SwapX v1 White Paper

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Summary

SwapX is an automated liquidity protocol. The goal is to build a cross-chain decentralized exchange where everyone can build their own trading shops. SwapX enables everyone to create their own exchange.

SwapX firmly believes that the fundamental vitality and prospect of DeFi is that everyone should get rewards from a fair and open financial network. DeFi today is still far from reaching that goal height- it is just a game in a small community with a small number of people.

SwapX deploys an independent transaction contract for each token (V1 is mainly for ERC20 tokens). These contracts hold USDT-ERC20 as well as their associated ERC20 tokens. This can achieve trade between two trading pairs based on related supplies, and users will directly trade with these reserves. The price is generated by the market-making mechanism equation with a constant product, which will ensure the relative balance of the overall reserve. Liquidity providers create liquidity pools to collect reserves. They provide trading tokens to the system and receive a certain percentage of service fees. Each liquidity provider will also receive pool token and platform governance tokens as rewards. The trading contracts are registered and connected together, so that USDT can be the medium for trading between ERC20 tokens. In the more advanced version, SwapX will be upgraded, out of USDT and smart contracts, to build a more open model, supporting multiple classes of assets.

This white paper explains the business model, planning and smart contracts of the SwapX V1.

Summary

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Disclaimer

Project Overview

SwapX is an innovative project based on liquidity supply-demand relationship. At present, stablecoins swap and DeFi platform tokens, rather than mainstream cryptos, contribute most trading volume in DeFi. The DeFi platform promotes a huge increase in the revenue of the assets pool, thereby driving rapid market growth. However, this will not, and should not, be the normal model of DEX. SwapX is committed to improving on transaction fees and speed, which will enable DEX to provide transactions for mainstream assets, and to popularize DeFi from a niche game for a small number of people to public financial services.

SwapX is a decentralized exchange based on the equation function with a constant product market maker model, which implements automatic trading between tokens through smart contracts. SwapX is based on an exchange pool, instead of an order book, to make decentralized automatic trading. The conversion is automatically executed by smart contracts on a constant equation algorithm.

SwapX v1 is a token exchange protocol based on Ethereum smart contract. subsequent versions will be upgraded to a public chain with lower fees and higher speed. The base currency on SwapX v1 is USDT. In the current version, all liquidity pools must be based on the base currency.

Value

SwapX fully considers Defi and the liquidity in the financial network, and builds its business under the framework of inclusive finance. SwapX firmly believes that the vitality of DeFi is being integrated into the public economy and life, connecting everyone's assets, managing assets allocation on market needs, and stimulating the liquidity and utilization of assets. For our goal, SwapX has built a new economic model.

Ideology

1. Investors have the right to obtain income related to their own investment, and their profit should not be deprived from information asymmetry.
2. Investors should reap benefits from decision-making, cost, effort, and time, rather than an unsustainable model as a game in the capital market.
3. Investors have the right to manage their investments and should be responsible for their own management.
4. Regardless of involvement in the model in any way, investors should be able to freely switch roles and should not be hindered by any man-made or mechanism.
5. Concise that the public can directly understand and easily use.

Based on these concept and ideology, we hope that users on the SwapX platform:

1. do not need to convert into specific currency but directly invest their own assets into the platform to start earning income.
2. those Investors, who have the desire and ability to operate, can establish a mini DEX, through which they can obtain returns far beyond the simple liquidity provision
3. Investors on SwapX will not suffer malicious fraud.

4. Investors on SwapX will obtain incentives and returns with long-term value. Even if the business is upgraded, the rights and benefits of investors will be extended or even expanded.

Run a DEX like a ‘Taobao’ shop

SwapX team builds the business by borrowing a concept familiar to the public: Taobao. Everyone can open a DeFi shop on SwapX, and operate a liquidity pool—we call it a ‘shop’ on SwapX like running a Taobao shop. Think of SwapX as a C2C mall, then each liquidity pool is a shop. Everyone can apply to open a shop (liquidity pool) on SwapX. Once the shop is established, running it will be like operating an online shop. Users can advertise the shop in various channels and social media. Similar to online stores, these shops will have their own independent second-level domains.

SwapX has established a series of mechanisms to reward and reward shop runners- these rewards can even far exceed the fee income obtained solely from liquidity provision.

