



Cyberscope

## Audit Report

# Crazy Treasure Token

September 2022

Type      BEP20

Network    BSC

Address    0x47cA78c8B49122DCaBeE58E339Ff98D51B6ad4b3

Audited by   © cyberscope

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## Contract Review

<b>Contract Name</b>	CTTToken
<b>Compiler Version</b>	v0.8.7+commit.e28d00a7
<b>Optimization</b>	200 runs
<b>Licence</b>	GNU GPLv3
<b>Explorer</b>	<a href="https://bscscan.com/token/0x47cA78c8B49122DCaBeE58E339Ff98D51B6ad4b3">https://bscscan.com/token/0x47cA78c8B49122DCaBeE58E339Ff98D51B6ad4b3</a>
<b>Symbol</b>	CTT
<b>Decimals</b>	18
<b>Total Supply</b>	700,000,000
<b>Domain</b>	<a href="https://www.crazy-treasure.com">https://www.crazy-treasure.com</a>

## Source Files

<b>Filename</b>	<b>SHA256</b>
<b>contract.sol</b>	f251dfdef099198066db0f982294aac4d2f743a0ac37f4777931d2969f01b017

## Audit Updates

<b>Initial Audit</b>	29th September 2022
<b>Corrected</b>	

# Contract Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	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	Passed

# Contract Diagnostics

● Critical   ● Medium   ● Minor / Informative

Severity	Code	Description	Status
●	STC	Succeeded Transfer Check	Unresolved
●	MC	Missing Check	Unresolved
●	L01	Public Function could be Declared External	Unresolved
●	L13	Divide before Multiply Operation	Unresolved

## STC - Succeeded Transfer Check

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L420,430
<b>Status</b>	Unresolved

### Description

According to the ERC20 specification, the transfer methods should be checked if the result is successful. Otherwise, the contract may wrongly assume that the transfer has been established.

```
token.transfer(msg.sender, token.balanceOf(address(this)));  
//  
token.transfer(msg.sender, tokensToWithdraw);
```

### Recommendation

The contract should check if the result of the transfer methods is successful.

## MC - Missing Check

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L609,404
<b>Status</b>	Unresolved

### Description

The contract is processing variables that have not properly sanitized and checked that they form the proper shape. These variables may produce vulnerability issues.

The constructor mints tokens according to the arguments. The initialAccounts length should be equal with the initialBalances length. Each initialBalances entry should be greater than zero.

```
constructor() payable ERC20("Crazy Treasure Token", "CTT") {  
    //  
    //  
    //  
    for(uint8 i = 0; i < accounts.length; i++) {  
        require(accounts[i] != address(0));  
        _mint(accounts[i], supplies[i]);  
    }  
}
```

The values that are initialized on the constructor are used as diviators in the expressions. For instance, the interval property should not be zero since it will revert the transactions.

```
constructor(address _beneficiary, uint256 _start, uint256 _duration, uint256  
_interval,uint256 _initialTokens) {  
    beneficiary = _beneficiary;  
    start = _start;  
    duration = _duration;  
    interval = _interval;  
    initialTokens = _initialTokens;  
}
```

## Recommendation

The contract should properly check the variables according to the required specifications.



## L01 - Public Function could be Declared External

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L408,584,341,521,702,625,504,535,547,413,606,349,496,687,528,566
<b>Status</b>	Unresolved

### Description

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

```
setToken
transferFrom
renounceOwnership
decimals
burnFrom
decreaseAllowance
symbol
balanceOf
transfer
...
```

### Recommendation

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

## L13 - Divide before Multiply Operation

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L413
<b>Status</b>	Unresolved

### Description

Performing divisions before multiplications may cause lose of prediction.

```
tokensByPart = initialTokens.div(parts)
```

### Recommendation

The multiplications should be prior to the divisions.

