



Cyberscope

Audit Report

Captain Glory

December 2022

Github <https://github.com/Captain567/code>

Commit [5f86a02778d441bf0be02550b90e0ab8a4550813](#)

Audited by © cyberscope

Table of Contents

Table of Contents	1
Contract Review	3
Source Files	3
Audit Updates	3
Contract Analysis	4
ST - Stops Transactions	5
Description	5
Recommendation	5
BC - Blacklists Addresses	6
Description	6
Recommendation	6
Contract Diagnostics	7
RSML - Redundant SafeMath Library	8
Description	8
Recommendation	8
US - Untrusted Source	9
Description	9
Recommendation	9
L02 - State Variables could be Declared Constant	10
Description	10
Recommendation	10
L04 - Conformance to Solidity Naming Conventions	11
Description	11
Recommendation	11
L07 - Missing Events Arithmetic	12
Description	12

Recommendation	12
L09 - Dead Code Elimination	13
Description	13
Recommendation	13
L11 - Unnecessary Boolean equality	14
Description	14
Recommendation	14
Contract Functions	15
Contract Flow	20
Domain Info	21
Summary	22
Disclaimer	23
About Cyberscope	24

Contract Review

Contract Name	CaptainGlory
Github	https://github.com/Captain567/code
Commit	5f86a02778d441bf0be02550b90e0ab8a4550813
Explorer	https://testnet.bscscan.com/token/0x821434b17B6981D5E61e3E247e3F73c339A970Ab
Symbol	CAPTAIN
Decimals	9
Total Supply	5,000,000,000
Domain	captainglory.io

Source Files

Filename	SHA256
contract.sol	d1b306c43acb438ed7cc2dbd92cc3bd7e8e2511e732f813193daa69a89d57a26

Audit Updates

Initial Audit	4th December 2022
Corrected	

Contract Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Unresolved
●	OCTD	Transfers Contract's Tokens	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	ULTW	Transfers Liquidity to Team Wallet	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Unresolved

ST - Stops Transactions

Criticality	minor / informative
Location	contract.sol#L1111
Status	Unresolved

Description

The contract owner has the authority to prevent sales of a user if they are more than 0.0001% of the total supply in a period of one day. The owner may take advantage of it by setting the to `antiDumpTime` 1 day. Additionally, read more information on the [Untrusted Source](#) finding.

```
require(  
    antiDump[from] < block.timestamp,  
    "Err: antiDump active"  
);
```

Recommendation

The contract could embody a check for not allowing setting the `antiDumpTime` more than a reasonable amount. A suggested implementation could be limited to some minutes.

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.

BC - Blacklists Addresses

Criticality	medium
Location	contract.sol#L1070
Status	Unresolved

Description

The contract owner has the authority to stop addresses from transactions. The owner may take advantage of it by calling the `blacklistAddress` function.

```
require(!_isBlacklisted[from] && !_isBlacklisted[to], 'Blacklisted address');
```

Recommendation

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 / Informative

Severity	Code	Description	Status
●	RSML	Redundant SafeMath Library	Unresolved
●	US	Untrusted Source	Unresolved
●	L02	State Variables could be Declared Constant	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L07	Missing Events Arithmetic	Unresolved
●	L09	Dead Code Elimination	Unresolved
●	L11	Unnecessary Boolean equality	Unresolved

RSML - Redundant SafeMath Library

Criticality	minor / informative
Location	contract.sol#L504
Status	Unresolved

Description

The Solidity versions that are greater than or equal to 0.8.0 do not need the use of SafeMath Library. The usage of the SafeMath library produces unnecessary additional gas.

```
library SafeMath {  
  ...  
}
```

Recommendation

The team is advised to remove the SafeMath library as it is safe to do math operations without it.

US - Untrusted Source

Criticality	critical
Location	contract.sol#L1073
Status	Unresolved

Description

The contract uses an external contract in order to determine the transaction's flow. The external contract is untrusted as the owner can give any address as a value. As a result it may produce security issues and harm the transactions.

```
pinkAntiBot.onPreTransferCheck(from, to, amount);
```

Recommendation

The contract should use a trusted external source. A trusted source could be either a commonly recognized or an audited contract. The pointing addresses should not be able to change after the initialization.

