



AUDITEK SECURITY

COMPLETE AUDIT REPORT

CYBER ZOON

Security Assessment

August 25 2021

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Approved by
LILLIAN PRATT

Audit Details



Audited project

Cyber Zoon



Deployer address

0x033621d28894137239bf2c7054cd8438e47ae6bd



Client contacts:

Cyber Zoon TEAM



Blockchain

Binance Smart Chain



Project website:

<http://www.Cyberzoon.io>



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

Auditek was commissioned by Cyber Zoon to perform an audit of smart contracts:

<https://bscscan.com/address/0x13c0ed52530f0a68c638cd133d00c802a7d09178>

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.**

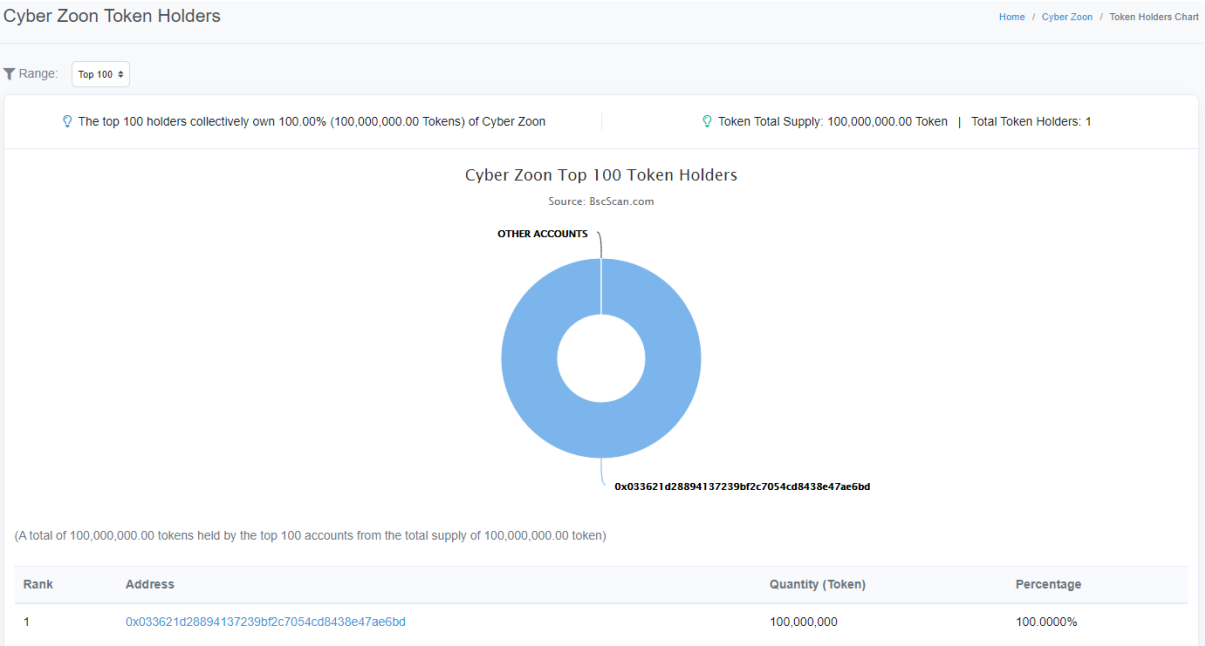
The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Contracts Details

