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AUDIT COMPANY

Smart Contract Security Audit

TechRate

July, 2021

Audit Details

Audited project

Bocker Inu

Deployer address

0x4B1392018442C92e90FA87bf22a6A2839Ec7a09B

Client contacts:

Bocker Inu team

Blockchain

Ethereum

Project website:

https://bockerinu.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 Bocker Inu to perform an audit of smart contracts:

https://etherscan.io/address/0x640a8c704e0e05bf6d884fa1e39872fb80a10af0#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

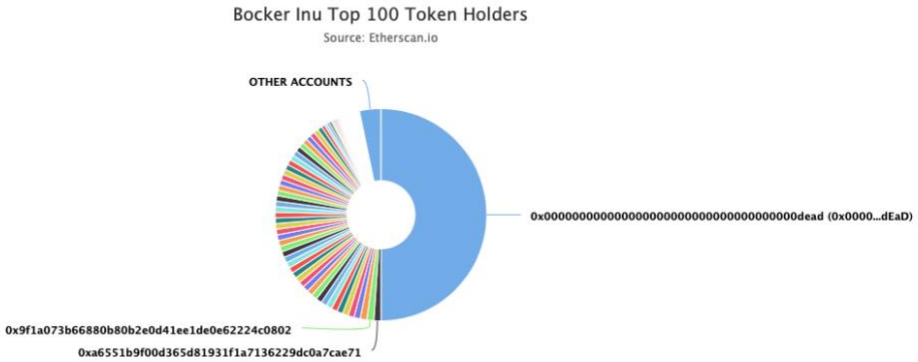
Token contract details for 06.07.2021

Contract name	Bocker Inu
Contract address	0x640a8c704e0e05bf6d884Fa1e39872Fb80A10AF0
Total supply	1,000,000,000,000,000
Token ticker	BOCKER
Decimals	9
Token holders	357
Transactions count	744
Top 100 holders dominance	96.73%
Tax fee	2
Total fees	32371767314218766423902
Uniswap pair	0x22d3c7732f386ce7aff3876b164c0cd441095e30
Contract deployer address	0x4B1392018442C92e90FA87bf22a6A2839Ec7a09B
Contract's current owner address	0x0000000000000000000000000000000000000000

Bocker Inu Token Distribution

The top 100 holders collectively own 96.73% (967,260,904,125,863.00 Tokens) of Bocker Inu

Token Total Supply: 1,000,000,000,000,000.00 Token | Total Token Holders: 357

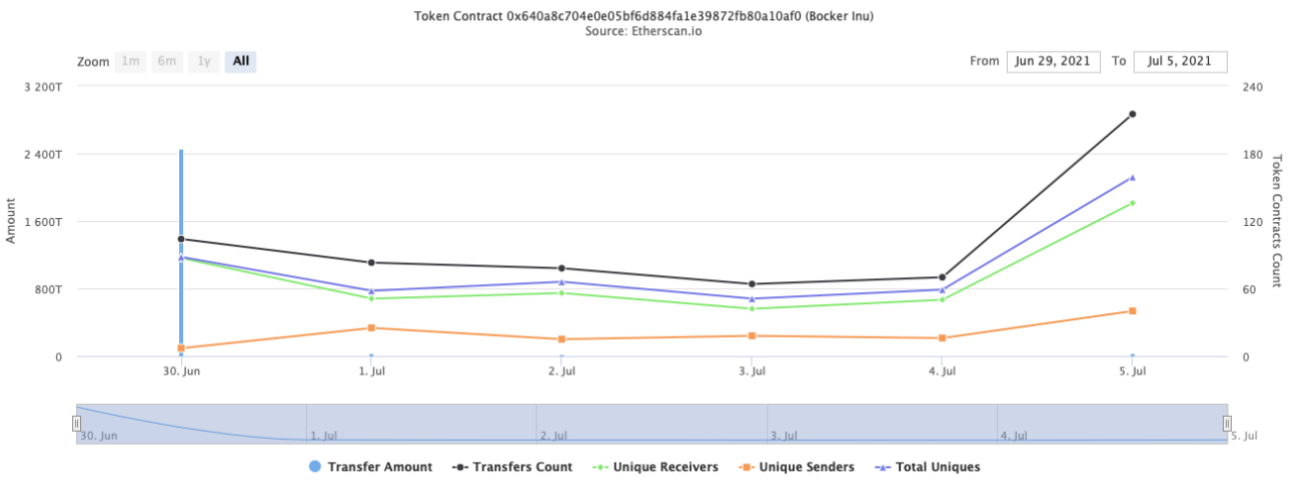


(A total of 967,260,904,125,863.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000.00 token)

