



Cyberscope

Audit Report

Bodyguard Inu

May 2022

Type BEP20

Network BSC

Address 0xc4fDD5c8E6A5AdA28321339589168B09F37f2D99

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Contract Review

Contract Name	BodyGuardInuToken
Compiler Version	v0.8.1+commit.df193b15
Optimization	200 runs
Licence	MIT
Explorer	https://bscscan.com/token/0xc4fDD5c8E6A5AdA28321339589168B09F37f2D99
Symbol	BOGI
Decimals	18
Total Supply	1,000,000,000
Domain	bodyguardinu.net

Source Files

Filename	SHA256
BodyGuardInuToken.sol	a5cb618b7934f34b92070c08b812f909d7c4d09f83c81818e643209563e4109c
Context.sol	5828bf38f9376b659a8edbbe2df0d06b29a09e37ecd470465dda2bbcb612c85d
ERC20.sol	3952b89ce445f58f4526ee39e44eb96df05047706d12b87d6c9fda015d0e620e
IERC20.sol	e19cf0a53de434b19f2453b04a5f9091184a1a604a8f826cb7b6d929559f8a
IUniswapV2Factory.sol	2481db85ce86dd6c0aa7e2d69030b1e6b18d376ebf0b7d0e9085af860fb7d40d
IUniswapV2Router	5563ddc2f75c2f6f31bc38b57794ceff4ea33de9f6fecb5

01.sol	d037f0691f16d53b2
IUniswapV2Router 02.sol	3e72e65e02e79fbafe86b01c0c98fed4cfc65d67e30f7e0 210eee1a0b485d3ff
Ownable.sol	1e6f27bdac9bc733d02947df628e628d687e6eb48174e e8f19b905e5960eef16
SafeMath.sol	8f6eb80f10e1c33265a5402c5b51ed7984531a9cf365f2 d5d05d56d277e196b6

Audit Updates

Initial Audit	8th May 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

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
●	L09	Dead Code Elimination
●	L15	Local Scope Variable Shadowing

L01 - Public Function could be Declared External

Criticality	minor
Location	BodyGuardInuToken.sol#L60 ERC20.sol#L38,46,63,70,101,114,131,154,177,200 Ownable.sol#L41,50

Description

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

```
transferOwnership  
renounceOwnership  
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	BodyGuardInuToken.sol#L25,12,22,24,23

Description

Constant state variables should be declared constant to save gas.

```
_marketingAddress  
_devAddress  
WBNB  
TOTAL_SUPPLY  
DEAD
```

Recommendation

Add the constant attribute to state variables that never change.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	BodyGuardInuToken.sol#L60,12,15,16,17,18,22,25 IUniswapV2Router01.sol#L7

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.

```
WETH
DEAD
WBNB
burnBuyFee
burnSellFee
marketingBuyFee
marketingSellFee
TOTAL_SUPPLY
_swapEnabled
```

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

BodyGuardInuToken.sol#L22

Description

There are segments that contain unused state variables.

WBNB

Recommendation

Remove unused state variables.

L09 - Dead Code Elimination

Criticality	minor
Location	ERC20.sol#L264,302

Description

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

```
_setupDecimals  
_burn
```

Recommendation

Remove unused functions.

L15 - Local Scope Variable Shadowing

Criticality

minor

Location

BodyGuardInuToken.sol#L28

Description

There are variables that are defined in the local scope containing the same name from an upper scope.

```
_symbol  
_name
```

Recommendation

The local variables should have different names from the upper scoped variables.

Contract Functions

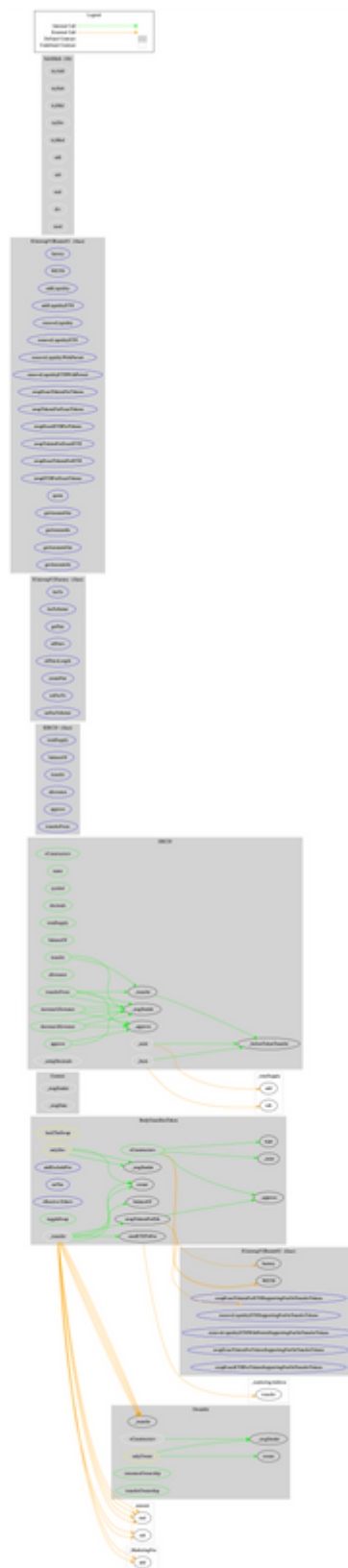
Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
BodyGuardInu Token	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	addExcludeFee	External	✓	onlyOwner
	setTax	External	✓	onlyOwner
	<Receive Ether>	External	Payable	-
	toggleSwap	Public	✓	onlyDev
	_transfer	Internal	✓	
	swapTokensForEth	Private	✓	lockTheSwap
	sendETHToFee	Private	✓	
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
ERC20	Implementation	Context, IERC20		
	<Constructor>	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	✓	
	_setupDecimals	Internal	✓	
	_beforeTokenTransfer	Internal	✓	
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IUniswapV2Factory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
IUniswapV2Router01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-
	removeLiquidityWithPermit	External	✓	-
	removeLiquidityETHWithPermit	External	✓	-

	swapExactTokensForTokens	External	✓	-
	swapTokensForExactTokens	External	✓	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	✓	-
	swapExactTokensForETH	External	✓	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-
	getAmountIn	External		-
	getAmountsOut	External		-
	getAmountsIn	External		-
IUniswapV2Router02	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
Ownable	Implementation	Context		
	<Constructor>	Internal	✓	
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
SafeMath	Library			
	tryAdd	Internal		
	trySub	Internal		
	tryMul	Internal		
	tryDiv	Internal		
	tryMod	Internal		

	add	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	mod	Internal		
	sub	Internal		
	div	Internal		
	mod	Internal		

Contract Flow



Domain Info

Domain Name	bodyguardinu.net
Registry Domain ID	2693991174_DOMAIN_NET-VRSN
Creation Date	2022-05-05T14:03:34Z
Updated Date	2022-05-05T14:03:36Z
Registry Expiry Date	2025-05-05T14:03:34Z
Registrar WHOIS Server	whois.hostinger.com
Registrar URL	https://www.hostinger.com
Registrar	Hostinger, UAB
Registrar IANA ID	1636

The domain has been created 3 days before the creation of the audit. It will expire in almost 3 years.

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

Summary

Bodyguard 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 3%.

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.

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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>