Cyberscope

Audit Report

Baby Kabosu Inu

March 2022

Type	BEP20
Network	BSC
Address	0xFB70227010d68aeCC9e69732367cD6427E6Cf615
Audited by	© cyberscope

Table of Contents

Contract Review

Contract Name	BabyKabosuInu
Compiler Version	v0.8.0+commit.c7dfd78e
Optimization	5000 runs
Licence	None
Explorer	https://bscscan.com/token/0xFB70227010d68aeCC9e69732367cD6427E6Cf615
Symbol	BKI
Decimals	9
Total Supply	99,999,999,999,999
Source	contract.sol
Domain	babykabosuinu.com

Audit Updates

Initial Audit	6th March 2022
Corrected	

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

ST - Stop Transactions

Criticality	critical
Location	contract.sol#L874,915

Description

The contract owner has the authority to stop transactions for all users by setting the variable tradingEnable to false.

The contract owner can also turn this contract into a honeypot and prevent users from selling their tokens by increasing the sell fees to 100%.

```
require(tradingEnable,"trading is disable");

if(recipient == uniswapV2Pair){

 if(!isTaxless[sender] && !isTaxless[recipient] && !inSwapAndLiquify){
           transferAmount = collectSellFee(sender,amount,rate);
}
```

Recommendation

The contract could embody a check for not allowing setting the _maxTxAmount less than a reasonable amount. A suggested implementation could check that the maximum amount should be more than a fixed percentage of the total supply.

The team should carefully manage the private keys of the owner’s account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

ELFM - Exceed Limit Fees Manipulation

Criticality	critical
Location	contract.sol#L1171,1179

Description

The contract owner has the authority to increase over the allowed limit of 25%. The owner may take advantage of it by calling the `setSellFee` function with high percentage values.

```
 function setSellFee(uint256 ecosystemFee,uint256 marketingFee,uint256
rewardFee,uint256 liquidityFee,uint256 taxFee) external onlyOwner {
        _SellmarketingFee=marketingFee;
        _SelllLiquidityFee=liquidityFee;
        _SelltaxFee=taxFee;
        _rewardFee = rewardFee;
        _ecosystemFee = ecosystemFee;
    }
```

Recommendation

The contract could embody a check for the maximum acceptable value.

The team should carefully manage the private keys of the owner’s account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

Contract Diagnostics

● Critical ● Medium ● Minor

Severity	Code	Description
●	L01	Public Function could be Declared External
●	L02	State Variables could be Declared Constant
●	L05	Unused State Variable
●	L04	Conformance to Solidity Naming Conventions
●	L09	Dead Code Elimination
●	L07	Missing Events Arithmetic
●	L13	Divide before Multiply Operation

L01 - Public Function could be Declared External

Criticality	minor
Location	contract.sol#L536,545,704,708,712,716,725,735,744,753 and 4 more

Description

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

```
reflectionFromToken
isExcluded
decreaseAllowance
increaseAllowance
transferFrom
approve
allowance
transfer
totalSupply
...
```

Recommendation

Use the external attribute for functions never called from the contract.

L02 - State Variables could be Declared Constant

Criticality	minor
Location	contract.sol#L655,654,624,644,664,622,623,637

Description

Constant state variables should be declared constant to save gas.

```
_tokenTotal
_symbol
_name
_liquidityFeeTotal
_feeDecimal
_decimals
_SellrewardFee
_SellecosystemFee
```

Recommendation

Add the constant attribute to state variables that never change.

L05 - Unused State Variable

Criticality	minor
Location	contract.sol#L627

Description

There are segments that contain unused state variables.

```
_balanceLimit
```

Recommendation

Remove unused state variables.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	contract.sol#L566,1187,626,627,628,630,631,632,633,637 and 18 more

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.

```
_liquidityFeeTotal
_taxFeeTotal
_SellecosystemFee
_SellrewardFee
_SelllLiquidityFee
_SellmarketingFee
_SelltaxFee
_ecosystemFee
_rewardFee
...
```

Recommendation

Follow the Solidity naming convention.
https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions

L09 - Dead Code Elimination

Criticality	minor
Location	contract.sol#L450,385,398,417,437,321,353,33,293,268 and 1 more

Description

Functions that are not used in the contract, and make the code's size bigger.

```
mod
ceil
_msgData
sendValue
isContract
functionCallWithValue
functionCall
_functionCallWithValue
...
```

Recommendation

Remove unused functions.

