



# Smart Contract Security Audit Report

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## UBEX Token

January 2023

Security Status



[www.hacksafe.io](http://www.hacksafe.io)



# Audit Details



## Audited project

UBEX Token



## Deployer address

0x474e028b9710bef801d3a0ba3c282e729c0e3591



## Client contacts

UBEX Token



## 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 UBEX Token to perform an audit of smart contracts:

- <https://etherscan.io/token/0x6704b673c70de9bf74c8fba4b4bd748f0e2190e1#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

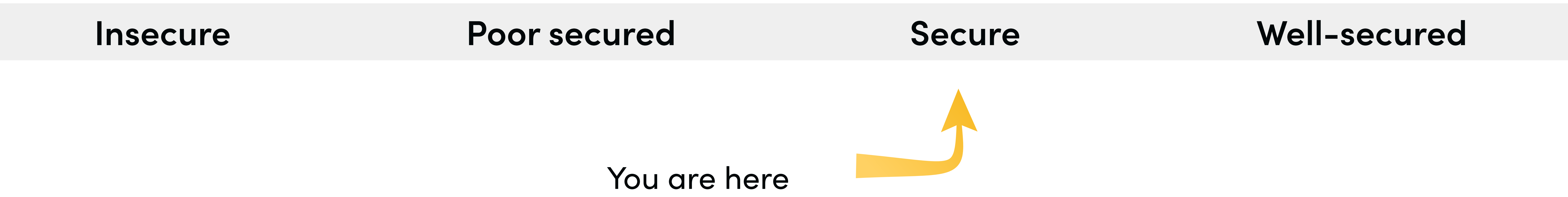
## Token contract details for 10.01.2023

Token Type	: DEFI
Contract name	: UbexToken
Contract address	: 0x6704B673c70dE9bF74C8fBa4b4bd748F0e2190E1
Total supply	: 3,923,877,491.5182999999984176086
Token ticker	: UBEX
Decimals	: 18
Token Holders	: 15,373
Transactions count	: 66,238
Compiler version	: v0.4.23+commit.124ca40d
Contract deployer address	: 0x474e028b9710bef801d3a0ba3c282e729c0e3591
Owner address	: 0x474e028b9710bef801D3a0bA3c282e729C0e3591



# 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.



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.

# UBEX Token Distribution

 The top 100 holders collectively own 60.63% (2,379,227,790.45 Tokens) of UBEX Token

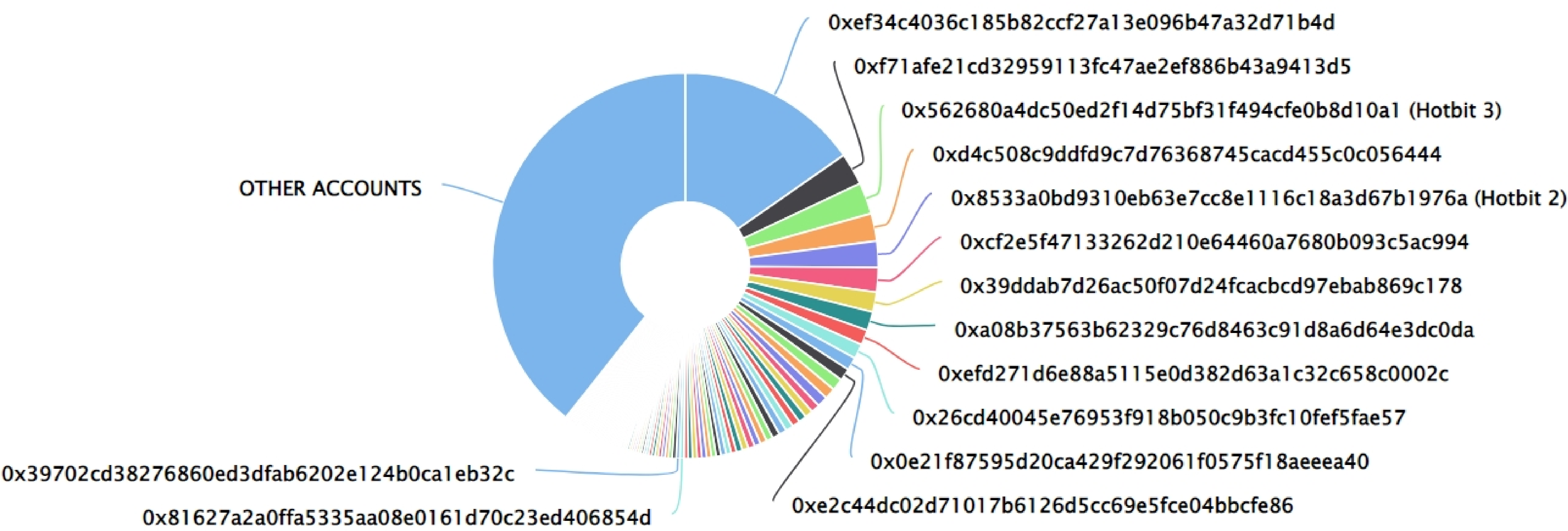
 Token Total Supply: 3,923,877,491.52 Token

