Shareslake

A fully stable blockchain ecosystem.

An ecosystem for volatility protected use cases.

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Introduction

There are several use cases out there that could benefit from the public blockchain technology but are not yet applying it.
Public blockchains run on top of its own base coin, whose price usually fluctuates a lot. For example, ADA in Cardano.
Although the price fluctuations may serve as the hook to attract the initial users, it keeps a lot others away.
A direct example of these use cases is the traditional stock markets. They could strongly benefit from the public blockchain technology, but the volatility makes it infeasible to move them to public blockchains.

Shareslake is focused on creating a **fully stable blockchain ecosystem** that can be embraced by all those use cases that could benefit from the technology without exposure to volatility.
For that, the Shareslake Network is an open blockchain network, based on Cardano technology, **whose base coin is a fiat backed stablecoin**, Redeemable (RED).

Shareslake is the fully stable branch of Cardano. The Shareslake network supports everything you can do in Cardano, but is powered by a stablecoin instead of ADA. Operate a pool, earn staking rewards, interact with smart contracts, everything on top of USD-backed coin.

The Redeemable stablecoin arrived to Cardano mainnet in September 2022, becoming **the first stablecoin in the Cardano ecosystem**.
The **Shareslake network** was released on May 1st, 2022, becoming **the first non-official Cardano network**. The first Cardano fork (codebase).

Redeemable Stablecoin

The Redeemable stablecoin was the first stablecoin to reach the Cardano mainnet, in September 2022.

Redeemable is a fiat backed stablecoin, maintaining its value thanks to a USD reserve. To mint a Redeemable it is required to add 1 USD to the reserve, and canceling 1 RED allows to redeem the USD from the reserve.

1 RED = 1 USD

We understand the concerns people may have about this process, so we publish a transparency section in the website to easily check the reserves state. In the transparency section we will provide periodic audits of the accounts by a third party, so people do not have to trust the information provided by Shareslake.

The minting and redemptions can be done through the Shareslake Dashboard. Currently the dashboard allows to mint and redeem in both Cardano and Shareslake mainnets.

Due to regulatory requirements, the usage of the dashboard is restricted to the users passing the KYC process, and citizens from some jurisdictions are not allowed to use it, according to U.S. laws.

The Dashboard monitors operations according to Anti-Money Laundering and Counter Terrorism Financing.

Shareslake Network

Shareslake became the **first “non-official” Cardano Network on May 1st, 2022**.

The Shareslake network is a parallel deployment of the Cardano blockchain, with some different configurations.

Instead of ADA as base coin, it is powered by the fiat-backed Redeemable stablecoin, which means everything happening on the network is powered by a coin that has a 1:1 peg with the U.S. dollar based on a real reserve that serves as collateral.
New Redeemables can be minted by adding USD to the fiat reserve and in the same way, redeeming the USD is possible by burning the Redeemable.

The Shareslake network divides the time in epochs, and there is an epoch boundary every 3 days.

Anyone can deploy a stake pool into the Shareslake network in the same way it is done in the official Cardano *mainnet*. To make the process easier, we created a GitHub repository containing all the steps and the scripts for a semi-automatic pool setup.

A stake pool operator (SPO) is in charge of maintaining the pool running as well as renewing the pool certificates. The SPO will earn a fixed amount of Redeemable and the rest will be distributed among the delegators.
The delegators are people that delegate their staking rights to a pool. They can continue using their Redeemable as normal after delegating and they will be earning a reward.

The transaction validations are done using a Proof of Stake, which requires much fewer resources than the Proof of Work used by Bitcoin or Ethereum. The number of blocks that a validation pool will validate depends proportionally on the number of RED it has stacked. Thus, the more Redeemable in the stack, the more fees it will collect from validating transactions.

For further information we recommend learning about Cardano staking and Ouroboros, since Shareslake works in the same way.

Shareslake Economy

Every transaction that is created in the network requires a fee. Since Redeemable is fully collateralized, the transaction fee can be easily calculated and it is deterministic in USD terms. That allows configuring a small fee while still enough for making the network flooding prohibitively expensive.

Redeemable has a 1:1 peg with the US dollar, this means each Redeemable corresponds to one U.S. dollar on the reserve ($1 = 1 RED)

Redeemable fees are initially set as a fixed 0.1 RED plus 0.0005 RED for each byte of the transaction. The average transaction contains 500 bytes, so for an average transaction, the fee will be around 0.25 RED.
There is also a minimum UTxO that is configured to be around 0.15 RED.

The fees and the minimum UTxO make the network not suitable for micro-payments since the minimum amount of Redeemable you can send is 0.15 RED and it will cost around 0.25 RED in fees. Nevertheless, for most normal payments, the fee can be considered negligible.

Just like Cardano does for Catalyst, a percentage of the whole network fees is used to reward the companies adding value to the network.
These percentages can change in the future to adapt to the network traffic, initially, they are set as follow:

- 0.75% to distribute as staking rewards.
- 0.25% divided into:
    - 0.15% to reward companies
    - 0.1% to fund Shareslake development

People can delegate to stake pools in order to get validation rewards. The delegation of the staking rights increases the network security and helps people to obtain some extra incomes without locking their funds.

Living Costs Pegged token

Having Redeemable as a 1:1 backed coin is great, but like with any other fiat-backed stablecoin, the fiat currency inflation will affect the Redeemable holders.

Preserving the purchasing power time has always been a big challenge. Initially, the Redeemable was about to serve both purposes, but we found out that in practical terms it is better to have Redeemable as a 1:1 backed coin and create a second token to serve this specific feature.