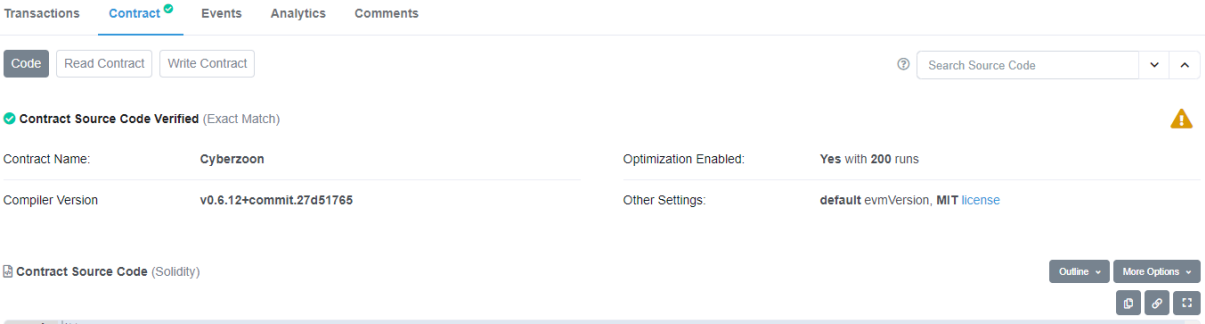
Token contract details for 23.08.2021

Token name	Cyber Zoon
Contract address	0x13C0ED52530F0a68c638cD133d00C802a7D09178
Total supply	100,000,000
Token Symbol	CZ
Decimals	9
Token holders	1
Transactions count	1
Top 100 holders dominance	100.00%
Liquidity fee	5
Tax fee	3
Total fees	8
Uniswap V2 pair	0x93d94fcb0dcc8a88257b2d2eec7a2615ebedb542
Contract deployer address	0x033621d28894137239bf2c7054cd8438e47ae6bd
Contract's current owner address	0x033621d28894137239bf2c7054cd8438e47ae6bd

Cyber Zoon Token Distribution



Cyber Zoon Contract Interaction Details



Cyber Zoon Top 10 Token Holders

Transfers

Holders

Info

Read Contract

Write Contract

Analytics

Comments

Token Holders Chart

A total of 1 token holder

First

<

Page 1 of 1

>

Last

Rank	Address	Quantity	Percentage	Analytics
1	0x033621d28894137239bf2c7054cd8438e47ae6bd	100,000,000	100.0000%	

[Download CSV Export]

A total of 01 holders

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)

- [Pub] <Constructor> #
- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner
- [Pub] transferOwnership #
 - modifiers: onlyOwner
- [Pub] getUnlockTime
- [Pub] getTime
- [Pub] lock #
 - modifiers: onlyOwner
- [Pub] unlock #

+ [Int] IUniswapV2Factory

- [Ext] feeTo
- [Ext] feeToSetter
- [Ext] getPair
- [Ext] allPairs
- [Ext] allPairsLength
- [Ext] createPair #

- [Ext] setFeeTo #
- [Ext] setFeeToSetter #

+ [Int] IUniswapV2Pair

- [Ext] name
- [Ext] symbol
- [Ext] decimals
- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] allowance
- [Ext] approve #
- [Ext] transfer #
- [Ext] transferFrom #
- [Ext] DOMAIN_SEPARATOR
- [Ext] PERMIT_TYPEHASH
- [Ext] nonces
- [Ext] permit #
- [Ext] MINIMUM_LIQUIDITY
- [Ext] factory
- [Ext] token0
- [Ext] token1
- [Ext] getReserves
- [Ext] price0CumulativeLast
- [Ext] price1CumulativeLast
- [Ext] kLast
- [Ext] burn #
- [Ext] swap #
- [Ext] skim #
- [Ext] sync #
- [Ext] initialize #

+ [Int] IUniswapV2Router01

- [Ext] factory
- [Ext] WETH
- [Ext] addLiquidity #
- [Ext] addLiquidityETH (\$)
- [Ext] removeLiquidity #
- [Ext] removeLiquidityETH #
- [Ext] removeLiquidityWithPermit #
- [Ext] removeLiquidityETHWithPermit #
- [Ext] swapExactTokensForTokens #
- [Ext] swapTokensForExactTokens #
- [Ext] swapExactETHForTokens (\$)
- [Ext] swapTokensForExactETH #
- [Ext] swapExactTokensForETH #
- [Ext] swapETHForExactTokens (\$)
- [Ext] quote
- [Ext] getAmountOut
- [Ext] getAmountIn
- [Ext] getAmountsOut
- [Ext] getAmountsIn

+ [Int] IUniswapV2Router02 (IUniswapV2Router01)

- [Ext] removeLiquidityETHSupportingFeeOnTransferTokens #
- [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens #

