TechRate

AUDIT COMPANY

Smart Contract Security Audit

TechRate

August, 2021

Audit Details

Audited project

RedShiba

Deployer address

0x48FeB545d20c0ff8B1958879460bfD458425DCD4

Client contacts:

RedShiba team

Blockchain

Binance Smart Chain

Project website:

https://shiba.red/

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 RedShiba to perform an audit of smart contracts:
https://bscscan.com/address/0xf57d0b57074a5cf1cb0dd9453eb5af4e5174d157#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 16.08.2021

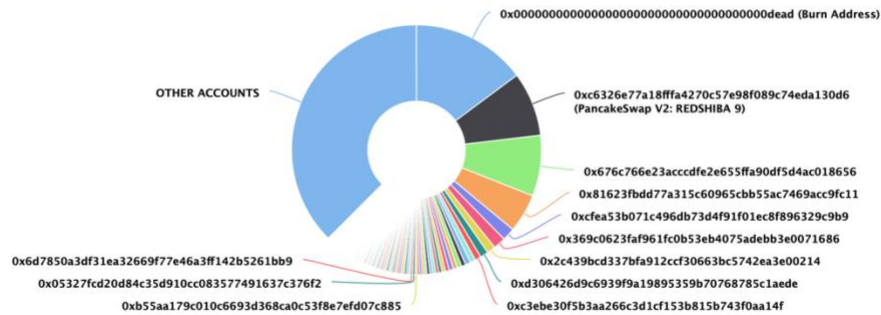|	
Contract name	RedShiba
Contract address	0xf57D0B57074a5Cf1cB0DD9453eb5af4e5174D157
Total supply	1,000,000,000,000,000,000
Token ticker	REDSHIBA
Decimals	9
Token holders	11,122
Transactions count	38,090
Top 100 holders dominance	62.49%
Contract deployer address	0x48FeB545d20c0ff8B1958879460bfD458425DCD4
Contract's current owner address	0x0000000000000000000000000000000000000000

RedShiba Token Distribution

RedShiba Top 100 Token Holders
Source: BscScan.com

0x0000000000000000000000000000000000000dead (Burn Address)

0xc6326e77a18fffa4270c57e98f089c74eda130d6
(PancakeSwap V2: REDSHIBA 9)

0x676c766e23acccdfe2e655ffa90df5d4ac018656
0x81623fbdd77a315c60965cbb55ac7469acc9fc11
0xcfea53b071c496db73d4f91f01ec8f896329c9b9
0x369c0623faf961fc0b53eb4075adebb3e0071686
0x2c439bcd337bfa912ccf30663bc5742ea3e00214
0xd306426d9c6939f9a19895359b70768785c1aede
0xc3ebe30f5b3aa266c3d1cf153b815b743f0aa14f

OTHER ACCOUNTS

0x6d7850a3df31ea32669f77e46a3ff142b5261bb9
0x05327fcd20d84c35d910cc083577491637c376f2
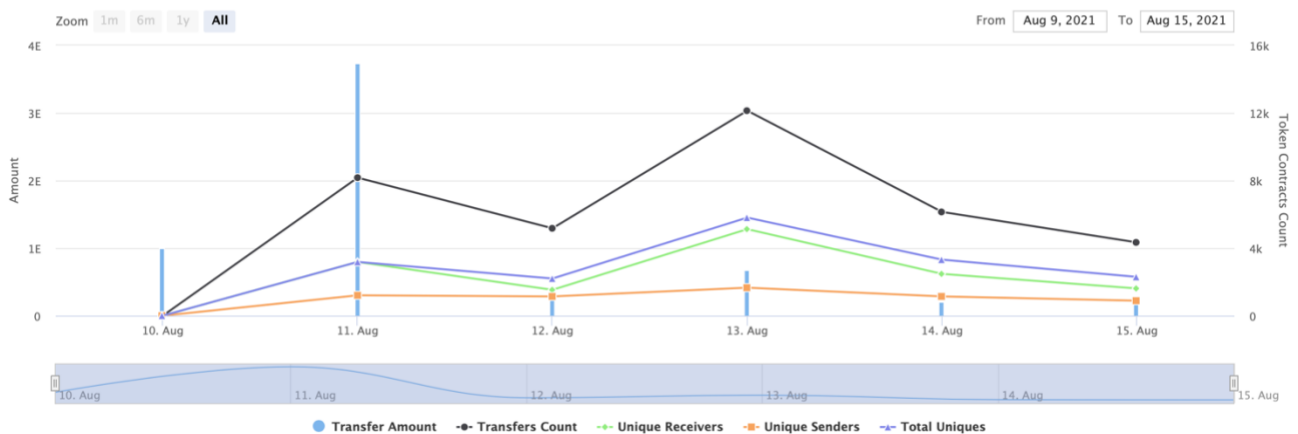0xb55aa179c010c6693d368ca0c53f8e7efd07c885

