HackSafe

Smart Contract Security Audit Report

STARLINK

February 2023

Security Status

★ ★ ★ ★ ★

www.hacksafe.io

Audit Details

Audited project
STARLINK

Deployer address
0xa221af4a429b734abb1cc53fbd0c1d0fa47e1494

Client contacts
STARLINK Team

Blockchain
Ethereum

Website
https://www.starlproject.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 STARLINK to perform an audit of smart contracts:

- https://etherscan.io/token/0x8e6cd950ad6ba651f6dd608dc70e5886b1aa6b24#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 03.02.2023

Token Type	: Gaming
Contract name	: StarLink
Contract address	: 0x8E6cd950Ad6ba651F6DD608Dc70e5886B1AA6B24
Total supply	: 10,000,000,000,000
Token ticker	: STARL
Decimals	: 18
Token Holders	: 35,344
Transactions count	: 301,531
Compiler version	: v0.8.4+commit.c7e474f2
Contract deployer address	: 0xa221af4a429b734abb1cc53fbd0c1d0fa47e1494
Owner address	: No owner

Social profiles

Twitter Profile	: https://twitter.com/starlinketh
Github Profile	: https://github.com/StarlinkMeta
Telegram profile	: https://t.me/starlinkofficial
Coinmarketcap profile	: https://coinmarketcap.com/currencies/star-link/
Coingecko Profile	: https://www.coingecko.com/en/coins/starlink/

