

Swaap: A Global Payment Network

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Abstract. A trusted global cryptographic currency would allow financial transactions to be settled among companies and individuals across the board, on a secure, rapid, and cost-efficient way, without going through a financial institution and eliminating any need for currency exchange among transactions taking place between different jurisdictions. Direct and unbiased processing of these transactions by the blockchain is part of proposed solution, but the main benefit is the accessing of liquidity in different local currencies, through our liquidity pool, where users will be able to redeem their Swaap Tokens (SAP) in fiat currency at any time, and have their funds deposited directly in their bank accounts. The liquidity pool will work as a currency basket where all funds will be secured and locked away until a user decides to redeem it. We intend to make this process transparent and trustful, with procedures being validated in the blockchain and regular independent audits being conducted, with all this information made available to the public, always. Having a multi-currency and multi-asset cryptographic currency also comes makes it less susceptible to volatility, with the liquidity pool balancing itself even in case of severe devaluation or debasement of an individual currency or asset class.

1. Introduction

There is a vast array of cryptographic assets distributed among different networks of which people choose as stores-of-value, means of exchange or investments. There are thousands of them, spread throughout the internet, each one with its own peculiarities, making them more, or less valuable to its users. Though, despite the wide range of different tokens, coins, and currencies out there, it is right to say that most of them can be divided in two main categories: stablecoins and free-floating coins.

Stablecoins are usually hard-pegged to a fiat currency of choice, mimicking its value on a 1:1 ratio, whereas free-floating coins - or simply crypto currencies - are not hard-pegged to any fiat currency and its value can often be directly linked to its acceptance, usage, and market demand.

But despite stablecoins and crypto currencies having their own pros and cons, both fail on serving its users as a truly global mean of exchange, that can serve both as a democratic and unbiased currency and a reliable source of fiat-liquidity, when required. That is the main problem we are going to address with Swaap.

We intend to align blockchain technology with a financial framework that will allow us to serve our users with a truly global payment solution, on a very low-cost and extremely secure way, completely eliminating the need for currency exchange and the use of financial or any other trusted third-party institutions to validate these transactions.

Swaap will allow borderless transactions to be settled in seconds or minutes, on a purely peer-to-peer system, using the Ethereum blockchain to validate and store all this information on an immutable and perpetual way, making the whole process extremely secure and transparent.

Apart from serving its purpose as a secure mean of exchange, Swaaps will also be a reliable source of liquidity in fiat currency. Users will be able to redeem their tokens in fiat currencies at any given time, using our own platform to do so, having their funds deposited directly in their bank accounts.

This will be possible thanks to our liquidity pool, which will basket several different currencies and will be the pivot of liquidity for users purchasing and redeeming Swaaps with and on fiat currencies. The pool will gather several different currencies and a select range of assets, such as gold and silver, which will be stored and managed by our organization.

The liquidity pool will allow us to create not only a very fiat-liquid cryptographic currency, but also a less volatile currency, which will be less susceptible to weaknesses on a particular fiat currency or asset class, balancing itself out by its own diversified collateralization framework, making it a more reliable store-of-value in times of financial uncertainty.

Swaaps will offer the liquidity reliability, and low volatility of stablecoins – such as DAI and Tether – and the non-biased and democratic nature of crypto currencies - such as Bitcoin, Litecoin and Ether – at the same time. Such properties will make Swaap attractive for a wide-ranged public, creating a new concept of cryptographic currency that diverges from both the stablecoins and the free-floating crypto currencies as we know.

Among the reasons we believe Swaap will be a smarter and more attractive choice among other crypto currencies and stablecoins:

- It is backed by a diversified range of collateral, which makes it less volatile than any other crypto currency and more reliable than any other stablecoin.
- It uses the Ethereum network and blockchain ledger, which is a reputable, well-tested, and reliable platform, opposite to new and untested networks.
- It is built as an ERC-20 token, making it compatible with most Ethereum wallets and a range of existent technologies that will allow users to enhance their experience by allowing easy integration and usage of the tokens.
- It will have a free-floating exchange value, making it an extremely attractive investment instrument.
- It will offer reliable and multi-currency liquidity through official platforms, eliminating fraud and scamming risks to the users.

2. Technology and Processes

Issuance and Acquirement of Swaaps

Users will be able to mint Swaaps at any time by depositing collateral against it, and it they will be able to do it directly through our platform. The collateral will be measured against the current market price and the user will be credited with the Swaaps, directly on their ERC-20 wallet. The collateral will be pooled and stored in our liquidity pool.

