



Smart Contract Security Audit

<u>TechRate</u> November, 2021

Audit Details



Audited project

Crypto Shield



Deployer address

0xbd96246cdfa026067ea9dd7ff4dc4312134a3c54



Client contacts:

Crypto Shield team



Blockchain

Binance Smart Chain / Ethereum





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 Crypto Shield to perform an audit of smart contracts:

- https://bscscan.com/address/0xc944273b805debd35c63011943abc5ab9eddb8 e3#code
- https://etherscan.io/token/0xc944273b805debd35c63011943abc5ab9eddb8e3

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.

101101001010010010011

101000001

0010

10000001

100010010011011011011111111

10111010001100000001111101100101011011

100001000110101

011001000100000

110000

10000110

100 101 101 100 11011

100011000010110000

10001010010001100

BSC Contracts Details

Token contract details for 22.11.2021

Contract name	Crypto Shield
Contract address	0xc944273b805DeBd35c63011943ABc5aB9eDdb8E3
Total supply	10,000,000,000
Token ticker	SHIELD
Decimals	18
Token holders	363
Transactions count	814
Top 100 holders dominance	100.00%
Contract deployer address	0xbd96246cdfa026067ea9dd7ff4dc4312134a3c54
Contract's current owner address	0xbd96246cdfa026067ea9dd7ff4dc4312134a3c54

Ethereum Contracts Details

Token contract details for 22.11.2021

Contract name	Crypto Shield
Contract address	0xc944273b805DeBd35c63011943ABc5aB9eDdb8E3
Total supply	10,000,000,000
Token ticker	SHIELD
Decimals	18
Token holders	3
Transactions count	3
Top 100 holders dominance	100.00%
Contract deployer address	0xbd96246cdfa026067ea9dd7ff4dc4312134a3c54
Contract's current owner address	0xbd96246cdfa026067ea9dd7ff4dc4312134a3c54

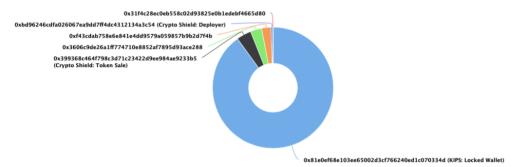
Crypto Shield Token Distribution BSC

The top 100 holders collectively own 100.00% (9.999.745.375.57 Tokens) of Crypto Shield

○ Token Total Supply: 10.000.000.000.00 Token | Total Token Holders: 363

Crypto Shield Top 100 Token Holders

Source: BscScan.com



(A total of 9,999,745,375.57 tokens held by the top 100 accounts from the total supply of 10,000,000,000,000 token)

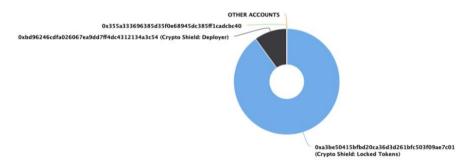
Crypto Shield Token Distribution Ethereum

The top 100 holders collectively own 100.00% (10.000.000.000.00 Tokens) of Crypto Shield

▼ Token Total Supply: 10,000,000,000.00 Token | Total Token Holders: 3

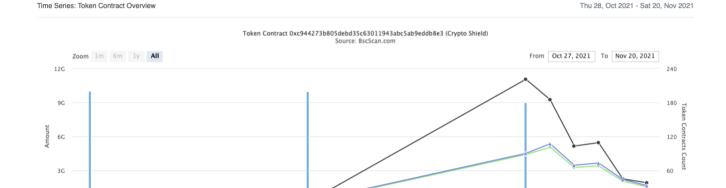
Crypto Shield Top 100 Token Holders

Source: Etherscan.i

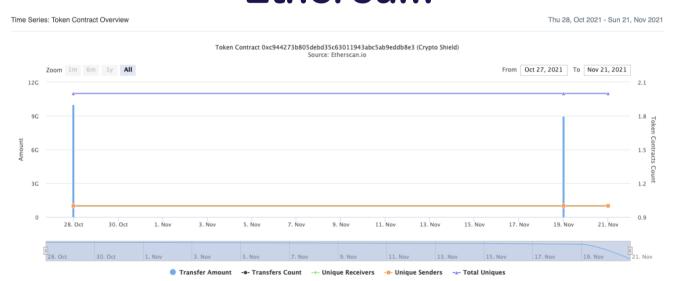


 $(A\ total\ of\ 10,000,000,000.00\ tokens\ held\ by\ the\ top\ 100\ accounts\ from\ the\ total\ supply\ of\ 10,000,000,000.00\ token)$

Crypto Shield Contract Interaction Details BSC



Crypto Shield Contract Interaction Details Ethereum



Crypto Shield Top 10 Token Holders BSC

Rank	Address	Quantity (Token)	Percentage
1		9,000,000,000	90.0000%
2	Crypto Shield: Token Sale	396,809,201.80932050586706	3.9681%
3	0x3606c9de26a1ff774710e8852af7895d93ace288	300,000,000	3.0000%
4	0xf43cdab758e6e841e4dd9579a059857b9b2d7f4b	250,000,000	2.5000%
5	Crypto Shield: Deployer	49,980,000	0.4998%
6	0x31f4c28ec0eb558c02d93825e0b1edebf4665d80	350,000.4	0.0035%
7	0x21464990774364f5331901350d463297d1057f55	212,335.84733551060596	0.0021%
8	0xd415b0cc965b84e460fd7e4af58e8efb15c76607	180,000	0.0018%
9	0x5e5914ecb5863fdcb8ee3f12b5a2a8c981ad7c92	174,600	0.0017%
10	0x65384e027c462bb637daa3d9d4c5faaad3660e00	150,000	0.0015%

Crypto Shield Top 10 Token Holders Ethereum

Rank	Address	Quantity (Token)	Percentage
1	Crypto Shield: Locked Tokens	9,000,000,000	90.0000%
2	Crypto Shield: Deployer	999,797,500	9.9980%
3	0x355a333696385d35f0e68945dc385ff1cadcbc40	202,500	0.0020%

Contract functions details

+ [Int] IBEP20 - [Ext] totalSupply - [Ext] decimals - [Ext] symbol - [Ext] name - [Ext] getOwner - [Ext] balanceOf - [Ext] transfer # - [Ext] allowance - [Ext] approve # - [Ext] transferFrom # + Context - [Int] <Constructor> # - [Int] _msgSender - [Int] _msgData + [Lib] SafeMath - [Int] add - [Int] sub - [Int] sub - [Int] mul - [Int] div - [Int] div - [Int] mod - [Int] mod + Ownable (Context) - [Int] <Constructor> # - [Pub] owner - [Pub] renounceOwnership # - modifiers: onlyOwner - [Pub] transferOwnership # - modifiers: onlyOwner - [Int] transferOwnership # + SHIELDToken (Context, IBEP20, Ownable) - [Pub] <Constructor> # - [Ext] getOwner - [Ext] decimals - [Ext] symbol - [Ext] name - [Ext] totalSupply - [Ext] balanceOf - [Ext] transfer # - [Ext] allowance - [Ext] approve # - [Ext] transferFrom # - [Pub] increaseAllowance # - [Pub] decreaseAllowance # - [Pub] mint

- modifiers: onlyOwner
- [Int] _transfer #
 [Int] _mint #
 [Int] _burn #

- [Int] _approve #
 [Int] _burnFrom #
- (\$) = 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. Known vulnerabilities of BEP-20 token

Issue:

• Lack of transaction handling mechanism issue. More detail is here.

Recommendation:

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

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

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

Owner can mint any amount of tokens.

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.

