Margin Token Audit Information

1. Margin Token Introduction

Margin Tokens allow for anyone to gain exposure to a dual momentum trading system acting on a portfolio of tokens, simply by holding the Margin Token in their Metamask wallet. Each Margin Token is 100% backed by its underlying assets. To purchase a Margin Token, supply one of the assets in the portfolio to the Margin Token pool. Send a Margin Token back to the pool to redeem a portfolio token of your choice.

If a token, such as BNB, is in a strong uptrend and therefore desired in the Margin Token portfolio, there will be a reward for supplying this asset and a fee for redeeming it. If the market turns and BNB is no longer desired, there will be a reward for redeeming this asset and a fee for supplying it. This creates a potential arbitrage opportunity that incentivizes market participants to keep the pool's allocations consistent with the dual momentum trading strategy.

An automated dual momentum trading system will update the deposit and redeem fees or rewards based on its strategy. Rather than the pool of assets incurring trading fees internally by interacting with a DeFi protocol such as PancakeSwap, the fees are passed on to the users via the rewards for depositing and redeeming assets as desired.

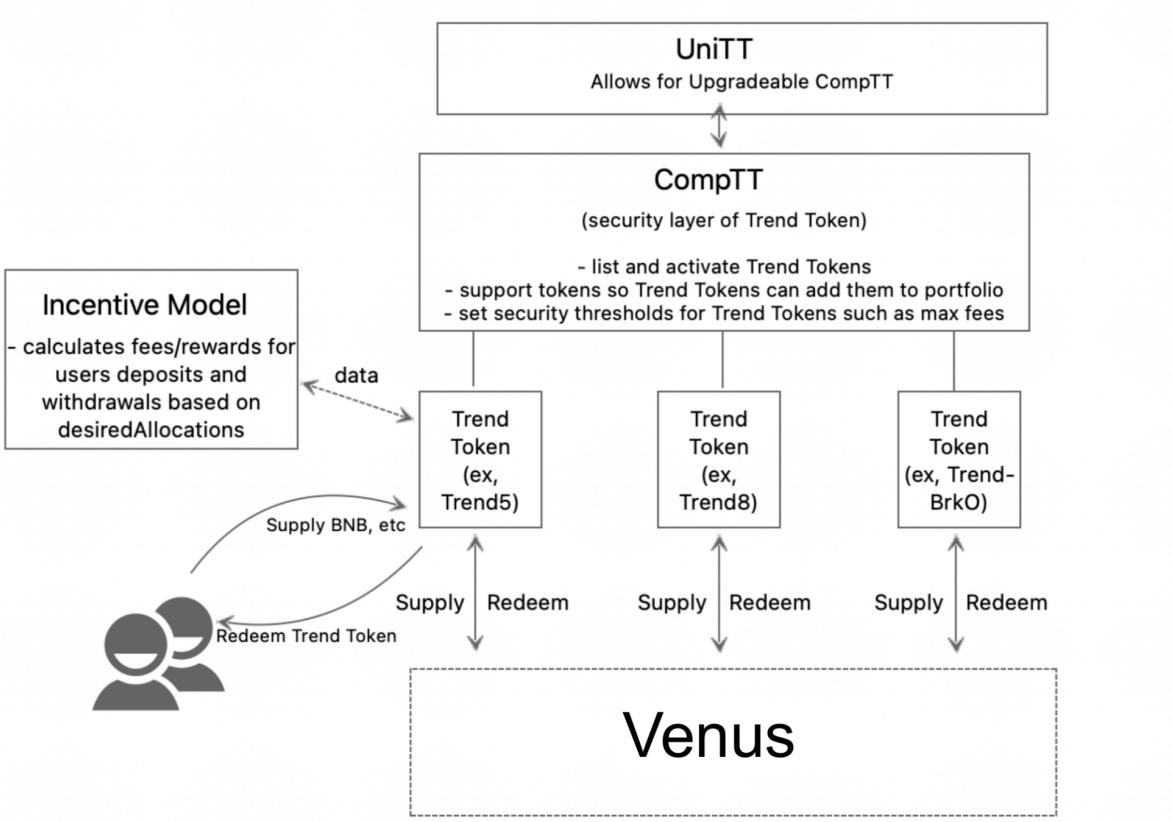
2. Portfolio Options

There will be types of TreMarginnd Tokens, each with a different portfolio theme. This is similar to the different types of portfolio options offered for Trendbot and Marginbot. To begin, three Trend Tokens will be offered.

