



Smart Contract Security Audit Report

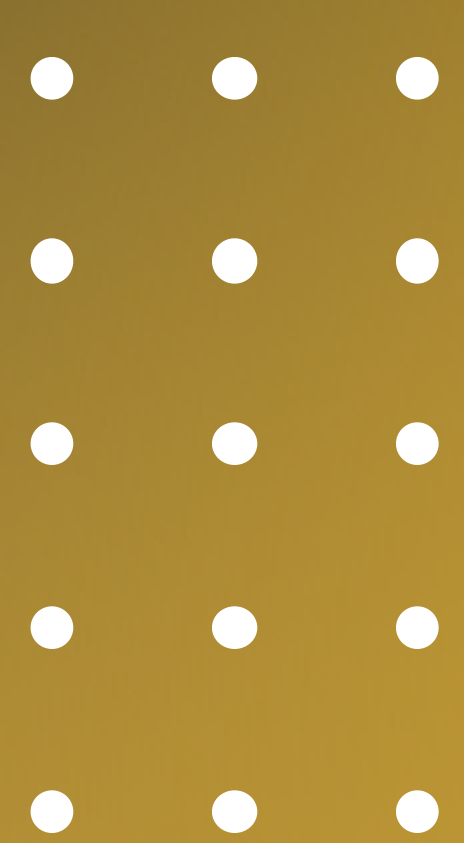
AiLink Token

October 2022

Security Status



www.hacksafe.io



Audit Details



Audited project

AiLink Token



Deployer address

0xcF279D0fE095cd97C846d8BAef27fa5b4B6c10da



Client contacts

AiLink Token Team



Blockchain

Ethereum



Website

<http://ailink.in/pc.html>

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 AiLink Token to perform an audit of smart contracts:

- <https://etherscan.io/token/0x4289c043a12392f1027307fb58272d8ebd853912#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 understood to 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 20.10.2022

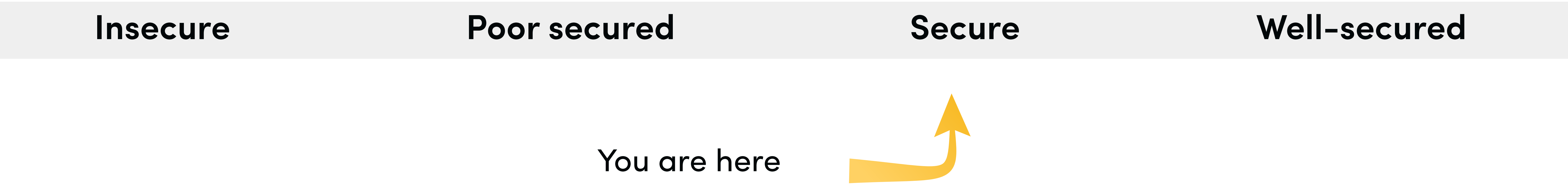
Token Type	: ERC20
Contract name	: TokenERC20
Contract address	: 0x4289c043A12392F1027307fB58272D8EBd853912
Total supply	: 10,000,000,000
Token ticker	: ALI
Decimals	: 18
Token holders	: 13,743
Transactions count	: 56,152
Compiler version	: v0.4.16+commit.d7661dd9
Contract deployer address	: 0xcF279D0fE095cd97C846d8BAef27fa5b4B6c10da
Owner address	: No owner

Social profiles

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

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 as owner does not have control over smart contract.



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 2 low and some very low-level issues.

AiLink Token Distribution

 The top 100 holders collectively own 98.61% (9,860,797,489.19 Tokens) of AiLink Token

