

TechRate
June, 2022



SMART CONTRACTS SECURITY AUDIT REPORT



Techrate_audits



Techrate



Techrate1

Audit Details



Audited project

G.O.A.T TOKEN



Deployer address

0xde911f8fc9f17a3f16e3907b2355969b9b76b741



Client contacts:

G.O.A.T TOKEN team



Blockchain

Ethereum



Project website:

<https://www.goat-erc20.com>

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

Background

TechRate was commissioned by G.O.A.T TOKEN to perform an audit of smart contracts:

<https://etherscan.io/address/0x74edaf28fc4b9e6a1618d613839daaf6a9d075db#code>

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Contracts Details

Token contract details for 16.06.2022

Contract name G.O.A.T TOKEN

Contract address 0x74EDAf28fc4b9E6A1618D613839Daaf6A9D075dB

Total supply 100,000,000,000,000,000

Token ticker G.O.A.T

Decimals 9

Token holders 980

Transactions count 13,633

Top 100 holders dominance 94.14%

Total fees 6480295180473393037583947

Liquidity buy/sell fee 6/10

Marketing address 0x18f3e0c9f3bdd2e79e3eeeb1bcd8e6bb9702095f

Uniswap V2 pair 0x4cedf45d496e5bc36beda9197b0edc4957d98080

Contract deployer address 0xde911f8fc9f17a3f16e3907b2355969b9b76b741

Owner address 0xde911f8fc9f17a3f16e3907b2355969b9b76b741

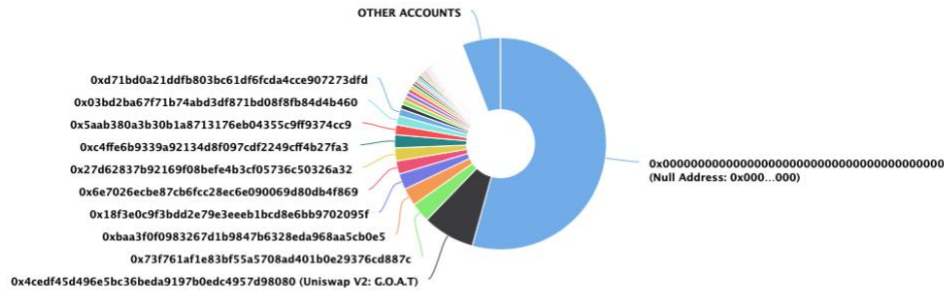
G.O.A.T TOKEN Token Distribution

The top 100 holders collectively own 94.14% (94,138,656,948,435,900.00 Tokens) of G.O.A.T Token

Token Total Supply: 100,000,000,000,000.00 Token | Total Token Holders: 980

G.O.A.T Token Top 100 Token Holders

Source: Etherscan.io



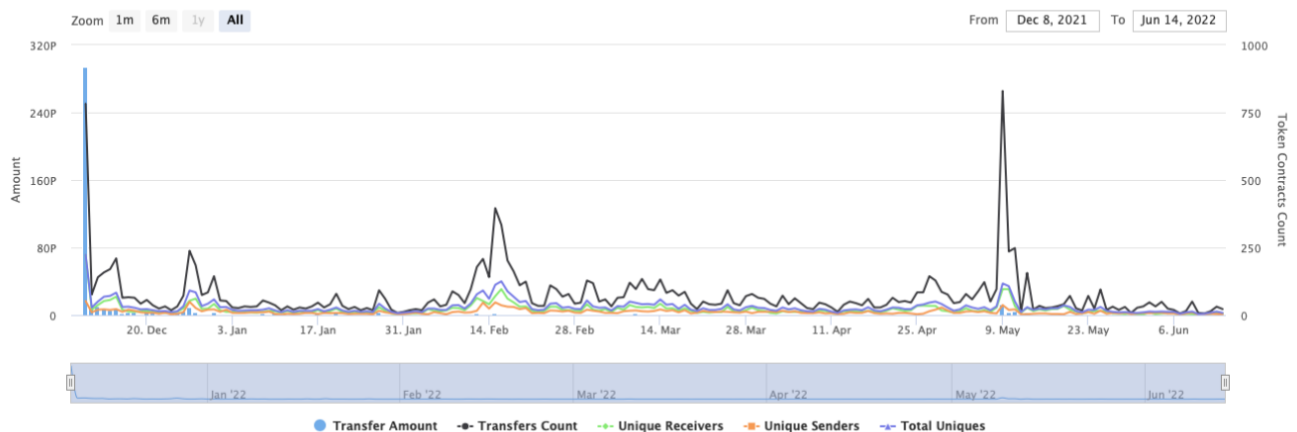
(A total of 94,138,656,948,435,900.00 tokens held by the top 100 accounts from the total supply of 100,000,000,000,000.00 token)

