Cyberscope

Audit Report

Dex on Crypto

August 2023

Network BSC

Address 0xde314a065aaaf11e794706f8585c77e3bb7a2741

Audited by © cyberscope

Analysis

Critical Medium Minor / Informative Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

Table of Contents

Review

Contract Name	DividendToken
Compiler Version	v0.8.16+commit.07a7930e
Optimization	200 runs
Explorer	https://bscscan.com/address/0xde314a065aaaf11e794706f8585c77e3bb7a2741
Address	0xde314a065aaaf11e794706f8585c77e3bb7a2741
Network	BSC
Symbol	DOCSWAP
Decimals	18
Total Supply	1,000,000

Audit Updates

Initial Audit	20 Aug 2023

Source Files

Filename	SHA256
contracts/tokens/dividendToken/dividendToken/DividendToken.sol	a6562d7c561fbd01600e0d1315f1f651368e1c1bc65377a0954b72c5804d306d

Findings Breakdown

Severity	Unresolved	Acknowledged	Resolved	Other
Critical	0	0	0	0
Medium	0	0	0	0
Minor / Informative	0	0	0	0

Functions Analysis

Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
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		
SafeMathInt	Library			
	mul	Internal		
	div	Internal		

	sub	Internal		
	add	Internal		
	abs	Internal		
	toUint256Safe	Internal		
SafeMathUint	Library			
	toInt256Safe	Internal		
Initializable	Implementation			
ContextUpgradeable	Implementation	Initializable		
	__Context_init	Internal	✓	initializer
	__Context_init_unchained	Internal	✓	initializer
	_msgSender	Internal		
	_msgData	Internal		
IERC20Upgradeable	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-

IERC20MetadataUpgradeable	Interface	IERC20Upgradeable		
	name	External		-
	symbol	External		-
	decimals	External		-
ERC20Upgradeable	Implementation	Initializable, ContextUpgradeable, IERC20Upgradeable, IERC20MetadataUpgradeable		
	__ERC20_init	Internal	✓	initializer
	__ERC20_init_unchained	Internal	✓	initializer
	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	✓	
	_afterTokenTransfer	Internal	✓	
OwnableUpgradeable	Implementation	Initializable, ContextUpgradeable		
	__Ownable_init	Internal	✓	initializer
	__Ownable_init_unchained	Internal	✓	initializer
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_setOwner	Private	✓	
DividendPayingTokenInterface	Interface			
	dividendOf	External		-
	withdrawDividend	External	✓	-
DividendPayingTokenOptionalInterface	Interface			
	withdrawableDividendOf	External		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	External		-

DividendPayingToken	Implementation	ERC20Upgradeable, OwnableUpgradeable, DividendPayingTokenInterface, DividendPayingTokenOptionalInterface		
	__DividendPayingToken_init	Internal	✓	initializer
	distributeCAKEDividends	Public	✓	onlyOwner
	withdrawDividend	Public	✓	-
	_withdrawDividendOfUser	Internal	✓	
	dividendOf	Public		-
	withdrawableDividendOf	Public		-
	withdrawnDividendOf	Public		-
	accumulativeDividendOf	Public		-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	
	_setBalance	Internal	✓	
IterableMapping	Library			
	get	Public		-
	getIndexOfKey	Public		-
	getKeyAtIndex	Public		-
	size	Public		-

	set	Public	✓	-
	remove	Public	✓	-
DividendTracker	Implementation	OwnableUpgradeable, DividendPayingToken		
	initialize	External	✓	initializer
	_transfer	Internal		
	withdrawDividend	Public		-
	excludeFromDividends	External	✓	onlyOwner
	isExcludedFromDividends	Public		-
	updateClaimWait	External	✓	onlyOwner
	updateMinimumTokenBalanceForDividends	External	✓	onlyOwner
	getLastProcessedIndex	External		-
	getNumberOfTokenHolders	External		-
	getAccount	Public		-
	getAccountAtIndex	Public		-
	canAutoClaim	Private		
	setBalance	External	✓	onlyOwner
	process	Public	✓	-
	processAccount	Public	✓	onlyOwner
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		
		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	✓	
Ownable	Implementation	Context		
		Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_setOwner	Private	✓	
Clones	Library			
	clone	Internal	✓	
IUniswapV2Factory	Interface			
	createPair	External	✓	-