L07 - Missing Events Arithmetic

Criticality	minor
Location	contract.sol#L1171,1179,1197

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.

```
minTokensBeforeSwap = amount
_SellmarketingFee = marketingFee
_marketingFee = marketingFee
```

Recommendation

Emit an event for critical parameter changes.

L13 - Divide before Multiply Operation

Criticality	minor
Location	contract.sol#L951,1014

Description

Performing divisions before multiplications may cause lose of prediction.

```
ecosystemFee = amount.mul(_SellecosystemFee).div(10 ** (_feeDecimal + 2))
rewardFee = amount.mul(_SellrewardFee).div(10 ** (_feeDecimal + 2))
liquidityFee = amount.mul(_SelllLiquidityFee).div(10 ** (_feeDecimal + 2))
marketingFee = amount.mul(_SellmarketingFee).div(10 ** (_feeDecimal + 2))
taxFee = amount.mul(_SelltaxFee).div(10 ** (_feeDecimal + 2))
ecosystemFee = amount.mul(_ecosystemFee).div(10 ** (_feeDecimal + 2))
rewardFee = amount.mul(_rewardFee).div(10 ** (_feeDecimal + 2))
liquidityFee = amount.mul(_liquidityFee).div(10 ** (_feeDecimal + 2))
marketingFee = amount.mul(_marketingFee).div(10 ** (_feeDecimal + 2))
...
```

Recommendation

The multiplications should be prior to the divisions.

