



Cyberscope

# Audit Report

## **Safuu Inu**

April 2022

Sha256 3456214f06ff06e182c69264756bb3c4acd94cfe1afe5728b2fb9a49f255d522

Audited by © cyberscope

# Table of Contents

<b>Table of Contents</b>	<b>1</b>
<b>Source Files</b>	<b>2</b>
<b>Audit Updates</b>	<b>2</b>
<b>Contract Analysis</b>	<b>3</b>
<b>Contract Diagnostics</b>	<b>4</b>
<b>L01 - Public Function could be Declared External</b>	<b>5</b>
Description	5
Recommendation	5
<b>L02 - State Variables could be Declared Constant</b>	<b>6</b>
Description	6
Recommendation	6
<b>L04 - Conformance to Solidity Naming Conventions</b>	<b>7</b>
Description	7
Recommendation	7
<b>L05 - Unused State Variable</b>	<b>8</b>
Description	8
Recommendation	8
<b>L07 - Missing Events Arithmetic</b>	<b>9</b>
Description	9
Recommendation	9
<b>Contract Functions</b>	<b>10</b>
<b>Contract Flow</b>	<b>14</b>
<b>Domain Info</b>	<b>15</b>
<b>Summary</b>	<b>16</b>
<b>Disclaimer</b>	<b>17</b>
<b>About Cyberscope</b>	<b>18</b>

## Source Files

Filename	SHA256
contract.sol	3456214f06ff06e182c69264756bb3c4acd94cfe1afe5728b2fb9a49f255d522

## Audit Updates

Initial Audit	9th April 2022
Corrected	13th April 2022

# Contract Analysis

● Critical   ● Medium   ● Minor   ● Pass

Severity	Code	Description
●	ST	Contract Owner is not able to stop or pause transactions
●	OCTD	Contract Owner is not able to transfer tokens from specific address
●	OTUT	Owner Transfer User's Tokens
●	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)
●	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
●	MT	Contract Owner is not able to mint new tokens
●	BT	Contract Owner is not able to burn tokens from specific wallet
●	BC	Contract Owner is not able to blacklist wallets from selling

# Contract Diagnostics

● Critical    ● Medium    ● Minor

Severity	Code	Description
●	L01	Public Function could be Declared External
●	L02	State Variables could be Declared Constant
●	L04	Conformance to Solidity Naming Conventions
●	L05	Unused State Variable
●	L07	Missing Events Arithmetic

## L01 - Public Function could be Declared External

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L80,84,97,702

### Description

Public functions that are never called by the contract should be declared external to save gas.

```
getUnpaidEarnings  
transferOwnership  
unauthorize  
authorize
```

### Recommendation

Use the external attribute for functions never called from the contract

## L02 - State Variables could be Declared Constant

**Criticality**

minor

**Location**

contract.sol#L180,193,342,340,341,343,349

### Description

Constant state variables should be declared constant to save gas.

```
_totalSupply  
ZERO  
WBNB  
SHIB  
DEAD  
dividendsPerShareAccuracyFactor
```

### Recommendation

Add the constant attribute to state variables that never change.

## L04 - Conformance to Solidity Naming Conventions

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L114,219,170,179,180,617,674,679,684,694,723,340,341,342,343,345,346,347,349,351,353,354,367

### Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow \_ at the beginning of the mixed\_case match for private variables and unused parameters.

```
_presaler  
_allowances  
_balances  
_maxTxAmount  
_totalSupply  
_decimals  
_symbol  
_name  
ZERO  
...
```

### Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions>



## L05 - Unused State Variable

**Criticality**

minor

**Location**

contract.sol#L340

### Description

There are segments that contain unused state variables.

SHIB

### Recommendation

Remove unused state variables.

