



TechRate
AUDIT COMPANY

Smart Contract Security Audit

Audit Details



Audited project
Centurion Inu



Deployer address
0x5172cc865f636eee7c4f8c738febd2b157a8ece2



Client contacts:
Centurion Inu team



Blockchain
Ethereum



Project website:
<https://centurioninutoken.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 Centurion Inu to perform an audit of smart contracts:

<https://etherscan.io/address/0x9f91d9f9070b0478abb5a9918c79b5dd533f672c#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

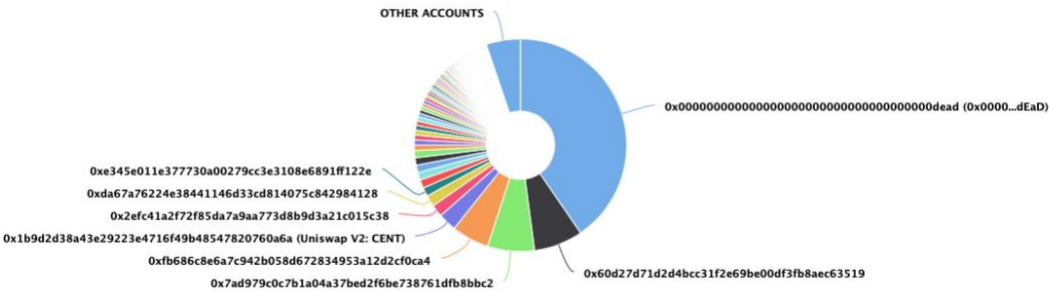
Token contract details for 22.09.2021

Contract name	Centurion Inu
Contract address	0x5172cc865f636eee7c4f8c738febd2b157a8ece2
Total supply	1,000,000,000,000,000,000
Token ticker	CENT
Decimals	9
Token holders	620
Transactions count	2,160
Top 100 holders dominance	94.79%
Contract deployer address	0x5172cc865f636eee7c4f8c738febd2b157a8ece2
Contract's current owner address	0x00

Centurion Inu Token Distribution

The top 100 holders collectively own 94.79% (947,898,760,242,085,000.00 Tokens) of Centurion Inu | Token Total Supply: 1,000,000,000,000,000.00 Token | Total Token Holders: 620

Centurion Inu Top 100 Token Holders
Source: Etherscan.io

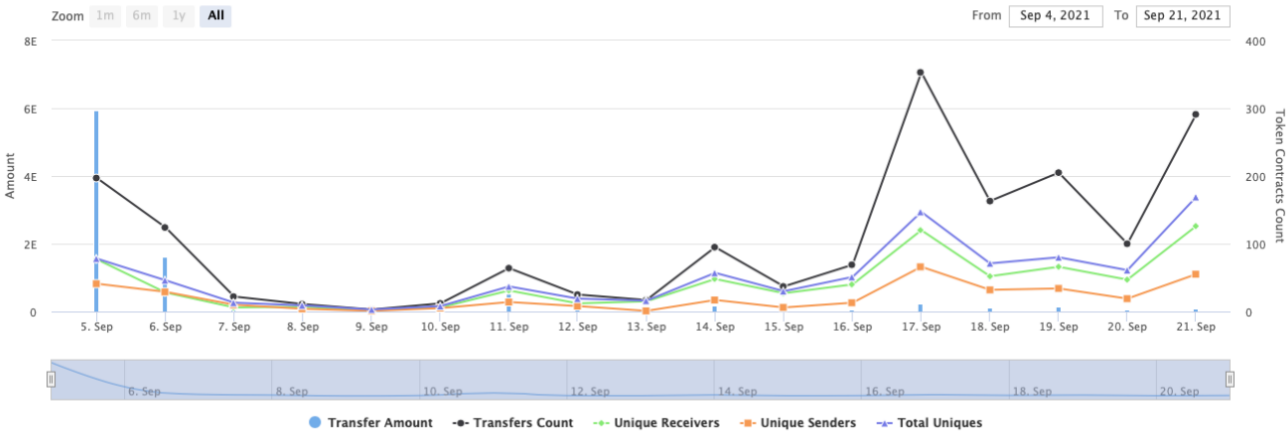


(A total of 947,898,760,242,085,000.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000.00 token)


Centurion Inu Contract Interaction Details

Time Series: Token Contract Overview | Sun 5, Sept 2021 - Tue 21, Sept 2021

Token Contract 0x9f91d9f9070b0478abb5a9918c79b5dd533f672c (Centurion Inu)
Source: Etherscan.io