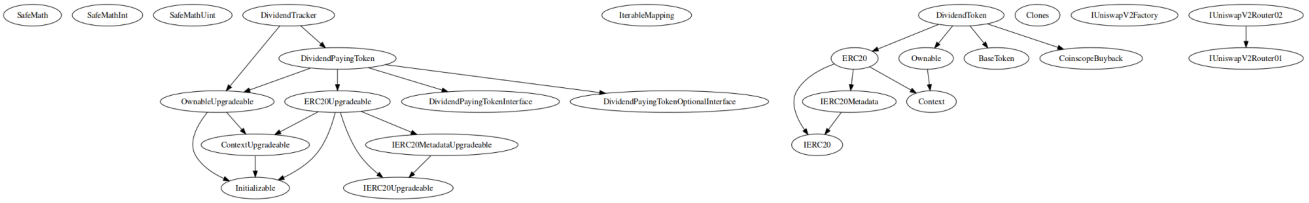
	getPair	External		-
IUniswapV2Router01	Interface			
	factory	External		-
	WETH	External		-
	WETC	External		-
	WHT	External		-
	WROSE	External		-
	WAVAX	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	addLiquidityAVAX	External	Payable	-
	addLiquidityETC	External	Payable	-
	addLiquidityROSE	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-
	removeLiquidityETHWithPermit	External	✓	-
	swapExactTokensForTokens	External	✓	-
	swapExactETHForTokens	External	Payable	-
	swapExactTokensForETH	External	✓	-
IUniswapV2Router02	Interface	IUniswapV2 Router01		
	swapExactTokensForTokensSupporting FeeOnTransferTokens	External	✓	-

	swapExactTokensForETCSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForAVAXSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForROSESupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
BaseToken	Implementation			
CoinscopeBuyback	Implementation			
	coinscopeBuyback	Internal	✓	
DividendToken	Implementation	ERC20, Ownable, BaseToken, CoinscopeBuyback		
		Public	Payable	ERC20
	getNativeCurrency	Internal		
		External	Payable	-
	setSwapTokensAtAmount	External	✓	onlyOwner
	excludeFromFees	External	✓	onlyOwner
	includeInFees	External	✓	onlyOwner
	excludeMultipleAccountsFromFees	External	✓	onlyOwner
	setMarketingWallet	External	✓	onlyOwner
	setTokenRewardsFee	External	✓	onlyOwner
	setLiquidityFee	External	✓	onlyOwner

