TechRate
June, 2022

SMART CONTRACTS SECURITY AUDIT REPORT

Audit Details

Audited project

SpookyShiba

Deployer address

0x6d907fcdb34e66697867614aaadfeb3acd731f62

Client contacts:

SpookyShiba team

Blockchain

Binance Smart Chain

Project website:

Not provided

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 SpookyShiba to perform an audit of smart contracts:
https://bscscan.com/address/0x9c2b1b3780a8b36b695f0b2781668664ac1bf25a#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

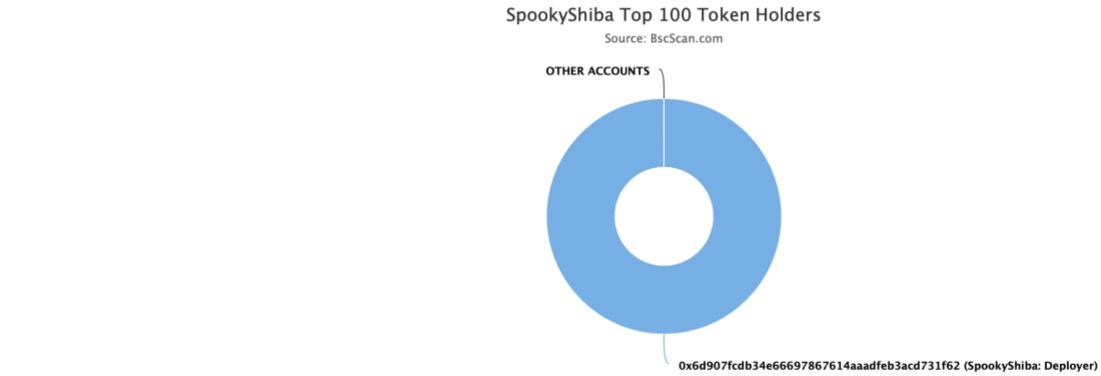
Token contract details for 12.06.2022

Contract name	SpookyShiba
Contract address	0x9c2B1B3780A8B36B695f0b2781668664aC1Bf25A
Total supply	1,000,000,000
Token ticker	SPKY
Decimals	18
Token holders	1
Transactions count	1
Top 100 holders dominance	100.00%
Tokens/Swap addresses	0x6d907FCdB34e66697867614aAAdfEb3ACD731f62
Ratios	0/7/3/10
Tax rates	400/400/0
LP pair	0x102b4d4437745a0f5560788730b85284ff476a50
Contract deployer address	0x6d907fcdb34e66697867614aaadfeb3acd731f62
Owner address	0x6d907fcdb34e66697867614aaadfeb3acd731f62

SpookyShiba Token Distribution

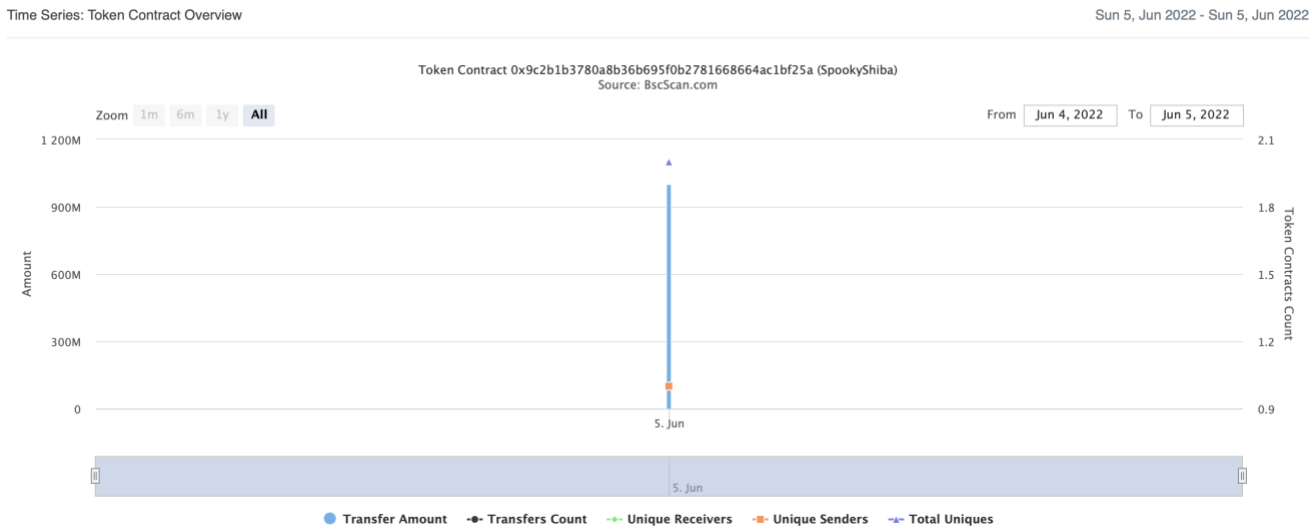
The top 100 holders collectively own 100.00% (1,000,000,000.00 Tokens) of SpookyShiba

