



Smart Contract Security Audit

<u>TechRate</u> December, 2021

Audit Details



Audited project

Kuber Finance



Deployer address

0x7b2b847042f3be15330fec32bd4b11d3b7fbf97b



Client contacts:

Kuber Finance team



Blockchain

Binance Smart Chain



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 below 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 Kuber Finance to perform an audit of smart contracts:

https://bscscan.com/address/0xa76d458210b5b335eee20f8393f0b07574a8ac71#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.

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Contracts Details

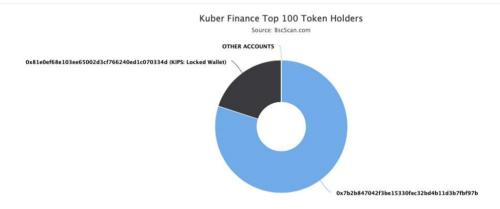
Token contract details for 11.12.2021

Contract name	Kuber Finance
Contract address	0xa76d458210b5B335eeE20f8393F0b07574a8Ac71
Total supply	1,000,000,000
Token ticker	KUBER
Decimals	9
Token holders	2
Transactions count	2
Top 100 holders dominance	100.00%
Contract deployer address	0x7b2b847042f3be15330fec32bd4b11d3b7fbf97b
Contract's current owner address	0x7b2b847042f3be15330fec32bd4b11d3b7fbf97b

Kuber Finance Token Distribution

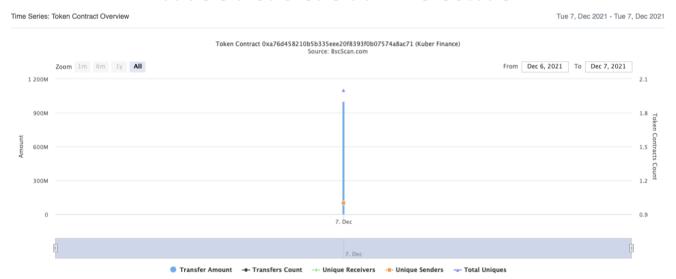


▼ Token Total Supply: 1,000,000,000.00 Token I Total Token Holders: 2



(A total of 1,000,000,000.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000 token)

Kuber Finance Contract Interaction Details



Kuber Finance Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x7b2b847042f3be15330fec32bd4b11d3b7fbf97b	800,000,000	80.0000%
2	☐ KIPS: Locked Wallet	200,000,000	20.0000%



Contract functions details

- + [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 # + [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] nonces

- [Ext] transferFrom #

- [Ext] DOMAIN_SEPARATOR- [Ext] PERMIT_TYPEHASH

- [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 #

+ [Lib] SafeMath

- [Int] tryAdd
- [Int] trySub
- [Int] tryMul
- [Int] tryDiv
- [Int] tryMod
- [Int] add
- [Int] sub
- [Int] mul
- [Int] div
- [Int] mod
- [Int] sub
- [Int] div
- [Int] mod

+ [Int] IERC20

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

+ [Int] IERC20Metadata (IERC20)

- [Ext] name
- [Ext] symbol
- [Ext] decimals

+ Context

- [Int] _msgSender
- [Int] _msgData

+ ERC20 (Context, IERC20, IERC20Metadata)

- [Pub] <Constructor> #
- [Pub] name
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf

```
- [Pub] transfer #
 - [Pub] allowance
 - [Pub] approve #
 - [Pub] transferFrom #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
 - [Int] _transfer #
 - [Int] mint#
 - [Int] burn #
 - [Int] approve #
 - [Int] _beforeTokenTransfer #
 - [Int] afterTokenTransfer #
+ Ownable (Context)
 - [Pub] <Constructor> #
 - [Pub] owner
 - [Pub] renounceOwnership #
   - modifiers: onlyOwner
 - [Pub] transferOwnership #
  - modifiers: onlyOwner
 - [Int] transferOwnership #
+ KUBER (ERC20, Ownable)
 - [Pub] <Constructor> #
   - modifiers: ERC20
 - [Ext] <Fallback> ($)
 - [Pub] decimals
 - [Pub] getUserFee
 - [Pub] getUserTransferLockedDays
 - [Pub] getLastTransferTime
 - [Pub] getStartTime
 - [Pub] excludeFromFees #
   - modifiers: onlyOwner
 - [Pub] includeExcludeBuyAddress #
   - modifiers: onlyOwner
 - [Pub] includeExcludeMaxWallet#
   - modifiers: onlyOwner
 - [Ext] setinvestmentWallet #
   - modifiers: onlyOwner
 - [Ext] setBurnFee #
  - modifiers: onlyOwner
 - [Ext] setTaxDays #
   - modifiers: onlyOwner
 - [Ext] setTransferDays #
   - modifiers: onlyOwner
 - [Ext] setBurnPercent #
   - modifiers: onlyOwner
 - [Ext] setInvestmentPercent #
   - modifiers: onlyOwner
 - [Pub] setMaxWalletAmount #
   - modifiers: onlyOwner
 - [Ext] setMaxTxAmount #
   - modifiers: onlyOwner
 - [Ext] setinvestmentFee #
   - modifiers: onlyOwner
```

- [Ext] blacklistAddress #
 - modifiers: onlyOwner
- [Pub] isExcludedFromFees
- [Pub] isBuyAddress
- [Pub] isMaxWalltetAddress
- [Int] _transfer #
- [Prv] swapAndSendToInvestment #
- [Prv] swapTokensForBnb #
- [Ext] transferAnyBEP20 #
 - modifiers: onlyOwner
- [Ext] transferStuckBNB #
 - modifiers: onlyOwner
- (\$) = 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.

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 exclude from fees.
- Owner can include addresses in _isBuyAddress and _isMaxWalletAddress arrays.
- Owner can change _investmentWalletAddress.
- Owner can change taxDays and transferDays.
- Owner can change burn and investment percent.
- Owner can change maxWalletToken and maxTxAmount values.
- Owner can change burn and investment fee.
- Owner can blacklist addresses.
- Owner can withdraw contract tokens and BNBs.

Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details are NOT provided by the team.

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.

