



Smart Contract Security Audit

<u>TechRate</u> March, 2022

Audit Details



Audited project

CDCoin



Deployer address

0x62b44a66447be3e373fbda76d75d08c16a945e77



Client contacts:

CDCoin team



Blockchain

Binance Smart Chain





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 CDCoin to perform an audit of smart contracts:

https://bscscan.com/address/0x9d359D5215D13580A08bd4E5436C5E8Cd3201Fd0#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.

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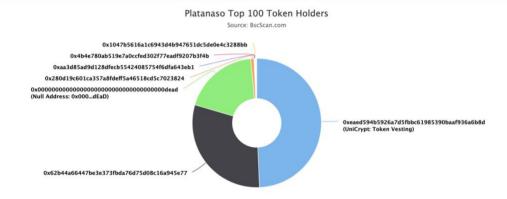
Contracts Details

Token contract details for 08.03.2022

Contract name	CDCoin
Contract address	0x9d359D5215D13580A08bd4E5436C5E8Cd3201Fd0
Total supply	5,000,000,000,000
Token ticker	PLNT
Decimals	18
Token holders	260
Transactions count	2,880
Top 100 holders dominance	100.00%
Reward token	0xe9e7cea3dedca5984780bafc599bd69add087d56
Total fees	16
Token rewards fee	7
Uniswap V2 pair	0x97406e22ffbe04676611a1d2ec8ae04fb02f43ea
Contract deployer address	0x62b44a66447be3e373fbda76d75d08c16a945e77
Contract's current owner address	0x62b44a66447be3e373fbda76d75d08c16a945e77

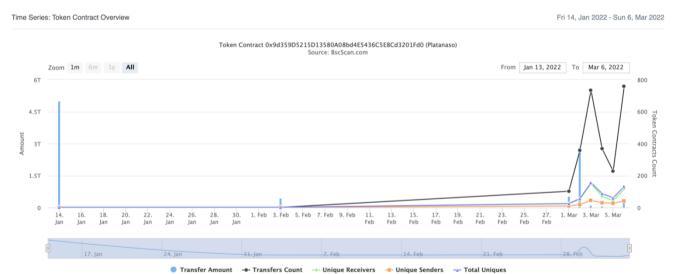
CDCoin Token Distribution

▼ Token Total Supply: 5,000,000,000,000.00 Token | Total Token Holders: 260



(A total of 4,999,873,448,607.98 tokens held by the top 100 accounts from the total supply of 5,000,000,000,000.00 token)

CDCoin Contract Interaction Details



CDCoin Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	🖹 UniCrypt: Token Vesting	2,466,823,463,124.881159445220040412	49.3365%
2	0x62b44a66447be3e373fbda76d75d08c16a945e77	1,510,498,046,641.527019668738241275	30.2100%
3	Null Address: 0x000dEaD	947,579,583,256.2704	18.9516%
4	0x280d19c601ca357a8fdeff5a46518cd5c7023824	40,000,000,000	0.8000%
5	0xaa3d85ad9d128dfecb55424085754f6dfa643eb1	7,277,933,749.71113959735970589	0.1456%
6	0x4b4e780ab519e7a0ccfed302f77eadf9207b3f4b	5,381,222,315.451233497974963434	0.1076%
7	0x1047b5616a1c6943d4b947651dc5de0e4c3288bb	5,006,218,817.960413443009175985	0.1001%
8	0x6fcb97669986dafbd813e2761773cb37bd622b54	5,000,000,000	0.1000%
9	0x2ea5d806250e8e30fac1ff98727f5073fbdfb99a	2,413,123,201.086644062227567886	0.0483%
10	0x7814e19512ba3c4c8686ecc7f11750bcc7173422	1,975,409,974.892178027452819633	0.0395%

Contract functions details

```
+ [Int] IERC20
 - [Ext] totalSupply
 - [Ext] balanceOf
 - [Ext] transfer #
 - [Ext] allowance
 - [Ext] approve #
 - [Ext] transferFrom #
+ [Int] IERC20Metadata (IERC20)
 - [Ext] name
 - [Ext] symbol
 - [Ext] decimals
+ Context
 - [Int] _msgSender
 - [Int] msqData
+ ERC20 (Context, IERC20, IERC20Metadata)
 - [Pub] <Constructor> #
 - [Pub] name
 - [Pub] symbol
 - [Pub] decimals
 - [Pub] totalSupply
 - [Pub] balanceOf
 - [Pub] transfer #
 - [Pub] allowance
 - [Pub] approve #
 - [Pub] transferFrom #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
 - [Int] _transfer #
 - [Int] _mint #
 - [Int] _burn #
 - [Int] approve #
 - [Int] beforeTokenTransfer #
 - [Int] afterTokenTransfer #
+ Ownable (Context)
 - [Pub] <Constructor>#
 - [Pub] owner
 - [Pub] renounceOwnership #
   - modifiers: onlyOwner
 - [Pub] transferOwnership #
   - modifiers: onlyOwner
 - [Prv] setOwner#
+ [Lib] SafeMath
 - [Int] tryAdd
```

