



Cyberscope

# Audit Report

## **Mario**

May 2023

Network    BSC

Address    0x8a3F42A2688De0376a32381CB9B42fAeC7A67b54

Audited by    © cyberscope

# Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

# Diagnostics

● Critical ● Medium ● Minor / Informative

Severity	Code	Description	Status
●	L02	State Variables could be Declared Constant	Unresolved
●	L19	Stable Compiler Version	Unresolved

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## Review

Contract Name	Token
Compiler Version	v0.8.19+commit.7dd6d404
Optimization	200 runs
Explorer	<a href="https://bscscan.com/address/0x8a3f42a2688de0376a32381cb9b42faec7a67b54">https://bscscan.com/address/0x8a3f42a2688de0376a32381cb9b42faec7a67b54</a>
Address	0x8a3f42a2688de0376a32381cb9b42faec7a67b54
Network	BSC
Symbol	MARIO
Decimals	18
Total Supply	10,000,000

## Audit Updates

Initial Audit	30 May 2023
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## Source Files

Filename	SHA256
Token.sol	583f314a6689463c155f1e931663a070183746542f9c7330fba4ce0db27c5b47

## Findings Breakdown



● Critical	0
● Medium	0
● Minor / Informative	2

Severity	Unresolved	Acknowledged	Resolved	Other
● Critical	0	0	0	0
● Medium	0	0	0	0
● Minor / Informative	2	0	0	0

## L02 - State Variables could be Declared Constant

<b>Criticality</b>	Minor / Informative
<b>Location</b>	Token.sol#L7,8,9,10
<b>Status</b>	Unresolved

### Description

State variables can be declared as constant using the constant keyword. This means that the value of the state variable cannot be changed after it has been set. Additionally, the constant variables decrease gas consumption of the corresponding transaction.

```
uint public totalSupply = 10000000 * 10 ** 18
string public name = "Mario"
string public symbol = "MARIO"
uint public decimals = 18
```

### Recommendation

Constant state variables can be useful when the contract wants to ensure that the value of a state variable cannot be changed by any function in the contract. This can be useful for storing values that are important to the contract's behavior, such as the contract's address or the maximum number of times a certain function can be called. The team is advised to add the constant keyword to state variables that never change.

## L19 - Stable Compiler Version

<b>Criticality</b>	Minor / Informative
<b>Location</b>	Token.sol#L2
<b>Status</b>	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 ^0.8.19;
```

### Recommendation

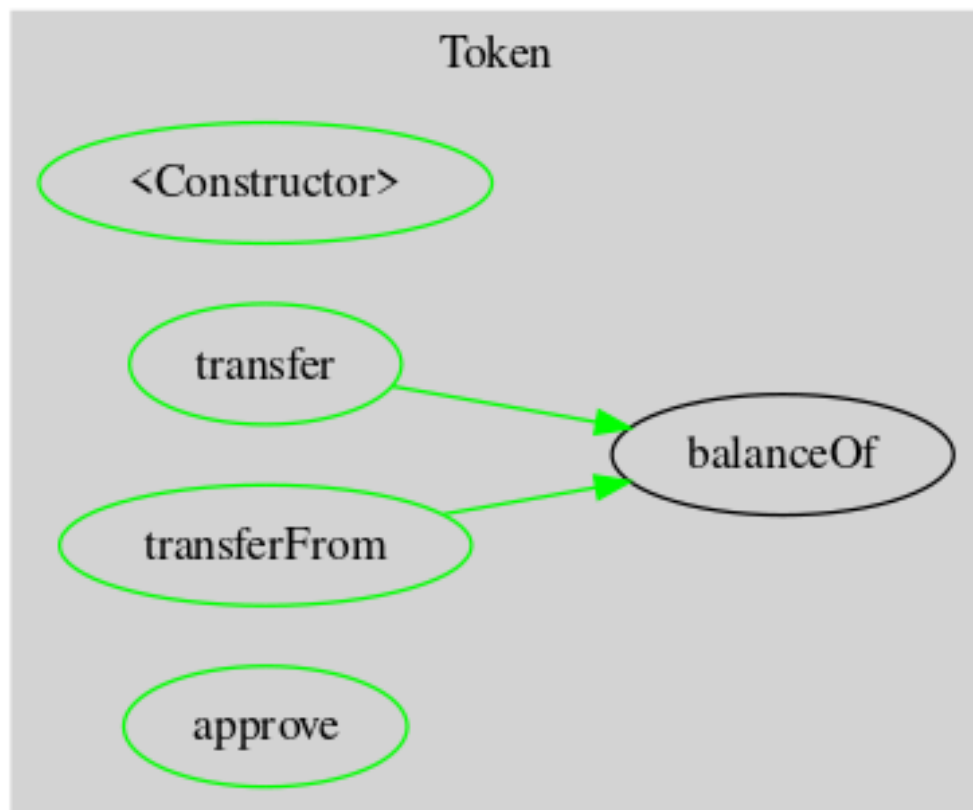
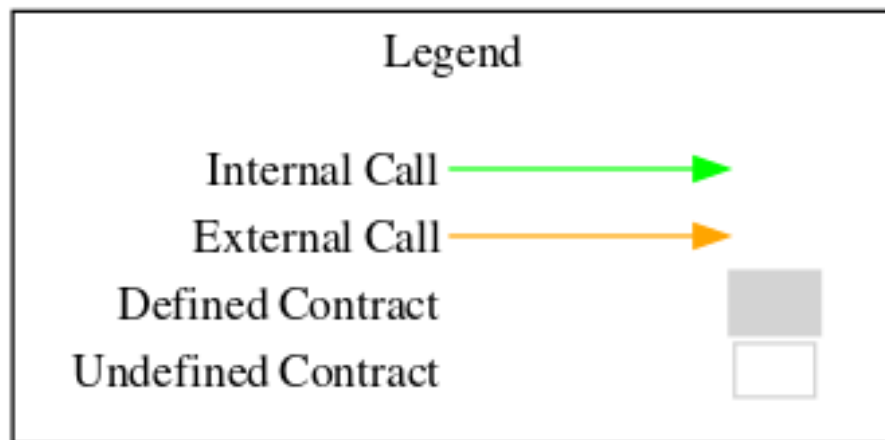
The team is advised to lock the pragma to ensure the stability of the codebase. The locked pragma version ensures that the contract will not be deployed with an unexpected version. An unexpected version may produce vulnerabilities and undiscovered bugs. The compiler should be configured to the lowest 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.



## Functions Analysis

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
Token	Implementation			
		Public	✓	-
	balanceOf	Public		-
	transfer	Public	✓	-
	transferFrom	Public	✓	-
	approve	Public	✓	-

## Flow Graph



## Summary

Mario contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. Mario is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler errors or critical issues.

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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.



**The Cyberscope team**

<https://www.cyberscope.io>