HackSafe

Smart Contract Security Audit Report

HuobiToken

November 2022

Security Status

★★★★½

www.hacksafe.io

Audit Details

Audited project
HuobiToken

Deployer address
0xCBA472D0fe169e5632f217b3c00e9225165dEa6e

Client contacts
HuobiTokena Team

Blockchain
Ethereum

Website
https://www.huobipro.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.

Procedure

Step 1 - In-Depth Manual Review

Manual line-by-line code reviews to ensure the logic behind each function is sound and safe from various attack vectors. This is the most important and lengthy portion of the audit process (as automated tools often cannot find the nuances that lead to exploits such as flash loan attacks).

Step 2 - Automated Testing

Simulation of a variety of interactions with your Smart Contract on a test blockchain leveraging a combination of automated test tools and manual testing to determine if any security vulnerabilities exist.

Step 3 – Leadership Review

The engineers assigned to the audit will schedule meetings with our leadership team to review the contracts, any comments or findings, and ask questions to further apply adversarial thinking to discuss less common attack vectors.

Step 4 - Resolution of Issues

Consulting with the team to provide our recommendations to ensure the code's security and optimize its gas efficiency, if possible. We assist project team's in resolving any outstanding issues or implementing our recommendations.

Step 5 - Published Audit Report

Boiling down results and findings into an easy-to-read report tailored to the project. Our audit reports highlight resolved issues and any risks that exist to the project or its users, along with any remaining suggested remediation measures. Diagrams are included at the end of each report to help users understand the interactions which occur within the project.

Background

HackSafe was commissioned by HuobiToken to perform an audit of smart contracts:

- https://etherscan.io/token/0x6f259637dcd74c767781e37bc6133cd6a68aa161#code

The purpose of the audit was to achieve the following:

- Ensutre that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be 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.

Contract Details

Token contract details for 02.11.2022

Token Type	: ERC20
Contract name	: HBToken
Contract address	: 0x6f259637dcD74C767781E37Bc6133cd6A68aa161
Total supply	: 500,000,000
Token ticker	: HT
Decimals	: 18
Token holders	: 50,559
Transactions count	: 659,403
Compiler version	: v0.4.19+commit.c4cbbb05
Contract deployer address	: 0xCBA472D0fe169e5632f217b3c00e9225165dEa6e
Owner address	: No owner

Social profiles

Twitter Profile	: https://twitter.com/HUOBI_Pro
Telegram profile	: https://t.me/huobiproofficial
Coinmarketcap profile	: https://coinmarketcap.com/currencies/huobi-token/
Coingecko profile	: https://www.coingecko.com/en/coins/huobi-token/

Audit Summary

According to the standard audit assessment, Customer`s solidity smart contracts are **“Well Secure”.** This token contract does not contain owner control, which do make it fully decentralized as owner does not have control over smart contract.

Insecure	Poor secured	Secure	Well-secured

You are here

We used various tools like Slither, Mythril and Remix IDE. At the same time this finding is based on critical analysis of the manual audit. All issues found during automated analysis were manually reviewed and applicable vulnerabilities are presented in the issues checking status.

We found 0 critical, 0 high, 0 medium and 1 low.

