



Title

Blockchain Security

Smart Contract Final Audit Report

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1. Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice 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 disclaimer below - please make sure to read it in full.

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2. Overview

KaizenGlobal was commissioned by the BLU Token team to perform an audit of their smart contract. The audit was conducted between 31/05/2023 and 01/06/2023.

The purpose of this audit was to achieve the following:

- Identify potential security issues with smart contracts
- Formally check the logic behind given smart contracts.

Information in this report should be used for understanding the risk exposure of smart contracts, and as a guide to improving the security posture of smart contracts by remediating the issues that were identified.

The code is available at Binanace Smart Chain:

BLU Token 0x6B7c184fE5D316D9a26E3C5dE5a2c91b4EE03022.

2.1 Summary

Project name

BLU

Platform

Binanace Smart Chain

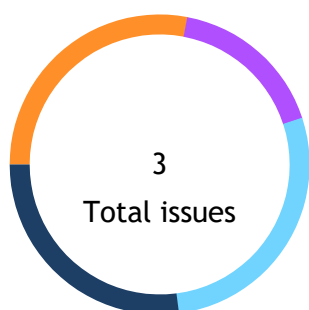
Language

Solidity

2.2 Contracts

Name	Address
ERC20BSC.sol	0x6B7c184fE5D316D9a26E3C5dE5a2c91b4EE03022

3. Found issues



● High	0 (0%)
● Medium	0 (0%)
● Low	3 (100%)
● Info	0 (0%)

C1. ERC20BSC.sol

ID	Severity	Title	Status
C1-03	● Low	Fixed Compiler Version	☑ Acknowledged
C1-04	● Low	Ownership Issue	☑ Acknowledged
C1-05	● Low	withdrawERC20FromContract checks	☑ Acknowledged

4. Contracts

C1. ERC20BSC.sol

Overview

This token is using basic implementation of the OpenZeppelin ERC20 and Ownable standard. It's also using OpenZeppelin SafeErc20 interface to transfer other token's that are transferred to this contract address.

Issues

C1-01 Issue# 1 ● Low Acknowledged

Fixed Compiler Version

Recommendation

It's preferred you should use a fixed

Compiler Version Example:

Current: `pragma solidity ^0.8.17;`

Updated: `pragma solidity 0.8.17;`

C1-02 Issue# 2 ● Low Acknowledged

Ownership issue

Recommendation

If you are deploying the contract yourself it would be better you don't pass the owner in the constructor. If you don't pass it deployer will be the owner.

C1-03 Issue# 3 ● Low Acknowledged

withdrawERC20FromContract checks

Recommendation

In the withdrawERC20FromContract function there should be a check that `_to` address can't be address zero and `_amount` transfer shouldn't be zero

Conclusion

The reviewed contract doesn't have any major issues.

Appendix A. Issues' severity classification

- **Critical.** Issues that may cause an unlimited loss of funds or entirely break the contract workflow. Malicious code (including malicious modification of libraries) is also treated as a critical severity issue. These issues must be fixed before deployments or fixed in already running projects as soon as possible.
- **High.** Issues that may lead to a limited loss of funds, break interaction with users, or other contracts under specific conditions. Also, issues in a smart contract, that allow a privileged account the ability to steal or block other users' funds.
- **Medium.** Issues that do not lead to a loss of funds directly, but break the contract logic. May lead to failures in contracts operation.
- **Low.** Issues that are of a non-optimal code character, for instance, gas optimization tips, unused variables, errors in messages.
- **Informational.** Issues that do not impact the contract operation. Usually, informational severity issues are related to code best practices, e.g. style guide.

Appendix B. List of examined issue types

- Business logic overview
- Functionality checks
- Following best practices
- Access control and authorization
- Reentrancy attacks
- Front-run attacks
- DoS with (unexpected) revert
- DoS with block gas limit
- Transaction-ordering dependence
- ERC/BEP and other standards violation
- Unchecked math
- Implicit visibility levels
- Excessive gas usage
- Timestamp dependence
- Forcibly sending ether to a contract
- Weak sources of randomness
- Shadowing state variables
- Usage of deprecated code



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