(A total of 624,912,684,413,722,000.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000,000.00 token)

RedShiba Contract Interaction Details

Time Series: Token Contract Overview

Tue 10, Aug 2021 - Sun 15, Aug 2021

Token Contract 0xf57d0b57074a5cf1cb0dd9453eb5af4e5174d157 (RedShiba)
Source: BscScan.com

Zoom 1m 6m 1y **All**   From Aug 9, 2021 To Aug 15, 2021

● Transfer Amount   ●— Transfers Count   +— Unique Receivers   ■— Unique Senders   ▲— Total Uniques

RedShiba Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	Burn Address	148,356,942,663,449,000.160092428	14.8357%
2	PancakeSwap V2: REDSHIBA 9	83,088,491,394,716,300.482530173	8.3088%
3	0x676c766e23acccdfe2e655ffa90df5d4ac018656	78,600,155,914,059,700.95960001	7.8600%
4	0x81623fbdd77a315c60965cbb55ac7469acc9fc11	50,000,000,000,000,000	5.0000%
5	0xcfea53b071c496db73d4f91f01ec8f896329c9b9	16,416,261,422,475,600.459651255	1.6416%
6	0x369c0623faf961fc0b53eb4075adebb3e0071686	16,021,412,293,807,300.517282832	1.6021%
7	0x2c439bcd337bfa912ccf30663bc5742ea3e00214	11,050,325,165,390,400.951787891	1.1050%
8	0xd306426d9c6939f9a19895359b70768785c1aede	10,511,996,491,738,200.640774079	1.0512%
9	0xc3ebe30f5b3aa266c3d1cf153b815b743f0aa14f	7,928,091,181,689,550.055779212	0.7928%
10	0x3b320053f11097654b61267c88409dd9b5f11b25	7,082,086,265,779,330.281669774	0.7082%

Contract functions details

+ Context
- [Int] _msgSender

+ [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

+ Ownable (Context)
- **[Pub]** <Constructor> **#**
- **[Pub]** owner
- **[Pub]** renounceOwnership **#**
  - modifiers: onlyOwner

+ [Int] IUniswapV2Factory
- **[Ext]** createPair **#**

+ [Int] IUniswapV2Router02
- **[Ext]** swapExactTokensForETHSupportingFeeOnTransferTokens **#**
- **[Ext]** factory
- **[Ext]** WETH
- **[Ext]** addLiquidityETH **($)**

+ RedShiba (Context, IERC20, Ownable)
- **[Pub]** <Constructor> **#**
- **[Pub]** name
- **[Pub]** symbol
- **[Pub]** decimals
- **[Pub]** totalSupply
- **[Pub]** balanceOf
- **[Pub]** transfer **#**
- **[Pub]** allowance
- **[Pub]** approve **#**
- **[Pub]** transferFrom **#**
- **[Ext]** setCooldownEnabled **#**
  - modifiers: onlyOwner
- **[Prv]** tokenFromReflection
- **[Prv]** removeAllFee **#**
- **[Prv]** restoreAllFee **#**
- **[Prv]** _approve **#**

- **[Prv]** _transfer **#**
- **[Prv]** swapTokensForEth **#**
  - modifiers: lockTheSwap
- **[Prv]** sendETHToFee **#**
- **[Ext]** openTrading **#**
  - modifiers: onlyOwner
- **[Pub]** setBots **#**
  - modifiers: onlyOwner
- **[Pub]** delBot **#**
  - modifiers: onlyOwner
- **[Prv]** _tokenTransfer **#**
- **[Prv]** _transferStandard **#**
- **[Prv]** _takeTeam **#**
- **[Prv]** _reflectFee **#**
- **[Ext]** \<Fallback\> **($)**
- **[Ext]** manualswap **#**
- **[Ext]** manualsend **#**
- **[Prv]** _getValues
- **[Prv]** _getTValues
- **[Prv]** _getRValues
- **[Prv]** _getRate
- **[Prv]** _getCurrentSupply
- **[Ext]** setMaxTxPercent **#**
  - 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.

⊘ **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 enable cooldown(user to user trading with time offset).
- Owner can change the maximum transaction amount.
- Owner can add and remove bots(no transferring between this addresses).
- Fee address can withdraw half of the contract balance to fee address another half to marketing address.

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 provided by the team:
https://app.unicrypt.network/amm/pancake-v2/pair/0xc6326e77a18fffa4270c57e98f089c74eda130d6

Ownership renounce details provided by the team:
https://bscscan.com/tx/0xb78125f9858d65db925c912f4aa696a51e04cb2869f23b3a65ff61cd740d03ba

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.