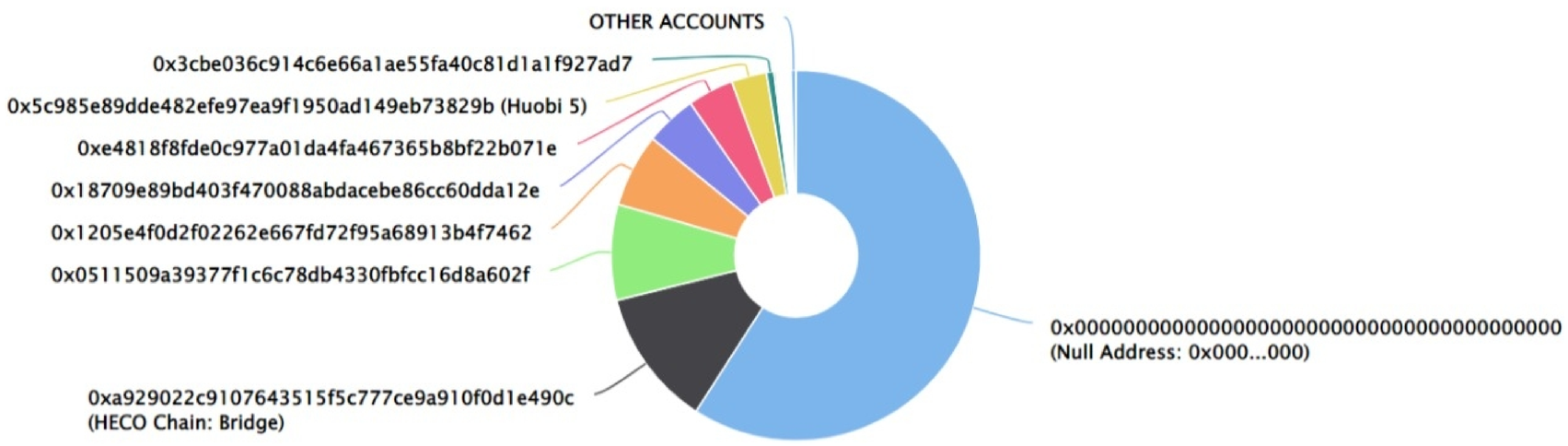
HuobiToken Token Distribution

The top 100 holders collectively own 99.58% (497,905,011.90 Tokens) of HuobiToken