Token Total Supply: 1,000,000,000.00 Token | Total Token Holders: 1



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

SpookyShiba Contract Interaction Details



SpookyShiba Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	SpookyShiba: Deployer	1,000,000,000	100.0000%

Contract functions details

+ [Int] IERC20
  - [Ext] totalSupply
  - [Ext] decimals
  - [Ext] symbol
  - [Ext] name
  - [Ext] getOwner
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #

+ [Int] IFactoryV2
  - [Ext] getPair
  - [Ext] createPair #

+ [Int] IV2Pair
  - [Ext] factory
  - [Ext] getReserves
  - [Ext] sync #

+ [Int] IRouter01
  - [Ext] factory
  - [Ext] WETH
  - [Ext] addLiquidityETH ($)
  - [Ext] addLiquidity #
  - [Ext] getAmountsOut
  - [Ext] getAmountsIn

+ [Int] IRouter02 (IRouter01)
  - [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
  - [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens ($)
  - [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
  - [Ext] swapExactTokensForTokens #

+ SpookyShiba_V2 (IERC20)
  - [Pub] <Constructor> ($)
  - [Ext] <Fallback> ($)
  - [Ext] transferOwner #
    - modifiers: onlyOwner
  - [Pub] renounceOwnership #

  - modifiers: onlyOwner
- [Ext] totalSupply
- [Ext] decimals
- [Ext] symbol
- [Ext] name
- [Ext] getOwner
- [Ext] allowance
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] approve #
- [Int] _approve #
- [Ext] transferFrom #
- [Pub] setNewRouter #
  - modifiers: onlyOwner
- [Ext] setLpPair #
  - modifiers: onlyOwner
- [Ext] setTaxes #
  - modifiers: onlyOwner
- [Ext] setRatios #
  - modifiers: onlyOwner
- [Ext] setExcludedFromLimits #
  - modifiers: onlyOwner
- [Pub] isExcludedFromLimits
- [Pub] isExcludedFromFees
- [Pub] setExcludedFromFees #
  - modifiers: onlyOwner
- [Pub] getMaxTX
- [Pub] getMaxWallet
- [Pub] getAmountTokensLastSold
- [Pub] percentLastSoldToBuyBackTimesTen
- [Pub] setBuyBackEnabled #
  - modifiers: onlyOwner
- [Pub] setPercentLastSoldToBuyBackTimesTen #
  - modifiers: onlyOwner
- [Prv] _getSellBnBAmount
- [Ext] setSwapSettings #
  - modifiers: onlyOwner
- [Ext] setWallets #
  - modifiers: onlyOwner
- [Ext] setContractSwapEnabled #
  - modifiers: onlyOwner
- [Int] _hasLimits
- [Int] _transfer #
- [Int] contractSwap #
  - modifiers: lockTheSwap

- [Prv] buyBackTokens #
  - modifiers: lockTheSwap
- [Prv] swapETHForTokens #
- [Int] _checkLiquidityAdd #
- [Pub] enableTrading #
  - modifiers: onlyOwner
- [Ext] sweepContingency #
  - modifiers: onlyOwner
- [Pub] transferContractToken #
  - modifiers: onlyOwner
- [Ext] multiSendTokens #
- [Int] _finalizeTransfer #
- [Int] takeTaxes #

($) = 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.**	Low issues
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

1. Out of gas

Issue:

- The function multiSendTokens() uses the loop to multitransfer. Function will be aborted with OUT_OF_GAS exception if there will be a long addresses list.

Recommendation:
Check that the array length is not too big.

Notes:

- _amountTokensLastSold after the buyBackTokens() remains the same.

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

- Owner can transfer whole ownership.
- Owner can change Uniswap router address.
- Owner can include in LpPair array.
- Owner can change fees and ratios.
- Owner can exclude from the fees and limits.
- Owner can enable/disable buyback.
- Owner can change _percentLastSoldToBuyBackTimesTen.
- Owner can change swapThreshold, contractSwapTimer and swapAmount.
- Owner can change tokens and swap addresses.
- Owner can enable/disable contractSwapEnabled.
- Owner can enable trading and recalculate swapThreshold and swapAmount.
- Owner can withdraw contract BNBs and ERC20 tokens.

Conclusion

Smart contracts contain low 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 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.