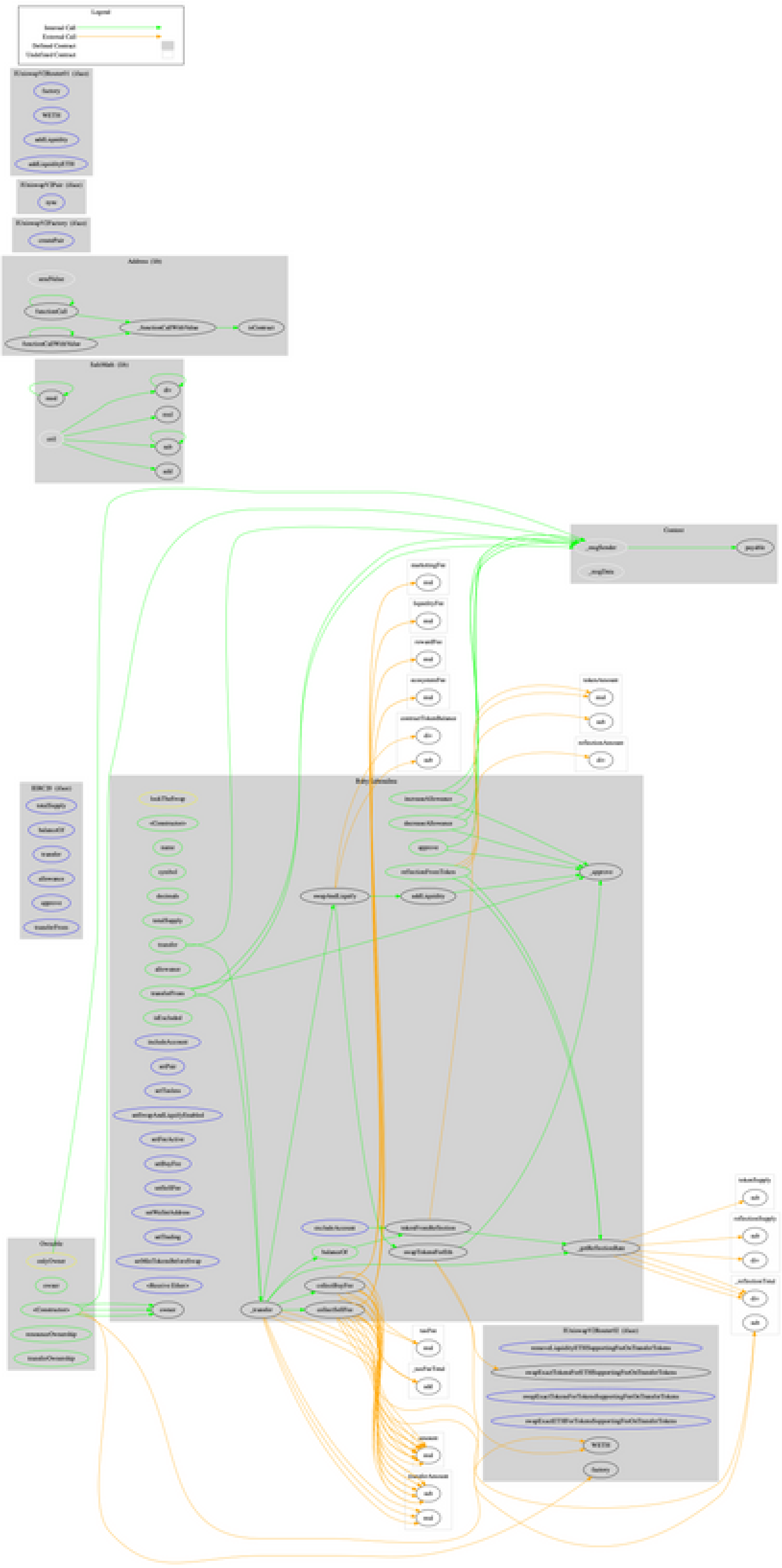
Contract Functions

Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
SafeMath	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		
	mod	Internal		
	ceil	Internal		
Address	Library			
	isContract	Internal		
	sendValue	Internal	✓	
	functionCall	Internal	✓	
	functionCall	Internal	✓	
	functionCallWithValue	Internal	✓	

	functionCallWithValue	Internal	✓	
	_functionCallWithValue	Private	✓	
Ownable	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
IUniswapV2Factory	Interface			
	createPair	External	✓	-
IUniswapV2Pair	Interface			
	sync	External	✓	-
IUniswapV2Router01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
IUniswapV2Router02	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
BabyKabosuInu	Implementation	Context, IERC20, Ownable		
	<Constructor>	Public	✓	-

	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-
	allowance	Public		-
	approve	Public	✓	-
	transferFrom	Public	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	isExcluded	Public		-
	reflectionFromToken	Public		-
	tokenFromReflection	Public		-
	excludeAccount	External	✓	onlyOwner
	includeAccount	External	✓	onlyOwner
	_approve	Private	✓	
	_transfer	Private	✓	
	collectBuyFee	Private	✓	
	collectSellFee	Private	✓	
	_getReflectionRate	Private		
	swapAndLiquify	Private	✓	lockTheSwap
	addLiquidity	Private	✓	
	swapTokensForEth	Private	✓	
	setPair	External	✓	onlyOwner
	setTaxless	External	✓	onlyOwner
	setSwapAndLiquifyEnabled	External	✓	onlyOwner
	setFeeActive	External	✓	onlyOwner
	setBuyFee	External	✓	onlyOwner
	setSellFee	External	✓	onlyOwner
	setWalletAddress	External	✓	onlyOwner
	setTrading	External	✓	onlyOwner
	setMinTokensBeforeSwap	External	✓	onlyOwner
	<Receive Ether>	External	Payable	-

Contract Flow



Domain Info

Domain Name	
Registry Domain ID	2676572857_DOMAIN_COM-VRSN
Creation Date	2022-02-21T07:15:32.00Z
Updated Date	0001-01-01T00:00:00.00Z
Registry Expiry Date	
Registrar WHOIS Server	whois.namecheap.com
Registrar URL	http://www.namecheap.com
Registrar	NAMECHEAP INC
Registrar IANA ID	1068

The domain has been created 13 days before the creation of the audit.

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

Summary

Baby Kabosu Inu claims to be A Metaverse NFT Game Token that rewards users, while giving Dogs a home. The Project has a friendly and growing community.

There are some functions that can be abused by the owner, like manipulating fees up to 100% and disabling trades. The contract can be converted into a honeypot and prevent users from selling if the owner abuses the admin functions. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats.

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