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AUDIT COMPANY

# Smart Contract Security Audit

TechRate

November, 2021

# Audit Details



Audited project

**1BOX Token**



Deployer address

**0x9A622F73aFF270149D2977b1eE6a078c37C19E17**



Client contacts:

**1BOX Token team**



Blockchain

**Binance Smart Chain**



Project website:

**<https://www.1boxnft.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 1BOX Token to perform an audit of smart contracts:

<https://bscscan.com/address/0x82160113b730fC0B36C18795CC976fda93ccc1e1#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 06.11.2021

Contract name	1BOX Token
Contract address	0x82160113b730fC0B36C18795CC976fda93ccc1e1
Total supply	300,000,000
Token ticker	1BOX
Decimals	18
Token holders	3
Transactions count	5
Top 100 holders dominance	100.00%
Contract deployer address	0x9A622F73aFF270149D2977b1eE6a078c37C19E17
Contract's current owner address	0x9A622F73aFF270149D2977b1eE6a078c37C19E17

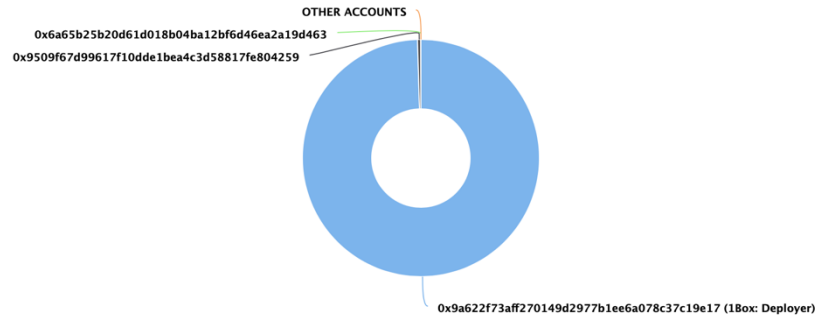
# 1BOX Token Token Distribution

The top 100 holders collectively own 100.00% (300,000,000.00 Tokens) of 1BOX Token

Token Total Supply: 300,000,000.00 Token | Total Token Holders: 3

1BOX Token Top 100 Token Holders

Source: BscScan.com



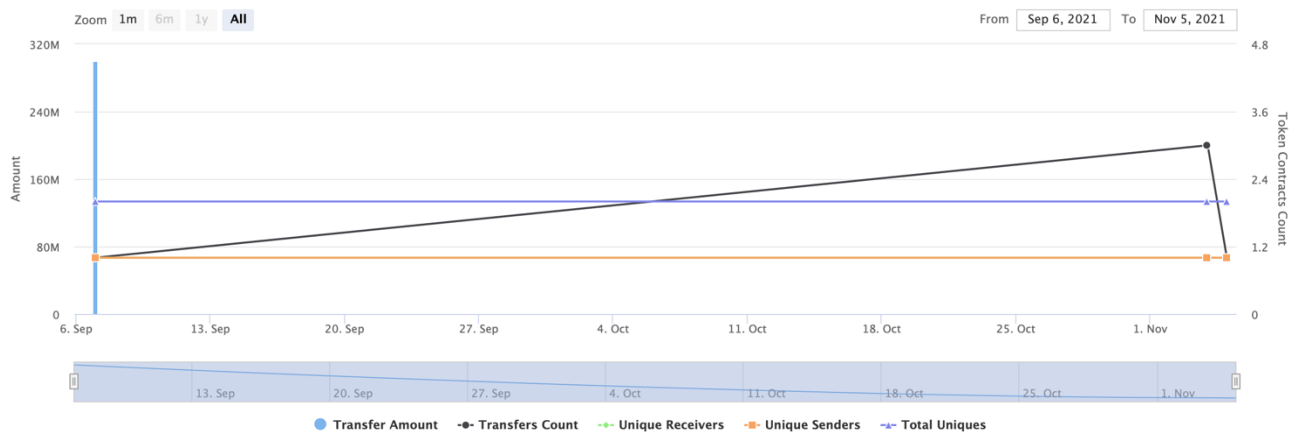
(A total of 300,000,000.00 tokens held by the top 100 accounts from the total supply of 300,000,000.00 token)

