



Smart Contract Security Audit Report

FUTURAX

September 2022

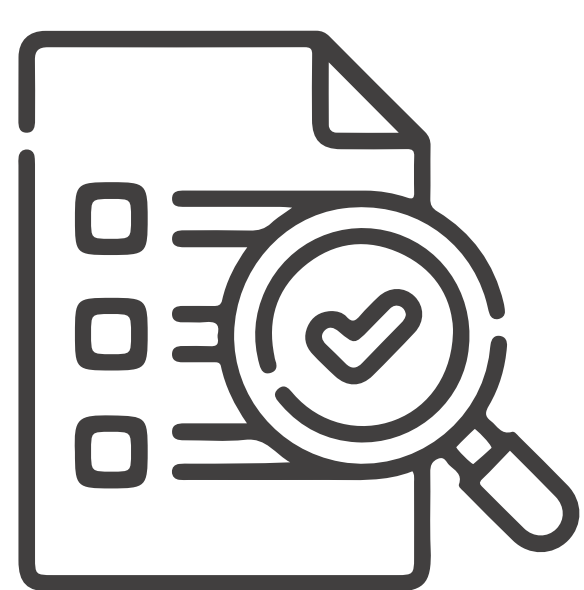
Security Status



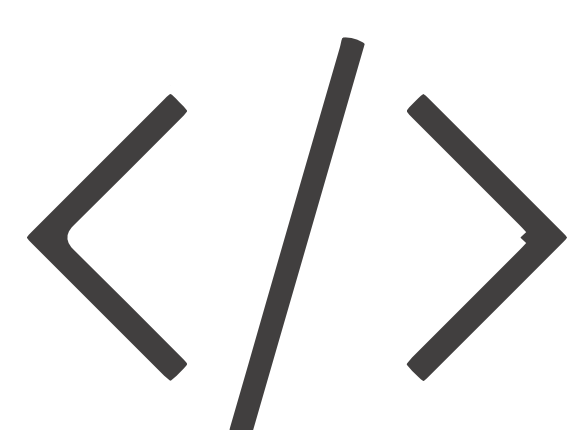
www.hacksafe.io



Audit Details



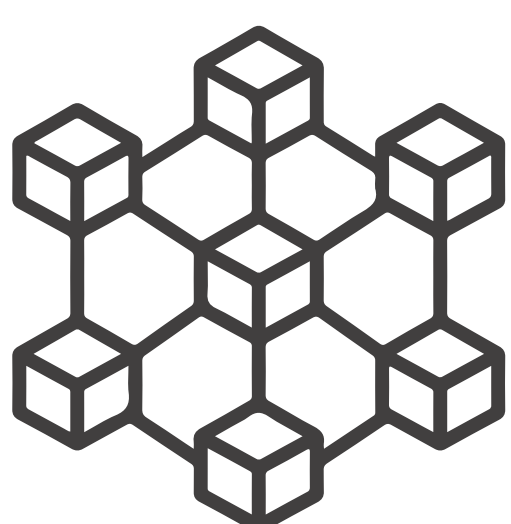
Audited project
FUTURAX



Deployer address
0x3f09b3f31c61dff4C803d77A39637FfbF00C06C1



Client contacts
FUTURAX Team



Blockchain
Ethereum



Website
Not provided

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 FUTURAX to perform an audit of smart contract:

- <https://etherscan.io/token/0x41875c2332b0877cdfaa699b641402b7d4642c32#code>

The purpose of the audit was to achieve the

- 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 20.09.2022

Token Type	: ERC20
Contract name	: FUTURAX
Contract address	: 0x41875C2332B0877cDFAA699B641402b7D4642c32
Compiler version	: v0.4.24+commit.e67f0147
Total supply	: 7,074,331,991
Token ticker	: FTXT
Decimals	: 8
Token holders	: 3,646
Transactions count	: 19,259
Contract deployer address	: 0x3f09b3f31c61dff4C803d77A39637FfbF00C06C1
Owner address	: 0x3f09b3f31c61dff4C803d77A39637FfbF00C06C1

Social profiles

Telegram profile	: https://t.me/futurax_info
Coingecko profile	: https://www.coingecko.com/en/coins/futurax/
Coinmarketcap profile	: https://coinmarketcap.com/currencies/futurax/

Claimed Smart Contract Features

Claimed Feature Detail

Tokenomics :