Bocker Inu Contract Interaction Details

Time Series: Token Contract Overview

Wed 30, Jun 2021 - Mon 5, Jul 2021



Bocker Inu Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x0000...dEaD	500,000,000,000,000	50.0000%
2	0xa6551b9f00d365d81931f1a7136229dc0a7cae71	10,796,737,456,710.443617309	1.0797%
3	0x9f1a073b66880b80b2e0d41ee1de0e62224c0802	10,722,113,504,637.081748839	1.0722%
4	0x4b1392018442c92e90fa87bf22a6a2839ec7a09b	10,225,553,720,379.541266379	1.0226%
5	0x6834111bf9acddc57edf3e8c3e9a70e6d4b32907	9,287,110,305,533.208453447	0.9287%
6	Uniswap V2: BOCKER	9,263,179,000,794.429186043	0.9263%
7	0xd715ca5e9caab952c1e49a6a871cf61100a1fd81	9,128,575,238,744.708211725	0.9129%
8	0x2ade452f5dd8ef9679814d0b2be334c15937e0a1	9,097,164,746,323.360045958	0.9097%
9	0xbfc4109513836cbed63fe457705e4b803a81211b	9,037,504,259,747.008442746	0.9038%
10	0x34a8aba28cd9d96685a5af73b25cfad4c1af8921	9,007,855,643,867.342817609	0.9008%

Contract functions details

+ 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

+ BOCKER (Context, IERC20, Ownable)
  - [Pub] <Constructor> #
  - [Pub] name
  - [Pub] symbol
  - [Pub] decimals
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] allowance
  - [Pub] approve #
  - [Pub] transferFrom #
  - [Pub] increaseAllowance #

- [Pub] decreaseAllowance #
- [Pub] isExcluded
- [Pub] totalFees
- [Ext] setMaxTxPercent #
  - modifiers: onlyOwner
- [Pub] reflect #
- [Pub] reflectionFromToken
- [Pub] tokenFromReflection
- [Ext] excludeAccount #
  - modifiers: onlyOwner
- [Ext] includeAccount #
  - modifiers: onlyOwner
- [Prv] _approve #
- [Prv] _transfer #
- [Prv] _transferStandard #
- [Prv] _transferToExcluded #
- [Prv] _transferFromExcluded #
- [Prv] _transferBothExcluded #
- [Prv] _reflectFee #
- [Prv] _getValues
- [Prv] _getTValues
- [Prv] _getRValues
- [Prv] _getRate
- [Prv] _getCurrentSupply
- [Ext] setUniswapPair #
  - 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 includeInAccount() uses the loop to find and remove addresses from the _excluded list. Function will be aborted with OUT_OF_GAS exception if there will be a long excluded addresses list.

```
ftrace | funcSig
function includeAccount(address account⬆) external onlyOwner() {
    require(_isExcluded[account⬆], "Account is already excluded");
    for (uint256 i = 0; i < _excluded.length; i++) {
        if (_excluded[i] == account⬆) {
            _excluded[i] = _excluded[_excluded.length - 1];
            _tOwned[account⬆] = 0;
            _isExcluded[account⬆] = false;
            _excluded.pop();
            break;
        }
    }
}
```

- The function _getCurrentSupply also uses the loop for evaluating total supply. It also could be aborted with OUT_OF_GAS exception if there will be a long excluded addresses list.

```
function _getCurrentSupply() private view returns (uint256, uint256) {
    uint256 rSupply = _rTotal;
    uint256 tSupply = _tTotal;
    for (uint256 i = 0; i < _excluded.length; i++) {
        if (
            _rOwned[_excluded[i]] > rSupply ||
            _tOwned[_excluded[i]] > tSupply
        ) return (_rTotal, _tTotal);
        rSupply = rSupply.sub(_rOwned[_excluded[i]]);
        tSupply = tSupply.sub(_tOwned[_excluded[i]]);
    }
    if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
    return (rSupply, tSupply);
}
```

Recommendation:

Check that the excluded array length is not too big.

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

- Owner can change max transaction amount.
- Owner can change Uniswap pair.

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://etherscan.io/tx/0xae74707c1641761148396f5e10022bf2ba3ca8bd0db60d63d763113f94b4220b

https://team.finance/view-coin/0x640a8c704e0e05bf6d884Fa1e39872Fb80A10AF0?name=Bocker%20Inu&symbol=BOCKER

Ownership renounce details provided by the team:
https://etherscan.io/tx/0x4e096ad320de23c4c2416dd50f1d5b50498f07aae533928eec5bd6cdd79fa6e1

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.