TechRate

AUDIT COMPANY

Smart Contract Security Audit

TechRate

July, 2021

Audit Details

Audited project

RedFeg

Deployer address

0x48FeB545d20c0ff8B1958879460bfD458425DCD4

Client contacts:

RedFeg team

Blockchain

Binance Smart Chain

Project website:

https://feg.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.

DISCLAIMER: By reading this report or any part of it, you agree to the terms of this disclaimer. If you do not agree to the terms, then please immediately cease reading this report, and delete and destroy any and all copies of this report downloaded and/or printed by you. This report is provided for information purposes only and on a non-reliance basis, and does not constitute investment advice. No one shall have any right to rely on the report or its contents, and TechRate and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers and other representatives) (TechRate) owe no duty of care towards you or any other person, nor does TechRate make any warranty or representation to any person on the accuracy or completeness of the report. The report is provided "as is", without any conditions, warranties or other terms of any kind except as set out in this disclaimer, and TechRate hereby excludes all representations, warranties, conditions and other terms (including, without limitation, the warranties implied by law of satisfactory quality, fitness for purpose and the use of reasonable care and skill) which, but for this clause, might have effect in relation to the report. Except and only to the extent that it is prohibited by law, TechRate hereby excludes all liability and responsibility, and neither you nor any other person shall have any claim against TechRate, for any amount or kind of loss or damage that may result to you or any other person (including without limitation, any direct, indirect, special, punitive, consequential or pure economic loss or damages, or any loss of income, profits, goodwill, data, contracts, use of money, or business interruption, and whether in delict, tort (including without limitation negligence), contract, breach of statutory duty, misrepresentation (whether innocent or negligent) or otherwise under any claim of any nature whatsoever in any jurisdiction) in any way arising from or connected with this report and the use, inability to use or the results of use of this report, and any reliance on this report.

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 RedFeg to perform an audit of smart contracts:
https://bscscan.com/address/0x25574cad6f03ffacd9d08b288e8d5d88997fb2f3#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.
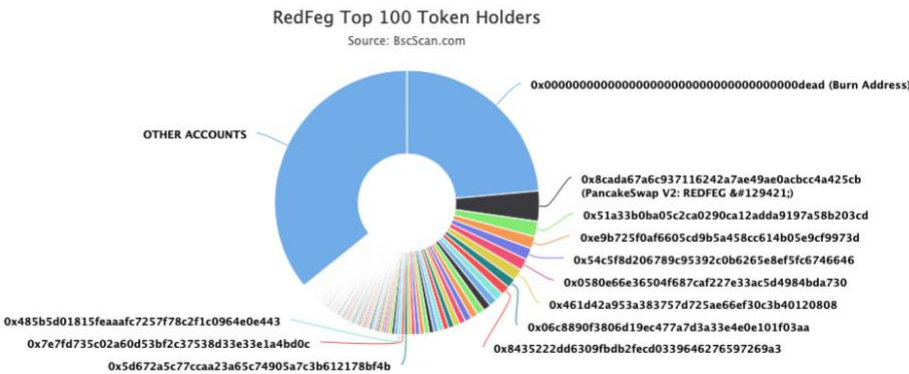
Contracts Details

Token contract details for 31.07.2021

Contract name	RedFeg
Contract address	0x25574Cad6F03FFacD9D08b288e8D5d88997fb2f3
Total supply	1,000,000,000,000,000,000
Token ticker	REDFEG 🔒
Decimals	9
Token holders	18,043
Transactions count	84,162
Top 100 holders dominance	64.22%
Contract deployer address	0x48FeB545d20c0ff8B1958879460bfD458425DCD4
Contract's current owner address	0x0000000000000000000000000000000000000000

RedFeg Token Distribution

RedFeg Top 100 Token Holders
Source: BscScan.com

0x0000000000000000000000000000000000000dead (Burn Address)

0x8cada67a6c937116242a7ae49ae0acbcc4a425cb
(PancakeSwap V2: REDFEG 🦍)

0x51a33b0ba05c2ca0290ca12adda9197a58b203cd

0xe9b725f0af6605cd9b5a458cc614b05e9cf9973d

0x54c5f8d206789c95392c0b6265e8ef5fc6746646

0x0580e66e36504f687caf227e33ac5d4984bda730

0x461d42a953a383757d725ae66ef30c3b40120808

0x06c8890f3806d19ec477a7d3a33e4e0e101f03aa

0x8435222dd6309fbdb2fecd0339646276597269a3

0x485b5d01815feaaafc7257f78c2f1c0964e0e443

0x7e7fd735c02a60d53bf2c37538d33e33e1a4bd0c

0x5d672a5c77ccaa23a65c74905a7c3b612178bf4b

OTHER ACCOUNTS

(A total of 642,191,826,120,604,000.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000,000.00 token)

