



**TechRate**

AUDIT COMPANY

# ShonToken

## Smart Contract Security Audit

# Audit Details



Audited project

ShonToken



Deployer address

0x0b34d4a7c5bfc7004b9a193f8309523e99ca766e



Client contacts:

ShonToken team



Blockchain

Binance Smart Chain



Project website:

<http://shontoken.com>

# 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 ShonToken team to perform an audit of smart contracts:

<https://bscscan.com/address/0x0b34d4a7c5bfc7004b9a193f8309523e99ca766e#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 23.06.2021

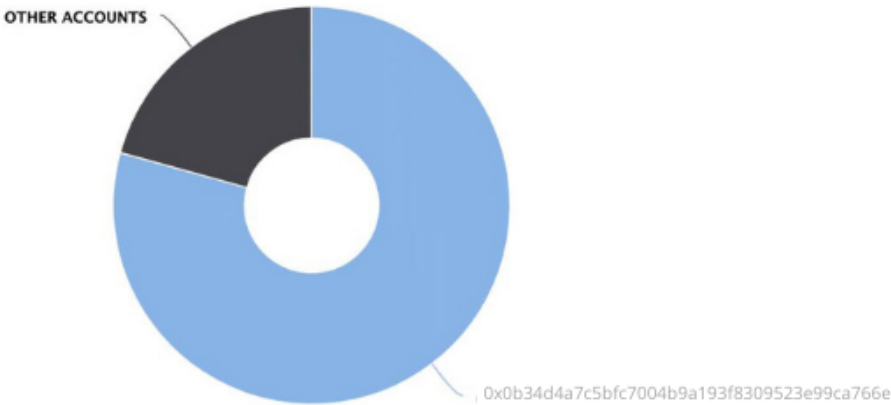
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Contract name	ShonToken
Contract address	0x0b34d4a7c5bfc7004b9a193f8309523e99ca766e
Total supply	10,000,000,000
Token ticker	SHON
Decimals	18
Token holders	5,024
Transactions count	5,397
Top 100 holders dominance	79.29 %
Contract deployer address	0x0b34d4a7c5bfc7004b9a193f8309523e99ca766e
Contract's current owner address	private info

# ShonToken Token Distribution

ShonToken Top 100 Token Holders

Source: BscScan.com

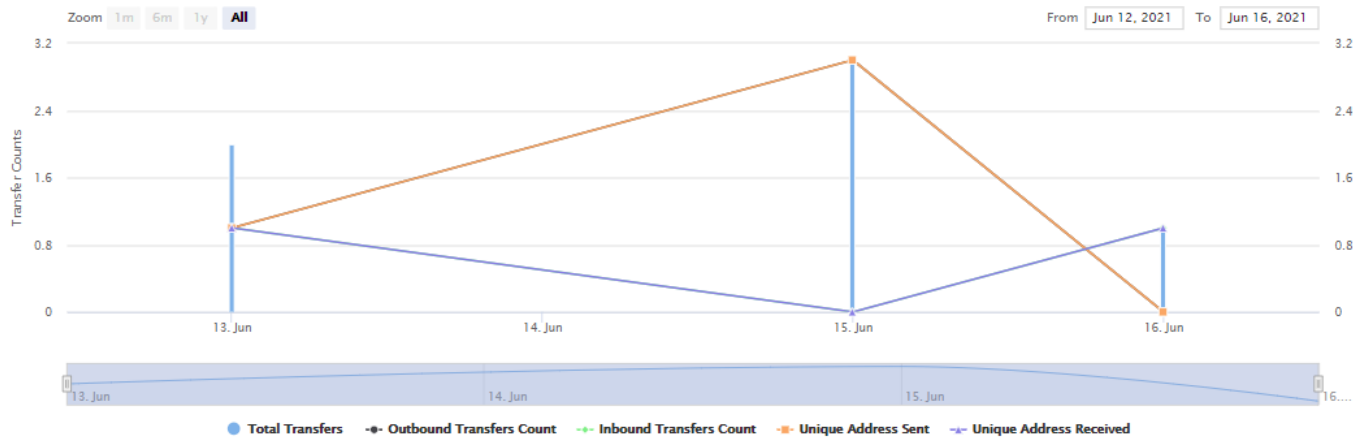


(A total of 16,650,000.00 tokens held by the top 100 accounts from the total supply of 21,000,000.00 token)

