

Introduction

xWIN Finance v2 is an upgraded version from v1, which appears to be a decentralized finance (DeFi) platform or asset management system on the BNB and Ethereum blockchain. It is designed to allow investors to create their private funds with a range of assets and strategies and have them managed automatically in a decentralized way. There are several new features and improvements, such as the integration of the Chainlink price feed as the default price oracle, a multi-DEX trading system using high liquidity DEXs, and the ability to hold multiple built-in trading strategy tokens. It also has a new fee structure and a performance fee feature to incentivize strong returns and attract high-quality fund managers. Overall, xWIN Finance v2 aims to provide a comprehensive and advanced asset management experience for its users and managers.

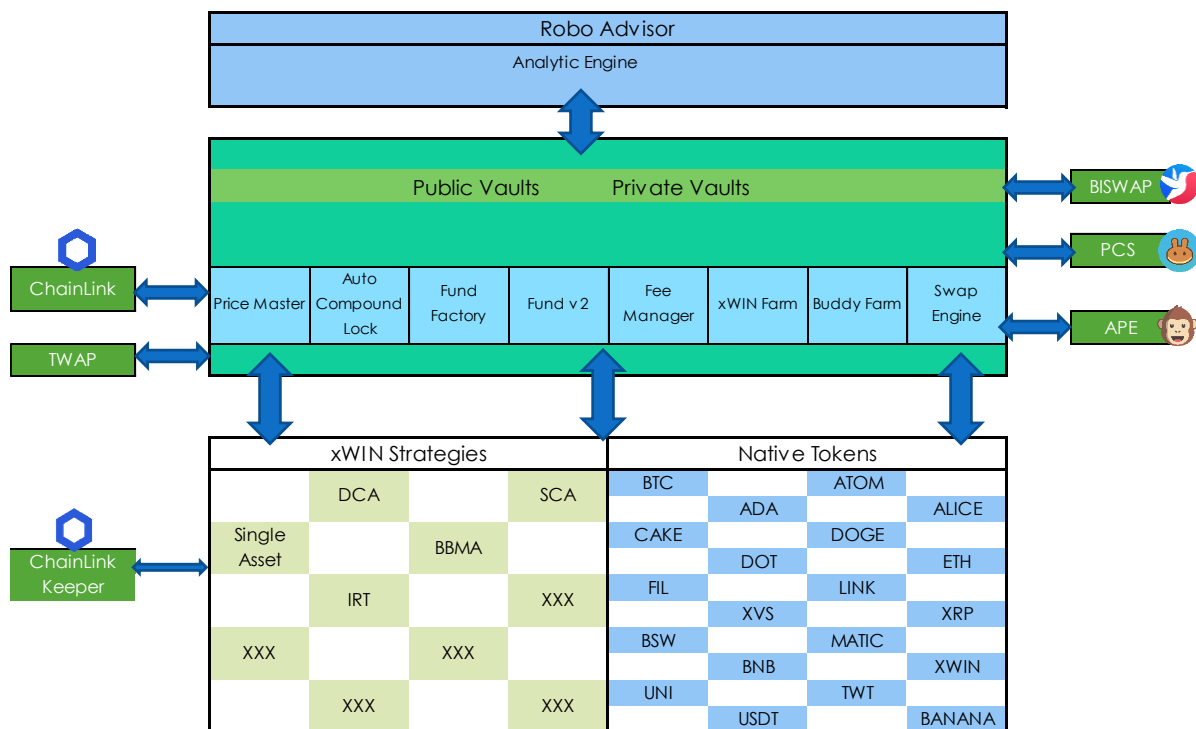


Figure 1: Overall of xWIN Finance v2

What is xWIN Robo Advisor?

The objective of this xWIN Robo Advisor is to allow individual investors or fund managers to create their own decentralized fund based on various market factors or personal risk parameters. xWIN Robo Advisor is built with an in-house optimizer engine, which allows investors to create the optimal portfolio through mean-variance efficient or weighted average Sharpe Ratio.