G.O.A.T TOKEN Contract Interaction Details


Time Series: Token Contract Overview

Fri 10, Dec 2021 - Tue 14, Jun 2022

Token Contract 0x74edaf28fc4b9e6a1618d613839daaf6a9d075db (G.O.A.T Token)
Source: Etherscan.io



G.O.A.T TOKEN Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	Null Address: 0x000...000	54,316,890,013,854,600.858228165	54.3169%
2	 Uniswap V2: G.O.A.T	7,936,376,535,367,180.989831411	7.9364%
3	0x73f761af1e83bf55a5708ad401b0e29376cd887c	2,999,293,693,677,430.813545228	2.9993%
4	0xbaa3f0f0983267d1b9847b6328eda968aa5cb0e5	2,699,743,462,327,030.336219148	2.6997%
5	0x18f3e0c9f3bdd2e79e3eeeb1bcd8e6bb9702095f	2,422,423,407,445,030.978083524	2.4224%
6	0x6e7026ecbe87cb6fcc28ec6e090069d80db4f869	2,001,839,531,906,160.979664254	2.0018%
7	0x27d62837b92169f08befe4b3cf05736c50326a32	2,000,000,000,000,000	2.0000%
8	0xc4ffe6b9339a92134d8f097cdf2249cff4b27fa3	1,985,445,200,417,110.946973536	1.9854%
9	0x5aab380a3b30b1a8713176eb04355c9ff9374cc9	1,514,324,231,607,440.877526533	1.5143%
10	0x03bd2ba67f71b74abd3df871bd08f8fb84d4b460	1,410,877,684,894,380.314340248	1.4109%

Contract functions details

+ [Int] IERC20

- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] transfer #
- [Ext] allowance
- [Ext] approve #
- [Ext] transferFrom #

+ [Lib] SafeMath

- [Int] add
- [Int] sub
- [Int] sub
- [Int] mul
- [Int] div
- [Int] div
- [Int] mod
- [Int] mod

+ Context

- [Int] _msgSender
- [Int] _msgData

+ [Lib] Address

- [Int] isContract
- [Int] sendValue #
- [Int] functionCall #
- [Int] functionCall #
- [Int] functionCallWithValue #
- [Int] functionCallWithValue #
- [Prv] _functionCallWithValue #

+ Ownable (Context)

- [Int] <Constructor> #
- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner
- [Pub] transferOwnership #
 - modifiers: onlyOwner
- [Pub] geUnlockTime
- [Pub] lock #
 - modifiers: onlyOwner

- [Pub] unlock #
- + [Int] IUniswapV2Factory
 - [Ext] feeTo
 - [Ext] feeToSetter
 - [Ext] getPair
 - [Ext] allPairs
 - [Ext] allPairsLength
 - [Ext] createPair #
 - [Ext] setFeeTo #
 - [Ext] setFeeToSetter #
- + [Int] IUniswapV2Pair
 - [Ext] name
 - [Ext] symbol
 - [Ext] decimals
 - [Ext] totalSupply
 - [Ext] balanceOf
 - [Ext] allowance
 - [Ext] approve #
 - [Ext] transfer #
 - [Ext] transferFrom #
 - [Ext] DOMAIN_SEPARATOR
 - [Ext] PERMIT_TYPEHASH
 - [Ext] nonces
 - [Ext] permit #
 - [Ext] MINIMUM_LIQUIDITY
 - [Ext] factory
 - [Ext] token0
 - [Ext] token1
 - [Ext] getReserves
 - [Ext] price0CumulativeLast
 - [Ext] price1CumulativeLast
 - [Ext] kLast
 - [Ext] mint #
 - [Ext] burn #
 - [Ext] swap #
 - [Ext] skim #
 - [Ext] sync #
 - [Ext] initialize #
- + [Int] IUniswapV2Router01
 - [Ext] factory
 - [Ext] WETH
 - [Ext] addLiquidity #