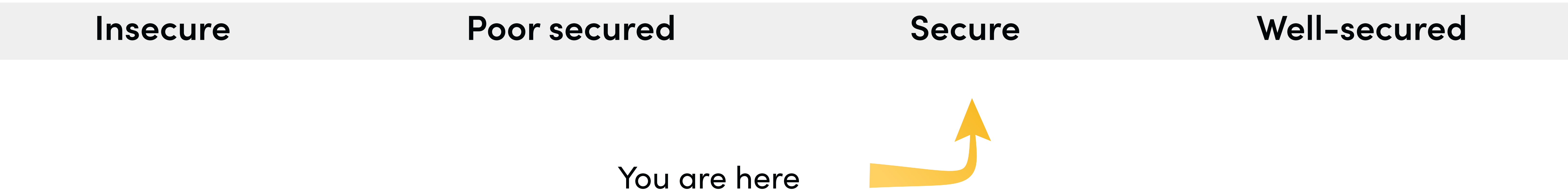
- Name : FUTURAX
- Symbol : FTXT
- Decimals : 8
- Protocol : ERC20
- Total supply : 7,074,331,991
- Contract address : 0x41875C2332B0877cDFAA699B641402b7D4642c32

Our Observation

YES, this is valid.

Audit Summary

According to the standard audit assessment, Customer`s solidity smart contracts are “secure”. This token contract does contain owner control, which do not make it fully decentralized as owner does 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, 1 medium and 2 low and some very low-level issues.

FUTURAX Token Distribution

 The top 100 holders collectively own 97.45% (6,894,219,581.67 Tokens) of FUTURAX

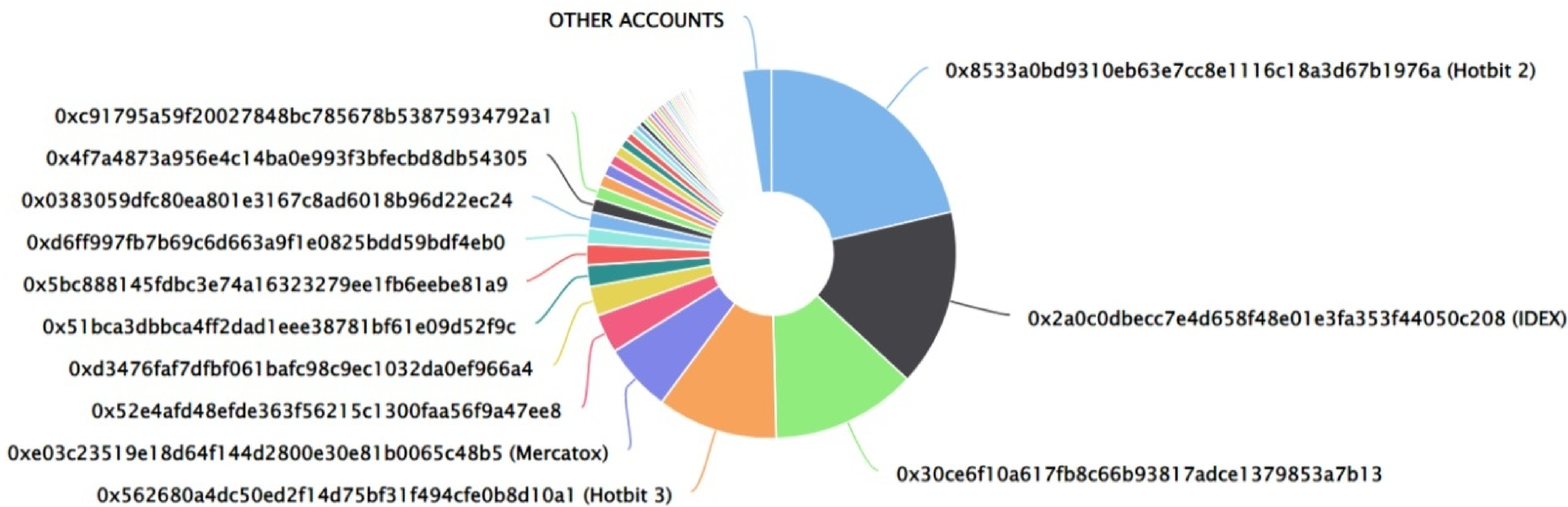
 Token Total Supply: 7,074,331,991.00 Token