Authentication and anti-fraud

To prevent malicious investors from establishing false liquidity for illegal profits, SwapX has set up an authentication mechanism to ensure the authenticity of the liquidity pool tokens—just like the mall’s anti-counterfeiting mechanism. Currently there are some fraudulent projects in the industry, but SwapX authentication mechanism will ensure that these fraudulent projects have no place to exist. SwapX provides maximum protection for investors. Anyone can apply to open a shop and ask for a platform certification. Operators will submit the KYC information, and the SwapX community will vet materials to verify the authenticity of the Token. Approved liquidity pool gets a ‘V’ (‘Verified’) certification and is recorded on the chain. The platform will prioritize and display the certified liquidity pools to ensure that investors will not suffer losses due to the interference of false information.

USDT makes the business more concise and sincere

Unlike many DeFi platforms in the industry, SwapX does not use over-collateralized stablecoin (such as DAI) or algorithmic central bank stablecoin(such as Basis), which are complicated with lower market share. Instead, SwapX boldly adopts USDT, the fia-collatered stablecoin USDT, with the widest penetration rate and is easily understood by the public. For their own interests, many DeFi platforms have associated many risky assets through pledged stablecoins, thereby increasing the risk of the entire platform model. At this point, the SwapX team is not superstitious in the so-called ‘pure decentralization’, but implements the solution that is the most transparent and easy-to-understand.

Diversified revenue model

Each shop is an independently operated entity - but the operator does not need to worry about revenue. SwapX connects the liquidity asker: major CEXs and DEXs, which can generate substantial fee income for shop owners and participants. The addition benefit includes:

1. Share token: Share tokens are the proof pass for each asset pool to lock the assets. Liquidity provider of each pool will get the corresponding number of share tokens according to liquidity provision. Share tokens can be pledged, traded, or used to establish liquidity pools in DEX. When users withdraw assets from the pool, they need to provide the corresponding number of share tokens as proof, and the smart contract will automatically destroy the recovered share tokens. The logic of the value under share tokens is: the more you invest, the more you gain, and the number of share tokens held will affect the acquisition of shop tokens..
2. Shop coin: Shop tokens are incentive tokens for liquidity providers to contribute to the liquidity pool. It has no pre-mining: the earlier you enter, the more assets you provide, the longer you last, the more shop tokens are allocated. Shop

tokens can be traded, pledged, and transferred. Shop Coin is an innovation based on mass finance. It is also the core value of the shop coin model: as long as the investors, regardless of investment scale, are willing to open a liquidity pool and operate it, they can get a generous amount of shop token as a reward. Each liquidity pool will have a corresponding type of shop coin, and each liquidity pool has a fixed limit of shop token to be issued. The issuance will be completed within 30 days since the establishment of the liquidity pool.The shop tokens are the only credentials obtained for the SWP, the SwapX platform governance coin. The shop tokens respects and values the operation of the liquidity pool.

3. SWP: SwapX's platform governance token, no pre-mining, all allocated to liquidity providers, SWP is released every day and release is completed in 30 days. SWPs are allocated to each liquidity pool in proportion to the size of its assets, and SWP in the liquidity pool are allocated to liquidity providers in proportion to their shop coin position. Only certified liquidity pools can distribute SWP, and SWP entitlements include community governance, payment of certification fees, etc. Users who hold SWPs will also receive entitlements in subsequent versions of SwapX.

The basic theory

automatic market making (AMM) rule

Market maker mode adopts a constant equation: X*Y=K. X is the quantity of ERC20 tokens, Y is the quantity of USDT, and K is a constant. X and Y are in a zero-sum relationship, buy USDT in the contract and the quantity of X will increase.

X-Y-K model

The X-Y-K model is: under model X*Y=K, where X and Y represent the number of two tokens respectively. When X and Y are traded, X*Y is always equal to K in the absence of transaction costs.

$$x' = x + \Delta x = (1 + \alpha)x = \frac{1}{1-\beta}x$$

$$y' = y - \Delta y = \frac{1}{1+\alpha}y = (1 - \beta)x$$

since $\alpha = \frac{\Delta x}{x}$ and $\beta = \frac{\Delta y}{y}$, then

$$\Delta x = \frac{\beta}{1-\beta}x$$

$$\Delta y = \frac{\alpha}{1+\alpha}y$$

α and β are the amount of change per transaction. From the above formula, before the change x · y and after the change x' · y' are equal