[Int] trySub[Int] tryMul[Int] tryDiv

- [Int] tryMod
- [Int] add
- [Int] sub
- [Int] mul
- [Int] div
- [Int] mod
- [Int] sub
- [Int] div
- [Int] mod

+ [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 #

+ [Lib] Clones

- [Int] clone #
- [Int] cloneDeterministic #
- [Int] predictDeterministicAddress
- [Int] predictDeterministicAddress

+ [Int] IUniswapV2Factory

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

+ [Int] IPinkAntiBot

```
- [Ext] setTokenOwner #
  - [Ext] onPreTransferCheck #
+ [Int] IERC20Upgradeable
 - [Ext] totalSupply
 - [Ext] balanceOf
 - [Ext] transfer #
 - [Ext] allowance
 - [Ext] approve #
 - [Ext] transferFrom #
+ [Int] IERC20MetadataUpgradeable (IERC20Upgradeable)
 - [Ext] name
 - [Ext] symbol
 - [Ext] decimals
+ Initializable
+ ContextUpgradeable (Initializable)
 - [Int] __Context_init #
   - modifiers: initializer
 - [Int] __Context_init unchained #
   - modifiers: initializer
 - [Int] _msgSender
 - [Int] msgData
+ ERC20Upgradeable (Initializable, ContextUpgradeable, IERC20Upgradeable,
IERC20MetadataUpgradeable)
 - [Int] ERC20 init#
   - modifiers: initializer
 - [Int] ERC20 init unchained #
   - modifiers: initializer
 - [Pub] name
 - [Pub] symbol
 - [Pub] decimals
 - [Pub] totalSupply
 - [Pub] balanceOf
 - [Pub] transfer #
 - [Pub] allowance
 - [Pub] approve #
 - [Pub] transferFrom #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
 - [Int] _transfer #
 - [Int] _mint #
 - [Int] burn #
 - [Int] _approve #
 - [Int] beforeTokenTransfer #
  - [Int] afterTokenTransfer #
+ OwnableUpgradeable (Initializable, ContextUpgradeable)
  - [Int] __Ownable_init #
   - modifiers: initializer
 - [Int] __Ownable_init_unchained #
```

- modifiers: initializer

- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner
- [Pub] transferOwnership #
 - modifiers: onlyOwner
- [Prv] setOwner #

+ [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] mint #
- [Ext] burn #
- [Ext] swap #
- **[Ext]** skim #
- [Ext] svnc #
- [Ext] initialize #

+ [Lib] SafeMathInt

- [Int] mul
- [Int] div
- [Int] sub
- [Int] add
- [Int] abs
- [Int] toUint256Safe