RedFeg Contract Interaction Details

Time Series: Token Contract Overview   Fri 16, Jul 2021 - Fri 30, Jul 2021

Token Contract 0x25574cad6f03ffacd9d08b288e8d5d88997fb2f3 (RedFeg)
Source: BscScan.com

Zoom 1m 6m 1y All   From Jul 15, 2021   To Jul 30, 2021

● Transfer Amount   -●- Transfers Count   -●- Unique Receivers   -■- Unique Senders   -▲- Total Uniques
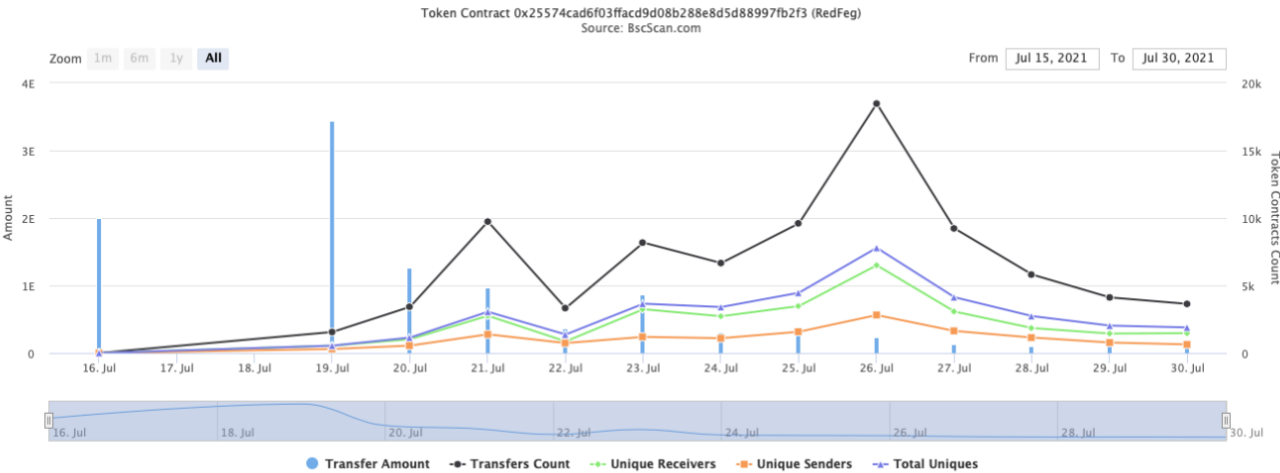
RedFeg Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	Burn Address	235,767,354,347,671,000.492986991	23.5767%
2	📄 PancakeSwap V2: REDFEG 🦍	37,068,434,266,863,400.129699416	3.7068%
3	0x51a33b0ba05c2ca0290ca12adda9197a58b203cd	18,653,596,932,723,300.515552783	1.8654%
4	0xe9b725f0af6605cd9b5a458cc614b05e9cf9973d	15,068,286,198,352,300.46264959	1.5068%
5	0x54c5f8d206789c95392c0b6265e8ef5fc6746646	14,252,815,399,442,300.276378235	1.4253%
6	0x0580e66e36504f687caf227e33ac5d4984bda730	14,000,245,018,615,500.789623116	1.4000%
7	0x461d42a953a383757d725ae66ef30c3b40120808	14,000,012,398,083,800.870009316	1.4000%
8	0x06c8890f3806d19ec477a7d3a33e4e0e101f03aa	11,852,171,215,577,900.35803472	1.1852%
9	0x8435222dd6309fbdb2fecd0339646276597269a3	11,080,400,491,412,100.593439478	1.1080%
10	0xa9d656da31d7af3b5e5d40c08c163bb51417b41a	10,400,480,483,996,300.004909883	1.0400%

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 **($)**

+ RedFeg (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/0x8cada67a6c937116242a7ae49ae0acbcc4a425cb

Ownership renounce details provided by the team:
https://bscscan.com/tx/0xbff33fef05559b2a6b550d8546d0e84b3a46f9c3e4d58563f8a60634fa58e99b

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.