

# Smart Contract Audit

**FOR** 

# Coinalyzer

**DATED: 16 FEB 23'** 



# **AUDIT SUMMARY**

Project name - Coinalyzer

Date: 16 February, 2023

**Scope of Audit-** Audit Ace was consulted to conduct the smart contract audit of the solidity source codes.

Audit Status: Passed (Contract developed by Pinksale Safu Dev)

#### **Issues Found**

Status	Critical	High	Medium	Low	Suggestion
Open	0	0	0	0	0
Acknowledged	0	0	0	0	0
Resolved	0	0	0	0	0



# **USED TOOLS**

#### Tools:

#### 1- Manual Review:

a line by line code review has been performed by audit ace team.

#### 2- BSC Test Network:

all tests were done on BSC Test network, each test has its transaction has attached to it.

#### 3- Slither: Static Analysis

**Testnet Link:** all tests were done using this contract, tests are done on BSC Testnet

https://testnet.bscscan.com/address/0x2Fcf2d933B E2bC83891Cf8Fe7f21FBFd8cecAEd7#code



# **Token Information**

Token Name: Coinalyzer

Token Symbol: Coinz

Decimals: 18

**Token Supply: 1,000,000** 

Token Address: Not Provided

#### Checksum:

f0e4c2f76c58916ec258f246851bea091d14d4247a2f c3e18694461b1816e13b

Deployer: Not Provided



# **TOKEN OVERVIEW**

Fees:

Buy Fees: 0%

Sell Fees: 0%

Transfer Fees: 0%

Fees Privilige: None

Ownership: Owned

Minting: No mint function

Max Tx Amount/ Max Wallet Amount: No

Blacklist: No

Other Priviliges: No



# **AUDIT METHODOLOGY**

The auditing process will follow a routine as special considerations by Auditace:

- Review of the specifications, sources, and instructions provided to Auditace to make sure the contract logic meets the intentions of the client without exposing the user's funds to risk.
- Manual review of the entire codebase by our experts, which is the process of reading source code line-byline in an attempt to identify potential vulnerabilities.
- Specification comparison is the process of checking whether the code does what the specifications, sources, and instructions provided to Auditace describe.
- Test coverage analysis determines whether the test cases are covering the code and how much code isexercised when we run the test cases.
- Symbolic execution is analysing a program to determine what inputs cause each part of a program to execute.
- Reviewing the codebase to improve maintainability, security, and control based on the established industry and academic practices.



# **VULNERABILITY CHECKLIST**





# **CLASSIFICATION OF RISK**

#### Severity

- Critical
- High-Risk
- Medium-Risk
- Low-Risk
- Gas Optimization/Suggestion

### **Description**

These vulnerabilities could be exploited easily and can lead to asset loss, data loss, asset, or data manipulation. They should be fixed right away.

A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.

A vulnerability that could affect the desired outcome of executing the contract in a specific scenario.

A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.

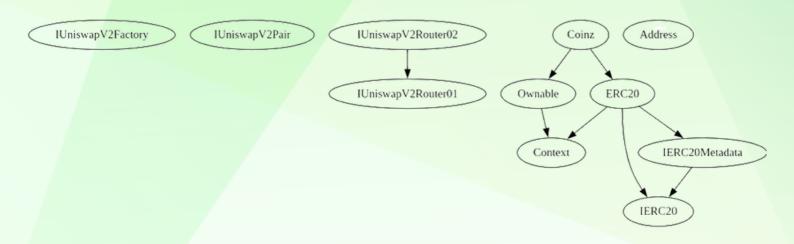
A vulnerability that has an informational character but is not affecting any of the code.

## **Findings**

Severity	Found
◆ Critical	0
◆ High-Risk	0
◆ Medium-Risk	0
♦ Low-Risk	0
<ul><li>Gas Optimization /</li><li>Suggestions</li></ul>	0



