



TechRate
AUDIT COMPANY

Smart Contract Security Audit

Audit Details



Audited project

BleuFi



Deployer address

0xea502b2f3c015ce6c6c3a1ecd38826e9b26f6988



Client contacts:

BleuFi team



Blockchain

Binance Smart Chain



Project website:

<https://app.bleufi.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 BleuFi to perform an audit of smart contracts:

<https://bscscan.com/address/0xffdc00285dde1f5b5c65c6a963357b4c55d8f601#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 19.01.2022

Contract name	BleuFi
Contract address	0xFdC00285DDe1f5b5c65C6a963357b4C55d8f601
Total supply	10,000,000,000
Token ticker	BLEU
Decimals	2
Token holders	14,789
Transactions count	33,941
Top 100 holders dominance	75.81%
Liquidity fee	2
marketing fee	3
Total fee	7
pair	0x8650a48fd9b0ce49dd3b5b1baa4ded27def070ae
Contract deployer address	0xea502b2f3c015ce6c6c3a1ecd38826e9b26f6988
Contract's current owner address	0xea502b2f3c015ce6c6c3a1ecd38826e9b26f6988

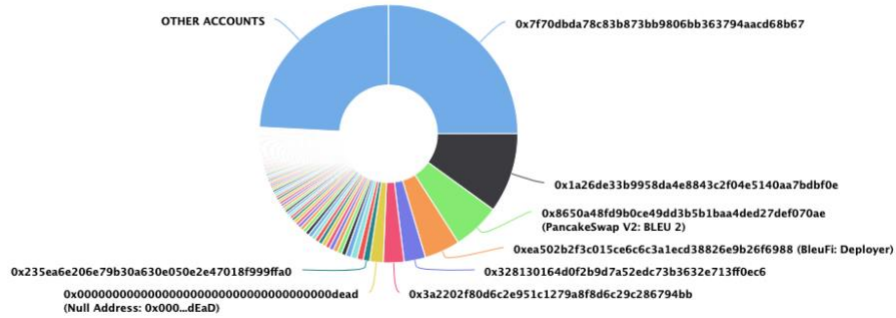
BleuFi Token Distribution

The top 100 holders collectively own 75.81% (7,581,038,581.12 Tokens) of BleuFi

Token Total Supply: 10,000,000,000.00 Token | Total Token Holders: 14,789

BleuFi Top 100 Token Holders

Source: BscScan.com



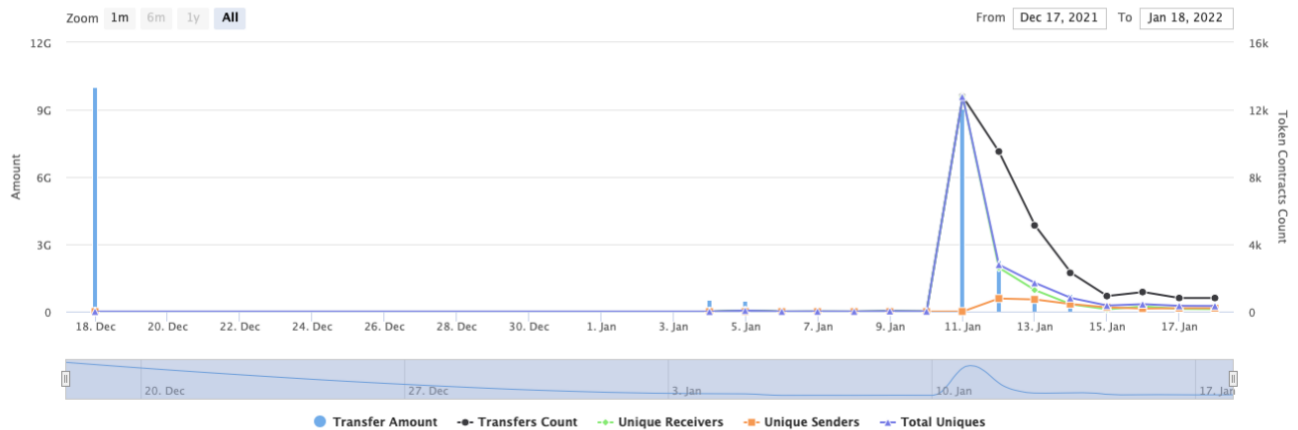
(A total of 7,581,038,581.12 tokens held by the top 100 accounts from the total supply of 10,000,000,000.00 token)

BleuFi Contract Interaction Details


Time Series: Token Contract Overview

Sat 18, Dec 2021 - Tue 18, Jan 2022

Token Contract 0xffdc00285dde1f5b5c65c6a963357b4c55d8f601 (BleuFi)
Source: BscScan.com



