

MY PLACE X

Blockchain Technology as Global Accessible Address and Identity System.

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1 THE MY PLACE X SYSTEM

1.1 Introduction

The My Place X System uses the blockchain technology as a distributed immutable database which contains the encrypted personal data of the user. A lot of the code used in Bitcoin is not necessary. For example the double spend mechanism, the account balancing, the principle of the longest chain is the valid one as well as the mining of blocks to include transaction data.

If one considers the above, only the encryption technology, the public ledger as containing encrypted data and the principle of being distributed is retained. The technology of signatures forms an integral part of the system in order to verify that the data does belong to the requesting user.

1.2 Technology build on

The core technology that the system is built on is existing technology that is widely distributed and available. Here we refer to Smartphones, the GPS satellite system and software, Google maps, an internet connection and a camera.

Data is recorded by using the advanced capability of smartphones that can record the GPS coordinates of the device. The user records the GPS co-ordinates of residence and stores it on the device. Unfortunately Smartphones can only record the GPS co-ordinates, at best, to a 6m error. This is not good enough to pin-point the residence and there a photo graph of the residence can be included in the data to be stored. My Place X is not there to replace the existing address system, but

t enhance it. Thus, if a more traditional address is available, the street address, unit number, suburb, town, city, province/state, zip code and country can also be stored. An ID sized photo of the user can also be recorded and stored. The above information is called the “basic information”

The system, however, allows for a significant more options. The information stored can also included ID/social security numbers, passport numbers, banking details, social media links, login details, next of kin, etc. or whatever end users might demand, while the software is developed.

The most difficult part of the software is entering the data.

Data can then be exchanged with other devices, e.g, cellphone to cellphone, chat software such as Whatsapp and WeChat, social media devices, email, online field entries, 2D barcodes, blue tooth, wireless and push technology. The user can then transfer the selected information directly to the end user or use the My Place X system, which runs on the internet.

1.3 Design parameters

The Spot-X team has developed the following design criteria.

- Ease of use, even for the non-technically savvy users
- The technical compleity must be hidden and only made available on demand
- Must run on Android, IOS and PC
- Node and server software must be PC and server based, windows, Mac and Linux comptible
- Minimum data transfer (Bytes) between cellphone and the internet
- Only the user must control the private keys and be able to fully control the confidentiality of data.
- The network, nodes and servers may never have access to the data in unencrypted form.
- The user must be able to select any information, even if it is just a single field, and send it to an end user.
- The data must only be available for retrieval for a specified period.
- The end user must be able to store the users information on their server.
- Storage of the Basic Information must be free of charge. Hopefully this will improve adoption.
- Subsequent data, such as KYC, etc can be charged for.
- The cost must be kept low and thus transaction fees are charged per byte requested.
- Provision must be made for lost Private and Public keys and retrieval of such keys.
- The system must be able to prune unused data and control the size of the main blockchain.
- Because the initial Basic Information is stored free of charge, provision must be made for spamming.
- Mining is replaced by a Proof Of Stake algorithm
- Nodes and servers should not be limited in quantity and each and every node must be able to earn a return on their investment.
- Nodes and servers should be constantly monitored for the quality of service they provide, removed from the network pool if they do not, but allowed to return if they have improved their.
- Implement a voting system.

- Retain portion of the Transaction Fee in a System Account, which can be spend based on the voting of the Nodes and server operators.
- Use already available stable crypto currencies for Transaction Fees.

1.4 Blockchain configuration

Spot-X has developed an algorithm that currently fulfils 90% of the above Design criteria. We have decided not to make the details of this algorithm available to the general public due to its sensitive nature and avoid unnecessary competition at this stage. Blockchain technology is revolutionary but not rocket science. We have designed and build rockets in our careers. :-)

The basic principle is as follows.