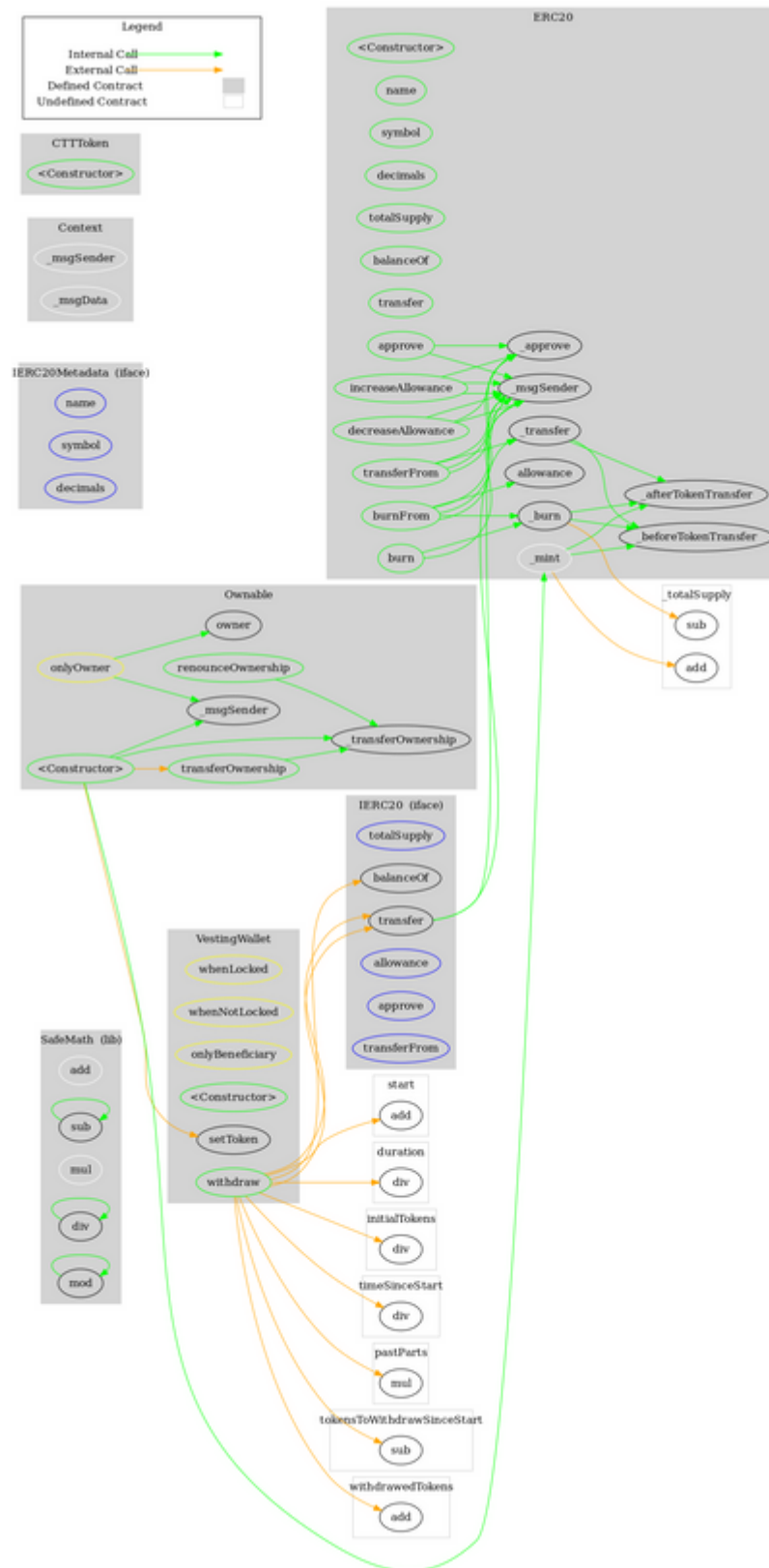
# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>SafeMath</b>	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		
	mod	Internal		
<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
	_transferOwnership	Internal	✓	
<b>VestingWallet</b>	Implementation	Ownable		
	<Constructor>	Public	✓	-
	setToken	Public	✓	onlyOwner whenNotLocke d
	withdraw	Public	✓	onlyBeneficiar y whenLocked
<b>ERC20</b>	Implementation	Context, IERC20, IERC20Met adata		
	<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	Public	✓	-
	burnFrom	Public	✓	-
	_burn	Internal	✓	
	_approve	Internal	✓	
	_beforeTokenTransfer	Internal	✓	

	_afterTokenTransfer	Internal	✓	
<b>CTTToken</b>	Implementation	ERC20, Ownable		
	<Constructor>	Public	Payable	ERC20

# Contract Flow



## Domain Info

<b>Domain Name</b>	crazy-treasure.com
<b>Registry Domain ID</b>	2689177276_DOMAIN_COM-VRSN
<b>Creation Date</b>	2022-04-14T03:04:01Z
<b>Updated Date</b>	2022-04-14T03:20:20Z
<b>Registry Expiry Date</b>	2023-04-14T03:04:01Z
<b>Registrar WHOIS Server</b>	whois.godaddy.com
<b>Registrar URL</b>	<a href="https://www.godaddy.com">https://www.godaddy.com</a>
<b>Registrar</b>	GoDaddy.com, LLC
<b>Registrar IANA ID</b>	146

The domain was created 6 months before the creation of the audit. It will expire in 7 months.

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

## Summary

Crazy Treasure Token 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.



## 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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## 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 provide all the essential tools to assist users draw their own conclusions.



The Cyberscope team

<https://www.cyberscope.io>