Swaap Exchange Tokens

By detaching the value of our main token from the intrinsic value of the liquidity pool, we create a potential liquidity constraint that could cause the system to collapse if the value of all circulating tokens becomes greater the value of the liquidity pool. To solve this problem, for each token (SAP) issued to a user, a mirrored exchangeable token (SAPX) will be issued to a smart contract and, upon redemption, users will go through a 2-stage process, first exchanging SAP for SAPX, and then exchanging SAPX for fiat currency.

Swaap Exchange Tokens, or SAPX, will have a perpetual exchange ratio of 1:1 SAP and its value will be determined by the sum of all currencies and assets in the liquidity pool, denominated in USD, divided by the total amount of outstanding tokens.

This will ensure that the platform will never run out of liquidity – even if all users decide to redeem their tokens at the same time – whilst still allowing speculation on the future value of the liquidity pool when exchanging the main tokens.

Swaap Governance Tokens

A limited amount of governance tokens will be issued and rewarded to community leaders, volunteers, team members and supporters that will help on developing and managing the Swaap platform. These tokens will be freely exchanged between users and will give voting rights to its holders, which will be called ‘Governors’, and governance will be exercised through governance pools, published on our official website.

Voting will imply on sending these tokens to an official ERC-20 address, representing either ‘Yes’ or ‘No’, and whichever address end up with the greater token count by the end of the voting period, will be the winner. There will never be a maximum or set number of tokens a Governor can send, always being those with most tokens, the ones with the greater voting and decision power within the platform.

3. Liquidity Pool

The liquidity pool will provide collateralization and liquidity to the tokens, being a key-element for the functioning of the whole platform. It will host a range of currencies and assets, which will be held secure and accessible only for token redemption purposes.

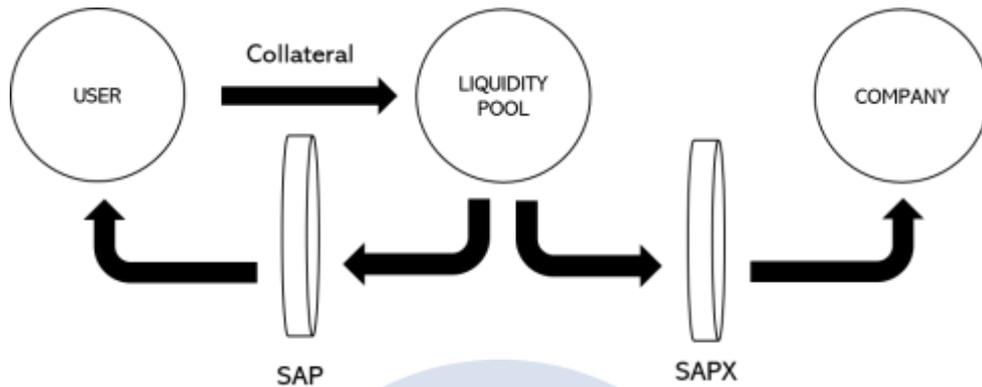
All collateral deposited by users will be digitised and converted into smart contract units and different smart contracts will be created to represent different assets or currencies. All this be done in the blockchain, and users will have 24/7 access to these smart contracts for audit and compliance checks. They will be accessible through our website our directly through Ethereum block explorer platforms, such as Etherscan.

Because some of the assets that will be held within the pool cannot be completely digitised – such as fiat currencies, for example -, they will have to be trusted to banks and other financial institutions for storage and custody. These funds will be regularly audited by independent third-party companies, and the information released to the public.

4. Flow of Funds

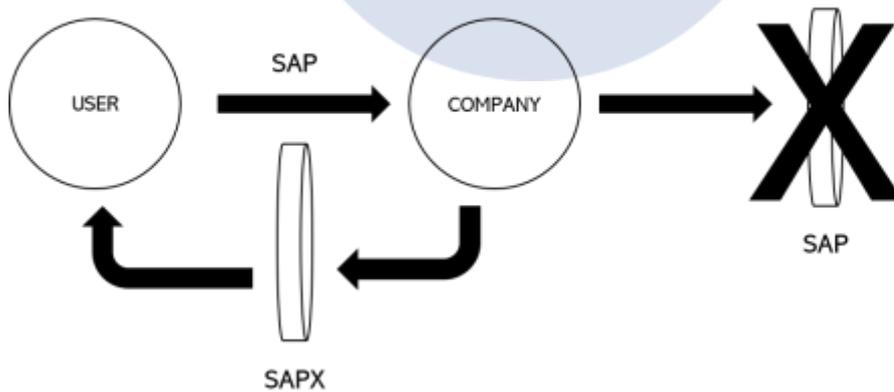
The charts below demonstrate how funds and tokens are issued, exchanged, held, and destroyed within the Svaap framework.