What allocation approaches are available?

Individual investors provide age and risk tolerance parameters and choose the allocation model. xWIN engines provides two approaches:

1. Mean Variance Optimization
2. Weighted Average Sharpe Ratio

xWIN platform continuously capturing the all the related market data of all the universal assets supported including our own strategies. The data will be analyzed and transformed into statistical data such as expected returns, volatilities, covariance, and Sharpe ratio. These data are important parameters to achieve the optimal asset allocation for our clients

Mean-Variance Optimization

In portfolio management, mean-variance analysis is a method used to determine the optimal allocation of assets in a portfolio using the factors provided including risk tolerance and age. It involves considering the expected return and risk (variance) of each asset in the portfolio and finding the combination that maximizes the expected return for a given level of risk.

The mean-variance analysis allows investors to benefit as it enables better decision-making and improved performance. Mean-variance analysis helps investors create the optimal combination of assets by maximizing the expected returns for a given level of risk. Putting all the investment into one asset is very risky and may not return as much. Diversification allows investors to invest different portions of their account into many different strategies which reduce risk. The xWIN optimizer creates the best portfolio for its investor by creating not only the best tokens for the investor but also how much allocation for each asset using the inputs from the user.

Weighted-Average Sharpe Ratio

The Weighted Average Sharpe Ratio uses the Sharpe Ratio, the measure of risk-adjusted return. The risk-adjusted return considers the risk as well as the risk-free rate to see how much return a token is compared to the safest option like stable coin staking. The approach will first allocate the major allocation into stable coin staking asset based on the risk tolerances as

parameter. Finally, the remaining weights will be allocated based on the Sharpe ratio weight of each risky token.

$$W = \frac{\sum_{i=1}^n w_i X_i}{\sum_{i=1}^n w_i} + W \text{ (Risk Free)}$$

W = Weighted average

n = Number of tokens

w_i = weight applied to X values

X_i = Sharpe ratio value



What is xWIN Swap Engine?

xWIN v2 performs all the token swap during the deposit or withdrawal from the users. To issue a real time v2 vault token back to the user, the protocol swaps the input currency, USDT into the allocated tokens such as BTC, ETH or XWIN in various decentralized exchanges.

Why does xWIN v2 Need xWIN Swap?

There are many DEXes in the BNB chain ecosystem. Each of the DEX has a different level of liquidity for each trading pair. Therefore, as a portfolio management platform, xWIN v2 must be able to swap different tokens in different DEX to achieve the optimal trading output.

How does xWIN Swap is built?

xWIN Swap integrated various DEXes in the ecosystem such as PancakeSwap, Biswap and Apeswap. xWIN Swap was built to perform token swap during the deposit and withdrawal of xWIN v2 public and private funds on-chain. If the public vault is allocated 40% of CAKE and 60% of Banana. Then the xWIN vault will swap USDT to CAKE token in Pancakeswap, while swapping into Banana in Apeswap because they have more liquidity in the DEX respectively.

What is Pancakeswap, Biswap and Apeswap DEX?

A DEX (decentralized exchange) is a peer-to-peer marketplace where users can trade cryptocurrencies in a non-custodial manner without the need for an intermediary to facilitate the transfer and custody of funds. DEXs substitute intermediaries—traditionally, banks, brokers, payment processors, or other institutions—with blockchain-based smart contracts that facilitate the exchange of assets. PancakeSwap has the largest number of daily in BNB ecosystem. See the liquidity volume in these 3 DEXes

Total Liquidity

Pancakeswap	\$2.16b
Biswap	\$205m
Apeswap	\$26m



What is xWIN Price Oracle?

xWIN Price Oracle acts as a middleman to retrieve all the token prices including native tokens such as BTC or ETH, Liquidity Pool tokens, as well as the xWIN strategies, xWIN public and private vaults unit price created in xWIN protocol.

