

Audit Report **BullBuck\$**

July 2023

Network GOERLI ETH

Address 0x452ad37B61BE1C247871cF0932e62e9dBeFC7Bb5

Audited by © cyberscope



Analysis

CriticalMediumMinor / InformativePass

| Severity | Code | Description | Status |
|----------|------|-------------------------|--------|
| • | ST | Stops Transactions | Passed |
| • | OTUT | Transfers User's Tokens | Passed |
| • | ELFM | Exceeds Fees Limit | Passed |
| • | MT | Mints Tokens | Passed |
| • | ВТ | Burns Tokens | Passed |
| • | ВС | Blacklists Addresses | Passed |

Diagnostics

Critical
 Medium
 Minor / Informative

| Severity | Code | Description | Status |
|----------|------|----------------------------|------------|
| • | L18 | Multiple Pragma Directives | Unresolved |
| • | L19 | Stable Compiler Version | Unresolved |



Table of Contents

| Analysis | 1 |
|----------------------------------|----|
| Diagnostics | 2 |
| Table of Contents | 3 |
| Review | 4 |
| Audit Updates | 4 |
| Source Files | 4 |
| Findings Breakdown | 5 |
| L18 - Multiple Pragma Directives | 6 |
| Description | 6 |
| Recommendation | 6 |
| L19 - Stable Compiler Version | 7 |
| Description | 7 |
| Recommendation | 7 |
| Functions Analysis | 8 |
| Inheritance Graph | 11 |
| Flow Graph | 12 |
| Summary | 13 |
| Disclaimer | 14 |
| About Cyberscope | 15 |



Review

| Contract Name | BUCK |
|------------------|---|
| Compiler Version | v0.8.20+commit.a1b79de6 |
| Optimization | 200 runs |
| Explorer | https://goerli.etherscan.io/address/0x452ad37b61be1c247871cf 0932e62e9dbefc7bb5 |
| Address | 0x452ad37b61be1c247871cf0932e62e9dbefc7bb5 |
| Network | GOERLI |
| Symbol | BUCK |
| Decimals | 18 |
| Total Supply | 100,000,000,000 |

Audit Updates

| Initial Audit | 03 Jul 2023 |
|---------------|-------------|
|---------------|-------------|

Source Files

| Filename | SHA256 |
|----------|--|
| BUCK.sol | 024212d8dde3d5f7618bf1491c3e09e7aae7d38743abc8dd54180ef8ab d2e5fd |

Findings Breakdown



| Severity | | Unresolved | Acknowledged | Resolved | Other |
|----------|---------------------|------------|--------------|----------|-------|
| • | Critical | 0 | 0 | 0 | 0 |
| • | Medium | 0 | 0 | 0 | 0 |
| | Minor / Informative | 2 | 0 | 0 | 0 |



L18 - Multiple Pragma Directives

| Criticality | Minor / Informative |
|-------------|--------------------------------|
| Location | BUCK.sol#L6,33,118,148,515,555 |
| Status | Unresolved |

Description

If the contract includes multiple conflicting pragma directives, it may produce unexpected errors. To avoid this, it's important to include the correct pragma directive at the top of the contract and to ensure that it is the only pragma directive included in the contract.

```
pragma solidity ^0.8.0;
pragma solidity ^0.8.19;
pragma solidity ^0.8.12;
```

Recommendation

It is important to include only one pragma directive at the top of the contract and to ensure that it accurately reflects the version of Solidity that the contract is written in.

By including all required compiler options and flags in a single pragma directive, the potential conflicts could be avoided and ensure that the contract can be compiled correctly.



L19 - Stable Compiler Version

| Criticality | Minor / Informative |
|-------------|--------------------------------|
| Location | BUCK.sol#L6,33,118,148,515,555 |
| Status | Unresolved |

Description

The _______ symbol indicates that any version of Solidity that is compatible with the specified version (i.e., any version that is a higher minor or patch version) can be used to compile the contract. The version lock is a mechanism that allows the author to specify a minimum version of the Solidity compiler that must be used to compile the contract code. This is useful because it ensures that the contract will be compiled using a version of the compiler that is known to be compatible with the code.

```
pragma solidity ^0.8.0;
pragma solidity ^0.8.19;
pragma solidity ^0.8.12;
```

Recommendation

The team is advised to lock the pragma to ensure the stability of the codebase. The locked pragma version ensures that the contract will not be deployed with an unexpected version. An unexpected version may produce vulnerabilities and undiscovered bugs. The compiler should be configured to the lowest version that provides all the required functionality for the codebase. As a result, the project will be compiled in a well-tested LTS (Long Term Support) environment.