I. Token Purchasing



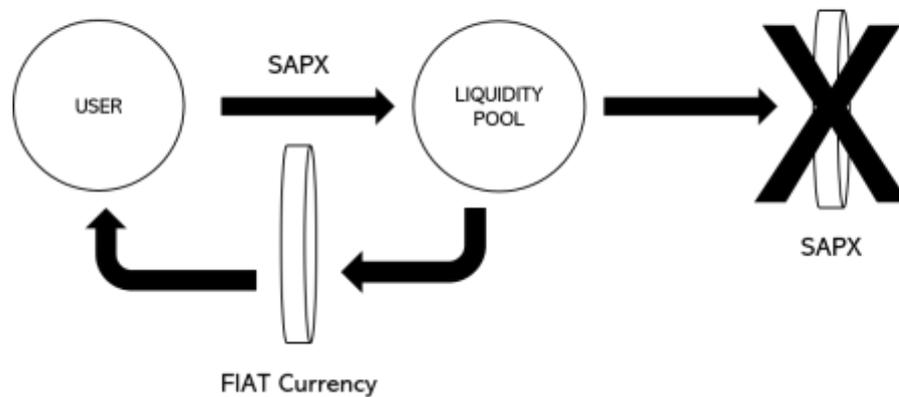
Flowchart: 1. User deposits collateral; 2. SAP tokens are issued and credited to the user; 3. Mirroring SAPX tokens are issued and credited to the company; 4. SAPX tokens will remain under the company's custody until future redemption by a user.

II. Redemption, Stage 1



Flowchart: 1. User requests to exchange SAP for SAPX; 2. SAPX held by the company is transferred to user on a 1:1 exchange ratio; 3. The exchanged SAP tokens are permanently destroyed by the company.

III. Redemption, Stage 2



Flowchart: 1. User requests to exchange SAPX for fiat currency; 2. Fiat currency is sent to the user's bank account; 3. The exchanged SAPX tokens are permanently destroyed by the company.

5. Reliability and Proof of Funds

Transparency

All information regarding the issuance of the tokens will be recorded in the blockchain database, on a perpetual and super secure way. Nor we, nor anyone else will be able to modify any of this information and all the historical data and analytics of the tokens and contracts will be easily accessible through our own portal or through third-party block explorers, such as Etherscan.

Independent Auditing

The company will conduct periodic independent auditing on the liquidity pool and all the reports will be made publicly available.

Liquidity

We have developed a framework that offers a constraint-free liquidity environment, and we should never incur in liquidity problems, even on the worst scenarios. Also, all information that concerns asset and currency allocations will be publicly available through our liquidity pool smart contracts, making the users themselves powerful compliance checkers and auditors of the whole functioning of the liquidity pool.

6. Main Applications

Here we summarize the main applications of Swaaps across the crypto and blockchain eco system and for its users on a broader scale.

The main benefits applicable to all groups are:

- The blockchain technology makes Swaaps a secure and fail proof mean of exchange on a global level, with borderless payments being made and settled in a matter of seconds or minutes.
- Crypto currencies and assets are in high demand by the investment public, which can push the value of the tokens higher.
- It is well collateralised with a diverse range of asset and asset classes, making its value less volatile and very resilient in times of financial instability.
- It has a whole eco system that serves users with user friendly and powerful applications.

Exchanges

Operating exchanges with fiat currencies and legacy systems can be complicated, slow, risky, and expensive. By offering Swaaps, an exchange can relieve themselves of such complications and risks and leverage on the benefits of working with a modern, decentralized, and technologically advanced mean of exchange, such as:

- Use crypto as a store of value, saving fees, physical space, logistics and operation costs.
- Outsource fiat custodial risk to us just manage cryptos.
- Store you Swaaps offline on a hard wallet, with low maintenance cost for a super secure environment.
- Anything you can do with Bitcoin as an exchange, you can do with Swaap, and much more.