The SwapX protocol introduces transaction fees on the basis of this model. The new model calculation formula is as follows:

$$x'_{\rho} = x + \Delta x = (1+\alpha)x = \frac{1+\beta(\frac{1}{\gamma}-1)}{1-\beta}x$$

$$y'_{\rho} = y - \Delta y = \frac{1}{(1+\alpha\gamma)}y = (1-\beta)y$$

Since $\alpha = \Delta x_{\frac{}{x}}$ and $\beta = \Delta y_{\frac{}{y}}$ and $\gamma = 1-\rho$, then :

$$\Delta x = \frac{\beta}{1-\beta} \cdot \frac{1}{\gamma} \cdot x$$

$$\Delta y = \frac{\alpha\gamma}{1+\alpha\gamma} \cdot y$$

After transaction fee ρ ($0 \leq \rho \leq 1$), it can be seen that $x' \cdot y'$ is greater than $x \cdot y$.

Transaction price calculation

The transaction price is calculated in two ways: one is to calculate the quantity Y that can be bought, given quantity X (Input); the other is to calculate the quantity X that is required, given quantity Y (Output).

Get Y (input) Given X

Given transaction number X$\Delta x > 0$, the transaction fee ρ ($0 \leq \rho \leq 1$). The Δy to be obtained is

$$\Delta y = \frac{\alpha\gamma}{1+\alpha\gamma} y$$

Since $\alpha = \frac{\Delta x}{x}$ and $\gamma = 1-\rho$, then:

$$x' = x + \Delta x = (1+\alpha)x$$

$$y' = y - \Delta y = \frac{1}{1+\alpha\gamma} y$$

Meaning that Δx token can be exchanged to Δy other tokens. At this time, the price of Y token is:

$$\frac{\Delta x}{\Delta y} = \frac{\Delta x}{\frac{\alpha\gamma}{1+\alpha\gamma}y} = \frac{1+\alpha\gamma}{\gamma} \cdot \frac{x}{y}$$

That is, the more X you buy, the larger α is, the higher the price is. If α=1 (buy with X tokens equal to the total amount of X in the current liquidity), you can only buy Y tokens that are almost half of the liquidity. Use x / y as the current trading price, then after one buy order, the price is now:

$$\frac{x'}{y'} = \frac{(1+\alpha)x}{\frac{1}{1+\alpha\gamma}y} = (1+\alpha)(1+\alpha\gamma)\frac{x}{y}$$

"Price" changes with the quadratic function of the f buy/sell ratio.

Given Y to calculate the required X (Output),

Given the number of Y (expected number) to be $0<\Delta y<y$, and the transaction fee ρ ($0\leq\rho\leq1$), the number of X required Δx is:

$$\Delta x = \frac{\beta}{1-\beta} \cdot \frac{1}{\gamma} \cdot x$$

since $\beta = \frac{\Delta y}{y} < 1$ and $\gamma = 1-\rho$, then:

$$x' = x + \Delta x = \frac{1+\beta(\frac{1}{\gamma}-1)}{1-\beta} \cdot x$$

$$y' = y - \Delta y = (1-\beta) \cdot y$$

In other words,Δy tokens can be exchanged for Δx X tokens. At this time, the price of Y token is:

$$\frac{\Delta x}{\Delta y} = \frac{\frac{\beta}{1-\beta}\frac{1}{\gamma}x}{\Delta y} = \frac{1}{(1-\beta)\gamma}\frac{x}{y}$$

That is, the more Y you buy, the larger β is, the higher the price. If β=1/2 (buy half of Y tokens

in current liquidity), approximately X tokens with moderate current liquidity are needed.

The above two methods are identical for calculating the price from the perspective of two tokens, respectively. Note that the price formula only distinguishes the direction of the price calculation and does not restrict the specific token types represented by X and Y.

Liquidity calculation

Liquidity providers can add or remove liquidity at any time. A triple (e, t, l) can be used to represent the state of the liquidity pool, where e represents the number of base currencies (USDT), t represents the number of tokens, and l represents the current total liquidity.

Increasing liquidity

Formula for increasing liquidity is as follows:

$$e' = (1 + \alpha)e$$

$$t' = (1 + \alpha)t$$

$$l' = (1 + \alpha)l$$

where the increased liquidity is $\Delta e > 0$, $\alpha = \frac{\Delta e}{e\ to}$

Increasing liquidity is actually to increase e and t in the same proportion.