L02 - State Variables could be Declared Constant

Criticality	minor / informative
Location	contract.sol#L893,911,896
Status	Unresolved

Description

Constant state variables should be declared constant to save gas.

```
totaltokensupply  
pinkAntiBot_  
deadWallet
```

Recommendation

Add the constant attribute to state variables that never change.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor / informative
Location	contract.sol#L970,787,804,786,898,654
Status	Unresolved

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.

```
_enable  
PERMIT_TYPEHASH  
MINIMUM_LIQUIDITY  
DOMAIN_SEPARATOR  
_isBlacklisted  
WETH
```

Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-conventions>.

L07 - Missing Events Arithmetic

Criticality	minor / informative
Location	contract.sol#L978,1010,1020,1015
Status	Unresolved

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.

```
antiDumpTime = interval  
buyFee = value  
maxtranscation = value  
sellFee = value
```

Recommendation

Emit an event for critical parameter changes.

L09 - Dead Code Elimination

Criticality	minor / informative
Location	contract.sol#L1167,385
Status	Unresolved

Description

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

```
addLiquidity  
_burn
```

Recommendation

Remove unused functions.

L11 - Unnecessary Boolean equality

Criticality	minor / informative
Location	contract.sol#L1063
Status	Unresolved

Description

The comparison to boolean constants is redundant. Boolean constants can be used directly and do not need to be compared to true or false.

```
require(bool,string)(tradingEnabled == true,Trading not enabled yet)
```

Recommendation

Remove the equality to the boolean constant.

Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IERC20Metadata	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
ERC20	Implementation	Context, IERC20, IERC20Metadata		
	<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	✓	
	_beforeTokenTransfer	Internal	✓	
Ownable	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
SafeMath	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		
	mod	Internal		
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		-
IUniswapV2Factory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
IUniswapV2Pair	Interface			
	name	External		-
	symbol	External		-
	decimals	External		-
	totalSupply	External		-
	balanceOf	External		-
	allowance	External		-
	approve	External	✓	-
	transfer	External	✓	-
	transferFrom	External	✓	-
	DOMAIN_SEPARATOR	External		-
	PERMIT_TYPEHASH	External		-

	nonces	External		-
	permit	External	✓	-
	MINIMUM_LIQUIDITY	External		-
	factory	External		-
	token0	External		-
	token1	External		-
	getReserves	External		-
	price0CumulativeLast	External		-
	price1CumulativeLast	External		-
	kLast	External		-
	mint	External	✓	-
	burn	External	✓	-
	swap	External	✓	-
	skim	External	✓	-
	sync	External	✓	-
	initialize	External	✓	-
IPinkAntiBot	Interface			
	setTokenOwner	External	✓	-
	onPreTransferCheck	External	✓	-
IUniswapV2Router02	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
CaptainGlory	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	<Receive Ether>	External	Payable	-

	setEnableAntiBot	External	✓	onlyOwner
	setantiDumpEnabled	External	✓	onlyOwner
	setantiDump	External	✓	onlyOwner
	updateUniswapV2Router	Public	✓	onlyOwner
	excludeFromFees	Public	✓	onlyOwner
	excludeMultipleAccountsFromFees	Public	✓	onlyOwner
	setbuyFee	External	✓	onlyOwner
	setsellFee	External	✓	onlyOwner
	setMaxtranscation	External	✓	onlyOwner
	setfeeWallet	Public	✓	onlyOwner
	setfeeActive	External	✓	onlyOwner
	startTrading	External	✓	onlyOwner
	setAutomatedMarketMakerPair	Public	✓	onlyOwner
	blacklistAddress	External	✓	onlyOwner
	_setAutomatedMarketMakerPair	Private	✓	
	isExcludedFromFees	Public		-
	_transfer	Internal	✓	
	recoverothertokens	Public	✓	onlyOwner
	recovertoken	Public	✓	onlyOwner
	addLiquidity	Private	✓	

Contract Flow



Domain Info

Domain Name	captainglory.io
Registry Domain ID	63e13bb5c5644c13893107243131a19a-DONUTS
Creation Date	2022-10-28T12:03:52Z
Updated Date	2022-11-02T12:04:41Z
Registry Expiry Date	2023-10-28T12:03:52Z
Registrar WHOIS Server	www.whois.crazydomains.com
Registrar URL	http://www.crazydomains.com
Registrar	Dreamscape Networks International Pte Ltd
Registrar IANA ID	1291

The domain was created about 1 month before the creation of the audit. It will expire in 11 months.

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

Summary

There are some functions that can be abused by the owner like stopping transactions and blacklisting addresses. 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

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.



The Cyberscope team

<https://www.cyberscope.io>