- [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
- [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)
- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
- + Cyber Zoon (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] isExcludedFromReward
 - [Pub] totalFees
 - [Pub] minimumTokensBeforeSwapAmount
 - [Pub] buyBackUpperLimitAmount
 - [Pub] deliver #
 - [Pub] reflectionFromToken
 - [Pub] tokenFromReflection
 - [Pub] excludeFromReward #
 - modifiers: onlyOwner
 - [Ext] includeInReward #
 - modifiers: onlyOwner
 - [Prv] _approve #
 - [Prv] _transfer #
 - [Prv] swapTokens #
 - modifiers: lockTheSwap
 - [Prv] buyBackTokens #
 - modifiers: lockTheSwap
 - [Prv] swapTokensForEth #
 - [Prv] swapETHForTokens #
 - [Prv] addLiquidity #
 - [Prv] _tokenTransfer #
 - [Prv] _transferStandard #
 - [Prv] _transferToExcluded #
 - [Prv] _transferFromExcluded #
 - [Prv] _transferBothExcluded #
 - [Prv] _reflectFee #
 - [Prv] _getValues
 - [Prv] _getTValues
 - [Prv] _getRValues
 - [Prv] _getRate
 - [Prv] _getCurrentSupply
 - [Prv] _takeLiquidity #
 - [Prv] calculateTaxFee
 - [Prv] calculateLiquidityFee
 - [Prv] removeAllFee #
 - [Prv] restoreAllFee #
 - [Pub] isExcludedFromFee
 - [Pub] excludeFromFee #

- modifiers: onlyOwner
- **[Pub]** includeInFee **#**
 - modifiers: onlyOwner
- **[Ext]** setTaxFeePercent **#**
 - modifiers: onlyOwner
- **[Ext]** setLiquidityFeePercent **#**
 - modifiers: onlyOwner
- **[Ext]** setMaxTxAmount **#**
 - modifiers: onlyOwner
- **[Ext]** setMarketingDivisor **#**
 - modifiers: onlyOwner
- **[Ext]** setNumTokensSellToAddToLiquidity **#**
 - modifiers: onlyOwner
- **[Ext]** setBuybackUpperLimit **#**
 - modifiers: onlyOwner
- **[Ext]** setMarketingAddress **#**
 - modifiers: onlyOwner
- **[Pub]** setSwapAndLiquifyEnabled **#**
 - modifiers: onlyOwner
- **[Pub]** setBuyBackEnabled **#**
 - modifiers: onlyOwner
- **[Ext]** prepareForPreSale **#**
 - modifiers: onlyOwner
- **[Ext]** afterPreSale **#**
 - modifiers: onlyOwner
- **[Prv]** transferToAddressETH **#**
- **[Ext]** <Fallback> **(\$)**

(\$) = 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 `includeInReward()` 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.

```
}  
  
function includeInReward(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 tax and liquidity fees.

```
string private _name = " Cyber Zoon ";
string private _symbol = "CZ";
uint8 private _decimals = 9;

uint256 public _taxFee = 5;
uint256 private _previousTaxFee = _taxFee;

uint256 public _liquidityFee = 5;
uint256 private _previousLiquidityFee = _liquidityFee;

IUniswapV2Router02 public immutable uniswapV2Router;
address public immutable uniswapV2Pair;

bool inSwapAndLiquify;
bool public swapAndLiquifyEnabled = true;

uint256 public _maxTxAmount = 500000000000 *10 ** 9;
uint256 private numTokensSellToAddToLiquidity = 500000000000 *10 ** 9;
```

- Owner can change maximum transaction amount.

```
ftrace | funcSig
function setMaxTxAmount(uint256 maxTxAmount↑) external onlyOwner() {
    _maxTxAmount = maxTxAmount↑;
}
```

- Owner can exclude from the fee.

```
function excludeFromFee(address account↑) public onlyOwner {
    _isExcludedFromFee[account↑] = true;
}
```

- Owner can change marketingDivisor.

```
ftrace | funcSig
function setMarketingDivisor(uint256 divisor↑) external onlyOwner() {
    marketingDivisor = divisor↑;
}
```

- Owner can change minimum number of tokens to add to liquidity.

```
ftrace | funcSig
function setNumTokensSellToAddToLiquidity(uint256 _minimumTokensBeforeSwap↑) external onlyOwner() {
    minimumTokensBeforeSwap = _minimumTokensBeforeSwap↑;
}
```

- **Owner can lock and unlock. By the way, using these functions the owner could retake privileges even after the ownership was renounced.**

```
//Locks the contract for owner for the amount of time provided
function lock(uint256 time) public virtual onlyOwner {
    _previousOwner = _owner;
    _owner = address(0);
    _lockTime = now + time;
    emit OwnershipTransferred(_owner, address(0));
}

//Unlocks the contract for owner when _lockTime is exceeds
function unlock() public virtual {
    require(_previousOwner == msg.sender, "You don't have permission to unlock");
    require(now > _lockTime , "Contract is locked until 7 days");
    emit OwnershipTransferred(_owner, _previousOwner);
    _owner = _previousOwner;
}
```

Conclusion

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

Liquidity locking details NOT provided by the team.

Auditek 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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