



Smart Contract Security Audit

Audit details:

Audited project:	IRON TOKEN
Deployer address:	0x6c5b998d7a07a3ebcf06edc5c964cb2849bb1cf4
Client contacts:	IRON TOKEN 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 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 IRON TOKEN to perform an audit of smart contracts:

- <https://bscscan.com/address/0xafce59058ef161a0939225e3ae5dedda687ddb2d#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 27.05.2021.

Contract name:	IRON TOKEN
Contract address:	0xafce59058ef161a0939225e3ae5dedda687ddb2d
Total supply:	10000000000000000000000000000000
Token ticker:	IRON
Decimals:	18
Token holders:	1
Transactions count:	1
Top 100 holders dominance:	100 %
Compiler version:	v0.6.12+commit.27d51765
Current cap:	0
Circulating supply:	30000000000000000000000000000000
Preminter:	0x6c5b998d7a07a3ebcf06edc5c964cb2849bb1cf4
Contract deployer address:	0x6c5b998d7a07a3ebcf06edc5c964cb2849bb1cf4
Contract's current owner address:	0x6c5b998d7a07a3ebcf06edc5c964cb2849bb1cf4

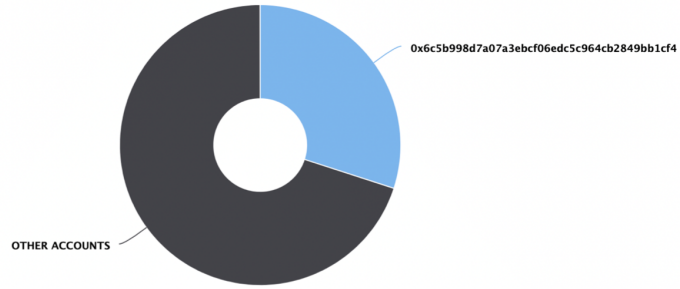
IRON TOKEN token distribution

The top 100 holders collectively own 30.00% (3,000,000,000.00 Tokens) of IRON TOKEN

Token Total Supply: 10,000,000,000.00 Token | Total Token Holders: 1

IRON TOKEN Top 100 Token Holders

Source: BscScan.com



(A total of 3,000,000,000.00 tokens held by the top 100 accounts from the total supply of 10,000,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	0x6c5b998d7a07a3ebcf06edc5c964cb2849bb1cf4	3,000,000,000	30.0000%

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 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

Functions outline

+ 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 #

+ Ownable (Context)

- [Int] <Constructor> #
- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner
- [Pub] transferOwnership #
 - modifiers: onlyOwner

+ IRONtoken (IERC20, Ownable)

- [Pub] <Constructor> #
- [Pub] name
- [Pub] symbol
- [Pub] decimals

- [Pub] totalSupply
- [Pub] circulateSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Int] _transfer #
- [Int] _mint #
- [Int] _burn #
- [Int] _approve #
- [Int] _setupDecimals #
- [Pub] mint #
 - modifiers: onlyOwner,checkCap
- [Ext] delegates
- [Ext] delegate #
- [Ext] delegateBySig #
- [Ext] getCurrentVotes
- [Ext] getPriorVotes
- [Int] _delegate #
- [Int] _moveDelegates #
- [Int] _writeCheckpoint #
- [Int] safe32
- [Int] getChainId
- [Int] _beforeTokenTransfer #

(\$) = payable function

= non-constant function

Security Issues

High Severity Issues

No high severity issues found.

Medium Severity Issues

No medium severity issues found.

Low Severity Issues

1. No delegates moving

Issue:

There are no delegates moving back to the zero address in the burn function.

Recommendation:

There should be delegates moving back to the zero address in the burn function. By the way function is not used and internal, so it could be removed.

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.