# **INHERITANCE TREE**





## **POINTS TO NOTE**

- Owner is not able to set buy/sell/transfer taxes (0%)
- Owner is not able to blacklist an arbitrary wallet
- Owner is not able to set max buy/sell/transfer amounts
- Owner is not able to disable trades
- Owner is not able to mint new tokens



```
| Contract |
                Type
                              Bases
<mark>|;-----:|;|;-----:|</mark>:|;-----:|
       **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
111111
**IUniswapV2Factory** | Interface | |||
| L | feeTo | External | | NO | |
| | | feeToSetter | External | | | NO
| | getPair | External | | NO | |
| | allPairs | External | | NO | |
| | allPairsLength | External | | NO | |
📙 createPair | External 📗 | 🛑 | NO 📗
📙 | setFeeTo | External 📗 | 🛑 | NO 📗
| L | setFeeToSetter | External | | ( NO | | |
| **IUniswapV2Pair** | Interface | | | |
| L | name | External | | NO | |
| L | symbol | External | | NO | |
| L | decimals | External | | NO | |
| L | totalSupply | External | | NO | |
| L | balanceOf | External | | NO | |
| L | allowance | External | | NO | |
| L | approve | External | | | NO | |
| L | transfer | External | | | NO | |
| L | transferFrom | External | | | NO | |
| L | DOMAIN SEPARATOR | External | | | NO | |
| L | PERMIT_TYPEHASH | External | | NO |
| L | nonces | External | | NO |
| L | permit | External | | | NO | |
| L | MINIMUM LIQUIDITY | External | | | NO | |
| L | factory | External | | NO | |
| L | token0 | External | | NO | |
| L | token1 | External | | NO | |
| L | getReserves | External | | | NO | |
| L | price0CumulativeLast | External | | NO | |
| L | price1CumulativeLast | External | | NO | |
| L | kLast | External | | NO | |
| L | mint | External | | | NO | |
| L | burn | External | | | NO | |
| L | swap | External | | | NO | |
| L | skim | External | | | NO | |
| L | sync | External | | | NO | |
| L | initialize | External | | | NO | |
```



```
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| **IUniswapV2Router01** | Interface | | | | | |
| L | factory | External | | NO | |
| L | WETH | External | | NO | |
| L | addLiquidity | External | | | NO | |
| L | removeLiquidity | External | | | NO | |
| | removeLiquidityETH | External | | | NO | |
| | removeLiquidityWithPermit | External | | | NO | |
| | removeLiquidityETHWithPermit | External | | | NO | |
| L | swapExactTokensForTokens | External | | ( NO | |
📙 | swapTokensForExactTokens | External 📗 | 🛑 | NO 📗
| L | swapExactETHForTokens | External | | 🔟 | NO | | |
| L | swapTokensForExactETH | External | | | | NO | |
| L | swapExactTokensForETH | External | | | NO | |
| L | swapETHForExactTokens | External | | I NO | |
| L | quote | External | | | NO | |
| L | getAmountOut | External L | NOL |
| L | getAmountIn | External | | NO | |
| L | getAmountsOut | External | | NO | |
| L | getAmountsIn | External | | NO | |
\mathbf{H}\mathbf{H}\mathbf{H}\mathbf{H}
| **IUniswapV2Router02** | Interface | IUniswapV2Router01 | | | | | |
| L | removeLiquidityETHSupportingFeeOnTransferTokens | External | | | NO | |
| L | removeLiquidityETHWithPermitSupportingFeeOnTransferTokens | External | | | | NO | |
| L | swapExactTokensForTokensSupportingFeeOnTransferTokens | External | | | NO | |
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| **IERC20** | Interface | | | | | |
| L | totalSupply | External | | NO | |
| L | balanceOf | External | | NO | |
| L | transfer | External | | | NO | |
| L | allowance | External | | NO | |
| L | approve | External | | | NO | |
| L | transferFrom | External | | | NO | |
IIIIIII
| **IERC20Metadata** | Interface | IERC20 | | | |
| L | name | External | | NO | |
| L | symbol | External | | NO | |
| L | decimals | External | | NO | |
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```



