



SMART CONTRACT SECURITY AUDIT

Final report

Plan: Simple

ONUS Token

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♦ INTRODUCTION

Rugdog has performed an ONUS project audit for its ONUS Token smart contract. ONUS token is a utility token for the ONUS ecosystem. The token is deployed on Ethereum, BSC, and Kardia.

Name	ONUS Token
Audit date	2022-07-21 - 2022-07-26
Language	Solidity
Network	Ethereum

♦ CONTRACTS CHECKED

Name	Address
ONUSToken.sol	e089f70f3f3805fdc8f60a1a

♦ AUDIT PROCESS

The code was audited by the team according to the following order:

Automated analysis

- ♦ Scanning the project's smart contracts with several publicly available automated Solidity analysis tools
- ♦ Manual confirmation of all the issues found by the tools

Manual audit

- ♦ Thorough manual analysis of smart contracts for security vulnerabilities
- ♦ Smart contracts' logic check

♦ ATTACKS CHECKED

Title	Check result
Unencrypted Private Data On-Chain	✓ passed
Code With No Effects	✓ passed
Message call with hardcoded gas amount	✓ passed
Typographical Error	✓ passed
DoS With Block Gas Limit	✓ passed
Presence of unused variables	✓ passed
Incorrect Inheritance Order	✓ passed
Requirement Violation	✓ passed
Weak Sources of Randomness from Chain Attributes	✓ passed
Shadowing State Variables	✓ passed
Incorrect Constructor Name	✓ passed
Block values as a proxy for time	✓ passed
Authorization through tx.origin	✓ passed
DoS with Failed Call	✓ passed
Delegatecall to Untrusted Callee	✓ passed

Use of Deprecated Solidity Functions	✓ passed
Assert Violation	✓ passed
State Variable Default Visibility	✓ passed
Reentrancy	✓ passed
Unprotected SELFDESTRUCT Instruction	✓ passed
Unprotected Ether Withdrawal	✓ passed
Unchecked Call Return Value	✓ passed
Floating Pragma	✓ passed
Outdated Compiler Version	✓ passed
Integer Overflow and Underflow	✓ passed
Function Default Visibility	✓ passed

◆ OVERVIEW OF RELEVANCE LEVELS

High relevance

Issues of high relevance may lead to losses of users' funds as well as changes of ownership of a contract or possible issues with the logic of the contract.

High-relevance issues require immediate attention and a response from the team.

Medium relevance

While issues of medium relevance don't pose as high a risk as the high-relevance ones do, they can be just as easily exploited by the team or a malicious user, causing a contract failure and damaging the project's reputation in the process. Usually, these issues can be fixed if the contract is redeployed.

Medium-relevance issues require a response from the team.

Low relevance

Issues of low relevance don't pose high risks since they can't cause damage to the functionality of the contract. However, it's still recommended to consider fixing them.

❖ ISSUES

High relevance issues

No high relevance issues found

Medium relevance issues

No medium relevance issues found

Low relevance issues**1. Variable Visibility (ONUSToken.sol)**

The masterWallet variable should be declared as constant. This state variable is not supposed to ever be changed.

Recommendation: We recommend declaring the masterWallet variable as constant.

2. Function Visibility (ONUSToken.sol)

Public functions `ONUSToken.pause()` and `ONUSToken.unpause()` can be declared as external to save gas. They are not called by the contract.

Recommendation: We recommend declaring the functions `ONUSToken.pause()` and

ONUSToken.unpause(){} as external.

3. Redundant code (ONUSToken.sol)

Functions grantRole and revokeRole are supposed to grant and revoke roles for addresses. They can be called from an adminRole account, but no account has this role or is able to receive it according to the constructor. These functions can't be called by any address. Their removal can reduce gas costs.

Recommendation: We recommend removing the redundant functions and all events related to them.

✦ CONCLUSION

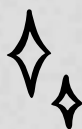
ONUS Token ONUSToken.sol contract was audited. 3 low relevance issues were found.

❖ **DISCLAIMER**


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