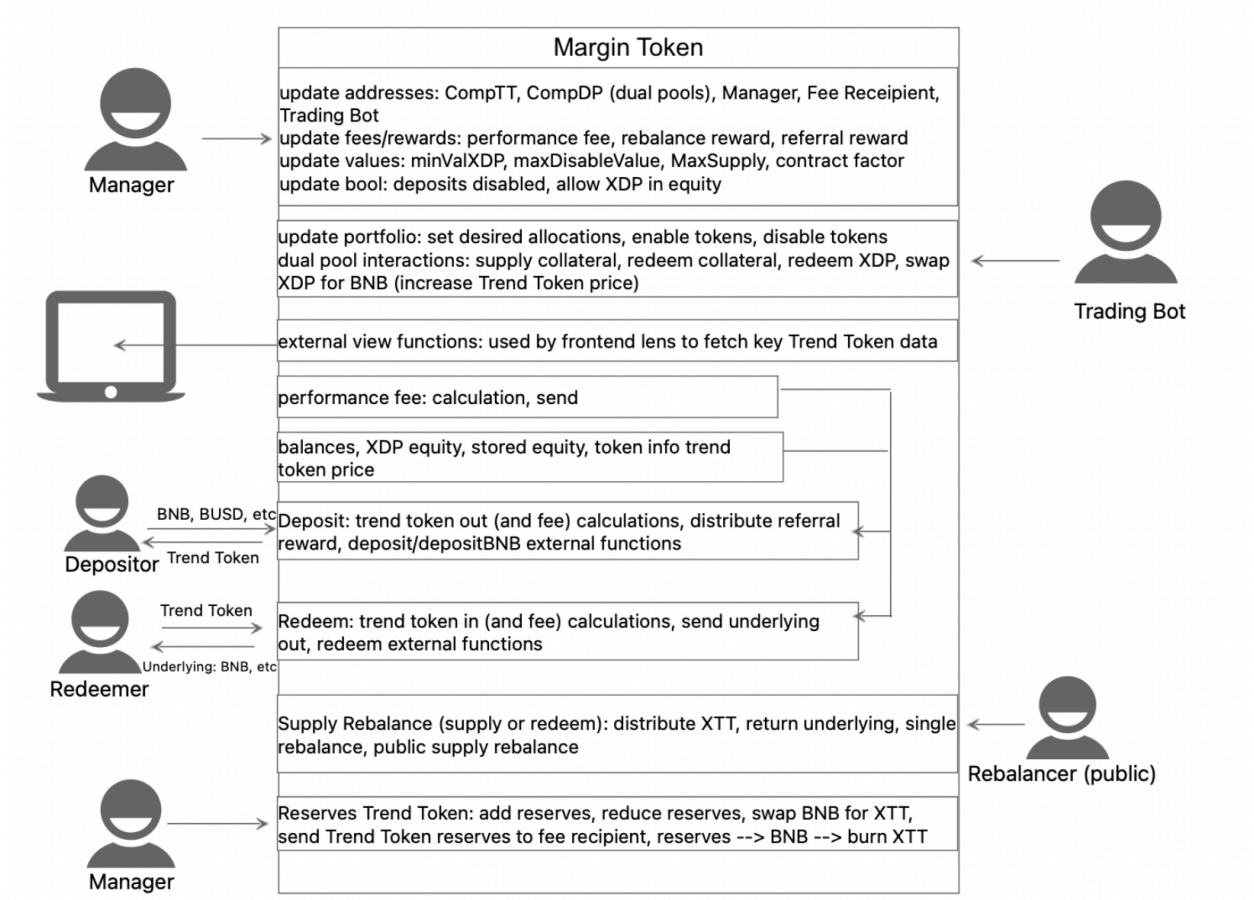
1) **MARGIN5:** Portfolio of USDT, BNB, and 3 top tokens by liquidity on PancakeSwap.
2) **MARGIN8:** Portfolio of USDT, BNB, and 5 top tokens by liquidity on PancakeSwap.
3) **MARGIN-BrkO:** Portfolio of USDT, BNB, and 0-5 tokens making new all time highs out of the highest 10-20 liquid tokens on PancakeSwap.

3. Architecture

3.1 Overall Architecture



3.2 Margin Token Architecture



4.0 Deploy Instructions

4.1 Comptroller

Governs all deployed Trend Tokens and ensures safety parameters

1. Deploy CompTT:
2. Deploy UniTT
3. Configure CompTT and UnitTT
    - _setPendingImplementation() in UniTT using CompTT address
    - _become() in CompTT using UniTT address
    - From now on, interact with CompTT using UniTT address but CompTT ABI
4. Add price Oracle to CompTT using _setPriceOracle()
    0x4aA176cCD63fC2C6FB881C568FE214889Cff4c6C (from Dual Pools)
    Mainnet: 0xCFA47D916Bd512429f05A418d3AF4CA556b03256
5. Support tokens/vTokens using _setToken(underlying, vToken), vTokens from Venus

4.2 Margin Tokens

1. Deploy XTT from XTTgov.sol
2. Add XTT and XVS in TrendTokenStorage.sol under xtt and xvs variables
3. Deploy IncentiveModelSimple from IncentiveModelSimple.sol (mainnet, not ETH, USDT)
    - Configure feePerToken for BNB, BTCB, and BUSD (0.08%, 0.10%, 0.10%)
4. Deploy MarginToken
5. Support Margin Token in CompTT
6. Set Locked to False in Margin Token
7. Add incentive model to Trend Token in _updateCompAndModels(0x00, 0x00, addr)
    - 0x0000000000000000000000000000000000000000,0x0000000000000000000000000000000000000000,0x5a68E6C688659193327B1D3e5519072846365ec8
8. Add Portfolio _enableTokens()
    - [0xae13d989daC2f0dEbFf460aC112a837C89BAa7cd,0x8301F2213c0eeD49a7E28Ae4c3e91722919B8B47],[1000000000000000000,0]
    - [0xbb4CdB9CBd36B01bD1cBaEBF2De08d9173bc095c,0xe9e7CEA3DedcA5984780Bafc599bD69ADd087D56,0x7130d2A12B9BCbFAe4f2634d864A1Ee1Ce3Ead9c],[0,1000000000000000000,0]

Removing a token

1. Remove token value to under maxDisableTokenValue (or will affect price too much)
2. _disableToken(bep20, [new position sizes])

Adding a token

1. _supportToken token:dToken in compTT
2. _enableToken([newToken],[allNewPositionSizes]) in Trend Token
3. _feePerToken() in incentiveModel
4. Make sure token price supported in Oracle