## L07 - Missing Events Arithmetic

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L219,617,627,642,679,684

### Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
targetLiquidity = _target
swapThreshold = _amount
_maxTxAmount = _totalSupply.mul(percent).div(100)
buybackMultiplierNumerator = numerator
autoBuybackCap = _cap
minPeriod = _minPeriod
```

### Recommendation

Emit an event for critical parameter changes.

# Contract Functions

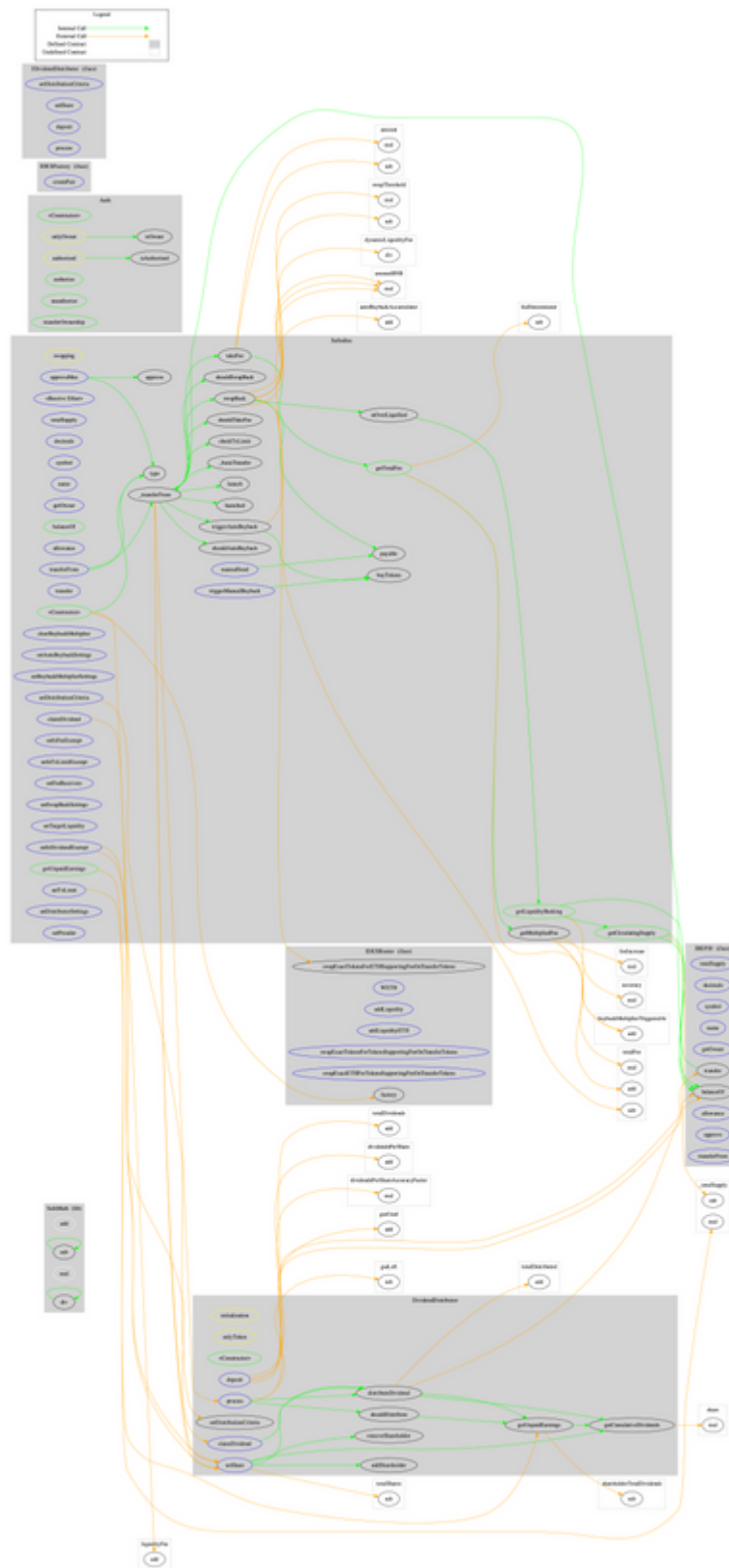
Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>SafeMath</b>	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
<b>IBEP20</b>	Interface			
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>Auth</b>	Implementation			
	<Constructor>	Public	✓	-
	authorize	Public	✓	onlyOwner
	unauthorize	Public	✓	onlyOwner
	isOwner	Public		-
	isAuthorized	Public		-
	transferOwnership	Public	✓	onlyOwner
<b>IDEXFactory</b>	Interface			

	createPair	External	✓	-
<b>IDEXRouter</b>	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
<b>IDividendDistributor</b>	Interface			
	setDistributionCriteria	External	✓	-
	setShare	External	✓	-
	deposit	External	Payable	-
	process	External	✓	-
<b>DividendDistributor</b>	Implementation	IDividendDistributor		
	<Constructor>	Public	✓	-
	setDistributionCriteria	External	✓	onlyToken
	setShare	External	✓	onlyToken
	deposit	External	Payable	onlyToken
	process	External	✓	onlyToken
	shouldDistribute	Internal		
	distributeDividend	Internal	✓	
	claimDividend	External	✓	onlyToken
	getUnpaidEarnings	Public		-
	getCumulativeDividends	Internal		
	addShareholder	Internal	✓	
	removeShareholder	Internal	✓	
<b>SafuuInu</b>	Implementation	IBEP20,		

		Auth		
	<Constructor>	Public	✓	Auth
	<Receive Ether>	External	Payable	-
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	Public		-
	allowance	External		-
	approve	Public	✓	-
	approveMax	External	✓	-
	transfer	External	✓	-
	transferFrom	External	✓	-
	_transferFrom	Internal	✓	
	_basicTransfer	Internal	✓	
	checkTxLimit	Internal		
	shouldTakeFee	Internal		
	getTotalFee	Public		-
	getMultipliedFee	Public		-
	takeFee	Internal	✓	
	shouldSwapBack	Internal		
	swapBack	Internal	✓	swapping
	shouldAutoBuyback	Internal		
	triggerManualBuyback	External	✓	authorized
	clearBuybackMultiplier	External	✓	authorized
	triggerAutoBuyback	Internal	✓	
	buyTokens	Internal	✓	swapping
	setAutoBuybackSettings	External	✓	authorized
	setBuybackMultiplierSettings	External	✓	authorized
	launched	Internal		
	launch	Internal	✓	
	setTxLimit	External	✓	authorized
	setIsDividendExempt	External	✓	authorized
