



# Audit Report

## **Cthulhu Token**

January 2022

Type	BEP20
Network	BSC
Address	0xd4961cB176Ab4871afd89bc143141BC1355DF954
Audited by	© coinscope

# Table of Contents

<b>Table of Contents</b>	<b>1</b>
<b>Contract Review</b>	<b>2</b>
<b>Audit Updates</b>	<b>2</b>
<b>Contract Analysis</b>	<b>3</b>
<b>Contract Diagnostics</b>	<b>4</b>
<b>L04 - Conformance to Solidity Naming Conventions</b>	<b>5</b>
<b>Description</b>	<b>5</b>
<b>Recommendation</b>	<b>5</b>
<b>Contract Functions</b>	<b>6</b>
<b>Contract Flow</b>	<b>12</b>
<b>Domain Info</b>	<b>13</b>
<b>Summary</b>	<b>14</b>
<b>Disclaimer</b>	<b>15</b>
<b>About Coinscope</b>	<b>16</b>

## Contract Review

<b>Contract Name</b>	CthulhuToken
<b>Compiler Version</b>	v0.8.4+commit.c7e474f2
<b>Optimization</b>	200 runs
<b>Licence</b>	MIT
<b>Explorer</b>	<a href="https://bscscan.com/token/0x077f0344956245a60d2bb7aed28108d13fb79d0d">https://bscscan.com/token/0x077f0344956245a60d2bb7aed28108d13fb79d0d</a>
<b>Symbol</b>	CTHL
<b>Decimals</b>	9
<b>Total Supply</b>	10,000,000,000
<b>Source</b>	contract.sol
<b>Domain</b>	cthulhubsc.com

## Audit Updates

<b>Initial Audit</b>	25th January 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

# Contract Diagnostics

● Critical    ● Medium    ● Minor

Severity	Code	Description
●	L04	Conformance to Solidity Naming Conventions

## L04 - Conformance to Solidity Naming Conventions

**Criticality**

minor

**Location**

contract.sol#L455,L453,L450 and 7 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.

```
altarAccount  
furnaceAccount  
_uniswapV2Pair  
...
```

### Recommendation

Follow the Solidity naming convention.

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

# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>IUniswapV2Router01</b>	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		-
<b>IUniswapV2Router02</b>	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-

	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
<b>IUniswapV2Pair</b>	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	✓	-



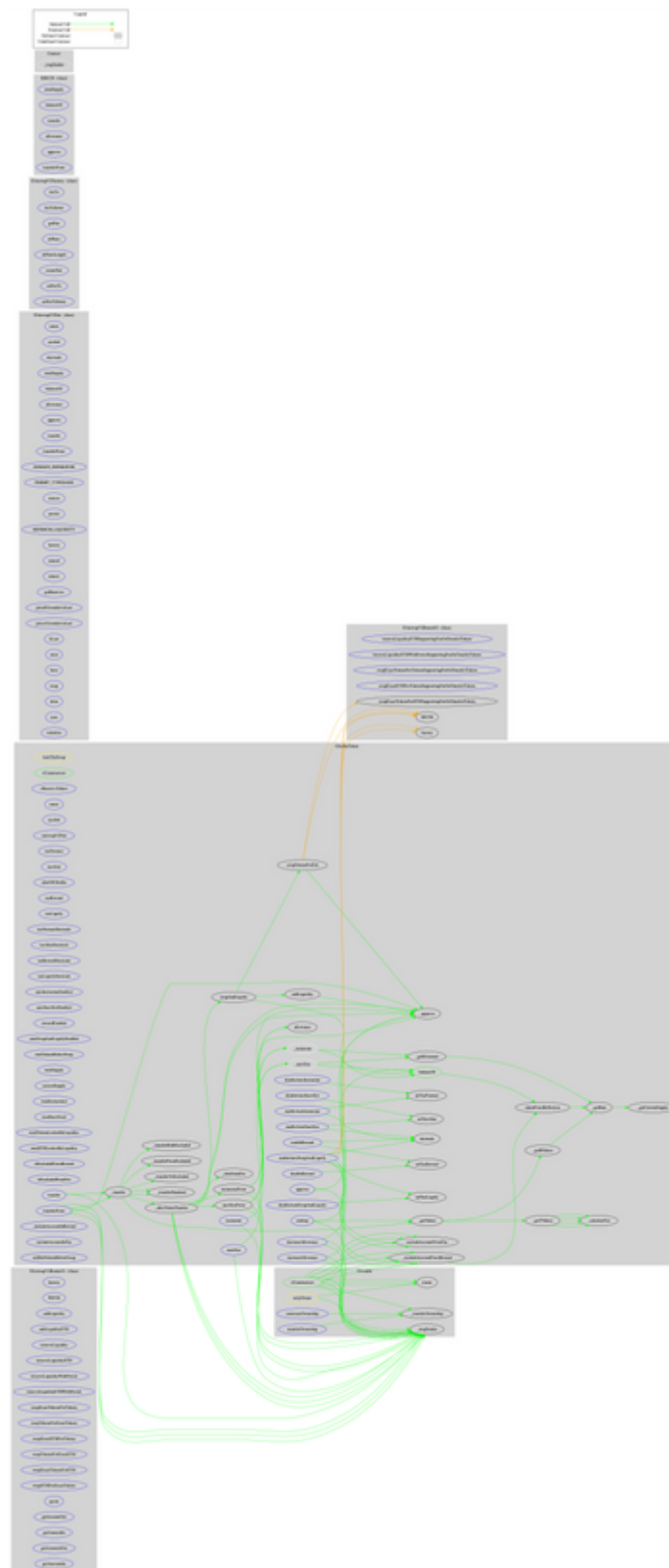
<b>IUniswapV2Factory</b>	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
<b>IERC20</b>	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>Context</b>	Implementation			
	_msgSender	Internal		
<b>Ownable</b>	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	External	✓	onlyOwner
	transferOwnership	External	✓	onlyOwner
	_transferOwnership	Internal	✓	
<b>CthulhuToken</b>	Implementation	Context, IERC20, Ownable		
	<Constructor>	Public	✓	-
	<Receive Ether>	External	Payable	-
	name	External		-
	symbol	External		-

