



> Smart  
Contract

Audit #



May 15  
2022

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# METHODOLOGY

## MAIN TESTS LIST:

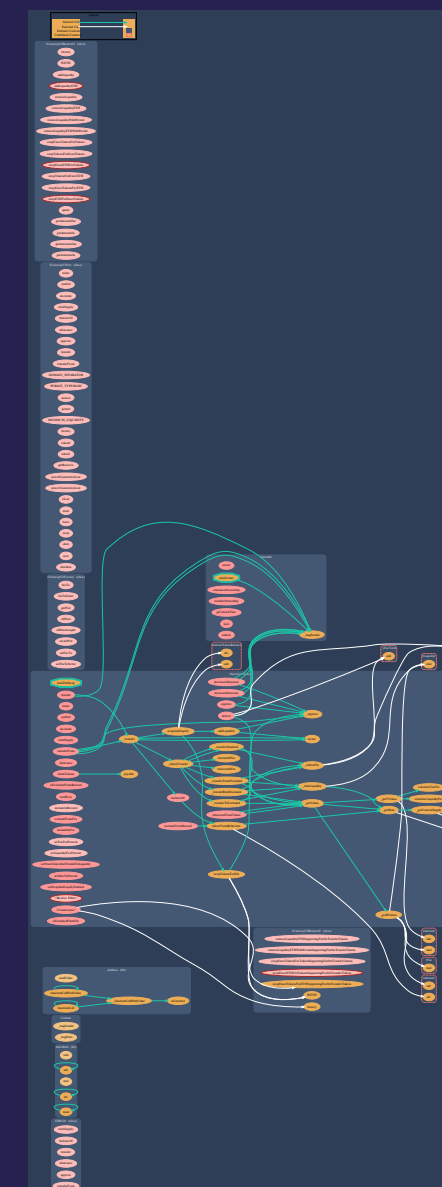
- ◆ Best code practices
- ◆ ERC20/BEP20 compliance (if applicable)
- ◆ FA2 compliance (if applicable)
- ◆ Logical bugs
- ◆ General Denial Of Service(DOS)
- ◆ Locked ether
- ◆ Private data leaks
- ◆ Using components with known vulns
- ◆ Weak PRNG
- ◆ Unused vars
- ◆ Unchecked call return method
- ◆ Code with no effects
- ◆ Pool Asset Security (backdoors in the underlying ERC-20)
- ◆ Function visibility
- ◆ Use of deprecated functions
- ◆ Authorization issues
- ◆ Re-entrancy
- ◆ Arithmetic Over/Under Flows
- ◆ Hidden Malicious Code
- ◆ External Contract Referencing
- ◆ Short Address/ Parameter Attack
- ◆ Race Conditions / Front Running
- ◆ Uninitialized Storage Pointers
- ◆ Floating Points and Precision
- ◆ Signatures Replay

# STRUCTURE OF CONTRACT

## 1.2.\_OPENCOIN.SOL

### CONTRACT METHODS ANALYSIS:

- ◆ `name()`  
Vulnerabilities not detected
- ◆ `symbol()`  
Vulnerabilities not detected
- ◆ `decimals()`  
Vulnerabilities not detected



Pic. 1.1

1.2.\_OpenCoin.sol

- ◆ `totalSupply()`  
Vulnerabilities not detected
- ◆ `balanceOf(address account)`  
Vulnerabilities not detected
- ◆ `transfer(address recipient, uint256 amount)`  
Vulnerabilities not detected
- ◆ `allowance(address owner, address spender)`  
Vulnerabilities not detected
- ◆ `approve(address spender, uint256 amount)`  
Vulnerabilities not detected
- ◆ `transferFrom(address sender, address recipient, uint256 amount)`  
Vulnerabilities not detected
- ◆ `increaseAllowance(address spender, uint256 addedValue)`  
Vulnerabilities not detected
- ◆ `decreaseAllowance(address spender, uint256 subtractedValue)`  
Vulnerabilities not detected
- ◆ `isExcludedFromReward(address account)`  
Vulnerabilities not detected
- ◆ `totalFees()`  
Vulnerabilities not detected
- ◆ `deliver(uint256 tAmount)`  
Vulnerabilities not detected