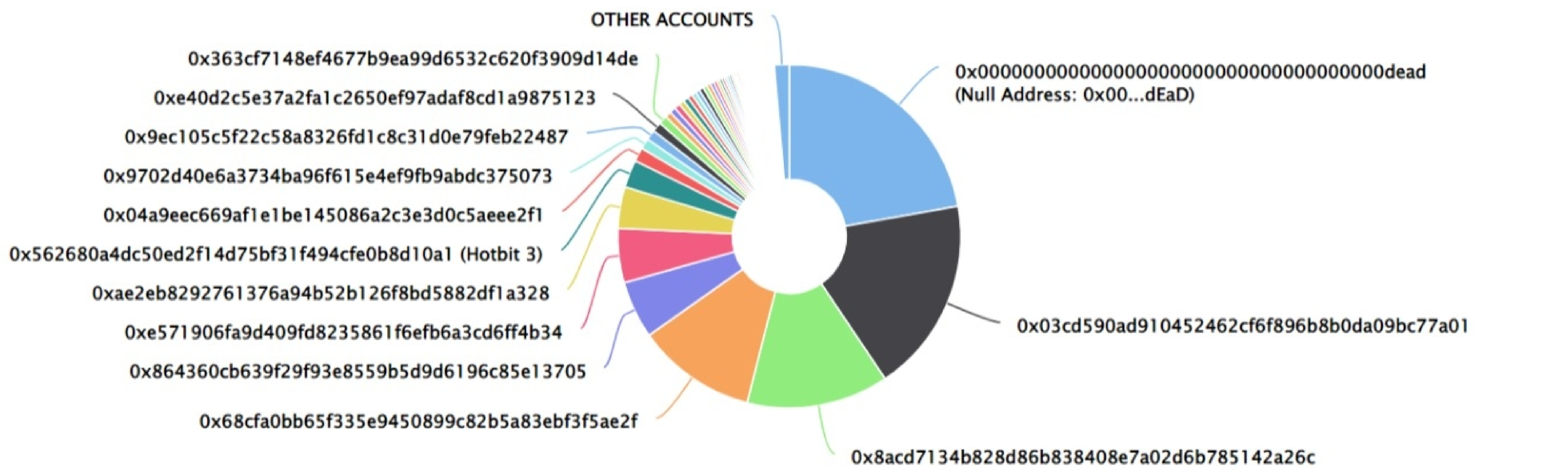
 Token Total Supply: 10,000,000,000.00 Token

