

Role: developer

Background: Founder of <https://bbfans.org> (in Chinese)

Leader of Chinese OByte developer Community

Bili Wang

Role: developer/tester

Background: Programmer of blockchain