	setIsFeeExempt	External	✓	authorized

	setIsTxLimitExempt	External	✓	authorized
	setFeeReceivers	External	✓	authorized
	setSwapBackSettings	External	✓	authorized
	setTargetLiquidity	External	✓	authorized
	manualSend	External	✓	authorized
	setDistributionCriteria	External	✓	authorized
	claimDividend	External	✓	-
	getUnpaidEarnings	Public		-
	setDistributorSettings	External	✓	authorized
	getCirculatingSupply	Public		-
	getLiquidityBacking	Public		-
	isOverLiquified	Public		-
	setPresaler	External	✓	authorized

# Contract Flow



## Domain Info

<b>Domain Name</b>	safuuinu.co
<b>Registry Domain ID</b>	D48AB4309C2154F29A0C4593EC463CD08-GDREG
<b>Creation Date</b>	2022-04-05T11:28:24Z
<b>Updated Date</b>	2022-04-05T11:28:27Z
<b>Registry Expiry Date</b>	2023-04-05T11:28:24Z
<b>Registrar WHOIS Server</b>	whois.namecheap.com
<b>Registrar URL</b>	<a href="http://www.namecheap.com">http://www.namecheap.com</a>
<b>Registrar</b>	NameCheap, Inc.
<b>Registrar IANA ID</b>	1068

The domain has been created 10 days before the creation of the audit. It will expire in 12 months.

There is no public billing information, the creator is protected by the privacy settings.



## Summary

Safuu Inu 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. The fees are fixed to 10%.

# Disclaimer

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment.

Cyberscope team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document. Always Do your own research and protect yourselves from being scammed.

The Cyberscope team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools. Under no circumstances did Cyberscope receive a payment to manipulate those results or change the awarding badge that we will be adding in our website.

Always Do your own research and protect yourselves from scams. This document should not be presented as a reason to buy or not buy any particular token.

The Cyberscope team disclaims any liability for the resulting losses.

## About Cyberscope

Coinscope audit and K.Y.C. service has been rebranded to Cyberscope.

Coinscope is the leading early coin listing, voting and auditing authority firm. The audit process is analyzing and monitoring many aspects of the project. That way, it gives the community a good sense of security using an informative report and a generic score.

Cyberscope and Coinscope are aiming to make crypto discoverable and efficient globally. They provides all the essential tools to assist users draw their own conclusions.



The Cyberscope team

<https://www.cyberscope.io>