The concept is simple: one unit of the token must always allow the acquisition of the same amount of products.
For example, if a slice of pizza costs 1 unit of the token today, in 10 years I should be able to buy the same slice of pizza with it, no matter how much the slice costs in USD terms.

This concept is more powerful than it seems. Like an individual's savings, corporation or institutional treasuries can be held without worrying about losing value over time. It eliminates the need of investing the funds, maintaining its value at the same time they remain liquid.

Shareslake Bridge

The Shareslake Bridge allows moving assets between Shareslake and other networks, including Redeemable.

The bridge allows people to move between networks without requiring a centralized exchange. For example, people can move the Redeemable stablecoin through the bridge and swap it for other assets in the destination network, without requiring to pass through a centralized exchange to directly convert between assets.

The Shareslake bridge currently supports to move Redeemable between Shareslake and Cardano. In the future it will support other networks and assets.

Bringing Companies On-Chain - Native Companies

Any company, either private or public, can join the network at any moment to take advantage of the technology with zero exposure to volatility.

A Shareslake native company is a company whose shares are directly tokenized into the network and that accepts Redeemable for the purchase of its products or services. It does not mean the company has to exclusively accept Redeemable or be exclusively tokenized in Shareslake.

Any company accepting Redeemable is providing the network with extra usability, thus, it is worth incentive the adoption by providing rewards proportional to the contributions. To fund such a rewarding scheme, a part of the whole network fees are accumulated each epoch, similar to how Cardano Catalyst works.

Those companies that issue their shares into the network will be able to fully automate their processes through smart contracts in order to generate reports, issue/buy back shares, set up employee vesting programs, manage sales, etc.

The long-term vision of Shareslake is to **serve as the base for the open stock markets of the future and companies tokenization**, to be the network where companies are completely tokenized and bring the equity markets on-chain to take advantage of the transparency, transaction immutability and decentralization. It will be cheaper for investors and the money will flow to companies instead of intermediaries.
The volatility of other blockchain ecosystems make this much more complicated since companies cannot afford the risk of maintaining funds in volatile assets, with Shareslake it is now possible thanks to being powered by Redeemable.

Identity Verification

Reaching the long term goal of bringing companies on-chain opens the door to trade company shares in a decentralized way, which means to decentralize a highly regulated industry.

Even though initially a DEX development was planned, it makes sense to allow any DEX to contribute to this process, and focus on the base infrastructure for that. There is a main problem to solve here, the identification of the persons involved in the transactions when they involve securities. (Note that in the network there can be tokens representing securities or any other king of tokens, such as image NFTs)
An on-chain identification process is required when transacting securities, so anyone can consult a registry to determine if the operation is allowed or not. It can be seen as a decentralized central source of identities identifying the wallets allowed to perform such transactions that DEXes or other applications can check before placing operations with assets under high regulation. This allows full compliance with minimal effort for DEXes and other applications.

It also allows you to self-custody your equity portfolio and connect it to any “exchange” anytime, without complex migrations or onboarding processes.

The second big problem to solve is to recover lost portfolios (lost wallets). When someone loses the wallet keys, it usually loses everything on the wallet. That is a valid approach for utility tokens, but not for security tokens. This requires creating a security token standard for eUTxO based networks.

More information on this will be published in the future while the project evolves.

Shareslake Ecosystem

The ecosystem is developed around the Shareslake network, which is compatible with the software of the Cardano ecosystem due to its own nature.

Shareslake is a fully stable ecosystem that aims to provide blockchain advantages to all the use cases that need to run completely isolated from volatility. The main objective is to make financial processes easier and open, allowing everyone to automate workflows that can also be used by others, either for personal or enterprise financial management.

Some examples of what is possible using the Shareslake ecosystem are salary payments, distributing dividends, managing automated vesting processes, companies' board voting processes, selling products without requiring crypto off-ramps, etc.
There are an infinite number of new possibilities in the Shareslake ecosystem, probably more than we can think of.

The ecosystem is also an important part to maintain the network running properly. The more applications running on top the network, the more incentives validators will receive to continue performing a good job of validating transactions.

We strongly think the future of forming companies is on-chain either for traditional companies or a new way of forming them. Imagine companies not bound to a single state, instead, they will have a global company, like a DAO/LAO that would have a subsidiary per state on which it has employees. Currently, this kind of structure does not exist, but everything points out that it will.

Roadmap

The development is structured in 3 different phases:

Network and coin

During this phase, the network is deployed, as well as the rest of the infrastructure to make it easier to use such as block explorer, APIs, wallets integration, etc.

The Redeemable can be minted and redeemed by interacting with the USD reserve.

Bridges are set up to transfer Redeemable and other assets between different networks such as the Cardano *mainnet*.

Stake pool operators start to deploy their nodes in Shareslake, improving the network security.

Bringing Companies and Adoption

The second phase consists of bringing companies on-chain. At this moment, people should have been able to check the power of having a fully stable blockchain ecosystem.

During this phase, we expect to attract tokenization companies, which are basically companies whose main business is to tokenize the equity of other companies.

We also expect people and companies to start using the Redeemable stablecoin for day to day payments.

During this phase we will create the recipe for companies rewards distribution based on real world facts about the network usage.

Allowing Decentralised Exchange of Securities

The third phase consists of deploying the on-chain identity registry and developing the securities standard for eUTxO based networks, which will allow people to trade company shares in a decentralized way.

Disclaimer

Everything described in this document is just a reference. It is subject to changes during the project development. We are building for people, so we dynamically adapt to what people request.