|

Total Token Holders: 15,373


UBEX Token Top 100 Token Holders

Source: Etherscan.io



## UBEX Token Top 20 Token Holders

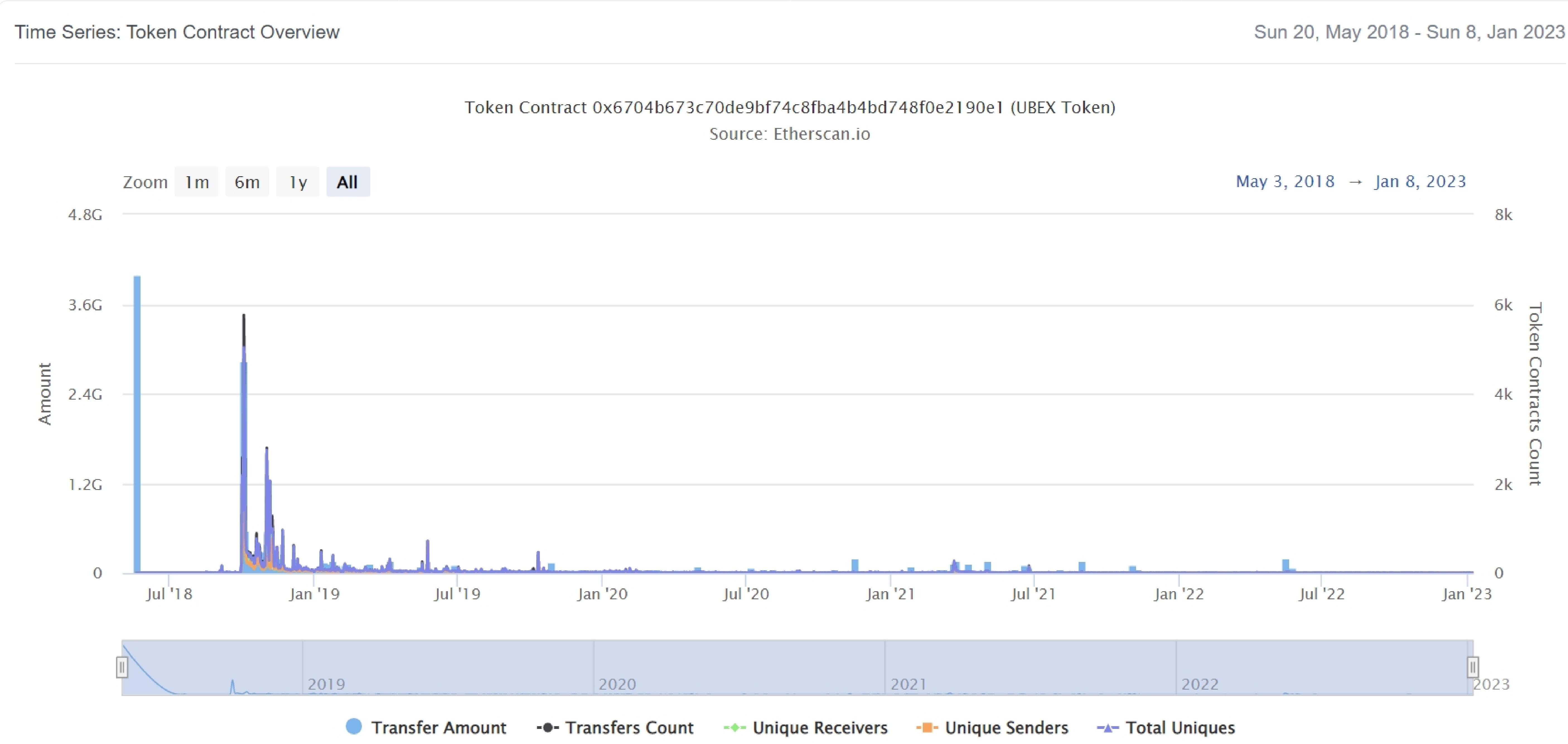
(A total of 2,379,227,790.45 tokens held by the top 100 accounts from the total supply of 3,923,877,491.52 token)