Remove liquidity

The calculation for removing liquidity is as follows:

$$e' = (1 - \alpha)e$$

$$t' = (1 - \alpha)t$$

$$l' = (1 - \alpha)l$$

where the removed liquidity is $0 < \Delta l < l$, $\alpha = \frac{\Delta l}{l\ To}$

Removing liquidity is to reduce e and t in equal proportions based on the proportion of liquidity.

Increasing and decreasing liquidity are calculated according to the price of x/y, but the accuracy of the calculation needs to be considered in the smart contract.

Design

create a liquidity pool

In SwapX, it is possible to create a pool for each trading pair. In SwapX v1, all liquidity pools have USDT as the base currency. Conversions between the tokens must be executed via the base currency as the medium.

When creating a liquidity pool, the creator needs to deposit a pair of currencies containing USDT as the initial liquidity pool, and the price ratio will also be the initial price of the liquidity pool and will be automatically market making by the smart contract according to the formula X*Y=K. As the first time a liquidity pool is created, a combination of contracts will be created (Factory smart contract to create the liquidity pool Exchange, shop token smart contract, etc.), so its on-chain gas cost will be higher than the gas cost of depositing funds for market making.

When a liquidity pool is set up, it becomes a shop with a secondary level domain. Creator can operate the shop, and the liquidity pool needs to be certified with a ‘V’ (‘Verified’) for platform incentive. The main purpose of liquidity pool certification is to prevent fraudulent token liquidity pools.

Market-making

Liquidity provision (pledge)

In addition to the liquidity pool creator, the rest of the liquidity provider can also act as a market maker, providing the market-making USDT and corresponding tokens in the liquidity pool, and earning a profit.

Only if the liquidity pool has a deep enough asset size can traders exchange smoothly and keep prices within a reasonable range without large slippage. If a liquidity pool has large slippage, it may result in losses to the trader, which will prevent the trader from continuing to trade in the liquidity pool, thereby lowering the fee income.

When the liquidity provider deposits market making funds (pledged tokens and USDT), the pairs are deposited into the liquidity pool proportionally, which depends on the current liquidity pool proportion. That is, the liquidity provider will deposit both tokens and USDTs of equal value at the current liquidity pool price, based on the real-time liquidity pool proportion.

If the liquidity provider deposits a fund for market-making, but during the transfer, another trader may complete an exchange transaction that changes the liquidity pool ratio, then the smart contract will deposit the asset using the latest ratio and the excess asset will be returned to the liquidity provider. The liquidity provider will receive a corresponding number of S-tokens based on liquidity contribution to the liquidity pool. Holding S-token receives revenue share from transaction fee, and S-token will be the only proof of redemption of the pledged assets.

When depositing funds for market-making, liquidity providers will receive a certain amount of shop tokens in addition to S-Tokens. Holding the shop tokens provides access to the governance token mining bonus. Please see the description of shop tokens for details.

Liquidity Withdrawal (redemption)

Users can withdraw the corresponding proportion (in proportion to the S-Token) of the liquidity pool with the S-Token, and the S-Token retrieved by the smart contract will be automatically destroyed.

The specific calculation formula can be referred to the description of the S-Token.

Conversion

According to the equation formula X * Y = K (X, Y represent the number of yoken and USDT in the liquid pool, and the value of K remains constant during the transaction), the user's conversion (buy or sell) affects the ratio of the number of currencies in the liquid pool and price would change. The pricing mechanism determines as the pool has more token or USDT, the price of the corresponding currency will increase, and the price of the transaction is as a quadratic function of the proportion of the transaction amount.

When users use a token to buy USDT, the number of tokens in the liquid pool increases, and while keeping the K-value constant, the system automatically calculates the corresponding decrease in the value of USDT, which is the number of total USDT trader can have. On the other hand, since the K-value depends entirely on the number of USDTs and tokens in the trader's pool, the K-value will change when new market-making funds deposited the liquidity pool.

In short, the ratio (price) of the number of USDT to the number of tokens changes when a trade executed, but the ratio (price) remains constant when market-making funds deposited into the pool; Value K, the product of number USDT to the number of token, remains constant when a trade executed, but changes when market-making funds deposited into the pool.