8

Functions Analysis

| Contract | Туре | Bases | | |
|---------------|----------------|------------|------------|-----------|
| | Function Name | Visibility | Mutability | Modifiers |
| | | | | |
| Context | Implementation | | | |
| | _msgSender | Internal | | |
| | _msgData | Internal | | |
| | | | | |
| IERC20 | Interface | | | |
| | totalSupply | External | | - |
| | balanceOf | External | | - |
| | transfer | External | 1 | - |
| | allowance | External | | - |
| | approve | External | 1 | - |
| | transferFrom | External | 1 | - |
| | | | | |
| IERC20Metadat | Interface | IERC20 | | |
| | name | External | | - |
| | symbol | External | | - |
| | decimals | External | | - |
| | | | | |



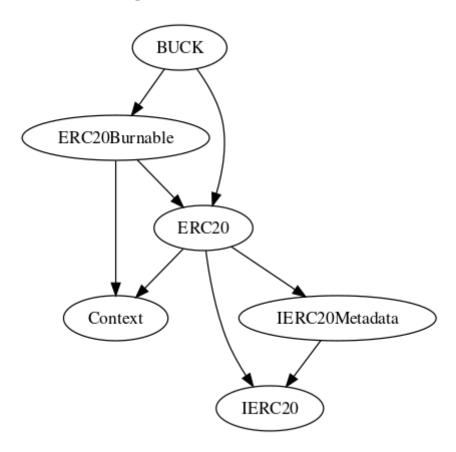
| ERC20 | Implementation | Context, IERC20, IERC20Meta data | | |
|---------------|----------------------|---|---|---|
| | | Public | ✓ | - |
| | name | Public | | - |
| | symbol | Public | | - |
| | decimals | Public | | - |
| | totalSupply | Public | | - |
| | balanceOf | Public | | - |
| | transfer | Public | ✓ | - |
| | allowance | Public | | - |
| | approve | Public | ✓ | - |
| | transferFrom | Public | ✓ | - |
| | increaseAllowance | Public | ✓ | - |
| | decreaseAllowance | Public | ✓ | - |
| | _transfer | Internal | ✓ | |
| | _mint | Internal | ✓ | |
| | _burn | Internal | ✓ | |
| | _approve | Internal | ✓ | |
| | _spendAllowance | Internal | ✓ | |
| | _beforeTokenTransfer | Internal | ✓ | |
| | _afterTokenTransfer | Internal | ✓ | |
| | | | | |
| ERC20Burnable | Implementation | Context, ERC20 | | |



| | burn | Public | ✓ | - |
|------|----------------|-----------------------------|----------|-------|
| | burnFrom | Public | ✓ | - |
| | | | | |
| виск | Implementation | ERC20, ERC20Burna ble | | |
| | | Public | 1 | ERC20 |

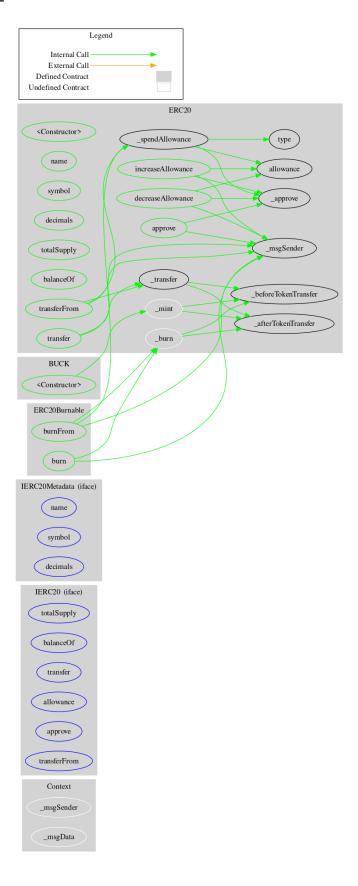


Inheritance Graph





Flow Graph





Summary

BullBuck\$ contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. BullBuck\$ is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.



Disclaimer

The information provided in this report does not constitute investment, financial or trading advice and you should not treat any of the document's content as such. This report may not be transmitted, disclosed, referred to or relied upon by any person for any purposes nor may copies be delivered to any other person other than the Company without Cyberscope's prior written consent. This report is not nor should be considered an "endorsement" or "disapproval" of any particular project or team. This report is not nor should be regarded as an indication of the economics or value of any "product" or "asset" created by any team or project that contracts Cyberscope to perform a security assessment. This document does not provide any warranty or guarantee regarding the absolute bug-free nature of the technology analyzed, nor do they provide any indication of the technologies proprietors' business, business model or legal compliance. This report should not be used in any way to make decisions around investment or involvement with any particular project. This report represents an extensive assessment process intending to help our customers increase the quality of their code while reducing the high level of risk presented by cryptographic tokens and blockchain technology.

Blockchain technology and cryptographic assets present a high level of ongoing risk Cyberscope's position is that each company and individual are responsible for their own due diligence and continuous security Cyberscope's goal is to help reduce the attack vectors and the high level of variance associated with utilizing new and consistently changing technologies and in no way claims any guarantee of security or functionality of the technology we agree to analyze. The assessment services provided by Cyberscope are subject to dependencies and are under continuing development. You agree that your access and/or use including but not limited to any services reports and materials will be at your sole risk on an as-is where-is and as-available basis Cryptographic tokens are emergent technologies and carry with them high levels of technical risk and uncertainty. The assessment reports could include false positives false negatives and other unpredictable results. The services may access and depend upon multiple layers of third parties.



About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.