Token Total Supply: 500,000,000.00 Token | Total Token Holders: 50,561

HuobiToken Top 100 Token Holders

Source: Etherscan.io



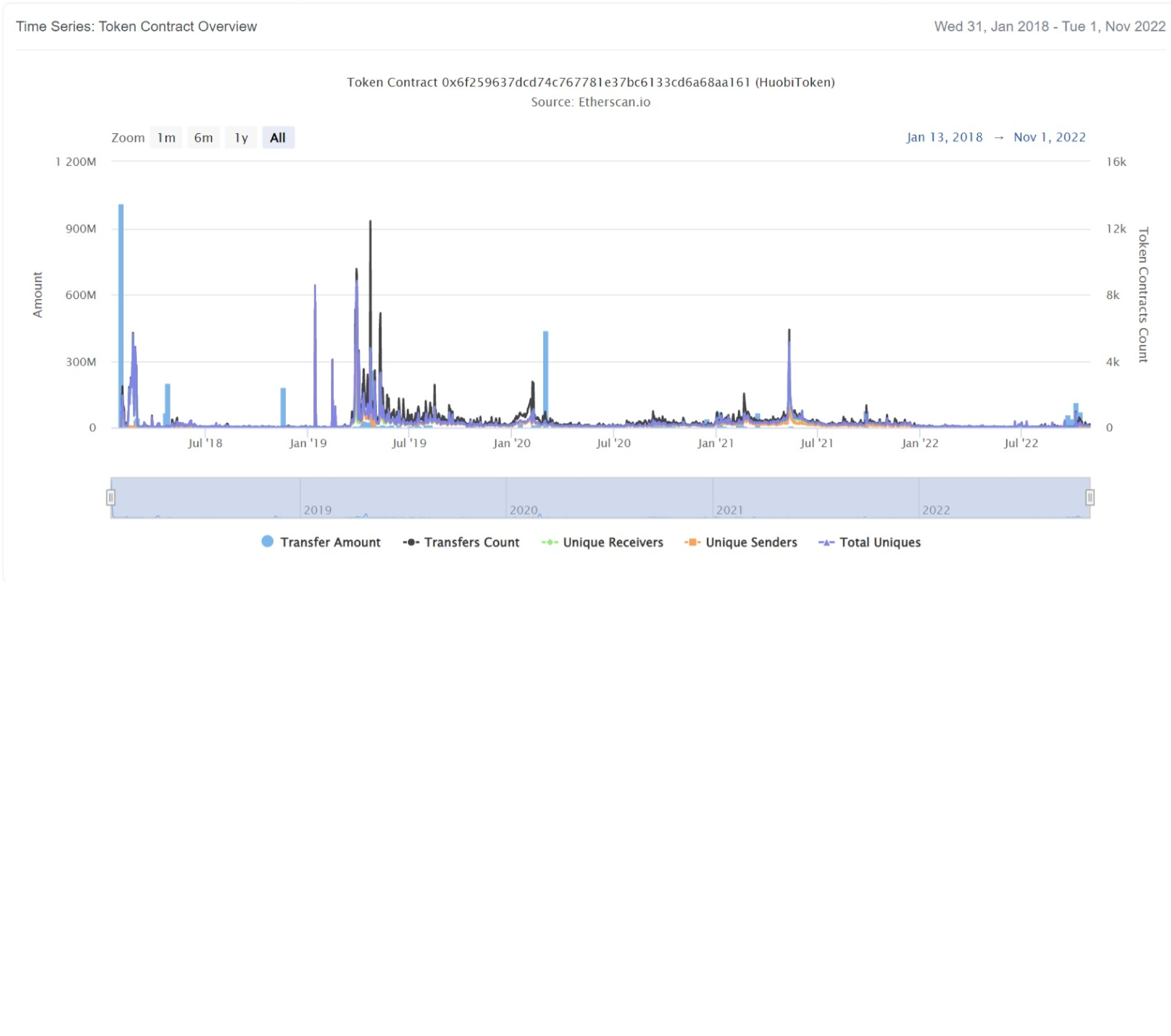
HuobiToken Token Top 20 Token Holders

(A total of 497,905,011.90 tokens held by the top 100 accounts from the total supply of 500,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	Null Address: 0x000...000	295,509,172.745587900767022048	59.1018%
2	HECO Chain: Bridge	60,005,288.861803947778147748	12.0011%
3	0x0511509a39377f1c6c78db4330fbfcc16d8a602f	41,807,241	8.3614%
4	0x1205e4f0d2f02262e667fd72f95a68913b4f7462	31,980,000	6.3960%
5	0x18709e89bd403f470088abdacebe86cc60dda12e	22,377,989	4.4756%
6	0xe4818f8fde0c977a01da4fa467365b8bf22b071e	20,000,000	4.0000%
7	Huobi 5	15,570,646.887268838046018995	3.1141%
8	0x3cbe036c914c6e66a1ae55fa40c81d1a1f927ad7	3,220,000	0.6440%
9	FTX Exchange	1,016,395.850948842622932271	0.2033%
10	0x523507fc9b69073f086544e97e32106f824d1f6d	874,897.4885	0.1750%
11	0xbf912b842c16606fe6321f7c45cf69766cff8d41	642,882.8219454	0.1286%
12	0xfb277a9b49b9ef66134d93b901d0be10cbd44b2c	599,926.01377646	0.1200%
13	0xe07cc845fe401f5c7fa8bfb71e940b774ca77632	308,507.9	0.0617%
14	Mexc.com 3	296,726.857444162343467232	0.0593%
15	0x8c1259ec671888b9a9d1886c4c35ac24baeee5a4	277,470.81509185	0.0555%
16	0x9639997508e2023d396f2144adb9888977d8eb34	249,999.48008492	0.0500%
17	0x3dd223968c2acb1071dfb327cc0065a5fa4d4b15	191,882.60910536	0.0384%
18	0xc29c78e27c09f5c639cf3031b2e61f0784a3714c	190,000	0.0380%
19	0x23af7238c611956ff5f669133ffa21cb1d79aa66	184,649.56537411	0.0369%
20	0xe103d7dce38a7f273400d6122d3d14110d3a5386	162,293	0.0325%

HuobiToken Token Distribution

HuobiToken Token Contract Overview



Contract functions details

+ Token
    -totalSupply
    -balanceOf
    -transfer
    -transferFrom
    -approve
    -allowance

+RegularToken (Token)
    -transfer #
    -transferFrom #
    -balanceOf
    -approve #
    -allowance

+UnboundedRegularToken (RegularToken)
    -[Pub] transferFrom #

+HBToken (UnboundedRegularToken)
    -HBToken #

($) = payable function
= non-constant function

Issues Checking Status

No.	Title	Status
1.	Unlocked Compiler Version	Passed
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
20.	Too old version	Low issue

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 issues found.
- **Medium Severity Issues**
  No medium severity issues found.
- **Low Severity Issues**
  One low severity issue founds.

1. Old compiler version

- **Description**
  Contract has been deployed using too old solidity version.
- **Recommendation**
  It is advisable to deploy contract using any of the latest version of solidity.

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.