+ [Lib] SafeMathUint

- [Int] toInt256Safe

+ [Lib] IterableMapping

- [Pub] get
- [Pub] getIndexOfKey
- [Pub] getKeyAtIndex
- [Pub] size
- [Pub] set#
- [Pub] remove #

```
+ [Int] DividendPayingTokenInterface
  - [Ext] dividendOf
  - [Ext] withdrawDividend #
+ [Int] DividendPayingTokenOptionalInterface
  - [Ext] withdrawableDividendOf
 - [Ext] withdrawnDividendOf
 - [Ext] accumulativeDividendOf
+ DividendPayingToken (ERC20Upgradeable, OwnableUpgradeable,
DividendPayingTokenInterface, DividendPayingTokenOptionalInterface)
  - [Int] DividendPayingToken init#
   - modifiers: initializer
 - [Pub] distributeCAKEDividends #
   - modifiers: onlyOwner
 - [Pub] withdrawDividend #
 - [Int] _withdrawDividendOfUser #
 - [Pub] dividendOf
 - [Pub] withdrawableDividendOf
 - [Pub] withdrawnDividendOf
 - [Pub] accumulativeDividendOf
 - [Int] _transfer #
 - [Int] mint #
 - [Int] _burn #
 - [Int] setBalance #
+ BaseToken
+ AntiBotBABYTOKEN (ERC20, Ownable, BaseToken)
 - [Pub] <Constructor> ($)
   - modifiers: ERC20
 - [Ext] setEnableAntiBot#
   - modifiers: onlyOwner
  - [Ext] <Fallback> ($)
  - [Ext] setSwapTokensAtAmount #
   - modifiers: onlyOwner
  - [Pub] updateDividendTracker #
   - modifiers: onlyOwner
 - [Pub] updateUniswapV2Router #
   - modifiers: onlyOwner
 - [Pub] excludeFromFees #
   - modifiers: onlyOwner
 - [Pub] excludeMultipleAccountsFromFees #
   - modifiers: onlyOwner
  - [Ext] setMarketingWallet #
   - modifiers: onlyOwner
 - [Ext] setTokenRewardsFee #
   - modifiers: onlyOwner
 - [Ext] setLiquiditFee #
   - modifiers: onlyOwner
 - [Ext] setMarketingFee #
   - modifiers: onlyOwner
  - [Pub] setAutomatedMarketMakerPair #
   - modifiers: onlyOwner
  - [Prv] _setAutomatedMarketMakerPair #
```

```
- [Pub] updateGasForProcessing #
   - modifiers: onlyOwner
 - [Ext] updateClaimWait #
  - modifiers: onlyOwner
 - [Ext] getClaimWait
 - [Ext] updateMinimumTokenBalanceForDividends #
   - modifiers: onlyOwner
 - [Ext] getMinimumTokenBalanceForDividends
 - [Ext] getTotalDividendsDistributed
 - [Pub] isExcludedFromFees
 - [Pub] withdrawableDividendOf
 - [Pub] dividendTokenBalanceOf
 - [Ext] excludeFromDividends #
   - modifiers: onlyOwner
 - [Pub] isExcludedFromDividends
 - [Ext] getAccountDividendsInfo
 - [Ext] getAccountDividendsInfoAtIndex
 - [Ext] processDividendTracker #
 - [Ext] claim #
 - [Ext] getLastProcessedIndex
 - [Ext] getNumberOfDividendTokenHolders
 - [Int] _transfer #
 - [Prv] swapAndSendToFee #
 - [Prv] swapAndLiquify #
 - [Prv] swapTokensForEth #
 - [Prv] swapTokensForCake #
 - [Prv] addLiquidity #
 - [Prv] swapAndSendDividends #
+ BABYTOKENDividendTracker (OwnableUpgradeable, DividendPayingToken)
 - [Ext] initialize #
  - modifiers: initializer
 - [Int] transfer
 - [Pub] withdrawDividend
 - [Ext] excludeFromDividends #
   - modifiers: onlyOwner
 - [Pub] isExcludedFromDividends
 - [Ext] updateClaimWait#
   - modifiers: onlyOwner

    - [Ext] updateMinimumTokenBalanceForDividends #

  - modifiers: onlyOwner
 - [Ext] getLastProcessedIndex
 - [Ext] getNumberOfTokenHolders
 - [Pub] getAccount
 - [Pub] getAccountAtIndex
 - [Prv] canAutoClaim
 - [Ext] setBalance #
   - modifiers: onlyOwner
 - [Pub] process #
 - [Pub] processAccount #
   - modifiers: onlyOwner
```

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

No high severity issues found.

Medium Severity Issues

No medium severity issues found.

- Low Severity Issues
 - 1. Out of gas

Issue:

 The function excludeMultipleAccountsFromFees() uses the loop to exclude multiple accounts from fees. Function will be aborted with OUT_OF_GAS exception if there will be a long addresses list.

Recommendation:

Be careful about accounts array length.

Notes:

 Owner can change dividend tracker that could be not audited and some functions may work in different ways.

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

- Owner can enable/disable antibot.
- Owner can change swapTokensAtAmount.
- · Owner can change dividend tracker.
- Owner can change Uniswap router address.
- Owner can exclude from the fees.
- Owner can change minimum token balance for dividends.
- Owner can change liquidity, marketing and tokenReward fees.
- Owner can exclude and include addresses in automatedMarketMakerPairs array.
- Owner can exclude from dividends.
- Owner can change marketing wallet.
- · Owner can change gas for processing.
- Owner can update claimWait value.

Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract. Contract contain interfaces that are not audited, some functions may work different ways.

Liquidity locking details provided by the team:

https://www.team.finance/view-

coin/0x9d359D5215D13580A08bd4E5436C5E8Cd3201Fd0?name=Platan aso&symbol=PLNT

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.