The current price of conversion USDT/tokens = the number of tokens in the liquid pool / the number of USDT in the liquid pool

Premium rate= (current price - estimated execution price) / current price

Note: The current price is not the actual execution price, and the actual execution price depends on the actual number of liquidity pools at the time when the trader initiates the conversion.

For traders, the larger the amount of a single trade, the higher the premium would be. Given the same transaction amount of the trader, the larger the liquidity pool, the lower the premium rate per unit transaction would generate, and the lower the user's transaction loss would be. In the case of a limited number of liquidity pools, it is recommended that traders convert a small amount to avoid excessive premium rates.

When making conversions, traders need to pay 0.3% of the transaction amount as a transaction fee, of which 0.25% of the fee will be allocated to the liquidity pool and 0.05% to the platform.

Applying for liquidity pool certification

Everyone can apply to get the liquidity pool ‘certified’. The SwapX community will verify the submitted information to verify the authenticity of the token, and the liquidity pools that pass the verification will receive the ‘V’ (‘Verified’) certification.

Certified liquid pools are considered to be trusted official tokens, and the certification information will also be recorded on the chain and will also be publicized on the SwapX website and on the shop's secondary level domain.

Only certified liquidity pools can participate in the mining allocation of governance token, and uncertified liquidity pools cannot receive governance token rewards. Please see the description of governance token distribution for more details.

Each certification requires associated certification fee to the specified address. The certification fee is settled in the platform governance token SWP. Detail fee schedule is explained on the SwapX website.

Note:

- Applicants may be asked for additional information during the certification process. Please leave valid contact information and be available for the duration of the certification.
- If the additional information takes longer than 1 month to be submitted, the certification will be considered a failure.
- If the certification fails, the certification fee will not be refunded.

Share token (S-Token)

S-Token is the pledge certificate of the liquidity pool. Whenever new funds are deposited to the liquidity pool, providers will receive a certain amount of S-Token to represent his/her fund in this liquidity pool. S-Token is an ERC-20 token, which can be transferred and traded freely. When the funds are recovered, the S-Token will be destroyed.

Obtain S-Token

Every time the assets are pledged to provide liquidity, the proveider's S-Token will be obtained.

The calculation formula for obtaining S-Token is:

$$S_{\Delta} = S_p \cdot \frac{U_{\Delta}}{U_p}$$

Among them:

- S_{Δ} the number of S-Tokens obtained this time
- S_p is the total amount of S-Tokens in the liquidity pool before pledge
- U_{Δ} is the USDT pledged to the liquidity pool this time
- U_p is the total USDT in the liquidity pool before pledge

Handling fee income

Holders of S-Tokens will receive a share of the handling fees in proportion to their shares in the pool. The handling fee for each transaction is 0.3% of the transaction amount, of which 0.25% is allocated to the liquidity pool and 0.05% to the platform. Handling fees are charged in the currency of origin.

The handling fee obtained from the liquidity pool will be allocated in proportion to the users' positions of the S-Token. In execution, the fee earned per transaction is immediately deposited into the liquidity pool, increasing the K-value and automatically calculating the price of the liquidity pool after redemption. Since the handling fees are added to the liquidity pool, but no additional S-Tokens are added, all S-Tokens are added at equal value. Handling fees are allocated in proportion to the S-Tokens, and the liquidity provider can withdraw the handling fee income by destroying the S-Tokens.

Assets Redemption

Users can redeem the assets pledged in the liquidity pool with S-Token, and the S-Token recovered by the contract will be destroyed.

The redemption of pledged assets depends on the proportion of S-Token, and the calculation formula is:

$$U_{\Delta} = U_p \cdot \frac{S_{\Delta}}{S_p}$$

$$T_{\Delta} = T_p \cdot \frac{S_{\Delta}}{S_p}$$

Among them:

- S_{Δ} is the amount of S-Token repayment (destroyed)
- S_p is the total amount of S-Token before repayment
- U_p is the number of USDT in liquidity pool before repayment
- U_{Δ} is the amount of USDT withdrawn this time
- T_p is the total amount of tokens in the liquidity pool before repayment.
- T_{Δ} is the number of tokens withdrawn this time.