Why does xWIN v2 Need Price Oracle?

xWIN v2 vaults need a price of each underlying token each time to calculate the unit price of the fund. Those token's price must be fetched on-chain real time in all activities such as deposit or withdrawal from the vault.

How does xWIN Price Oracle Achieve it?

xWIN Price Oracle is integrated into the world-famous price feed protocol, Chainlink as our default price feed into xWIN v2 protocol. In addition to the token price feed provided by Chainlink, xWIN Price Oracle was built to provide xWIN v2 public and private funds unit price on-chain. We are also supporting TWAP price as a proxy if the oracle price is not supported in Chainlink

What is Chainlink Price Feed?

Chainlink is a decentralized network of nodes that provide data and information from off-blockchain sources to on-blockchain smart contracts via oracles. Chainlink Data Feeds are the quickest way to connect our xWIN v2 vault to the real-world market prices of assets particularly in xWIN investment universes.

What is xWIN Fee?

xWIN v2 introduces the asset management traditional fee structure into transparent decentralized way. Instead of entry or exit fee as introduced in previous protocol, xWIN v2 provides an annualized fund manager fee and platform fee based on the total value lock in the vault. In addition, xWIN v2 includes a performance-based feature that allows fund managers to capture their rewards based on their trading skill.

Manager & Platform Fee

Each manager fee and platform fee in xWIN Finance platform vaults varies depending on the complexity. For example, simple fund provided such as auto staking fund may charge just as little as 0.50% while the complex fund that need more rebalance frequency such as auto trading vault may have higher fee structure.

In a traditional mutual fund, the manager fee is accumulated in the fund every day and the fee will be paid during the fiscal period, which is usually twice a year. However, the fee is accumulated in the vault by each block in xWIN v2. Each block in BNB network is about 3 seconds. Fund manager can process to withdraw the fee whenever it is necessary.

Performance Fee

We believe all the good trading skills and best performance manager deserve a reward for managing the fund. xWIN v2 brings this traditional feature and automate it as xWIN performance fee in the protocol. The performance fee is calculated based on each wallet's average entry price and is only charged when funds are withdrawn. For investors, xWIN v2 also integrated a new feature to allow individual investors to enjoy up to 50% discount on their performance fee.

How to enjoy the performance fee discount?

Investors can lock their xWIN tokens in our Auto Compound Lock protocol. In addition to earning high APR from the usual farming pool, investor:

1. Get extra bonus APR based on the locking period that range from 1 to 52 weeks
2. Enjoy the compound effect from their xWIN token staking
3. Get a performance fee discount on all the public and private vaults in xWIN Finance up to 50% discount.



xWIN AUTO COMPOUND LOCK

What is xWIN Auto Compound Lock?

This is a new feature we introduce in xWIN v2 to help our users to compound the interest earned through xWIN staking pool. In v1, you can stake and earn xWIN token without compounding effect. You can now stake + compound + bonus + permanent performance fee discount by locking xWIN tokens.

Why Do You Lock xWIN Tokens?

There are several advantages of using xWIN Auto Compound Lock feature.

Auto compound effect

It is earning xWIN tokens without reinvest manually. The vault will compound the earn xWIN through reinvesting into the pool whenever there is deposit or withdrawal.

Earn Extra Bonus

In addition to the auto compound effect, you will earn extra xWIN from a bonus pool in the xWIN farm. The longer you lock, the more you will earn

Enjoy Performance Fee Discount

All the private and public vaults have a performance fee if the vault outperforms your entry price. It is normally a fee between 10% to 20% of your earnings. By locking your xWIN tokens in the feature, you can enjoy up to 50% discount of the fee charges.

How Long Does It Lock?

You can choose from the minimum of 1 week to the maximum of 52 weeks for the locking periods. The longer you lock xWIN tokens, the higher APR you are eligible for from the extra bonus pool. You are allowed to extend the period or add more xWIN tokens during the lock period.