|

Total Token Holders: 3,646


FUTURAX Top 100 Token Holders

Source: Etherscan.io



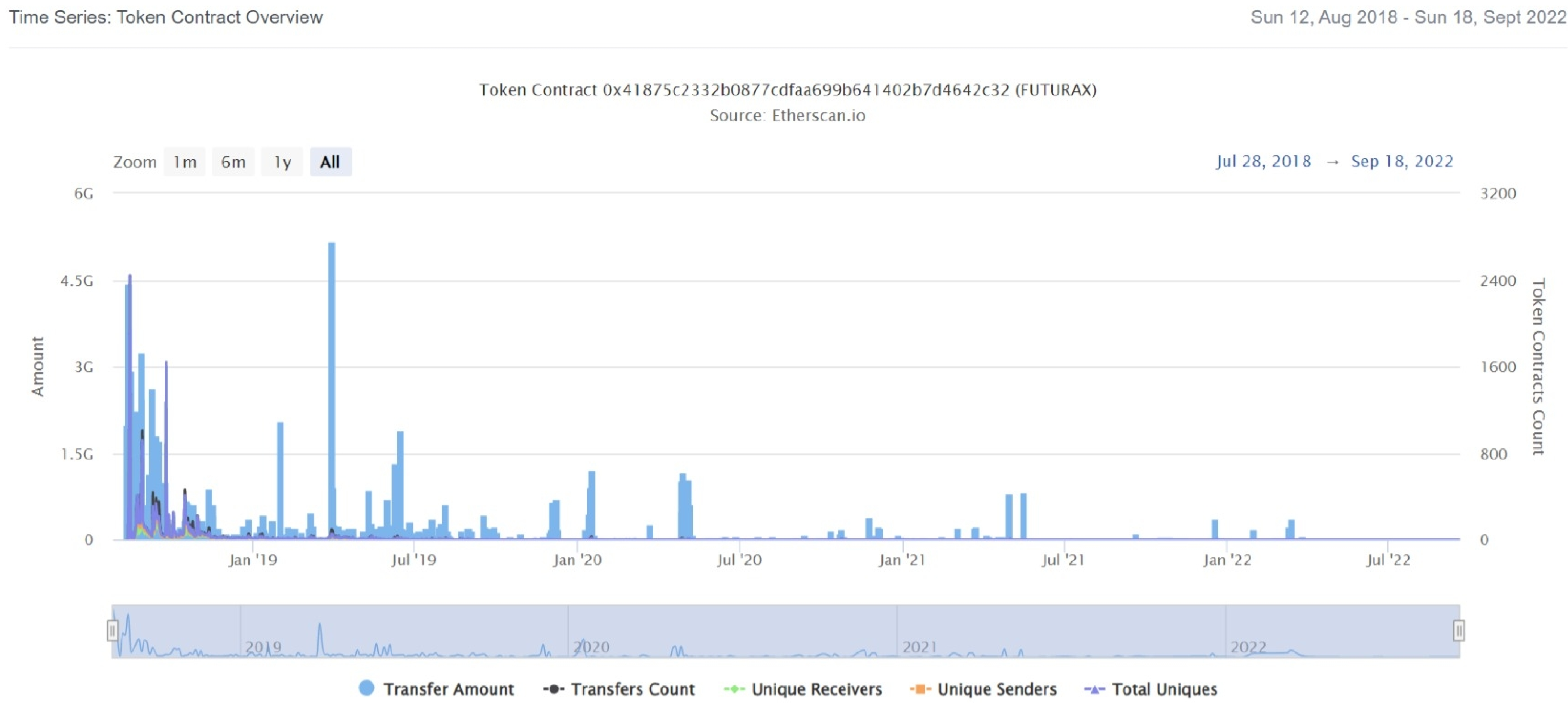
FUTURAX Top 20 Token Holders

(A total of 6,894,219,581.67 tokens held by the top 100 accounts from the total supply of 7,074,331,991.00 token)