```
**Address** | Library | |||
| L | sendValue | Internal 🦲 | 🛑 | | | | |
| L | functionCall | Internal 🦰 | 🛑 | |
| L | functionCall | Internal 🦰 | 🛑 | |
| L | functionCallWithValue | Internal 🦲 | 🛑 | |
| L | functionCallWithValue | Internal 🦰 | 🛑 | |
| | | functionStaticCall | Internal | | | | |
| | | functionStaticCall | Internal | | | | |
| L | functionDelegateCall | Internal 🦲 | 🛑 | |
| L | functionDelegateCall | Internal 🦰 | 🛑 | |
| L | verifyCallResult | Internal 🦰 | | |
| L | revert | Private 🦳 | | |
\Pi\Pi\Pi\Pi\Pi
| **Context** | Implementation | |||
| L | _msgSender | Internal 🦰 | | |
| L | _msgData | Internal 🦲 | | |
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| **Ownable** | Implementation | Context | | | |
| L | <Constructor> | Public | | ( NO | |
| L | owner | Public | | NO | |
| L | renounceOwnership | Public | | (e) | onlyOwner |
| L | transferOwnership | Public | | ( ) | onlyOwner |
IIIIIII
| **ERC20** | Implementation | Context, IERC20, IERC20Metadata | | | | | |
| L | <Constructor> | Public | | ( ) | NO | |
| L | name | Public | | NO | |
| L | symbol | Public | | NO | |
| L | decimals | Public | | NO | |
| L | totalSupply | Public | | NO | |
| L | balanceOf | Public | | NO | |
| L | transfer | Public | | | | NO | |
| L | allowance | Public | | NO | |
| L | approve | Public | | | NO | |
| L | transferFrom | Public | | ( ) | NO | |
| L | increaseAllowance | Public | | | NO | |
| L | decreaseAllowance | Public | | | NO | |
| L | _transfer | Internal 🦰 | 🛑 | |
| L | _mint | Internal 🦰 | 🛑 | |
| L | _burn | Internal 🦲 | 🧓 | |
```



```
| L | _approve | Internal 🖰 | 🛑 | |
| L | _beforeTokenTransfer | Internal 🦰 | 🛑 | |
| L | _afterTokenTransfer | Internal 🦰 | 🛑 | |
111111
| **Coinz** | Implementation | ERC20, Ownable | | | | | |
| L | <Constructor> | Public | | | | | ERC20 |
| L | <Receive Ether> | External | | I I INO | |
| L | claimStuckTokens | External | | | | onlyOwner |
| L | excludeFromFees | External | | | | onlyOwner |
| L | isExcludedFromFees | Public | | NO | |
| L | enableTrading | External | | | | onlyOwner |
📙 | transfer | Internal 🦰 | 🛑 | |
| Symbol | Meaning |
|:-----|
| Image: | Function is payable |
```



## STATIC ANALYSIS

```
Address._revert(bytes.string) (contracts/Token.sol#32-544) uses assembly

- INLINE AND (contracts/Token.sol#32-544) uses assembly

Reference: https://github.com/cytic/slither/dais/Detector-Documentation#assembly-usage

Address._revert(bytes.string) (contracts/Token.sol#32-544) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#32-99) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#32-99) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-97) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-949) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-949) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-93) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-93) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-93) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-73-93) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-73-93) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-73-73) is never used and should be removed

Address._functionCall(address.bytes) (contracts/Token.sol#34-73-73) is never used and should be removed

Address._functionCall(address.bytes.sol#34-73-73) is never used and should be removed

Address._functionCall(address.bytes.sol#34-73-73-73-73-73-
```

Result => A static analysis of contract's source code has been performed using slither,

No major issues were found in the output



# **FUNCTIONAL TESTING**

#### Router (PCS V2):

0xD99D1c33F9fC3444f8101754aBC46c52416550D1

1- Adding Liquidity (Passed):

liquidity added on Pancakeswap V2:

https://testnet.bscscan.com/tx/0xe58ebca3ee13a3ce019d3ad242a 71a3a0cb75c5724fc463e6b4703144c4facd1

no issue were found on adding liquidity.

2- Buying (0% max tax)(Passed):

https://testnet.bscscan.com/tx/0x0c2bfd7a0575ccf29af033ed1c2 6be5f0beee996b41018488fa2916b7e39704c

3- Selling (0% max tax)(Passed):

https://testnet.bscscan.com/tx/0x94a495b5a9250b2e31eeb80da7 c9c3b1ab4278d4149a5c9fa21f59678ca216cf

4-Transferring (0% tax)(Passed):

https://testnet.bscscan.com/tx/0x94a495b5a9250b2e31eeb80da7 c9c3b1ab4278d4149a5c9fa21f59678ca216cf192dd52b9



# **MANUAL TESTING**

## **NO ISSUES FOUND**



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