Individuals

The crypto public is remarkably diverse, but regardless of what individuals are doing with other crypto currencies and assets today, they can do more and better with Swaap. It can bring benefits to traders looking for profits, to long term investors looking for a secure store-of-value, to shoppers looking to avoid credit card fees or maintain their privacy, to individuals looking to receive from or send money abroad, to more revolutionary individuals looking to change the world, to those living in less developed countries looking for access to financial services for the first time, to developers looking to create new technologies and to all of those who have found many other uses for crypto currencies. For all these individuals, Swaap offers:

- The possibility of transacting on a borderless way using a reliable, secure, fast, and low-cost technology.
- The complete elimination of the ‘middleman’ and any other intermediaries; you have full control of your funds, always.
- The possibility of buying and selling pseudo anonymously.
- The avoidance of the currently expensive and non-reliable legacy banking system.
- The possibility of integrating existing technologies compatible with Ethereum and ERC-20 tokens.

Merchants

Merchants can benefit greatly from accepting Swaap as a form of payment, mostly by the fact that receiving Swaaps is completely free. There are already a range of existing compatible technologies that allow merchants to start receiving Swaaps almost instantly and with the simple scanning of a QR Code. The main benefits we see are:

- Free: Receiving Swaaps is completely free, so the merchant will be paid in full for their products and services.
- Instant: Your funds will be immediately available in your wallet and you will not need to wait to use them.
- Secure: It is super secure to receive Swaaps as all transactions are validated by the Ethereum Network.
- Integrated: The technology is easily integrable to existent payment technologies, with a range of tools already available, for free.

7. Eco-System

As with most of other cryptos and blockchains, several different applications can be built on top of Swaap and we intend to launch a series of official solutions that will be part of an eco-system, carrying our token on its core. These services will be built and provided both through our company's own initiative and through partnerships.

One of the key-projects we intend to develop is a fully operational financial platform, which will be similar to a digital bank, offering services such as loans, savings, current and investment accounts. We also aim to use this platform as the main official point-of-liquidity for Swaap users, which will be able to mint, convert and withdraw their funds on a seamless and efficient way.

Other projects that may comprise the Swaap eco-system could be: **A crypto exchange**, accepting fiat currency deposits but using Swaap as its main market of exchange; **A crypto margin trading app**, where users will be able to trade cryptos on a leverage and using Swaap as its main market of exchange; **Swaap crypto wallet**, compatible with all major crypto currencies, with real-time exchange options from fiat to SAP and vice-versa; **A payment gateway**, to offer a more comprehensive solution to merchants and professionals integrating their business and start being paid in Swaaps.

8. Potential Risks and Weaknesses

We understand to have created a rather robust and strong framework to issue the Swaap Tokens, but despite the tokens are not subject to any 'real world' constraints, the collateralization of these tokens will still depend on the legacy system, once it will be backed and redeemable on fiat currency, which implies that users will ultimately have to trust our company as bona fide custodians of this collateral. However, any other wallet, institution or exchange that may hold fiat currency are subject to the same weaknesses, on an even much greater degree.

Here is a summary of what we face as weaknesses and risk factors in our approach:

We could go bankrupt. In this case, the collateral would still be safe and the Swaaps redeemable in fiat currency.

Our bank could go insolvent. This is a risk faced by all users of the legacy financial system and by all exchange operators. We try to mitigate this by using different banks, in different parts of the world.

Our bank could freeze or confiscate funds. The crypto world is still largely unregulated throughout the world, but we still endeavour to work under extremely strict standards and to implement strategies to proof our company in case any controversial regulation takes place.

Relative centralisation of risk. We believe we are capable of overcoming this by adopting an international and a largely diversified approach when it comes to our operations. We believe our working framework will allow us to offer a near zero risk environment to our users and even on the worst-case scenario, they will still not lose any of their funds.

9. Conclusion

On an environment where there a ferocious competition for users and adepts, there is no way for a new token or coin to succeed if it does not really bring innovation and push the boundaries of the *status quo*, and we believe Swaap does both. The key points of innovation being:

Collateralization Framework. We have created a truly global currency that can be used on a borderless and unbiased way whilst still providing reliable source of liquidity in local currencies for its users. It is a whole new approach to collateralization and a whole new concept of what is a crypto currency.

Eco-System and Intrinsic Value. By serving our users with a whole eco-system and offering different services and solutions that are based on our technology, we are tying the value of the platform to productive and income generating assets and companies, pushing its intrinsic value far beyond the collateral held in the liquidity pool.

Investment and Tradability. Our three-token framework allows us not to exercise hard control over the token exchange rate, making it an attractive trading or investment instrument, as traders will be able to invest and trade on the future valuation of the liquidity pool.

Compatibility and Reliability. Swaap runs on Ethereum, which is a very reputable and well tested blockchain platform. It makes our token compatible with several wallets, plugins and integrators that are currently available to the public.