# 1BOX Token Contract Interaction Details

Time Series: Token Contract Overview

Tue 7, Sept 2021 - Fri 5, Nov 2021

Token Contract 0x82160113b730fC0B36C18795CC976fda93ccc1e1 (1BOX Token)  
Source: BscScan.com



# 1BOX Token Top 10 Token Holders

Rank	Address	Quantity	Percentage
1	<a href="#">1Box: Deployer</a>	298,665,466	99.5552%
2	<a href="#">0x9509f67d99617f10dde1bea4c3d58817fe804259</a>	1,334,334	0.4448%
3	<a href="#">0x6a65b25b20d61d018b04ba12bf6d46ea2a19d463</a>	200	0.0001%





# Contract functions details

## + Context

- [Int] <Constructor> #
- [Int] \_msgSender
- [Int] \_msgData

## + Ownable (Context)

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

## + [Int] IBEP20

- [Ext] totalSupply
- [Ext] decimals
- [Ext] symbol
- [Ext] name
- [Ext] getOwner
- [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
- [Int] min
- [Int] sqrt

## + [Lib] Address

- [Int] isContract
- [Int] sendValue #
- [Int] functionCall #
- [Int] functionCall #
- [Int] functionCallWithValue #
- [Int] functionCallWithValue #
- [Prv] \_functionCallWithValue #

## + [Lib] EnumerableSet

- [Prv] \_add #
- [Prv] \_remove #
- [Prv] \_contains



- [Prv] \_length
- [Prv] \_at
- [Int] add #
- [Int] remove #
- [Int] contains
- [Int] length
- [Int] at
- [Int] add #
- [Int] remove #
- [Int] contains
- [Int] length
- [Int] at
- [Int] add #
- [Int] remove #
- [Int] contains
- [Int] length
- [Int] at

#### + BEP20 (Context, IBEP20, Ownable)

- [Pub] <Constructor> #
- [Ext] getOwner
- [Pub] name
- [Pub] decimals
- [Pub] symbol
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] mint #
  - modifiers: onlyMinter
- [Int] \_transfer #
- [Int] \_mint #
- [Int] \_burn #
- [Int] \_approve #
- [Int] \_burnFrom #
- [Pub] addMinter #
  - modifiers: onlyOwner
- [Pub] delMinter #
  - modifiers: onlyOwner
- [Pub] getMinterLength
- [Pub] isMinter
- [Pub] getMinter
  - modifiers: onlyOwner

#### + OneBoxToken (BEP20)

- [Ext] delegates
- [Ext] delegate #
- [Ext] delegateBySig #
- [Ext] getCurrentVotes
- [Ext] getPriorVotes
- [Int] \_delegate #

- [Int] \_moveDelegates #
- [Int] \_writeCheckpoint #
- [Int] \_transfer #
- [Int] \_mint #
- [Int] safe32
- [Int] getChainId

(\$) = 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.	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

No low severity issues found.

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

- Owner can add / remove minters.

```
function addMinter(address _addMinter) public onlyOwner returns (bool) {
    require(_addMinter != address(0), "OneBoxToken: _addMinter is the zero address");
    return EnumerableSet.add(_minters, _addMinter);
}

function delMinter(address _delMinter) public onlyOwner returns (bool) {
    require(_delMinter != address(0), "OneBoxToken: _delMinter is the zero address");
    return EnumerableSet.remove(_minters, _delMinter);
}
```

- Minters can mint tokens up to max supply amount to any address.

```
function mint(address to,uint256 amount) public onlyMinter returns (bool) {
    if (amount.add(totalSupply()) > maxSupply) {
        return false;
    }
    _mint(to, amount);
    return true;
}

function _beforeTokenTransfer(address from, address to, uint256 amount) internal virtual override {
    super._beforeTokenTransfer(from, to, amount);

    if (from == address(0)) { // When minting tokens
        require(totalSupply().add(amount) <= _cap, "ERC20Capped: cap exceeded");
    }
}
```

# Conclusion

Smart contracts do not contain high severity issues! Smart contracts contain owner privileges. Audited only token of the project. Liquidity pair contract's security is not checked due to out of scope.

**Liquidity locking details NOT provided by the team.**

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## *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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