



Cyberscope

Documentation

TrendUp Token

May 2024

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TrendUp Token Features

1. Buy Fees (1% team, 1% liquidity)
2. Sell Fees (2% team, 1% liquidity)
3. Sale Restrictions (10% per 24 hours, resets if account receives more than 50% of his balance)
4. Voting to enable/disable sale restrictions.

Buy/Sell Fees

The token contract implements fees on buy/sell, accumulating fees and sending it to the team/adding to the liquidity pair when the fees are over the threshold *swapTokensAtAmount*.

The default fees are

- On Buys: 1% team fee, 1% liquidity fee
- On Sells: 2% team fee, 1% liquidity fee

These fees can be set by the owner using the *setFees* function, and these are also the max values the fees can be set to. Thus, the owner may only lower the fees.

Sale Restrictions

The token implements sale restrictions on any actions (i.e. transfers/buys/sells) and these restrictions can be disabled by the voting mechanism.

These restrictions are:

On the first action after 48 hours after an account's last action, the account's balance is recorded and it may use up to 10% of his balance every 24 hours.

If the account receives over 50% of his balance, his restrictions reset (i.e. the account balance is recorded, and it may use up to 10% of the updated balance every 24 hours).

Voting Mechanism

The voting mechanism enables holders to vote for or against sale restrictions. It is 100% on-chain and contract addresses are not allowed to vote. The votes are divided by the eligible vote supply in order to find the quorum. The voting power is 1:1 to the account's token balance. The contract addresses, zero address and dead address token balances are not included in the eligible vote supply.

An account may vote by calling *voteForSale*, and if the account wants to change its vote, it may call *voteAgainstSale* function.

The voting mechanism was implemented in a novel way in order to be 100% on-chain, using a linked list that keeps track of all votes while minimizing gas usage.

The quorum is calculated as follows:

- If the restrictions are enabled
 - If the votes against restrictions are at least 50.01%, restrictions are disabled
- If the restrictions are disabled
 - If the votes against restrictions are lower than 39.99%, restrictions are enabled

When an account that has voted transfers his tokens, his voting power decreases to an amount equal to his transfer amount.

When an account that has voted receives tokens, his voting power increases by an amount equal to the received tokens.

After 7 days since the user's last vote, his vote expires (does not get counted to the quorum).

Testnet Token Features Showcase

The deployment address on BSC Testnet (The is not the production contract)

<https://testnet.bscscan.com/address/0x61D24823fD220AFdFA1558351cBf9Dc6581140A9>

Account	Address
Owner	0x9A056303F5C5A40Fa3620D0e783a4c33DEA2E3B5
User 1	0x5141898E25fFB38a94b954376f2f66B433DcE162
User 2	0x488cE5bb7eBA72e9628517573A06744187EFf20F
User 3	0xe8B924099E1b6B5cE8c8f35aa85e4111c1cC197c
User 4	0x535EC21Caf86b456a8F86d9046aFf1d83322F391
Uer 5	0xBb8D0e1530Aa48f1Cff37A401c34D4e68c60c960

1. Owner transfers 45% of supply to user1
 - a. [tx](#)
2. Owner transfers 20% of supply to user2
 - a. [tx](#)
3. Owner transfers 20% of supply to user3
 - a. [tx](#)
4. Owner transfers 10% of supply to user4
 - a. [tx](#)
5. Owner transfers 5% of supply to user5
 - a. [tx](#)
6. User2 votes for sale (20% quorum)
 - a. [tx](#)
7. User3 votes for sale (40% quorum)
 - a. [tx](#)
8. User4 votes for sale (50% quorum)
 - a. [tx](#)
9. Transfer restrictions are still active because quorum must be at least 50.01%
10. User5 sends 0.01% of supply to user2 who has already voted (50.01% quorum)
 - a. [tx](#)
11. Transfer restrictions are disabled
12. User3 changed his mind and votes against sale (30.01% quorum)
 - a. [tx](#)
13. Transfer restrictions are enabled
14. User3 votes for sale again (50.01% quorum)
15. Transfer restrictions are disabled
16. Add Liquidity to TUP-WETH pair
 - a. [tx](#)
17. Swap and liquify triggered
 - a. [tx](#)
18. Test Only Function call setTime to over 7 days in the future (testing vote expiry)
 - a. [tx](#)
19. Transfer restrictions are enabled

External Functions

- function burn(uint256 value) external
 - Burns `value` amount of tokens from `msg.sender`, lowering the total supply.
- function burn(address from, uint256 value) external
 - Burns a `value` amount of tokens from `from` account, lowering the total supply. (allowance is spent from the `msg.sender`)
- function voteForSale() external
 - `msg.sender` votes to allow transfers without restrictions
- function voteAgainstSale() external
 - `msg.sender` votes to change his vote to be enable transfer restrictions
- function setTeamWallet(address payable newTeamWallet) external onlyOwner
 - Sets the `teamWallet` address, callable only by the owner.
- function setFees(uint256 newLiquidityFee, uint256 newBuyTeamFee, uint256 newSellTeamFee) external onlyOwner
 - Sets the contract's fees, callable only by the owner. (Fees must not exceed the limits)

About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



The Cyberscope team

<https://www.cyberscope.io>