- The user creates a set of private and public keys, which are stored on his device or on the internet in his email account or some storage facility. Third parties can print out an ID card with the keys in the form of a 2D bar code and provide it to the user in a laminated form.
- After all the information has been collected or when he would like to add information, such as KYC, the data is encrypted using the private keys.
- All data is stored and tagged using a predefined field names, similar to a database table.
- The data is sent to the My Place X network in user encrypted format, together with the signed standard message and public key.
- The My Place X network verifies the data, keys and signed standard data message. And stores it on the main blockchain.
- Naturally it is not that simple due to timing of data arrival to the network, but that is not really an issue. The data is collected in a pool, the pool is processed in a sequential list format, sent to a pre-determined node and server for processing, etc. The processing node and server generates an additional key set, send the public key to the user and discards the private key. At no stage does the node and server have access to the unencrypted data.
- When the user wants to retrieve his information, he provides a list of data fields to retrieve, the second network generated public key, and a signed standard message.
- Again the request is collected in a pool where it awaits allocation and processing. On the basis of a sequential list the request is processed. The node and server retrieve the specified fields from the Main Blockchain and stores the information on a sidechain with its specified life time. The index of the data on the sidechain is returned to the user or end user, depending on what was selected.
- The user send his public key, a signed message and the sidechain index, via SSL connection, to the end user.
- The end user sends the signed message and the Sidechain index to the network, where it is placed in a pool.
- The node and servers validate the signed message, checks the life time of the data and if everything is valid, retrieves the data from the Sidechain and sends it to the end user.
- The end user uses the public key of the user to decrypt the data.
- The process is then considered to be complete.
- The terms and conditions of the system specifies that the end user may not store sensitive data, such as banking details etc. on his system, unless given permission by the user.

Please note that the above algorithm is broadly described and there is a lot more to it. We can not guarantee that it will work sufficiently to protect the integrity of the data and that it is not hackable.

However Spot-X will do everything possible to make it possible. Due to the nature of the technology no guarantees are given for the success of the My Place X System.

1.5 Recovery of Master key

A Master Key utility will be implemented in order to allow the user to retrieve lost Private and Public Keys sets.

A password that forms a sentence together with other non-wellknown private data can be used to create a hash, which encrypts the Master Key recovery field. The user can store this Master key in a safe place.

1.6 Pruning and Junk Data

Currently it is planned that all storage transaction of Basic Information should be free to the User. This is to motivate users to join the network and can be seen as an incentive for adoption of the system. The user only has to pay for additional services such as KYC and other higher security storage data. He also has to pay for making the data available to an End User. However, this cost can be paid by an End User, such as an online merchant, as an incentive to draw possible clients. Since the basic data storage is free, it leaves the system open to abuse with bogus and fake data which can result in an unrealistic Main Blockchain length.

A usage index will be stored for each block on the block chain. This index will be increased on each Data Retrieval Transaction. The Main Blockchain will be evaluated on a 12 month basis and all blocks, that have not been used in that period, based on their usage index, will be removed. This function will be done by all nodes and the Main Blockchain will be re-assembled in that period.

1.7 Voting Feature

After 3 years Spot-X will open source the code base and formally remove itself from the development, marketing and promotion from the My Place X project.

A method will be created by which this function can continue and therefore a Voting Feature will be implemented. A Project Wallet will be created in order to fund various community proposed projects.

All node and server operators can participate in the voting process and determine what proposed projects are approved and how the funds are spent. The Project Wallet will be funded from a 10% retention of all Transaction Fees.

1.8 Additional Services

The My Place X System is not only a system for the poor and un-addressed but also for the more established people in the more developed nations. As we have stated before, the My Place X System

is not to replace the existing address system but to enhance it and bring the other half of the world population on line.

Google maps is not always up to date and there will be areas that have to be rescanned. Although all efforts will be made to liason with the relevant bodies, there will be an opportunity for entrepreneurs to use drone technology to map these areas and temporary store these maps on the network. Communities, governments or charities can pay these enterpreneurs for the services.

Although every effort will be made to keep the system as simple and user friendly as possible , not all people have the necessary technical know how or advanced cellphone to set up the initial data. Enterpreneurs can provide technical services and record the necessary basic information for a fee.

Crypto currencies might not be easy accessible. A third party can provide a local exchange via cellphone Apps or provide prepaid vouchers. Charity organisations can pay user in the relevant crypto currency for community work.

Read the full the White Paper

https://myplacex.io/documents/White_Paper.pdf.