## ShonToken Contract Interaction Details

SHON Token Transfers for 0x128796a169b298c28e5ac5eb1600de564787adbc

Source: BscScan.com



# Contract functions details

- + [Lib] SafeMath
  - [Int] mul
  - [Int] div
  - [Int] sub
  - [Int] add
- + ForeignToken
  - [Pub] balanceOf
  - [Pub] transfer #
- + BEP20Basic
  - [Pub] balanceOf
  - [Pub] transfer #
- + BEP20 (BEP20Basic)
  - [Pub] allowance
  - [Pub] transferFrom #
  - [Pub] approve #
- + BinanceFarmFinance (BEP20)
  - [Pub] <Constructor> #
  - [Pub] transferOwnership #
  - modifiers: onlyOwner
  - [Pub] finishDistribution #
    - modifiers: onlyOwner,canDistr
  - [Priv] distr #
  - modifiers: canDistr
  - [Int] Distribute #
  - modifiers: onlyOwner
  - [Ext] DistributeAirdrop #
  - modifiers: onlyOwner
    - [Ext] DistributeAirdropMultiple #
  - modifiers: onlyOwner
    - [Pub] updateTokensPerBsc #
  - modifiers: onlyOwner
  - [Ext] <Fallback> (\$)
  - [Pub] getTokens (\$)
  - modifiers: canDistr
  - [Pub] balanceOf
  - [Pub] transfer #
    - modifiers: onlyPayloadSize
  - [Pub] transferFrom #
    - modifiers: onlyPayloadSize
  - [Pub] approve #
  - [Pub] allowance
  - [Pub] getTokenBalance
  - [Pub] withdrawAll #
  - modifiers: onlyOwner
  - [Pub] withdraw #
  - modifiers: onlyOwner
  - [Pub] burn #
  - modifiers: onlyOwner
  - [Pub] add #
  - modifiers: onlyOwner
    - [Pub] withdrawForeignTokens #
  - 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.	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.Constant variable

Issue:

- The variable `target0drop` is unchanged and is equal to zero.

Recommendation:

Make that variable constant or recheck the logic.

### 2. Wrong checking

Issue:

- Marked condition below will always return false.

```
function getTokens() payable canDistr public {
    //...

    if (tokens == 0) {
        //...
    }else if(tokens > 0 && msg.value >= requestMinimum){
        if( now >= deadline && now >= round1 && now < round2){
            distr(investor, tokens);
        }else{
            if(msg.value >= bonusCond1){
                distr(investor, bonus);
            }else{
                distr(investor, tokens);
            }
        }
    }else{
```

Recommendation:

Remove that «if» statement of recheck the logic.

## 📄 Information

### 1.Economy

Total supply can be less then total distributed token amount.

## 2. Useless code lines

- The function `getTokens()` adds `countbonus` to `tokens`, but `countbonus` equals to zero.

```
✓ function getTokens() payable canDistr public {  
    uint256 tokens = 0;  
    uint256 bonus = 0;  
    uint256 countbonus = 0;  
    // ... countbonus is unchanged  
    bonus = tokens + countbonus;
```

- The function `getTokens()` has unused variables marked below.

```
✓ function getTokens() payable canDistr public {  
    uint256 tokens = 0;  
    uint256 bonus = 0;  
    uint256 countbonus = 0;  
    uint256 bonusCond1 = 1 ether;  
    .....uint256 bonusCond2 = 1 ether;  
    .....uint256 bonusCond3 = 1 ether;
```

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

- Owner can change tokens per BSC value.
- Owner can finish distribution.
- Owner can distribute airdrop.
- Owner can withdraw BSC.
- Owner can burn his tokens.
- Owner can increase total supply.
- Owner can withdraw foreign tokens from contract.

# Conclusion

Smart contracts contain low severity issues!

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## *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.*



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