HackSafe

Smart Contract Security Audit Report

COLLECTIABLE Token

April **2022**

Security Status

★★★★⯪

www.hacksafe.io

Audit Details

Audited project
COLLECTIABLE Token

Deployer address
0xcC00632C6Dd13008A30949e33dB3169dfF1fb31E

Client contacts
COLLECTIABLE team

Blockchain
Binance smart chain

Website
www.collectible.global

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

HeckSafe was commissioned by COLLECTIABLE Token to perform an audit of smart contracts:

- https://bscscan.com/address/0x4b2172e798572973b2e670678902d26d2e44c24a#code

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issue 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

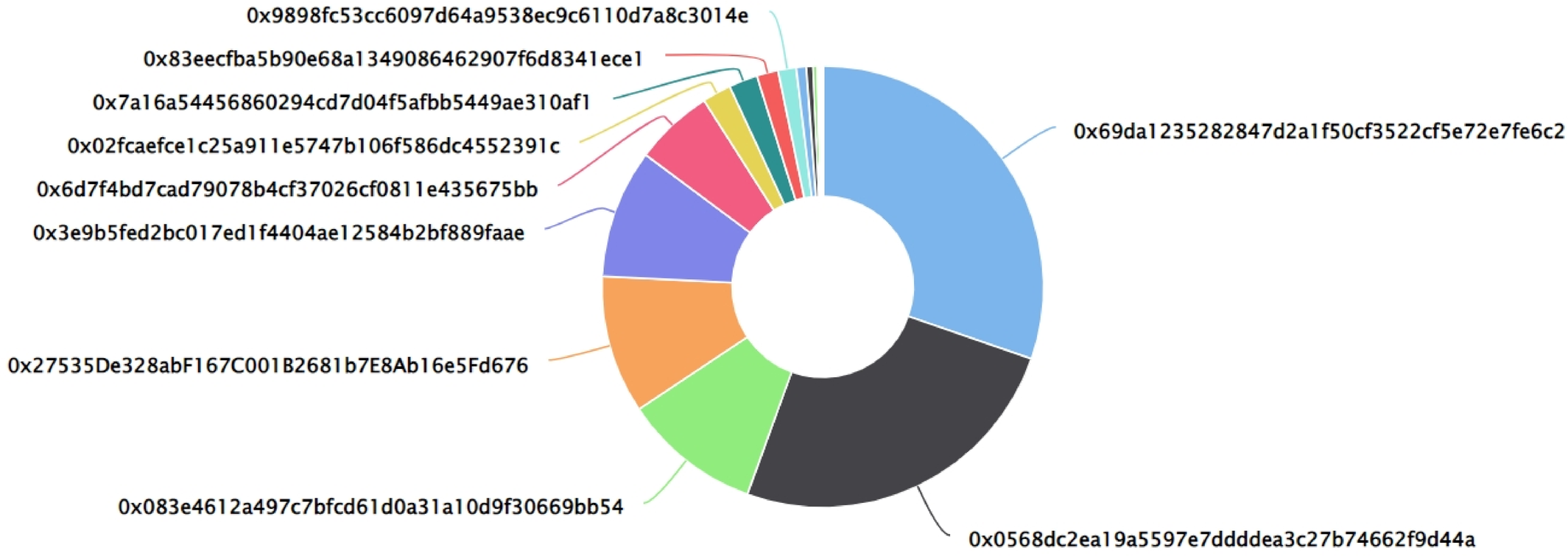
Token contract details for 14.04.2022

Contract name	: COLLECTIABLE Token
Contract address	: 0x4B2172E798572973B2e670678902d26D2e44C24A
Total supply	: 11880000
Token Ticker	: COLLT
Decimals	: 0
Network	: BSCScan
Transactions count	: 4,304
Token Holders	: 483 addresses
Contract deployer address	: 0xcC00632C6Dd13008A30949e33dB3169dfF1fb31E
Owner address	: 0x3e9b5FeD2bc017Ed1F4404AE12584b2Bf889faAe

