



Cyberscope

# Audit Report

## **NEON CITY**

March 2022

Type           BEP20

Network       BSC

Address       0x83664d0B609545FE155Ec2E0Bee0cb7916c50Ab4

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## Contract Review

<b>Contract Name</b>	Mycoin
<b>Compiler Version</b>	v0.8.4+commit.c7e474f2
<b>Optimization</b>	200 runs
<b>Licence</b>	None
<b>Explorer</b>	<a href="https://bscscan.com/token/0x83664d0B609545FE155Ec2E0Bee0cb7916c50Ab4">https://bscscan.com/token/0x83664d0B609545FE155Ec2E0Bee0cb7916c50Ab4</a>
<b>Symbol</b>	NCY
<b>Decimals</b>	18
<b>Total Supply</b>	1,000,000,000
<b>Domain</b>	neoncity.games

## Source Files

<b>Filename</b>	<b>SHA256</b>
<b>contract.sol</b>	dfe5f514f68cda04aa95bac448b916aa516046c8fd31525bfcf8937e7b12322e

## Audit Updates

<b>Initial Audit</b>	24th March 2022
<b>Corrected</b>	

# 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

## ELFM - Exceed Limit Fees Manipulation

<b>Criticality</b>	critical
<b>Location</b>	contract.sol#L598

### 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 `setFees` function with a high percentage value.

```
function setFees(uint256 marketFee, uint256 liquidityFee) external onlyOwner() {  
    _liquidityFee = liquidityFee;  
    _marketFee = marketFee;  
}
```

### 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
●	FSA	Fixed Swap Address
●	L01	Public Function could be Declared External
●	L04	Conformance to Solidity Naming Conventions
●	L07	Missing Events Arithmetic
●	L09	Dead Code Elimination

## FSA - Fixed Swap Address

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L571

### Description

The swap address is assigned once in the constructor and it can not be changed. The decentralized swaps sometimes create a new swap version or abandon the current. A contract that cannot change the swap address may not be able to catch-up the upgrade.

```
IPancakeswapV2Router02 _pancakeswapV2Router =  
IPancakeswapV2Router02(0x10ED43C718714eb63d5aA57B78B54704E256024E);  
  
pancakeswapV2Router = _pancakeswapV2Router;  
pancakeswapV2Pair = IPancakeswapV2Factory(_pancakeswapV2Router.factory())  
    .createPair(address(this), _pancakeswapV2Router.WETH());
```

### Recommendation

It could be better to allow the swap address mutation in case of future swap updates.



## L01 - Public Function could be Declared External

**Criticality**

minor

**Location**

contract.sol#L191,199,291,299,316,323,330,342,350,361 and 3 more

### Description

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

```
decreaseAllowance
increaseAllowance
transferFrom
approve
allowance
transfer
balanceOf
totalSupply
decimals
...
```

### Recommendation

Use the external attribute for functions never called from the contract

## L04 - Conformance to Solidity Naming Conventions

**Criticality**

minor

**Location**

contract.sol#L226,269,542,543,545,547,550,553

### 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.

```
_devFee  
_marketFee  
_liquidityFee  
total  
devAddress  
marketAddress  
_balances  
WETH
```

### Recommendation

Follow the Solidity naming convention.

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

## L07 - Missing Events Arithmetic

**Criticality**

minor

**Location**

contract.sol#L598

### 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.

```
_liquidityFee = liquidityFee
```

### Recommendation

Emit an event for critical parameter changes.

## L09 - Dead Code Elimination

**Criticality**

minor

**Location**

contract.sol#L497,450

### Description

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

```
_transfer  
_burn
```

### Recommendation

Remove unused functions.

# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>IERC20</b>	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>IERC20Metadata</b>	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
<b>Context</b>	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
<b>Ownable</b>	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_setOwner	Private	✓	
<b>IPancakeswapV2Factory</b>	Interface			
	createPair	External	✓	-

<b>IPancakeswap V2Router02</b>	Interface			
	factory	External		-
	WETH	External		-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
	addLiquidityETH	External	Payable	-
<b>ERC20</b>	Implementation	Context, IERC20, IERC20Meta data		
	<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	✓	
<b>Mycoin</b>	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	excludeFromFee	External	✓	onlyOwner
	includeInFee	External	✓	onlyOwner
	setFees	External	✓	onlyOwner
	_getFeeValues	Private		
	removeAllFee	Private	✓	

	restoreAllFee	Private	✓	
	isExcludedFromFee	External		-
	<Receive Ether>	External	Payable	-
	_transfer	Internal	✓	
	_tokenTransfer	Private	✓	
	_takeLiquidity	Private	✓	
	_takeMarket	Private	✓	
	_takeDevFee	Private	✓	

# Contract Flow





## Domain Info

<b>Domain Name</b>	neoncity.games
<b>Registry Domain ID</b>	39f2e3262ae346f393ed4063d878b958-DONUTS
<b>Creation Date</b>	2022-02-09T04:36:32Z
<b>Updated Date</b>	2022-03-23T03:49:51Z
<b>Registry Expiry Date</b>	2023-02-09T04:36:32Z
<b>Registrar WHOIS Server</b>	whois.dynadot.com
<b>Registrar URL</b>	http://dynadot.com
<b>Registrar</b>	Dynadot, LLC
<b>Registrar IANA ID</b>	472

The domain has been 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

The Smart Contract analysis reported one issue. The contract Owner can manipulate the fees. Apart from that, the contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions. 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.

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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>