BleuFi Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x7f70dbda78c83b873bb9806bb363794aacd68b67	2,500,000,000	25.0000%
2	0x1a26de33b9958da4e8843c2f04e5140aa7dbf0e	1,000,000,000	10.0000%
3	 PancakeSwap V2: BLEU 2	593,908,532.99	5.9391%
4	BleuFi: Deployer	445,379,338.79	4.4538%
5	0x328130164d0f2b9d7a52edc73b3632e713ff0ec6	267,953,810.2	2.6795%
6	0x3a2202f80d6c2e951c1279a8f8d6c29c286794bb	259,065,832.36	2.5907%
7	Null Address: 0x000...dEaD	168,565,747.27	1.6857%
8	0x235ea6e206e79b30a630e050e2e47018f999ffa0	81,604,900	0.8160%
9	0x42e415b05ef84951eabb439c39fd2e40f29c11fc	79,000,100	0.7900%
10	0xfc156b33ddc82dcb9b63b90946310d4ede839a83	77,497,800	0.7750%



Contract functions details

+ [Lib] SafeMath

- [Int] add
- [Int] sub
- [Int] sub
- [Int] mul
- [Int] div
- [Int] div

+ [Int] BEP20

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

+ Auth

- [Pub] <Constructor> #
- [Pub] authorize #
 - modifiers: onlyOwner
- [Pub] unauthorize #
 - modifiers: onlyOwner
- [Pub] isOwner
- [Pub] isAuthorized
- [Pub] transferOwnership #
 - modifiers: onlyOwner

+ [Int] PCSFactory

- [Ext] createPair #

+ [Int] PCSv2Router

- [Ext] factory
- [Ext] WETH
- [Ext] addLiquidityETH (\$)
- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #

+ BLEUFI (BEP20, Auth)

- [Pub] <Constructor> #
 - modifiers: Auth
- [Ext] <Fallback> (\$)
- [Ext] totalSupply
- [Ext] decimals
- [Ext] symbol
- [Ext] name
- [Ext] getOwner
- [Pub] balanceOf
- [Ext] allowance

- [Pub] approve #
- [Ext] approveMax #
- [Ext] transfer #
- [Ext] transferFrom #
- [Ext] setMaxWalletPercent_base10000 #
 - modifiers: onlyOwner
- [Ext] setMaxTxPercent_base10000 #
 - modifiers: onlyOwner
- [Ext] setMaxTxAbsolute #
 - modifiers: authorized
- [Int] _transferFrom #
- [Int] _basicTransfer #
- [Int] takeFee #
- [Ext] clearStuckBalance #
 - modifiers: authorized
- [Ext] set_sell_multiplier #
 - modifiers: onlyOwner
- [Pub] tradingStatus #
 - modifiers: onlyOwner
- [Pub] launchStatus #
 - modifiers: onlyOwner
- [Int] swapBack #
 - modifiers: swapping
- [Pub] enable_blacklist #
 - modifiers: onlyOwner
- [Pub] manage_blacklist #
 - modifiers: onlyOwner
- [Ext] setIsFeeExempt #
 - modifiers: authorized
- [Ext] setIsTxLimitExempt #
 - modifiers: authorized
- [Ext] setFees #
 - modifiers: authorized
- [Ext] setFeeReceivers #
 - modifiers: authorized
- [Ext] setSwapBackSettings #
 - modifiers: authorized
- [Ext] setTargetLiquidity #
 - modifiers: authorized
- [Pub] getCirculatingSupply
- [Pub] getLiquidityBacking
- [Pub] isOverLiquified
- [Ext] multiTransfer #
 - 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. Out of gas

Issue:

- The function `manage_blacklist()` uses the loop to change blacklist status of addresses. It also could be aborted with `OUT_OF_GAS` exception if there will be a long addresses list.

Recommendation:

Check that the array length is not too big.

Notes:

- There is sending tokens to burn address, instead of real burning (decreasing total supply).

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

- Owner can authorize addresses.
- Owner can change `_maxWalletToken` and `_maxTxAmount`.
- Owner can change `sellMultiplier`.
- Owner can change launch status.
- Owner can change trading status.
- Owner can change blacklist mode.
- Owner can multiTransfer listed token amounts (started from 1).
- Authorized addresses can change `_maxTxAmount`.
- Authorized addresses can withdraw contract BNBs.
- Authorized addresses can include in and exclude from fee and transaction amount.
- Authorized addresses can change fees.
- Authorized addresses can change fee receivers.
- Authorized addresses can change swap threshold and disable/enable swap.
- Authorized addresses can change `targetLiquidity`.

Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details provided by the team:

<https://dxsale.app/app/v3/dxlockview?id=0&add=0xea502b2f3c015ce6c6c3a1ecd38826e9b26f6988&type=lplock&chain=BSC>

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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