



# **Smart Contract Security Audit**

TechRate
July, 2021

## **Audit Details**



**Audited project** 

**Robust Token** 



Deployer address

0x91C42321126B48D89B2871CB90A0Dc537a5E1984



Client contacts:

**Robust Token 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 Robust Token to perform an audit of smart contracts:

 $\frac{https://bscscan.com/address/0x891e4554227385c5c740f9b483e935e3cbc29f01\#cod}{e}$ 

#### 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.

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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**

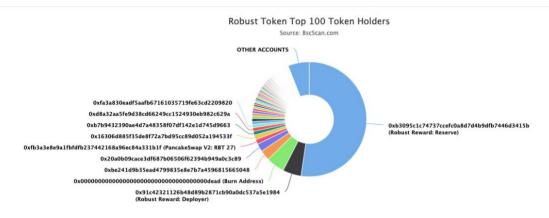
#### Token contract details for 01.07.2021

Contract name	Robust Token
Contract address	0x891E4554227385c5c740F9B483E935E3CbC29F01
Total supply	95,567.051894
Token ticker	RBT
Decimals	18
Token holders	728
Transactions count	20,612
Top 100 holders dominance	94.00%
Contract deployer address	0x91C42321126B48D89B2871CB90A0Dc537a5E1984
Contract's current owner address	0x9733f3838c013468165e7cf69ea87a8dd2e976fb
Rbw address	0x4cc23264e1ef8dd8173e4ec07e6a01cc7476d997
Rbt rate	100
Rbw rate	100
Rbt reserve address	0xb3095c1c74737ccefc0a8d7d4b9dfb7446d3415b

## **Robust Token Token Distribution**



Token Total Supply: 95,567.05 Token | Total Token Holders: 728



(A total of 89,835.49 tokens held by the top 100 accounts from the total supply of 95,567.05 token)

## Robust Token Contract Interaction Details

Token Contract Ox891e4554227385c5c740f9b483e935e3cbc29f01 (Robust Token)
Source: 8sc5can.com

From Apr 14, 2021 To Jun 29, 2021

200k

2400

190k

200k

200

# Robust Token Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1		50,000	52.3193%
2	Robust Reward: Deployer	5,000	5.2319%
3	Burn Address	4,950	5.1796%
4	0xbe241d9b35ead4799835e8e7b7a4596815665048	2,777.201832493859282929	2.9060%
5	0x20a0b09cace3df687b06506f62394b949a0c3c89	2,136.42	2.2355%
6	∄ PancakeSwap V2: RBT 27	1,294.683131854782453196	1.3547%
7	0x16306d885f35de8f72a7bd95cc89d052a194533f	1,242.677942007399861642	1.3003%
8	0xb7b9432390ae4d7a48358f07df142e1d745d9663	1,024.351137346515263922	1.0719%
9	0xd8a32aa5fe9d38cd66249cc1524930eb982c629a	981.82161933499471915	1.0274%
10	0xfa3a830eadf5aafb67161035719fe63cd2209820	925.387461930857017149	0.9683%

### **Contract functions details**

#### + Context - [Int] \_msgSender - [Int] msgData + [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 + [Lib] Address - [Int] isContract - [Int] sendValue # - [Int] functionCall # - [Int] functionCall # - [Int] functionCallWithValue # - [Int] functionCallWithValue # - [Prv] \_functionCallWithValue # + ERC20 (Context, IERC20) - [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] setupDecimals #

- [Int] \_beforeTokenTransfer #

- + Ownable (Context)
  - [Int] <Constructor> #
  - [Pub] owner
  - [Pub] renounceOwnership #
    - modifiers: onlyOwner
  - [Pub] transferOwnership #
    - modifiers: onlyOwner
- + rbtReward (ERC20, Ownable)
  - [Pub] mint #
    - modifiers: onlyOwner
- + robustToken (ERC20, Ownable)
  - [Pub] <Constructor> #
  - [Pub] transfer #
  - [Pub] transferFrom #
  - [Pub] setrbtRate #
    - modifiers: onlyOwner
  - [Pub] setrbwRate #
    - modifiers: onlyOwner
  - [Pub] rbtBurned
- (\$) = 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 change rbt and rbw rates.

```
ftrace|funcSig
function setrbtRate(uint256 newrbtRate1) public onlyOwner {
    require(newrbtRate1 > 0, "_rbtRate: Rate must be greater than 0");
    rbtRate = newrbtRate1;
}

ftrace|funcSig
function setrbwRate(uint256 newrbwRate1) public onlyOwner {
    require(newrbwRate1 > 0, "_rbwRate: Rate must be greater than 0");
    rbwRate = newrbwRate1;
}
```

### Conclusion

Smart contracts do not contain high severity issues!

#### 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.