Rank	Address	Quantity (Token)	Percentage
1	Hotbit 2	1,513,349,401	21.3921%
2	 IDEX	1,095,876,388.877773	15.4909%
3	0x30ce6f10a617fb8c66b93817adce1379853a7b13	899,828,814.793792	12.7196%
4	Hotbit 3	746,859,696.14030904	10.5573%
5	Mercatox	424,063,337.83740348	5.9944%
6	0x52e4afd48efde363f56215c1300faa56f9a47ee8	241,166,673.88661527	3.4090%
7	0xd3476faf7dfbf061bafc98c9ec1032da0ef966a4	181,187,847.83305914	2.5612%
8	0x51bca3dbbca4ff2dad1eee38781bf61e09d52f9c	134,133,122.5	1.8961%
9	0x5bc888145fdb3e74a16323279ee1fb6eebe81a9	127,008,108.10573137	1.7953%
10	0xd6ff997fb7b69c6d663a9f1e0825bdd59bdf4eb0	100,249,425.24795982	1.4171%
11	0x0383059dfc80ea801e3167c8ad6018b96d22ec24	99,129,666.1	1.4013%
12	0x4f7a4873a956e4c14ba0e993f3bfecbd8db54305	86,480,279.64308884	1.2225%
13	0xc91795a59f20027848bc785678b53875934792a1	76,771,792	1.0852%
14	0x92cc7904c26ed3da0f6314075650f4d11fa9774d	74,868,000	1.0583%
15	0x1f38ebcffb0be993b981225a917aaa8a6d6a4e52	72,344,389.46283028	1.0226%
16	0xed394172ddc02f8163ba7ac932670c3050b7b9ee	65,834,315	0.9306%
17	0x74c23e0def46ef610b25f9fc5f1170dbb4c3a89b	63,000,000.04477598	0.8905%
18	0xce45cccbe47af2c8ff65c0974786520d708ff822	54,150,659	0.7655%
19	0xa7d6a1af7aee7ab7ec71a9fedba47342ed39be91	49,587,000	0.7009%
20	0xfe16bd29b66a42396bd9c0ac145dc70522d8238f	37,900,000	0.5357%

FUTURAX Token Distribution

FUTURAX Contract Overview



Contract functions details

+ SafeMath

- [Int] mul
- [Int] div
- [Int] sub
- [Int] add

+ForeignToken

- [Pub] balanceOf
- [Pub] transfer

+ERC20Basic

- [Pub] balanceOf
- [Pub] transfer

+ERC20 (ERC20Basic)

- [Pub] allowance
- [Pub] transferFrom
- [Pub] approve

+FUTURAX (ERC20)

- [Pub] FUTURAX
- [Pub] transferOwnership #
 - modifiers: onlyOwner
- [Pub] finishDistribution #
 - modifiers: onlyOwner, canDistr
- [Pvt] distr #
 - modifiers: canDistr
- [Int] doAirdrop
- [Pub] adminClaimAirdrop #
 - modifiers: onlyOwner
- [Pub] adminClaimAirdropMultiple #
 - modifiers: onlyOwner
- [Pub] updateTokensPerEth #
 - modifiers: onlyOwner
- [Pub] getTokens \$
 - modifiers: canDistr
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] transferFrom #

Contract functions details

- [Pub] approve #
- [Pub] allowance
- [Pub] getTokenBalance
- [Pub] withdraw #
 - modifiers: onlyOwner
- [Pub] burn #
 - modifiers: onlyOwner
- [Pub] withdrawForeignTokens #
 - modifiers: onlyOwner

(\$) = 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.	Medium issue
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

One medium severity issues found.

1. Out of gas limit.

- **Description**

The smart contract have functions which has used for loopsadminClaimAirdropMultiple. The parameters of these function are array of addresses and unit. Large length of array can cause a error of out of gas for these two functions.

- **Recommendation**

It is advisable to either remove for loop or use smaller length of array to avoid the gas limit error.

✔ Low Severity Issues

Two low severity issue found.

1. Too old compiler version.

- **Description**

Contract has been deployed using too old compiler version.

- **Recommendation**

It is advisable that the compiler version of solidity should be among the new compiler versions.

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.

Security Issues

- **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 ^0.4.18 the contract should contain the following line:

```
pragma solidity 0.4.24;
```

Centralization

Owner Privileges :

- FUTURAX Contract:
 - Owner can burn and withdraw.
 - Owner can claim airdrop.
 - Owner can transfer ownership.
 - Owner can finish distribution of tokens.

This smart contract has some functions which can be executed by the owner (Admin) only. If the admin wallet private key would be compromised, it would create trouble as smart contract ownership has not been renounced. Following are the only admin functions:

- Transferownership
- Finishdistribution
- Adminclaimairdrop
- Adminclaimairdropmultiple
- Updatetokenspereth
- Withdraw
- Burn
- Withdrawforeigntokens

Conclusion

Smart contract contains low and 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.