Shop Token (Pair Tokens)

Each liquidity pool has its own dedicated shop token. Shop token is the incentive token for investors to contribute to the liquidity pools, and all shop tokens are generated by mining and released linearly through a mining algorithm, with 85% allocated to S-Token holders and 15% allocated to the platform community.

Holding shop tokens in certified liquidity pools will be rewarded with governance token SWP for mining.

Basic information

Currency name: trading pair +X, such as: DAIUSDTX

Distribution mechanism: 85% is allocated to S-Token holders, 15% allocated to developer funds (the main proceeds of the fund are: platform and contract version upgrades, daily operations Victoria, risk reserve, etc., the developer community will regularly publicize the use public fund)

Reward frequency: daily

Snapshot frequency: 15minutes (64blocks)

Mining mechanism

For each reward cycle, select the nearest block number based on the calculated award start and end times to determine the ‘Start Block’ and ‘End Block’ . Every 64 Blocks (every 15 minutes) is one ‘Snapshot Block’. Counting backwards from the ‘End Block’ until it gets the ‘Start Block’ to determine all Snapshot Blocks.

During every reward cycle, the shop token is rewarded based on the percentage of the total S-Token volume of this trading pair held at that address in each ‘Snapshot Block’.

During the daily reward cycle, the number of shop token available to a liquidity pool S-Token holder is calculated as following:

$$P_{\Delta} = \sum_{n=1}^{96} \frac{SH_n}{SP_n} \bullet P_n \cdot 85\%$$

In which:

- P_{Δ} is the number of shop tokens obtained at this time

- P_n is the number of shop tokens assigned to each snapshot blocks
- $SH_{n,}$ is the number of S-Token held in each snapshot
- SP_n is the total number of S-Token in liquidity pool in each snapshot

Receive reward

All the shop tokens obtained from mining will not be distributed automatically, but the number of mining rewards received by each account will be recorded in the smart contract. The user needs to initiate a reward collection request to the smart contract with their account and pay the corresponding gas fee.

At any time, users, through smart contracts, can check the total amount of shop tokens they have yet to receive in their ethereum account.

Governance Token (SWP)

SWP is SwapX's platform governance token. It is 100% generated by mining and released linearly through the mining algorithm. There is no reservation or pre-mining. SWP is mainly used for:

- liquidity incentive
- trading
- governance voting
- payment for certification fee
- eligibility to participate in V2 version

Basic information

Currency name: SWP

Distribution mechanism:100% allocated to shop token holders (only to verified liquidity pool)

Mining speed: Finish in 30 days since release date.

Reward period: Daily

Snapshot frequency:15minutes (64blocks).

Mining mechanism

Only certified liquidity pools can participate in SWP's mining reward distribution.

For each reward distribution cycle, select the nearest block number based on the calculated reward start and end times to determine the ‘Start Block’ and ‘End Block’. Every 64 blocks (every 15 minutes) is a ‘Snapshot Block’. Calculating backwards from the ‘End Block’ until the ‘Start Block’ is reached to determine all ‘Snapshot Blocks’.

During the reward cycle, allocate reward to the liquidity pool in base currency (USDT) according to its total liquidity out of the total volume in all certified liquidity pools in a ‘block snapshot’.

During the reward cycle, allocate governance tokens reward users according to the position of shop tokens, in his address, out of the total number of shop tokens in this liquidity pool in a ‘block snapshot’.

During the daily reward cycle, the SWP rewards available to a shop token holders of a certain liquidity pool shop token is calculated as :

$$SWP_{\Delta} = \sum_{n=1}^{96} \frac{PH_n}{PP_n} \bullet \frac{UP_n}{UA_n} \bullet SWP_n$$

In which:

- SWP_{Δ} is the number SWP obtained at this time
- SWP_n is the number of SWP allocated for each block snapshot
- PH_n is the number of shop tokens held in each snapshot
- PP_n is the total amount of shop tokens in liquid pool in each snapshot
- UP_n is the total number of USDT in liquid pool in each snapshot
- UA_n the total number of USDT in all certified liquidity pools

Receive payment.

All SWP obtained through mining will not be automatically distributed, but the number of mining rewards obtained by each account will be recorded in the smart contract. The user needs to initiate a reward request to the smart contract with his account and pay the corresponding gas fee.

At any time, users, through smart contracts, can check the total amount of SWP not yet claimed in their Ethereum account.

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