Audit Summary

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

Insecure	Poor secured	Secure	Well-secured

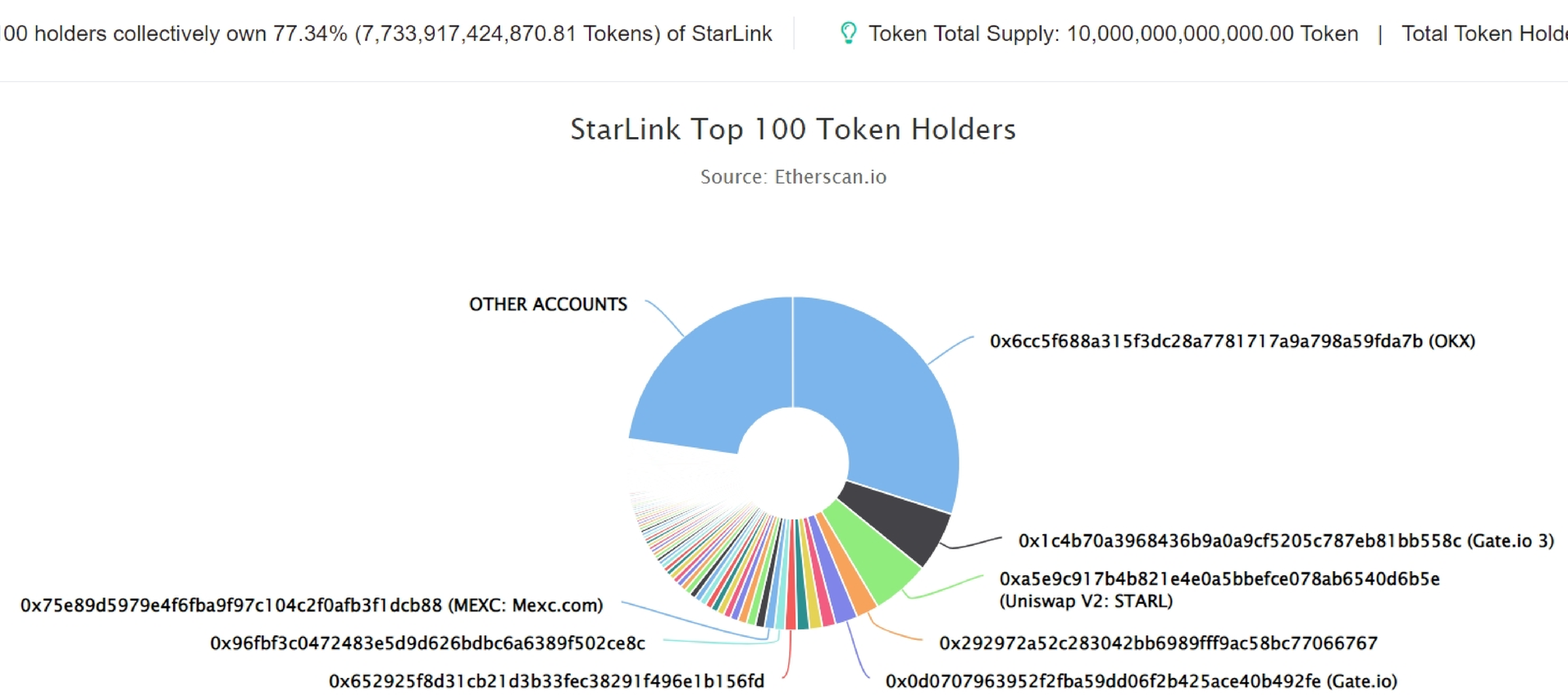
You are here 

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 0 low.

STARLINK Token Distribution

The top 100 holders collectively own 77.34% (7,733,917,424,870.81 Tokens) of StarLink | Token Total Supply: 10,000,000,000,000.00 Token | Total Token Holders: 35,346