|

Total Token Holders: 13,743

AiLink Token Top 100 Token Holders

Source: Etherscan.io



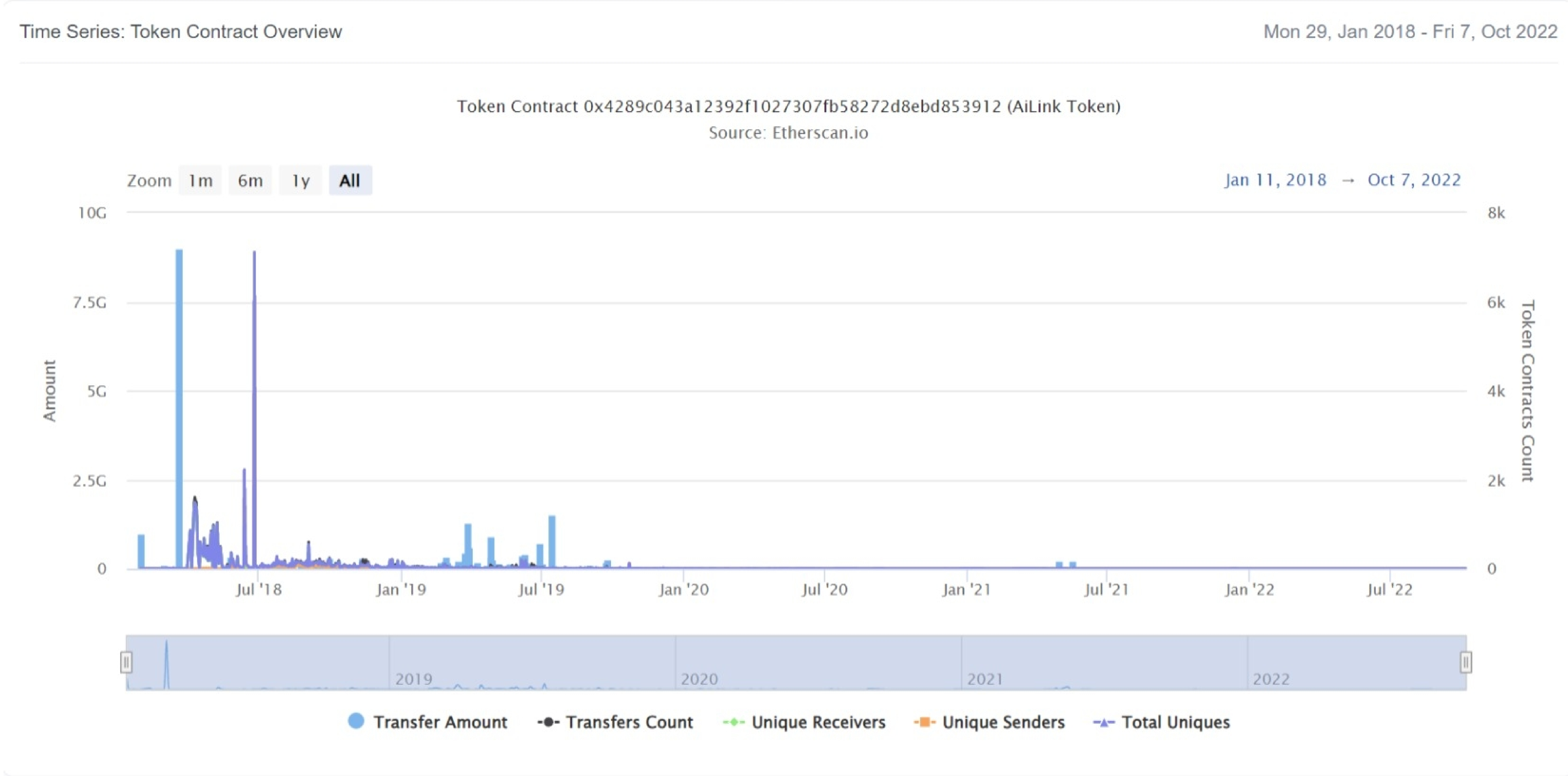
AiLink token 20 Token Holders

(A total of 9,860,797,489.19 tokens held by the top 100 accounts from the total supply of 10,000,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	Null Address: 0x00...dEaD	2,219,218,200	22.1922%
2	0x03cd590ad910452462cf6f896b8b0da09bc77a01	1,836,750,000	18.3675%
3	0x8acd7134b828d86b838408e7a02d6b785142a26c	1,340,670,000	13.4067%
4	0x68cfa0bb65f335e9450899c82b5a83ebf3f5ae2f	1,126,822,658	11.2682%
5	0x864360cb639f29f93e8559b5d9d6196c85e13705	540,475,086.993632589976849408	5.4048%
6	0xe571906fa9d409fd8235861f6efb6a3cd6ff4b34	511,736,815.152788	5.1174%
7	0xae2eb8292761376a94b52b126f8bd5882df1a328	389,067,800.3248	3.8907%
8	Hotbit 3	260,085,164.855072583120889454	2.6009%
9	0x04a9eec669af1e1be145086a2c3e3d0c5ae2f1	129,999,400	1.3000%
10	0x9702d40e6a3734ba96f615e4ef9b9abdc375073	100,000,000	1.0000%
11	0x9ec105c5f22c58a8326fd1c8c31d0e79feb22487	97,999,000	0.9800%
12	0xe40d2c5e37a2fa1c2650ef97adaf8cd1a9875123	89,000,000	0.8900%
13	0x363cf7148ef4677b9ea99d6532c620f3909d14de	80,580,818.18	0.8058%
14	0x67c3e8ed1b625de4217848dc82b6494526c02385	59,881,660.387499999975440384	0.5988%
15	0x45f7dd6a4d7c604414d6465b11833604eb8428e1	56,982,595	0.5698%
16	Hotbit 2	55,427,796.8599999998918918144	0.5543%
17	0xd5b26e4ad2881d9cd4eba816f96bdbd6220ca639	50,000,000	0.5000%
18	0x04c2b6ef58a33ce61ab1b83119972a8c6e0b994f	50,000,000	0.5000%
19	0x116446a749573b330f6b8e3ace0f4d23dcbc5622	44,397,061	0.4440%
20	0x45b3b873dcf4853b5d683e6f18c0a2ce40ad3a25	44,040,816.03	0.4404%

AiLink Token Distribution

AiLink Token Contract Overview



Contract functions details

+ tokenRecipient

-[Pub] receiveApproval

+ TokenERC20

-[Pub] TokenERC20

-[Int] _transfer #

-[Pub] transfer #

-[Pub] transferFrom #

-[Pub] approve #

-[Pub] approveAndCall #

-[Pub] burn #

-[Pub] burnFrom #

(\$) = 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.	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

Two 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.

2.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 0.4.16 the contract should contain the following line:

```
pragma solidity 0.4.16;
```


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.