- ◆ reflectionFromToken(uint256 tAmount,  
bool deductTransferFee)  
Vulnerabilities not detected
- ◆ tokenFromReflection(uint256 rAmount)  
Vulnerabilities not detected
- ◆ excludeFromReward(address account)  
Vulnerabilities not detected
- ◆ includeInReward(address account)  
Vulnerabilities not detected
- ◆ \_transferBothExcluded(address sender,  
address recipient, uint256 tAmount)  
Vulnerabilities not detected
- ◆ excludeFromFee(address account)  
Vulnerabilities not detected
- ◆ includeInFee(address account)  
Vulnerabilities not detected
- ◆ setTaxFeePercent(uint256 taxFee)  
Vulnerabilities not detected

- ◆ `setLiquidityFeePercent(uint256 liquidityFee)`  
Vulnerabilities not detected
- ◆ `setNumTokensSellToAddToLiquidity(uint256 swapNumber)`  
Vulnerabilities not detected
- ◆ `setMaxTxPercent(uint256 maxTxPercent)`  
Vulnerabilities not detected
- ◆ `setSwapAndLiquifyEnabled(bool _enabled)`  
Vulnerabilities not detected
- ◆ `_reflectFee(uint256 rFee, uint256 tFee)`  
Vulnerabilities not detected
- ◆ `_getValues(uint256 tAmount)`  
Vulnerabilities not detected
- ◆ `_getTValues(uint256 tAmount)`  
Vulnerabilities not detected
- ◆ `_getRValues(uint256 tAmount, uint256 tFee, uint256 tLiquidity, uint256 currentRate)`  
Vulnerabilities not detected



- ◆ `_getRate()`  
Vulnerabilities not detected
- ◆ `_getCurrentSupply()`  
Vulnerabilities not detected
- ◆ `_takeLiquidity(uint256 tLiquidity)`  
Vulnerabilities not detected
- ◆ `claimTokens()`  
Vulnerabilities not detected
- ◆ `_takeLiquidity(uint256 tLiquidity)`  
Vulnerabilities not detected

- ◆ `calculateTaxFee(uint256 _amount)`  
Vulnerabilities not detected
- ◆ `calculateLiquidityFee(uint256 _amount)`  
Vulnerabilities not detected
- ◆ `removeAllFee()`  
Vulnerabilities not detected
- ◆ `restoreAllFee()`  
Vulnerabilities not detected
- ◆ `isExcludedFromFee(address account)`  
Vulnerabilities not detected

- ◆ `_approve(address owner, address spender, uint256 amount)`  
Vulnerabilities not detected
- ◆ `_transfer(address from, address to, uint256 amount)`  
Vulnerabilities not detected
- ◆ `swapAndLiquify(uint256 contractTokenBalance)`  
Vulnerabilities not detected
- ◆ `swapTokensForEth(uint256 tokenAmount)`  
Vulnerabilities not detected
- ◆ `addLiquidity(uint256 tokenAmount, uint256 ethAmount)`  
Vulnerabilities not detected
- ◆ `_tokenTransfer(address sender, address recipient, uint256 amount, bool takeFee)`  
Vulnerabilities not detected
- ◆ `_transferStandard(address sender, address recipient, uint256 tAmount)`  
Vulnerabilities not detected
- ◆ `_transferToExcluded(address sender, address recipient, uint256 tAmount)`  
Vulnerabilities not detected
- ◆ `_transferFromExcluded(address sender, address recipient, uint256 tAmount)`  
Vulnerabilities not detected

# VERIFICATION CHECK SUMS

Contract Name	Solc version	Optimisation	Bytecode hash (SHA 256)
1.2._OpenCoin.sol	0.6.12	200	bd5de4c1bc6d7b0ba511ee5 b4f7ebb57f7d2c1b54178e86 275bbfa77b28485bd



# Get In Touch

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[info@smartstate.tech](mailto:info@smartstate.tech)

[smartstate.tech](https://smartstate.tech)