Centurion Inu Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x0000...dEaD	404,390,256,478,724,000.546053073	40.4390%
2	0x60d27d71d2d4bcc31f2e69be00df3fb8aec63519	74,554,091,521,239,800.932437709	7.4554%
3	0x7ad979c0c7b1a04a37bed2f6be738761dfb8bbc2	71,351,754,059,907,800.63624887	7.1352%
4	0xfb686c8e6a7c942b058d672834953a12d2cf0ca4	57,035,887,276,094,100.263062728	5.7036%
5	 Uniswap V2: CENT	27,827,874,103,744,000.247896324	2.7828%
6	0x2efc41a2f72f85da7a9aa773d8b9d3a21c015c38	18,653,253,317,863,300.195631312	1.8653%
7	0xda67a76224e38441146d33cd814075c842984128	17,205,658,580,450,900.34591103	1.7206%
8	0xe345e011e377730a00279cc3e3108e6891ff122e	13,205,058,477,213,400.599899775	1.3205%
9	0x2cdc0da366bd789b4f10f800b0acc035a84a753b	12,817,731,706,692,900.028808958	1.2818%
10	0xc95318b8b1f4dc2d2d7315b2aee48a0ff8e0715d	11,585,226,563,381,800.463701277	1.1585%



Contract functions details

+ Context

- [Int] _msgSender

+ [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

+ Ownable (Context)

- [Pub] <Constructor> #
- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner

+ [Int] IUniswapV2Factory

- [Ext] createPair #

+ [Int] IUniswapV2Router02

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

+ CenturionInu (Context, IERC20, Ownable)

- [Pub] <Constructor> #
- [Pub] name
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Ext] setCooldownEnabled #
 - modifiers: onlyOwner
- [Prv] tokenFromReflection
- [Prv] _approve #
- [Prv] _transfer #
- [Prv] swapTokensForEth #

- modifiers: lockTheSwap
- [Prv] sendETHToFee #
- [Ext] openTrading #
 - modifiers: onlyOwner
- [Pub] setBots #
 - modifiers: onlyOwner
- [Pub] delBot #
 - modifiers: onlyOwner
- [Prv] _tokenTransfer #
- [Prv] _transferStandard #
- [Prv] _takeTeam #
- [Prv] _reflectFee #
- [Ext] <Fallback> (\$)
- [Ext] manualswap #
- [Ext] manualsend #
- [Prv] _getValues
- [Prv] _getTValues
- [Prv] _getRValues
- [Prv] _getRate
- [Prv] _getCurrentSupply

(\$) = 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 enable cooldown (user to user trading with time offset).

```
function setCooldownEnabled(bool onoff) external onlyOwner() {
    cooldownEnabled = onoff;
}
```

- Owner can open swap trading.

```
function openTrading() external onlyOwner() {
    require(!tradingOpen, "trading is already open");
    IUniswapV2Router02 _uniswapV2Router = IUniswapV2Router02(0x7a250d5630B4cF539739dF2C5dAcb4c659F2488D);
    uniswapV2Router = _uniswapV2Router;
    _approve(address(this), address(uniswapV2Router), _tTotal);
    uniswapV2Pair = IUniswapV2Factory(_uniswapV2Router.factory()).createPair(address(this), _uniswapV2Router.WETH());
    uniswapV2Router.addLiquidityETH(value: address(this).balance)(address(this), balanceOf(address(this)), 0, 0, owner(), block.timestamp);
    swapEnabled = true;
    cooldownEnabled = true;
    _maxTxAmount = 10000000000000000 * 10**9;
    tradingOpen = true;
    IERC20(uniswapV2Pair).approve(address(uniswapV2Router), type(uint).max);
}
```

- Owner can add and remove bots (no transferring between this addresses).

```
function setBots(address[] memory bots_) public onlyOwner {
    for (uint i = 0; i < bots_.length; i++) {
        bots[bots_[i]] = true;
    }
}

function delBot(address notbot) public onlyOwner {
    bots[notbot] = false;
}
```

Conclusion

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

Liquidity locking details provided by the team:

<https://team.finance/view-coin/0x9f91d9f9070b0478Abb5a9918c79B5DD533F672C?name=Ceanturion%20Inu&symbol=CENT>

Ownership renounce details provided by the team:

<https://etherscan.io/tx/0xfd1293ca30253831951d8edbce47fb0f6021b22638c81c59bc659a04244fb6df#eventlog>

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.