HackSafe

Smart Contract Security Audit Report

VideoCoin

April **2022**

Security Status

★ ★ ★ ★ ★

www.hacksafe.io

Audit Details

Audited project
VideoCoin

Deployer address
0x68A17D0B24fd39c72a30351Cb8A6fdE7Bd4768bc

Client contacts
VideoCoin team

Blockchain
Binance smart chain

Website
https://www.vividlabs.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

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

- https://bscscan.com/address/0x2C9023bBc572ff8dc1228c7858A280046Ea8C9E5#code

Contract Details

Token contract details for 18.04.2022

Contract name	: VideoCoin
Contract address	: 0x2C9023bBc572ff8dc1228c7858A280046Ea8C9E5
Total supply	: 265 Million
Token Ticker	: VID
Decimals	: 18
Token Holders	: 2,506
Transactions count	: 37,173
Contract deployer address	: 0x68A17D0B24fd39c72a30351Cb8A6fdE7Bd4768bc
Owner address	: 0x68A17D0B24fd39c72a30351Cb8A6fdE7Bd4768bc

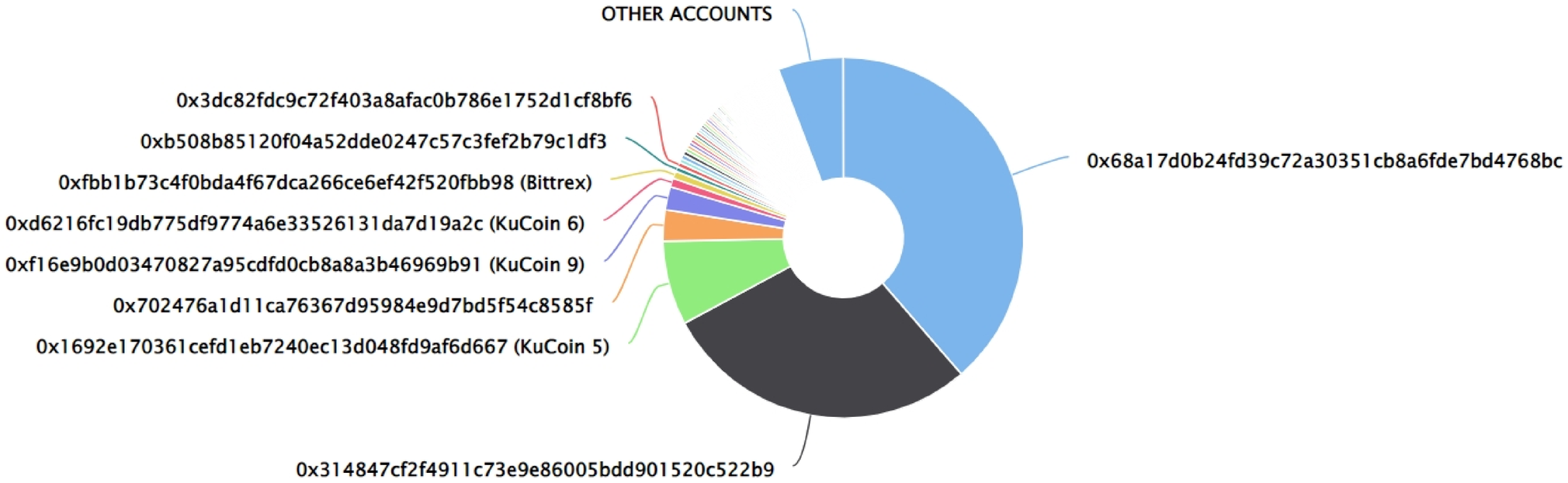
VideoCoin Token Distribution

The top 100 holders collectively own 94.16% (249,524,270.11 Tokens) of VideoCoin

Token Total Supply: 265,000,000.00 Token | Total Token Holders: 2,506

VideoCoin Top 100 Token Holders

Source: Etherscan.io



VideoCoin Top 10 Token Holders

(A total of 217,974,255.51 tokens held by the top 10 accounts from the total supply of 265,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	0x68a17d0b24fd39c72a30351cb8a6fde7bd4768bc	102,422,698.6807676	38.6501%
2	0x314847cf2f4911c73e9e86005bdd901520c522b9	75,514,569.54651159424676255	28.4961%
3	KuCoin 5	20,000,000	7.5472%
4	0x702476a1d11ca76367d95984e9d7bd5f54c8585f	7,448,738.4200600000001511	2.8108%
5	KuCoin 9	5,474,703.322379740233609108	2.0659%
6	KuCoin 6	2,100,000	0.7925%
7	Bittrex	1,738,284.22501004	0.6560%
8	0xb508b85120f04a52dde0247c57c3fef2b79c1df3	1,149,999.9999	0.4340%
9	0x3dc82fdc9c72f403a8afac0b786e1752d1cf8bf6	1,123,972.698949842057539265	0.4241%
10	0x988fc7e88b7d6c886382136b8177795d93197aba	1,001,288.61338768	0.3778%

Contract functions details

+ Ownable (Context)
    - [Pub] <Constructor>#
    - [Pub] renounceOwnership #
      - modifier: onlyOwner
    - [Pub] transferOwnership #
      - modifiers: onlyOwner
    -[Int] _transferOwnership #

+ Pausable (Ownable)
    - [Pub] pause #
      - modifers: onlyOwner, whenNotPaused
    - [Pub] unpause #
      - modifers: onlyOwner whenPaused

+ [Lib] SafeMath
    - [Int] mul
    - [Int] div
    - [Int] sub
    - [Int] add

+ ERC20Basic
    - [Pub] totalSupply
    - [Pub] balanceOf
    - [Pub] transfer #

+ ERC20 (ERC20Basic)
    - [Pub] allowance
    - [Pub] transferFrom #
    - [Pub] approve #

+ BasicToken (ERC20Basic)
    - [Pub] totalSupply
    - [Pub] transfer #
    - [Pub] balanceOf

+ StandardToken (ERC20, BasicToken)
    - [Pub] transferFrom #
    - [Pub] approve #

Contract functions details

- [Pub] allowance
- [Pub] increaseApproval #
- [Pub] decreaseApproval #

+ PausableToken (StandardToken, Pausable)
  - [Pub] transfer #
    -modifiers: whenNotPaused
  - [Pub] transferFrom #
    - modifiers: whenNotPaused
  - [Pub] approve #
    - modifiers: whenNotPaused
  - [Pub] increaseApproval #
    - modifiers: whenNotPaused
  - [Pub] decreaseApproval #
    - modifiers: whenNotPaused

+ VideoCoin (PausableToken)
  -<Constructor> #

($) = payable function
= non-constant function

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.	Passed
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 issues found.

- **Low Severity Issues**
  one low severity issues 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 ^0.4.23the contract should contain the following line:

  pragma solidity 0.4.23;

Owner Privileges

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

- VideoCoin CHAIN Contract:
    - Owner can transfer ownership.
    - Owner can renounce ownership.
    - Owner can set pause and unpause bool variable.

Conclusion

Smart contract contains low severity issues! The further transfer and operations with the fund raised are not related to this particular contract.

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.