HackSafe

Smart Contract Security Audit Report

Wootrade Network

January 2023

Security Status

★★★★½

www.hacksafe.io

Audit Details

Audited project
Wootrade Network

Deployer address
0xe64eb20471491956338eedc0f98242bc3ad0c91b

Client contacts
Wootrade Network

Blockchain
Ethereum

Website
https://woo.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.

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 Wootrade Network to perform an audit of smart contracts:

- https://etherscan.io/token/0x4691937a7508860f876c9c0a2a617e7d9e945d4b#code

The purpose of the audit was to achieve the following:

- Ensure 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 25.01.2023

Token Type	: DEFI
Contract name	: WootradeNetwork
Contract address	: 0x4691937a7508860F876c9c0a2a617E7d9E945D4B
Total supply	: 3,000,000,000
Token ticker	: WOO
Decimals	: 18
Token Holders	: 13,762
Transactions count	: 385,770
Compiler version	: v0.4.18+commit.9cf6e910
Contract deployer address	: 0xe64eb20471491956338eedc0f98242bc3ad0c91b
Owner address	: No owner

Social profiles

Facebook profile	: https://www.facebook.com/WOOnetwork.official
Twitter profile	: https://twitter.com/WOOnetwork
Telegram profile	: https://t.me/woonetwork
Inkedin profile	: https://www.linkedin.com/company/woonetwork/
coinmarketcap profile	: https://coinmarketcap.com/currencies/wootrade/

Audit Summary

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

Insecure	Poor secured	Secure	Well-secured

You are here

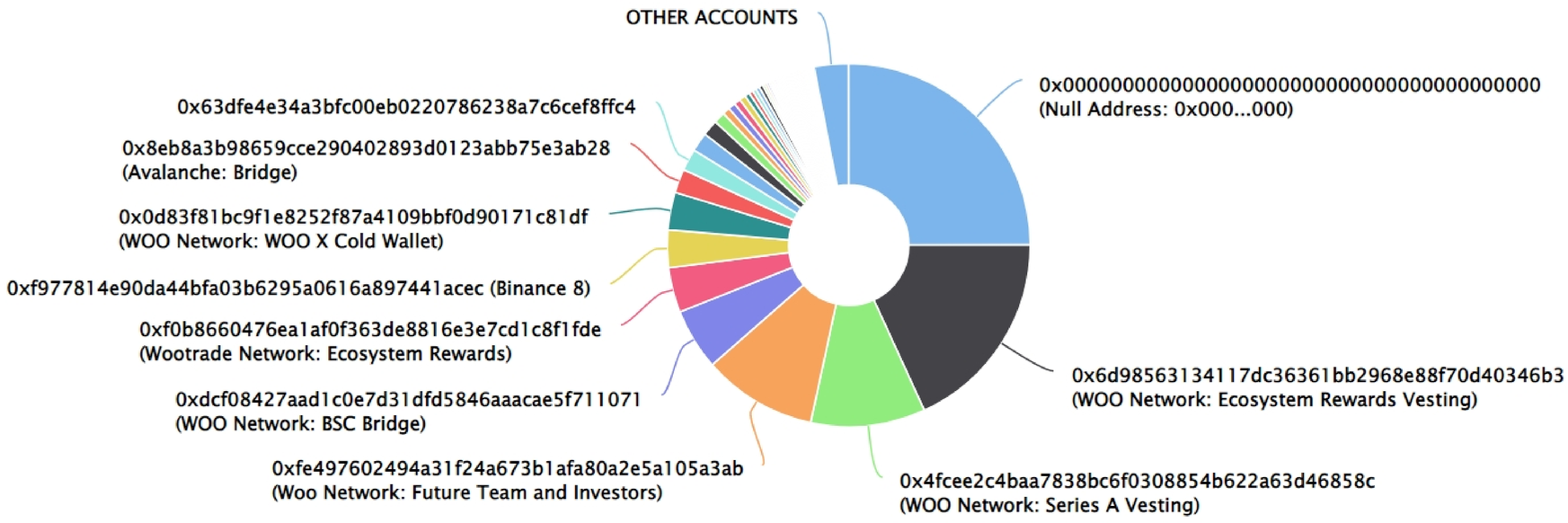
We used various tools like Slither, Mythril and Remix IDE. At the same time this finding is based on critical analysis of the manual audit. All issues found during automated analysis were manually reviewed and applicable vulnerabilities are presented in the issues checking status.

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

Wootrade Network Token Distribution

The top 100 holders collectively own 96.94% (2,908,195,364.19 Tokens) of Wootrade Network

