HackSafe

Smart Contract Security Audit Report

VYNK CHAIN

April **2022**

Security Status

★★★★½

www.hacksafe.io

Audit Details

Audited project
VYNK CHAIN

Deployer address
0x519334a4203fD86f5abc02372A2E96f051E91D57

Client contacts
VYNK CHAIN team

Blockchain
Binance smart chain

Website
https://vynkchain.org/

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 VYNK CHAIN to perform an audit of smart contracts:

- https://bscscan.com/address/0xee1ae38be4ce0074c4a4a8dc821cc784778f378c#code

Contract Details

Token contract details for 18.04.2022

Contract name	: VYNK CHAIN
Contract address	: 0xee1ae38BE4Ce0074C4A4A8DC821CC784778f378c
Total supply	: 99 Million
Token Ticker	: VYNC
Decimals	: 4
Token Holders	: 2,284
Transactions count	: 56,220
Contract deployer address	: 0x519334a4203fD86f5abc02372A2E96f051E91D57
Owner address	: 0x519334a4203fD86f5abc02372A2E96f051E91D57

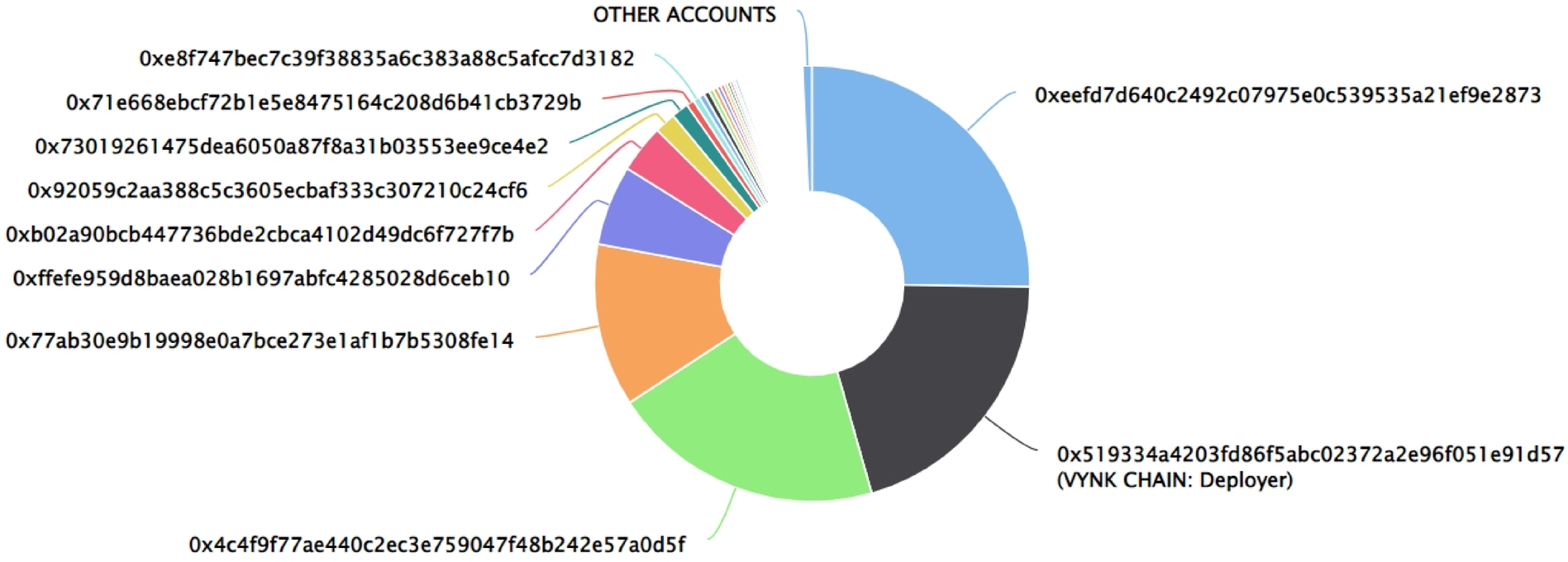
VYNK CHAIN Token Distribution

The top 500 holders collectively own 99.31% (98,315,151.00 Tokens) of VYNK CHAIN

Token Total Supply: 99,000,000.00 Token | Total Token Holders: 2,284

VYNK CHAIN Top 500 Token Holders

Source: BscScan.com



VYNK CHAIN Top 10 Token Holders

(A total of 90,416,723.93 tokens held by the top 10 accounts from the total supply of 99,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	0xeefd7d640c2492c07975e0c539535a21ef9e2873	25,000,000	25.2525%
2	VYNK CHAIN: Deployer	20,146,542.5599	20.3500%
3	0x4c4f9f77ae440c2ec3e759047f48b242e57a0d5f	20,000,000	20.2020%
4	0x77ab30e9b19998e0a7bce273e1af1b7b5308fe14	11,999,820.21	12.1210%
5	0xffefe959d8baea028b1697abfc4285028d6ceb10	5,878,197.4608	5.9376%
6	0xb02a90bcb447736bde2cbca4102d49dc6f727f7b	3,519,655.2352	3.5552%
7	0x92059c2aa388c5c3605ecbaf333c307210c24cf6	1,563,980.2253	1.5798%
8	0x73019261475dea6050a87f8a31b03553ee9ce4e2	1,258,726.8553	1.2714%
9	0x71e668ebcf72b1e5e8475164c208d6b41cb3729b	564,972.2947	0.5707%
10	0xe8f747bec7c39f38835a6c383a88c5afcc7d3182	484,829.0849	0.4897%

Contract functions details

+ Context
    - [Int] <Constructor>#
    - [Int] _msgSender
    - [Int] _msgData

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

+ [Int] IBEP20
    - [Ext] totalSupply
    - [Ext] balanceOf
    - [Ext] transfer #
    - [Ext] allowance
    - [Ext] approve #
    - [Ext] transferFrom #

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

+ [Lib] Address
    -[Int] isContract
    -[Int] sendValue

Contract functions details

+ BEP20 (Context, IBEP20)
    - [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] _setupDecimals #
    - [Int] _beforeTokenTransfer

+ VYNKCHAIN (Ownable, BEP20)
    - [Pub]<Constructor> #
    - [Pub] mint #
        - modifier: onlyOwner
    - [Pub] burn #
        - modifier: onlyOwner

($) = 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.	Low issue
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

Two 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 v0.6.8 the contract should contain the following line:

  pragma solidity 0.6.8;

2. Scoping and Declarations.

Unused function.

- **Description**

  The _msgData function does nothing.

- **Location**

  _msgData function

- **Recommendation**

  We advise to remove unused code which can help you to develop clean coding style and save some computational gas too.

Owner Privileges

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

- VYNK CHAIN Contract:
    - Owner can transfer ownership.
    - Owner can mint and destroy tokens.

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.