COLLECTIABLE Token Distribution

COLLECTIBLE Top 500 Token Holders

Source: BscScan.com



COLLECTIABLE Token Top 10 Token Holders

(A total of 11,651,870.00 tokens held by the top 10 accounts from the total supply of 11,880,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	0x69da1235282847d2a1f50cf3522cf5e72e7fe6c2	3,600,000	30.3030%
2	0x0568dc2ea19a5597e7ddddea3c27b74662f9d44a	3,000,000	25.2525%
3	0x083e4612a497c7bfcd61d0a31a10d9f30669bb54	1,200,000	10.1010%
4	0x27535De328abF167C001B2681b7E8Ab16e5Fd676	1,200,000	10.1010%
5	0x3e9b5fed2bc017ed1f4404ae12584b2bf889faae	1,120,087	9.4283%
6	0x6d7f4bd7cad79078b4cf37026cf0811e435675bb	688,000	5.7912%
7	0x02fcaefce1c25a911e5747b106f586dc4552391c	250,001	2.1044%
8	0x7a16a54456860294cd7d04f5afbb5449ae310af1	250,000	2.1044%
9	0x83eecfba5b90e68a1349086462907f6d8341ece1	188,282	1.5849%
10	0x9898fc53cc6097d64a9538ec9c6110d7a8c3014e	155,500	1.3089%

Contract functions details

+ CollectibleToken
    - [Pub] #
    - [Pub] balanceOf
    - [Pub] transfer #
    - [Pub] transferFrom #
    - [Pub] approve #
    - [Pub] allowance
    - [Pub] mint #
    - [Pub] burn #
    - [Pub] burnFrom #
    - [Pub] setOwner #
        - modifiers: isOwner

Issues Checking Status

No.	Title	Status
1.	Unlocked Compiler Version	Low issue
2.	Missing Input Validation	Passed
3.	Race conditions and Reentrancy. Cross-function race conditions.	Passed
4.	Possible delays in data delivery	Passed
5.	Oracle calls.	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.	Private use data leaks.	Passed
13.	Malicious Event log.	Passed
14.	Scoping and Declarations.	Passed
15.	Uninitialized storage pointers.	Passed
16.	Arithmetic accuracy.	Passed
17.	Design Logic.	Low issue
18.	Safe Open Zeppelin contracts implementation and usage.	Passed
19.	Incorrect Naming State Variable	Passed

Severity Definitions

Risk Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to assets loss or data manipulations.
High	High-level vulnerabilities are difficult to exploit; however, they also have a significant impact on smart contract execution, e.g., public access to crucial functions
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to assets loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution.

Security Issues

Critical Severity Issues
No critical severity issue found.

High Severity Issues
No high severity issue found.

Medium Severity Issues
No Medium severity issue found.

Low Severity Issues
Two low severity issue found.

1. Unlocked Compiler Version.

- **Description**

  The contract utilizes an unlocked compiler version. An unlocked compiler version in the contract's source code permits the user to compile it at or above a particular version. This, in turn, leads to differences in the generated bytecode between compilations due to differing compiler version numbers. This can lead to ambiguity when debugging as compiler-specific bugs may occur in the codebase that would be difficult to identify over a span of multiple compiler versions rather than a specific one.

- **Recommendation**

  It is advisable that the compiler version is alternatively locked at the lowest version possible so that the contract can be compiled. For example, for version v0.8.3 the contract should contain the following line:

  pragma solidity 0.8.3;

2. Design logic.

- **Description**

  balances and balanceOf returns the same value.
  allowed and allowance returns the same value.

- **Recommendation**

  We advise to declare balances mapping at line no 10 from public to private.
  We advise to declare allowed mapping at line no 11 from public to private.

Owner Privileges

Owner Privileges (in the period when the owner is not renounced) :

- COLLECTIABLE Token Contract:
    - Owner set new owner
    - Owner can mint new maximum cap value tokens.

Conclusion

Smart contract contains low severity issues!

HackSafe 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.