Token Total Supply: 3,000,000,000.00 Token | Total Token Holders: 13,763



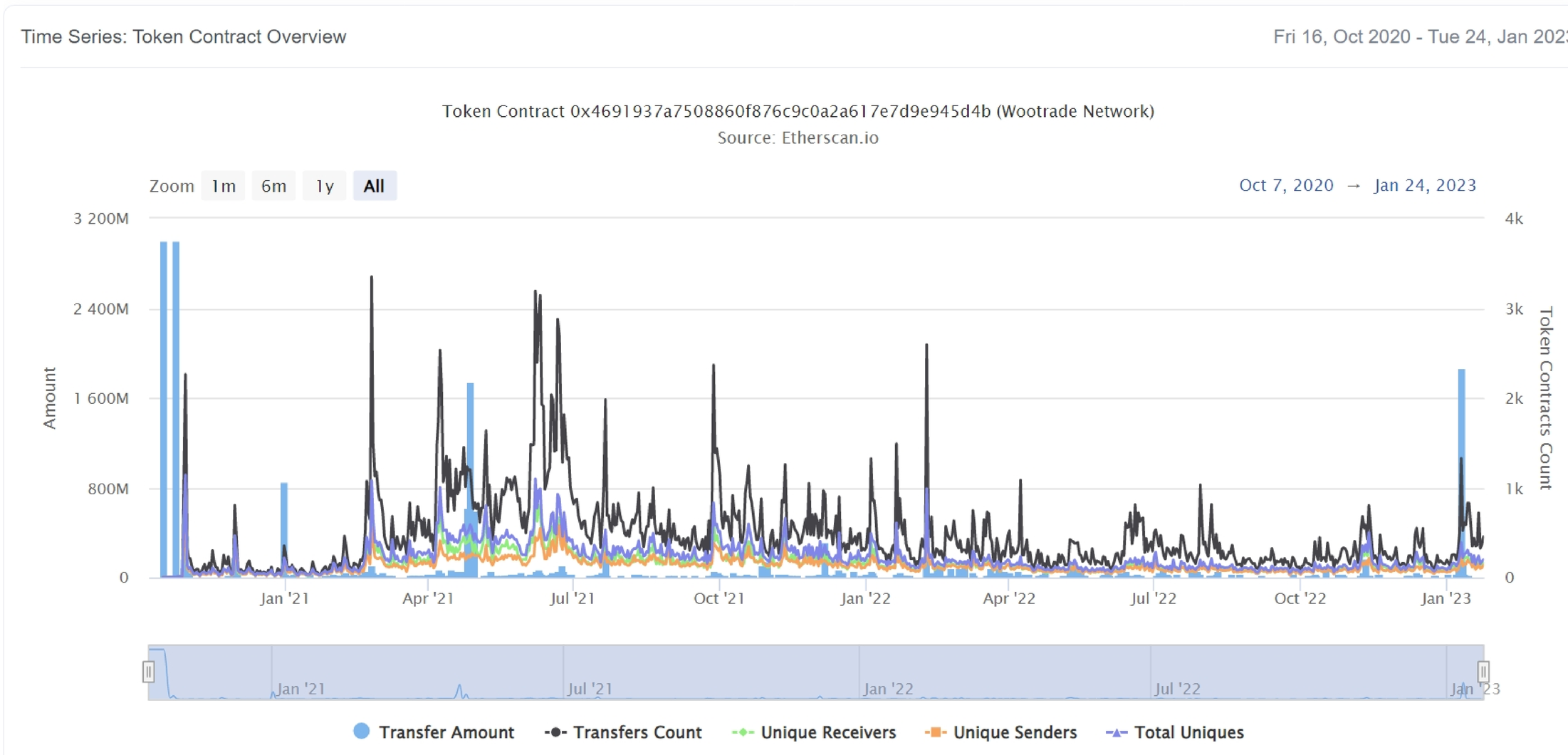
Wootrade Network Token Top 20 Token Holders

(A total of 2,908,195,364.19 tokens held by the top 100 accounts from the total supply of 3,000,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	Null Address: 0x000...000	749,274,177.16308554	24.9758%
2	WOO Network: Ecosystem Rewards Vesting	546,203,117.25641054360812425	18.2068%
3	WOO Network: Series A Vesting	306,043,690.884067970564232198	10.2015%
4	Woo Network: Future Team and Investors	305,556,200.175846478096452502	10.1852%
5	WOO Network: BSC Bridge	163,588,396.91	5.4529%
6	Wootrade Network: Ecosystem Rewards	120,000,000.40453489699187575	4.0000%
7	Binance 8	100,196,198.694	3.3399%
8	WOO Network: WOO X Cold Wallet	100,000,000	3.3333%
9	Avalanche: Bridge	63,753,472.789422541268252642	2.1251%
10	0x63dfe4e34a3bfc00eb0220786238a7c6cef8ffc4	58,040,916.876301	1.9347%
11	Wootrade Network: Liquidity Token Vault	51,062,967.83386805	1.7021%
12	0xea319fd75766f5180018f8e760f51c3d3c457496	42,675,774.40494255	1.4225%
13	Polygon (Matic): ERC20 Bridge	30,625,346.888182178834272127	1.0208%
14	OKX	19,398,629.439909567981140679	0.6466%
15	KuCoin 6	19,200,000	0.6400%
16	0x37c02192d0ca4c12dd7ac4d9b7e568a2aac27c9e	17,475,752.994938679700696824	0.5825%
17	Arbitrum One: L1 ERC20 Gateway	16,989,587.369526665838250369	0.5663%
18	0x0b631b2c0406e9712ee1b6fb377644ebdbf87144	13,224,293.98370399	0.4408%
19	0x588f50fb15e5edb6ae6fd27add4cffdb0fb39275	10,409,950.94677627	0.3470%
20	Uniswap V2: WOO 18	10,252,086.091747901478261083	0.3417%

Wootrade Network Token Distribution

Wootrade Network Contract Overview



Contract functions details

+Token
    -[Pub] balanceOf
    -[Pub] transfer #
    -[Pub] transferFrom #
    -[Pub] approve #
    -[Pub] allowance

+StandardToken (Token)
    -[Pub] transfer #
    -[Pub] transferFrom #
    -[Pub] balanceOf
    -[Pub] approve #
    -[Pub] allowance

+WootradeNetwork (StandardToken)
    -WootradeNetwork #
    -[Pub] approveAndCall #

($) = payable function
= non-constant function

Issues Checking Status

No.	Title	Status
1.	Compiler error	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 issue found.

- **Medium Severity Issues**

  No medium severity issue found.

- **Low Severity Issues**

  One low severity issue found.

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.