- [Ext] addLiquidityETH (\$)
 - [Ext] removeLiquidity #
 - [Ext] removeLiquidityETH #
 - [Ext] removeLiquidityWithPermit #
 - [Ext] removeLiquidityETHWithPermit #
 - [Ext] swapExactTokensForTokens #
 - [Ext] swapTokensForExactTokens #
 - [Ext] swapExactETHForTokens (\$)
 - [Ext] swapTokensForExactETH #
 - [Ext] swapExactTokensForETH #
 - [Ext] swapETHForExactTokens (\$)
 - [Ext] quote
 - [Ext] getAmountOut
 - [Ext] getAmountIn
 - [Ext] getAmountsOut
 - [Ext] getAmountsIn
- + [Int] IUniswapV2Router02 (IUniswapV2Router01)
- [Ext] removeLiquidityETHSupportingFeeOnTransferTokens #
 - [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens #
 - [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
 - [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)
 - [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
- + GoatToken (Context, IERC20, Ownable)
- [Pub] <Constructor> #
 - [Pub] name
 - [Pub] symbol
 - [Pub] decimals
 - [Pub] totalSupply
 - [Pub] balanceOf
 - [Pub] transfer #
 - [Pub] allowance
 - [Pub] approve #
 - [Pub] transferFrom #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
 - [Pub] totalFees
 - [Pub] reflectionFromToken
 - [Pub] tokenFromReflection
 - [Pub] manualSwapAndLiquify #
 - modifiers: onlyOwner
 - [Pub] excludeFromFee #
 - modifiers: onlyOwner
 - [Pub] includeInFee #

- modifiers: onlyOwner
- [Ext] setTax #
 - modifiers: onlyOwner
- [Ext] setMaxWalletHolding #
 - modifiers: onlyOwner
- [Ext] setMaxSell #
 - modifiers: onlyOwner
- [Ext] setAntiWhaleSellThreshold #
 - modifiers: onlyOwner
- [Pub] setSwapAndLiquifyEnabled #
 - modifiers: onlyOwner
- [Ext] <Fallback> (\$)
- [Prv] _reflectFee #
- [Prv] _getValues
- [Prv] _getTValuesArray
- [Prv] _getRValuesArray
- [Prv] _getRate
- [Prv] _getCurrentSupply
- [Prv] _takeLiquidity #
- [Prv] _takeOperations #
- [Prv] calculateTaxFee
- [Prv] calculateLiquidityFee
- [Prv] calculateOperationsFee
- [Prv] removeAllFee #
- [Pub] isExcludedFromFee
- [Prv] _approve #
- [Prv] _transfer #
- [Prv] swapAndLiquify #
 - modifiers: lockTheSwap
- [Prv] swapTokensForEth #
- [Prv] addLiquidity #
- [Prv] _tokenTransfer #
- [Prv] _transferStandard #

(\$)= payable function

= non-constant function

Issues Checking Status

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Passed
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

Security Issues

✓ High Severity Issues

No high severity issues found.

✓ Medium Severity Issues

No medium severity issues found.

✓ Low Severity Issues

No low severity issues found.

Owner privileges (In the period when the owner is not renounced)

- Owner can manually swap and liquify.
- Owner can exclude addresses from fees.
- Owner can change fees.
- Owner can change _maxWalletHolding.
- Owner can change _maxSell.
- Owner can change _antiWhaleSellThreshold.
- Owner can enable/disable swap and liquify.
- Owner can change numTokensSellToAddToLiquidity.
- Owner can lock and unlock. By the way, using these functions the owner could leave as owner even after the ownership was renounced.

Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details are provided by the team:

<https://app.unicrypt.network/amm/uni-v2/pair/0x4cedf45d496e5bc36beda9197b0edc4957d98080>

TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.