Rank	Address	Quantity (Token)	Percentage
1	0xef34c4036c185b82ccf27a13e096b47a32d71b4d	600,000,000.21095479	15.2910%
2	0xf71afe21cd32959113fc47ae2ef886b43a9413d5	106,162,840.294155307147937965	2.7056%
3	Hotbit 3	103,897,181.614708759352085801	2.6478%
4	0xd4c508c9ddfd9c7d76368745cacd455c0c056444	90,340,748.5891309743721738	2.3023%
5	Hotbit 2	86,475,746.3	2.2038%
6	0xcf2e5f47133262d210e64460a7680b093c5ac994	80,011,100	2.0391%
7	0x39ddab7d26ac50f07d24fcacbcd97ebab869c178	66,012,010.700713	1.6823%
8	0xa08b37563b62329c76d8463c91d8a6d64e3dc0da	61,403,300	1.5649%
9	0xefd271d6e88a5115e0d382d63a1c32c658c0002c	50,014,785.8147834	1.2746%
10	0x26cd40045e76953f918b050c9b3fc10fef5fae57	49,183,423.6655660296	1.2534%
11	0x0e21f87595d20ca429f292061f0575f18aeaaa40	41,963,372.34749228	1.0694%
12	0xe2c44dc02d71017b6126d5cc69e5fce04bbcf86	40,244,402.83384039	1.0256%
13	0xf84150a7714c006e7a3395e72c573f7a1cff037d	40,000,000	1.0194%
14	0x126d809698cfb15efd3a64974af43abd986998ab	36,265,118.2754628	0.9242%
15	0xb479f293bde50c6d9aa1cd6fa464a3bb0c72b75a	35,031,844.71118949013744831	0.8928%
16	0xd28e3d9f8c732183b4dacf3175c3df29543a93a8	28,454,544.66022984	0.7252%
17	 UBEX Token	26,476,792.203769331975564156	0.6748%
18	0x4fd26c5c9fc0bb29a5069673c663f8cf7d44bd27	26,003,378.4194993591902	0.6627%
19	0x3523aec646823192c1d254cdbe9772b93c17eaf9	25,940,074.760531806546769807	0.6611%
20	0xe4550ab1412e44e120d5730f844f9bb934d0b20e	25,054,749.52875038	0.6385%



# UBEX Token Distribution

## UBEX Token Contract overview



# Contract functions details

## +ERC20Basic

- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #

## +ERC20 (ERC20Basic)

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

## +DetailedERC20 (ERC20)

- [Pub] DetailedERC20

## +[Lib] SafeMath

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

## +BasicToken (ERC20Basic)

- [Pub] totalSupply
- [Pub] transfer #
- [Pub] balanceOf

## +BurnableToken (BasicToken)

- [Pub] burn #
- [Int] \_burn #

## +StandardToken (ERC20, BasicToken)

- [Pub] transferFrom #
- [Pub] approve #
- [Pub] allowance
- [Pub] increaseApproval #
- [Pub] decreaseApproval #

## +Ownable (Context)

- [Pub] Ownable #
- [Pub] transferOwnership #
- modifiers: onlyOwner

## +Pausable (Ownable)

- [Pub] pause #
- modifiers: onlyOwner, whenNotPaused



# Contract functions details

-[Pub] unpause #

-modifiers: onlyOwner, whenPaused

+PausableToken (StandardToken, Pausable)

-[Pub] transfer #

-modifiers: whenNotPaused

-[Pub] transferFrom #

-modifiers: whenNotPaused

-[Pub] approve #

-modifiers: whenNotPaused

-[Pub] allowance

-modifiers: whenNotPaused

-[Pub] increaseApproval #

-modifiers: whenNotPaused

-[Pub] decreaseApproval #

-modifiers: whenNotPaused

+UbexToken (DetailedERC20, StandardToken, BurnableToken, PausableToken)

-UbexToken #

(\$) = 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.



# Centralization

## Owner Privileges

- UBEX Token Contract:
  - Owner can transfer ownership.
  - Owner can pause/unpause transfers.

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

- transferOwnership
- pause
- unpause

# 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.