# {P()LY BL[]CK AUDITS}

Security Assessment

# VISION CITY

April 11th, 2023
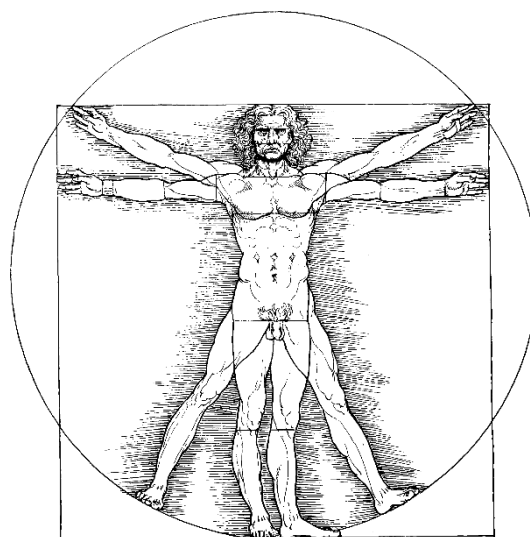
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# DISCLAIMER

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 based on 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.

# Summary

This report has been prepared for the Vision City smart contracts, to discover issues and vulnerabilities in the source code of their Smart Contract as well as any contract dependencies that were not part of an officially recognized library. A comprehensive examination has been performed, utilizing Dynamic Analysis, Static Analysis, and Manual Review techniques.

- The auditing process pays special attention to the following considerations:
- Testing the smart contracts against both common and uncommon attack vectors.
- Assessing the code base to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client. Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.

The security assessment resulted in findings that ranged from critical to informational. We recommend addressing these findings to ensure a high level of security standards and industry practices. We suggest recommendations that could better serve the project from the security perspective:

- Enhance general coding practices for better structures of source codes;
- Add enough unit tests to cover the possible use cases given they are currently missing in the repository;
- Provide more comments per each function for readability, especially contracts are verified in public;
- Provide more transparency on privileged activities once the protocol is live.

# Audit Details

VISION CITY SMART CONTRACT

Audit Methodology

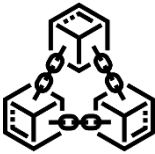Static Analysis, Manual Review, Testnet

Smart Contract

0x3Bf954e809620bF2f1Fcb667F1c7D2D2E94350d1

Project Deployer

0x52120e0E01B610C9EeD680d3e31b1ed8C141F5D6

Blockchain

Ethereum

Project Website

https://ryoshiverse.io

# Contract Overview

| Project Name: | VISION CITY SMART CONTRACT |
|---|---|
| Contract Address: | 0x3Bf954e809620bF2f1Fcb667F1c7D2D2E94350d1 |
| Total Supply: | 300,000,000,000 |
| Symbol: | VIZ |
| Decimals: | 9 |
| Current Holders: | 1 |
| Current Transactions: | 0 |
| Top Holder 100 Dominance: | 100% |
| Total Tax Fee: | 3% |
| Current Contract Owner: | 0x52120e0E01B610C9EeD680d3e31b1ed8C141F5D6 |
| Language: | Solidity |
| Version: | v0.8.19 +commit.7dd6d404 |

# Contract Functions

Interface IERC20 {
  [External] totalSupply
  [External] balanceOf
  [External] transfer
  [External] allowance
  [External] approve
  [External] transferFrom
}

Library Safemath {
  [Internal] tryAdd
  [Internal] trySub
  [Internal] tryMul
  [Internal] tryDiv
  [Internal] tryMod
  [Internal] add
  [Internal] sub
  [Internal] mul
  [Internal] div
  [Internal] mod
  [Internal] sub
  [Internal] div
  [Internal] mod
}

Contract Context {
  [Internal] _msgSender
  [Internal] _msgData
}

Abstract contract Ownable {
  [Public] <Constructor>
  [Public] owner
  [Modifier] onlyOwner
  [Public] renounceOwnership
  [Public] transferOwnership
  [Public] _transferOwnership
}

Library IERC20Metadata {
  [External] name
  [External] symbol
  [External] decimals
}

Contract ERC20 {
  [Public] <Constructor>
  [Public] name
  [Public] symbol
  [Public] decimals
  [Public] totalSupply
  [Public] balanceOf
  [Public] transfer
  [Public] allowance
  [Public] approve
  [Public] transferForm
  [Public] increaseAllowance
  [Public] decreaseAllowance
  [Private] _transfer
  [Private] _mint
  [Private] _burn
  [Private] _approve
  [Private] _beforeTokenTransfer
  [Private] _ afterTokenTransfer
}

Contract VisionCity {
  [Public] <Constructor>
  [External] setBuyFees
  [External] setSellFees
  [Public] excludeFromFees
  [External] setDevWallet
  [Public] isExcludedFromFees
  [Internal] _transfer
  [External] withdrawEthFromSc
  [External] withdrawTokenFromSc
}

# Security Issues Checking Status

| NO | Issue description | Status |
|----|-------------------|--------|
| 01 | Compiler errors. | Passed |
| 02 | Race conditions and Reentrancy. Cross-function race conditions. | Passed |
| 03 | Possible delays in data delivery. | Passed |
| 04 | Oracle calls. | Passed |
| 05 | Front running. | Passed |
| 06 | Timestamp dependence. | Passed |
| 07 | Integer Overflow and Underflow. | Passed |
| 08 | DoS with Revert. | Passed |
| 09 | DoS with block gas limit. | Passed |
| 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 | Fallback function security. | Passed |

# Security Issues

### Extreme Issues

## NO EXTREME ISSUES FOUND

### High Issues

## NO HIGH ISSUES FOUND

### Medium Issues

## NO MEDIUM ISSUES FOUND

### Low Issues

## NO LOW ISSUES FOUND

### Informational Issues

## NO INFORMATIONAL ISSUES FOUND

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

- Owner can change buyDevPercentage
- Owner can change sellDevPercentage
- Owner can excludeFromFee
- Owner can setDevWallet
- Owner can withdrawEthFromSc
- Owner can withdrawTokenFromSc

# Smart Contract Owner Functions

In the contract VisionCity.sol, the role Owner has the authority over the following function:

- approve
- decreaseAllowance
- excludeFromFees
- IncreaseAllowance
- renounceOwnership
- setBuyFees
- setDevWallet
- setSellFees
- transfer
- transferFrom
- transferOwnership
- withdrawEthFromSc
- withdrawTokenFromSc

# Top Holders Overview

○ The top 100 holders collectively own 100.00% (300,000,000,000.00 Tokens) of Vision City  |  ○ Token Total Supply: 300,000,000,000.00 Token  |  Total Token Holders: 1

## Vision City Top 100 Token Holders

Source: Etherscan.io

OTHER ACCOUNTS



0x52120e0e01b610c9eed680d3e31b1ed8c141f5d6

(A total of 300,000,000,000.00 tokens held by the top 100 accounts from the total supply of 300,000,000,000.00 token)

| Rank | Address | Quantity (Token) | Percentage |
|------|---------|------------------|------------|
| 1 | 0x52120e...C141F5D6 | 300,000,000,000 | 100.0000% |

# Conclusion

The smart contract contains no security issues. Please read our disclaimer above!

Audited on:    11-04-2023
Audited by:    Polymathist, the auditor