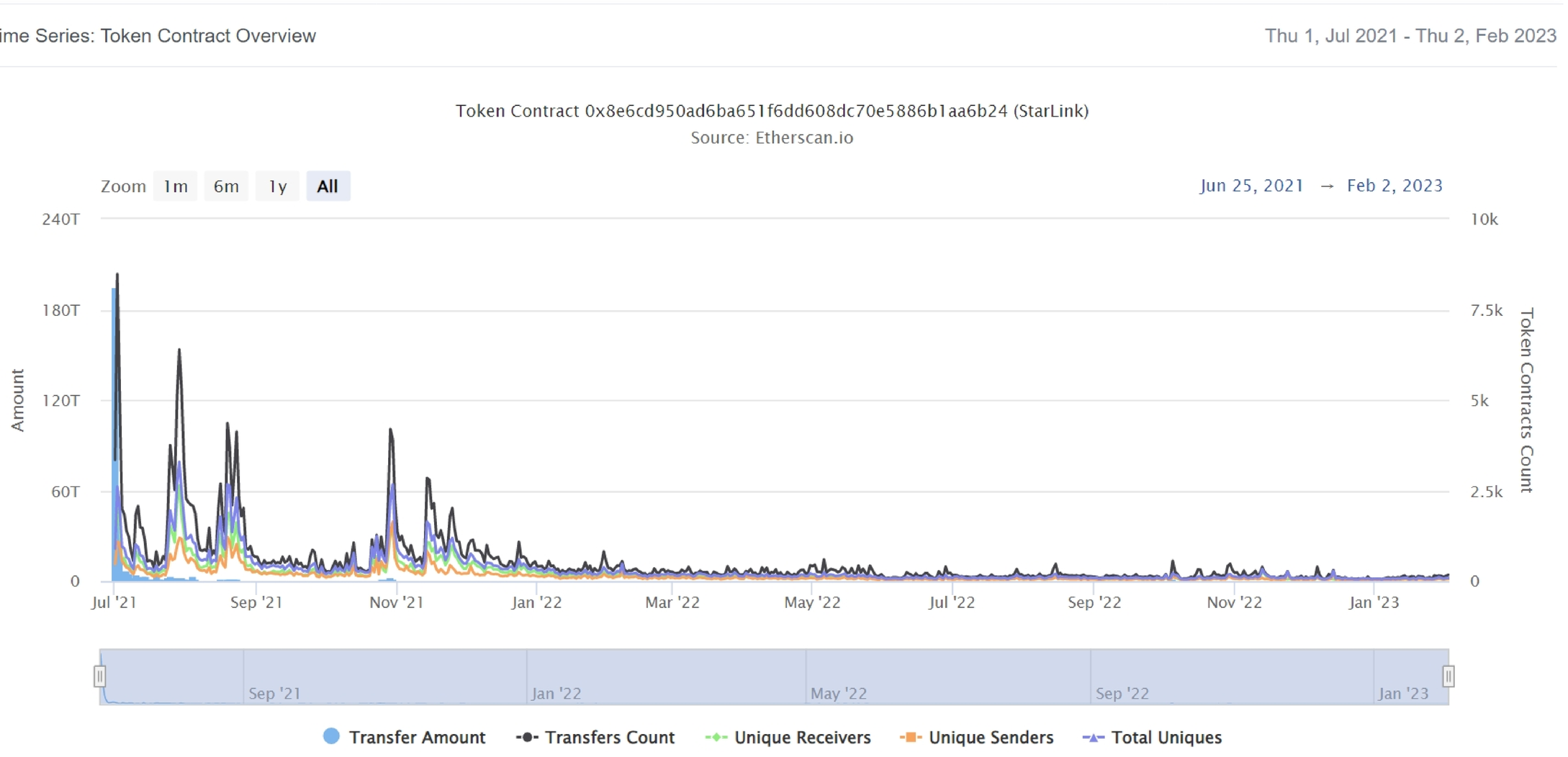
STARLINK Top 20 Token Holders

(A total of 7,733,917,424,870.81 tokens held by the top 100 accounts from the total supply of 10,000,000,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	OKX	2,995,696,444,030.066485533122147116	29.9570%
2	Gate.io 3	589,205,192,143.703097743549255857	5.8921%
3	Uniswap V2: STARL	563,602,759,345.986881859970765181	5.6360%
4	0x292972a52c283042bb6989fff9ac58bc77066767	219,199,252,291.971	2.1920%
5	Gate.io	218,985,896,435.383637560502611782	2.1899%
6	0x1b5b8260b981c9b4173847b651c4d49a3d589109	130,487,413,639.022997553437165322	1.3049%
7	0x6f9354a812dbb021eb835cddabef52fbc66ae5c7	123,456,789,100	1.2346%
8	0x37f8d3904749162e0f0a566c8d23ca33c5b7ac07	123,076,103,280.4391894	1.2308%
9	0x652925f8d31cb21d3b33fec38291f496e1b156fd	115,531,522,008.132042491121258256	1.1553%
10	0x96fbf3c0472483e5d9d626bdbc6a6389f502ce8c	100,000,000,000	1.0000%
11	MEXC: Mexc.com	96,946,613,937.400247930607262827	0.9695%
12	Hotbit 3	88,422,383,006.024630111524951464	0.8842%
13	0x6f1568c9a1be923664bb79417e7005e4131db8cf	88,000,000,000	0.8800%
14	0xa45f54bb32feb94e5a7cf7df0e6473a69f5f0376	85,888,810,048.318004623910219247	0.8589%
15	0xf5e3a29f68e839681f5f70f4927bff50211d61da	77,229,399,009.436749088208475658	0.7723%
16	0xc6bfbd4297efd99fa63c2a22346f321a1b87b42f	70,941,387,786.12262900493319084	0.7094%
17	0x9cb0c9c7d6dd4753b15c6630c7a4a92450b86ef1	67,184,694,058.024726958825237237	0.6718%
18	0x1fc12782aa600efbc01999490b7f4c16c5656c35	65,299,573,465.266435523143817281	0.6530%
19	MEXC: Mexc.com 2	62,486,498,867.155076483799351873	0.6249%
20	0x187e3534f461d7c59a7d6899a983a5305b48f93f	61,826,569,838.94031256	0.6183%

STARLINK Token Distribution

STARLINK Contract overview



Contract functions details

+Context
    -[Int] _msgSender
    -[Int] _msgData

+ERC20 (Context, IERC20, IERC20Metadata)
    -<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] _beforeTokenTransfer #

+StarLink (ERC20)
    -<constructor> #
    -[Pub] decimals

($) = 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	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 issue found.
- **Low Severity Issues**
  No low severity issue found.

Conclusion

Smart contract contains no medium 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.