	decimals	Public		-
	uniswapV2Pair	External		-
	taxFurnace	External		-
	taxAltar	External		-
	altarOfCthulhu	External		-
	taxReward	External		-
	taxLiquify	External		-
	taxFurnaceDecimals	External		-
	taxAltarDecimals	External		-
	taxRewardDecimals	External		-
	taxLiquifyDecimals	External		-
	autoIncinerateEnabled	External		-
	autoSacrificeEnabled	External		-
	rewardEnabled	External		-
	autoSwapAndLiquifyEnabled	External		-
	minTokensBeforeSwap	External		-
	totalSupply	External		-
	currentSupply	External		-
	totalIncinerated	External		-
	totalSacrificed	External		-
	totalTokensLockedInLiquidity	External		-
	totalETHLockedInLiquidity	External		-
	balanceOf	Public		-
	isExcludedFromReward	External		-
	isExcludedFromFee	External		-
	transfer	External	✓	-
	allowance	Public		-
	approve	External	✓	-
	transferFrom	External	✓	-
	increaseAllowance	External	✓	-
	decreaseAllowance	External	✓	-
	_incinerate	Internal	✓	
	_sacrifice	Internal	✓	
	_approve	Internal	✓	
	_transfer	Internal	✓	

	_afterTokenTransfer	Internal	✓	
	_transferStandard	Private	✓	
	_transferToExcluded	Private	✓	
	_transferFromExcluded	Private	✓	
	_transferBothExcluded	Private	✓	
	incinerate	External	✓	-
	sacrifice	External	✓	-
	incinerateFrom	Public	✓	-
	sacrificeFrom	Public	✓	-
	_excludeAccountFromReward	Public	✓	onlyOwner
	_includeAccountInReward	External	✓	onlyOwner
	excludeAccountFromFee	Public	✓	onlyOwner
	includeAccountInFee	External	✓	onlyOwner
	airdrop	External	✓	-
	tokenFromReflection	Internal		
	swapAndLiquify	Private	✓	lockTheSwap
	swapTokensForEth	Private	✓	
	addLiquidity	Private	✓	
	_distributeFee	Private	✓	
	_getValues	Private		
	_getTValues	Private		
	_getRValues	Private		
	_getRAmount	Private		
	_getRate	Private		
	_getCurrentSupply	Private		
	_calculateTax	Private		
	enableAutoIncinerate	External	✓	onlyOwner
	enableAutoSacrifice	External	✓	onlyOwner
	enableReward	External	✓	onlyOwner
	enableAutoSwapAndLiquify	External	✓	onlyOwner
	disableAutoIncinerate	External	✓	onlyOwner
	disableAutoSacrifice	External	✓	onlyOwner
	disableReward	External	✓	onlyOwner
	disableAutoSwapAndLiquify	External	✓	onlyOwner
	setMinTokensBeforeSwap	External	✓	onlyOwner

	setTaxFurnace	Public	✓	onlyOwner
	setTaxAltar	Public	✓	onlyOwner
	setTaxReward	Public	✓	onlyOwner
	setTaxLiquify	Public	✓	onlyOwner

# Contract Flow



## Domain Info

<b>Domain Name</b>	cthulhubsc.com
<b>Registry Domain ID</b>	2653990813_DOMAIN_COM-VRSN
<b>Creation Date</b>	2021-11-10T18:47:22.000Z
<b>Updated Date</b>	2021-11-10T18:47:23.000Z
<b>Registry Expiry Date</b>	
<b>Registrar WHOIS Server</b>	whois.ionos.com
<b>Registrar URL</b>	http://ionos.com
<b>Registrar</b>	IONOS SE
<b>Registrar IANA ID</b>	83

The domain has been created 2 months before the creation of the audit.

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

# Summary

Cthulhu is a meme token. The token 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. There is also a limit of max 11% fees.

The contract contains a novel tax functionality. The "furnace" fee moves the taxed amount to the "furnaceAccount" address and removes the amount from the total supply. The "alter" fee moves the taxed amount to the "altarAccount" address. Hence, every trade will slightly decrease the total supply and the furnace/alter accounts value will be increased. This will have a side effect on the market cap metric.

# 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 Coinscope team disclaims any liability for the resulting losses.



## About Coinscope

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.

Coinscope is aiming to make crypto discoverable and efficient globally. It provides all the essential tools to assist users draw their own conclusions.



The Coinscope.co team

<https://www.coinscope.co>