BitShares Development Proposal

by BunkerChain Labs and Cryptonomex, Inc

The purpose of this proposal is to define a statement of work for taking BitShares to the next step. Our goal is to make the user experience of BitShares equal to or better than existing exchanges, and enhance the current referral program to become more profitable.
This proposal is divided into several independent features that will be paid for upon completion.

Cryptonomex has identified the following mini-projects with fixed pricing. BunkerChain Labs will be overseeing the project and acting as an intermediary between Cryptonomex and BitShares.

1.0 RATE LIMITING TRANSACTIONS

This proposal has been retracted after community discussion. Instead fees will simply be lowered to just enough to prevent spam for everything except transfers and filled orders and account creation. The adjustment of fees can be done with a committee proposal and thus no charge.

2.0 ADJUSTING MARKET FEES

There are two kinds of fees in the BitShares system. Transaction fees are charged simply for broadcasting a transaction of any kind (transfer, create limit order, etc). Transaction fees are fixed fees depending upon the type of operation and are set by the committee members. Market fees are a percentage of every filled order and are set by the asset issuer.

Historically the committee account has charged 0% for trading BTS and therefore there was no need to distribute market fees to referrers. Under the proposed change, the committee members would change the market fee from 0% to something competitive with centralized exchanges and then revenue earned from these fees would qualify for the referral program.

Under this proposal, 100% of all trading fees for the BTS token will be subject to the same division as other fees (currently 20% to the network, 80% to the referral program). Trading fees for other assets (including Smart Coins) will not be subject to the referral program. Assets such as BitUSD or BitGOLD will still be able to charge a market fee, the proceeds of which will be denominated in BitUSD or BitGOLD and will be in the control of the committee account to be spent with stakeholder approval.

The network must still incentivise asset issuers by allowing them to set their own trading fees based upon the volume of the trade.

This particular proposal has no changes to the user interface and its scope is limited to the consensus protocol and C++ code.

When a user places an order they will pay the minimum order fee which will be on the order of $0.20 and will only apply if the order is partially matched. If they cancel the order they will get $0.19 back.

The cost of implementing and testing this change is $8500

3.0 HOSTED WALLET SERVICE

Users of traditional exchanges expect to be able to login from any computer. To upgrade BitShares to support this, bitshares.openledger.info will need to be upgraded with server-side hosting solution. The proposed solution would follow the Wallet Server Architecture outlined here: https://github.com/cryptonomex/graphene/wiki/Wallet-Server-Architecture

The server will be implemented in Node JS and store wallets in a SQL database.

In addition to creating the server, the GUI will need to be updated to support saving the wallet on the server by default. Users may choose to opt-out of server side storage.

This change is not a hardfork and will impact the user interface. Users will no longer be warned to backup their wallet and will be able to login from anywhere.

The cost of implementing and testing and deploying this change is $7500

4.0 IMPROVED MARKET STATISTICS

The market interface will require additional statistics to be gathered and tracked so that we can easily calculate moving averages, 24 hour volume, 24 hour change, etc. Additionally we would track volume by fees generated in order to prioritize trading pairs as they are listed in the GUI.

Additionally the API will need to be updated to make it easy for 3rd party trading bots to interface with the BitShares exchange. We will design an API that mimics as closely as possible the APIs of popular exchanges such as Bitstamp and Poloniex. With this approach trading tools that are compatible with those exchanges can be quickly adapted to BitShares.

The cost of implementing, testing, and deploying these API and statistics gathering tools is $7750.

5.0 USD Deposit / Withdraw / KYC management

In order to support a user experience consistent with existing exchanges, the wallet will need to be updated with native integration of KYC processes. This means the wallet will have forms for submitting documents to the wallet provider and automating whitelisting. It also means integrating USD deposit / withdrawal instructions similar to how other crypto-tokens can be deposited and withdrawn. Forms will be needed to collect and save bank routing information and tools will be required for operators like Open Ledger and MetaExchange and other exchanges to easily manage their UIAs on the network.

A withdraw is triggered by generating a transfer operation and including withdrawal instructions as a JSON object within the memo. The data in the JSON object includes things like bank account information.

The user's wallet will have to be updated to store / edit their bank account information to facilitate deposits and withdraws.

The Asset management GUI will need to be updated to support the following features:

1. Whitelist / Blacklist Authorities
2. Adding whitelist/blacklists
3. Managing asset Permissions and Flags (restricting transfers)
4. Funding Fee Pools
5. Set market fee rates / etc.

A server will have to be setup that receives copies of user IDs and other information required by KYC. The wallet will have to interface to this server to view pending validation requests and then automatically whitelist an account after doing the manual validation. This means the server will have to authenticate the asset issuer prior to revealing users private information.

This particular task has many complex user interface elements and will cost $16,000 to build and deploy to the standards of BitStamp.

ACCOUNTABILITY

In order to ensure that the product is delivered as promised, BunkerChain Labs will be designated as the prime contractor who will receive the worker pay. Upon completion of the tasks to the satisfaction of BunkerChain Labs, Cryptonomex will be paid for the work. In exchange for their administrative overhead associated with accounting, evaluation, and quality control Bunker Labs will charge an additional 10% fee on top of the prices quoted above.

The tasks above will be structured as 5 independent worker proposals for total of 3.5M BTS each for a combined total of 21M BTS. BunkerChain Labs will only sell enough BTS to cover actual costs and any leftover BTS will be returned to the BitShares blockchain reserve pool (making them available to fund future worker proposals at stakeholders direction).

This work will be done over a period of 2 months, during which 3 worker proposals paying 60,000 BTS per day will be available and 1 worker proposal paying 120,000 BTS per day.

If all work is completed then Cryptonomex will receive $47,750 and BunkerChain Labs will receive $4,775.

INTELLECTUAL PROPERTY

The quoted costs assume that the resulting work product will be owned by Cryptonomex and licensed to BitShares under the same terms as existing code. Existing terms allow the code to be used under a BSD-style license for use with the BitShares network. Use with other blockchains will require a license from Cryptonomex. This structure is designed to protect BitShares from competing clones while allowing Cryptonomex to offset some of the R&D costs.

The current license for the Graphene-UI (Wallet) is restricted to individual usage. To use the UI with a multi-user website such as Open Ledger requires a separate licenses from Cryptonomex.

If all 5 workers are funded to completion, then Cryptonomex will also allow the Graphene-UI code to be used under the same BSD-style license as the core C++ code. Anyone would be able to build better hosted (multi-user) wallet solutions for BitShares without having to license it from Cryptonomex. All other uses of the Graphene-UI will be subject to separate licensing from Cryptonomex. Other user cases include any blockchain other than BitShares.