

Smart Contract Security Audit

Audit details:

Audited project: IdoSwap

Deployer address: 0x34f3db5e641ef1bd092857770cf27e0ec8ef54c6

Client contacts: IdoSwap team

Blockchain: Binance Smart Chain

Project website: Not provided

May, 2021 TechRate

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 IdoSwap to perform an audit of smart contracts:

• <u>https://bscscan.com/address/0xc17fbf3c69134564b4cf8916a554b123be9990</u> 43#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.

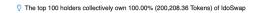
The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Contracts details

Token contract details for 15.05.2021.

Contract name:	IdoSwap
Contract address:	0xc17fbf3c69134564b4cf8916a554b123be999043
Total supply:	20020835650000000000000
Token ticker:	IDS
Decimals:	18
Token holders:	5
Transactions count:	12
Top 100 holders dominance:	100 %
Contract deployer address:	0x34f3db5e641ef1bd092857770cf27e0ec8ef54c6
Contract's current owner address:	0x2d86f6a33e5fd49900f3f571a0b98d2070b7b456

IdoSwap token distribution



↑ Token Total Supply: 200,208.36 Token | Total Token Holders:



(A total of 200,208.36 tokens held by the top 100 accounts from the total supply of 200,208.36 token)

IdoSwap top 10 token holders

Rank	Address	Quantity (Token)	Percentage
1	0x34f3db5e641ef1bd092857770cf27e0ec8ef54c6	200,016.9415	99.9044%
2	₫ 0x2d86f6a33e5fd49900f3f571a0b98d2070b7b456	189.415	0.0946%
3	PancakeSwap: IDS-BUSD	1.164277783911126556	0.0006%
4	PancakeSwap: IDS	0.830826327131453521	0.0004%
5	0x71ecff0c1de43b4d3f01cfa88133ccf1f41cf564	0.004895888957419923	0.0000%

Contract functions details

+ [Lib] SafeMath

- [Int] tryAdd
- [Int] trySub
- [Int] tryMul
- [Int] tryDiv
- [Int] tryMod
- [Int] add
- [Int] sub
- [Int] mul
- [Int] div
- [Int] mod
- [Int] sub
- [Int] div
- [Int] mod

+ Ownable (Context)

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

+ [Int] IBEP20

- [Ext] totalSupply
- [Ext] decimals
- [Ext] symbol
- [Ext] name
- [Ext] getOwner
- [Ext] balanceOf
- [Ext] transfer #
- [Ext] allowance
- [Ext] approve #
- [Ext] transferFrom #

+ Context

- [Int] _msgSender
- [Int] _msgData

+ BEP20 (Context, IBEP20, Ownable)

- [Pub] <Constructor> #
- [Ext] getOwner
- [Pub] name
- [Pub] symbol

- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] mint #
 - modifiers: onlyOwner
- [Int] _transfer #
- [Int] _mint #
- [Int] _burn #
- [Int] _approve #
- [Int] _burnFrom #
- + EggToken (BEP20)
 - [Pub] mint #
 - modifiers: onlyOwner
 - [Ext] delegates
 - [Ext] delegate #
 - [Ext] delegateBySig #
 - [Ext] getCurrentVotes
 - [Ext] getPriorVotes
 - [Int] _delegate #
 - [Int] _moveDelegates #
 - [Int] _writeCheckpoint #
 - [Int] safe32
 - [Int] getChainId
- (\$) = payable function
- # = non-constant function

Issues Checking Status

Nº	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

1. Known vulnerabilities of ERC-20 token

Issue:

Lack of transaction handling mechanism issue. More details <u>here</u>.

Recommendation:

Add the following code to the _transfer(address sender, ...) function:

```
require( _to != address(this) );
```

Conclusion

Smart contracts do not contain high severity issues! Audited only the file listed above, all other contracts of the project are not audited due to out of scope.

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.