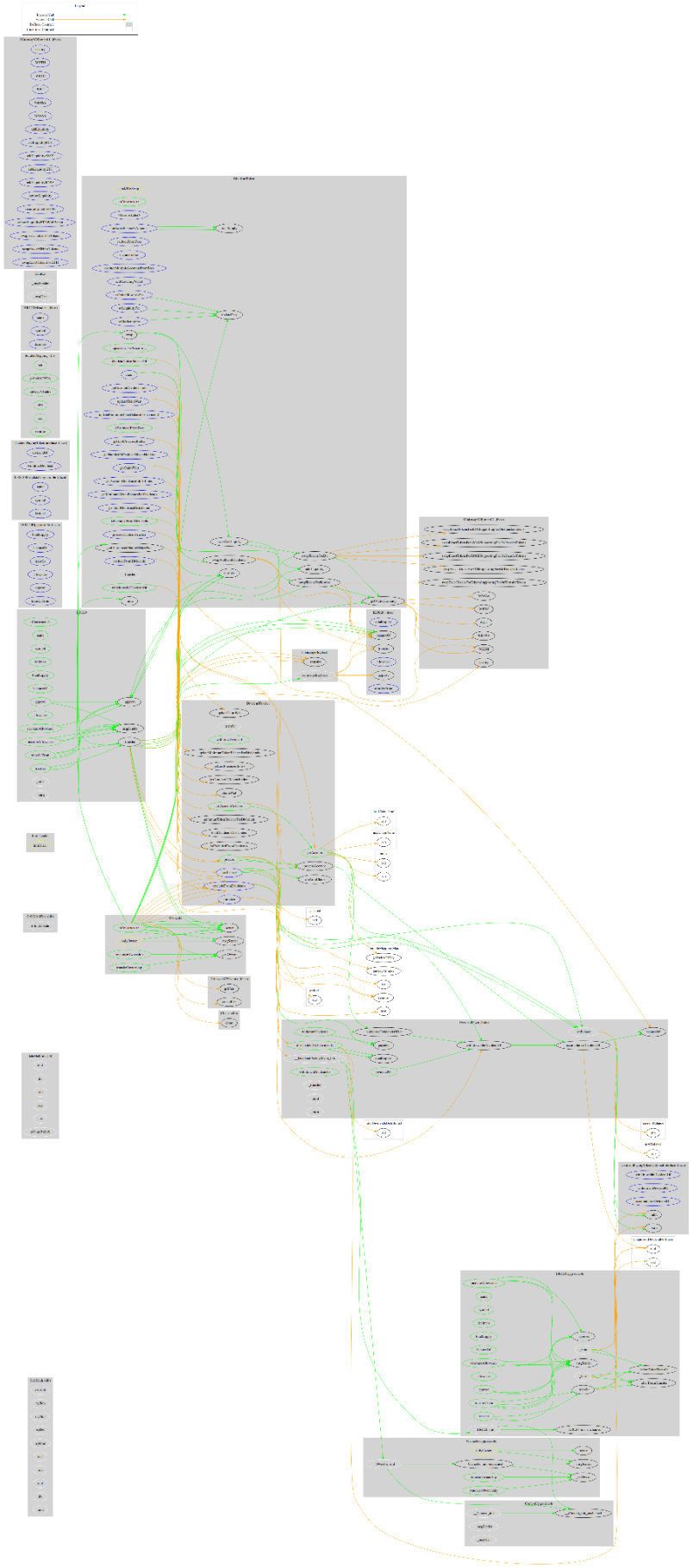
	setMarketingFee	External	✓	onlyOwner
	updateFees	Internal	✓	
	_setAutomatedMarketMakerPair	Private	✓	
	updateGasForProcessing	Public	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getClaimWait	External		-
	updateMinimumTokenBalanceForDividends	External	✓	onlyOwner
	getMinimumTokenBalanceForDividends	External		-
	getTotalDividendsDistributed	External		-
	isExcludedFromFees	Public		-
	withdrawableDividendOf	Public		-
	dividendTokenBalanceOf	Public		-
	excludeFromDividends	External	✓	onlyOwner
	isExcludedFromDividends	Public		-
	getAccountDividendsInfo	External		-
	getAccountDividendsInfoAtIndex	External		-
	processDividendTracker	External	✓	-
	claim	External	✓	-
	getLastProcessedIndex	External		-
	getNumberOfDividendTokenHolders	External		-
	_transfer	Internal	✓	
	swap	Private	✓	lockTheSwap
	swapAndLiquify	Private	✓	

	swapTokensForEth	Private	✓	
	addLiquidity	Private	✓	
	swapTokensForReward	Private	✓	
	swapAndSendDividends	Private	✓	

Inheritance Graph



Flow Graph



Summary

Dex on Crypto contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. Dex on Crypto 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. There is also a limit of max 20% fees.

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