



Cyberscope

Audit Report

Santa Doge

December 2022

Type BEP20

Network BSC

Address 0x38fD790c5F0dE8a83F8bABB78F3B7b034250e2c4

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Contract Review

Contract Name	SantaDoge
Compiler Version	v0.8.7+commit.e28d00a7
Optimization	200 runs
Licence	None
Explorer	https://bscscan.com/token/0x38fD790c5F0dE8a83F8bABB78F3B7b034250e2c4
Symbol	STDOGE
Decimals	18
Total Supply	100,000,000
Domain	santadoge.cash

Source Files

Filename	SHA256
contract.sol	b763d50c9650a58fd1babeb30e2b391fc2777b634c38e2f273651ecef4660814

Audit Updates

Initial Audit	7th December 2022
Corrected	

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

Severity	Code	Description	Status
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L09	Dead Code Elimination	Unresolved
●	L11	Unnecessary Boolean equality	Unresolved
●	L15	Local Scope Variable Shadowing	Unresolved

L04 - Conformance to Solidity Naming Conventions

Criticality	minor / informative
Location	contract.sol#L1143,1142,31,1141,1138
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.

```
marketingAddress  
marketingBuyFee  
WETH  
marketingSellFee  
maxSupply
```

Recommendation

Follow the Solidity naming convention.

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

L09 - Dead Code Elimination

Criticality	minor / informative
Location	contract.sol#L470,329,1124,383,453,443,1085,397,416,305,364,426,354
Status	Unresolved

Description

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

```
verifyCallResult  
sendValue  
_burnFrom  
functionCallWithValue  
functionDelegateCall  
_burn  
functionStaticCall  
isContract  
functionCall  
...
```

Recommendation

Remove unused functions.

L11 - Unnecessary Boolean equality

Criticality	minor / informative
Location	contract.sol#L1161
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.

```
taxStatus == true
```

Recommendation

Remove the equality to the boolean constant.

L15 - Local Scope Variable Shadowing

Criticality	minor / informative
Location	contract.sol#L1147,882
Status	Unresolved

Description

There are variables that are defined in the local scope containing the same name from an upper scope.

```
_symbol  
name  
symbol  
_name
```

Recommendation

The local variables should have different names from the upper scoped variables.

Contract Diagnostics

● Critical ● Medium ● Minor / Informative

Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
IUniswapV2Factory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
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		-
IUniswapV2Router02	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
IERC20	Interface			
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
Address	Library			
	isContract	Internal		
	sendValue	Internal	✓	
	functionCall	Internal	✓	
	functionCall	Internal	✓	
	functionCallWithValue	Internal	✓	
	functionCallWithValue	Internal	✓	
	functionStaticCall	Internal		

	functionStaticCall	Internal		
	functionDelegateCall	Internal	✓	
	functionDelegateCall	Internal	✓	
	verifyCallResult	Internal		
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		
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
Ownable	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_transferOwnership	Internal	✓	
ERC20	Implementation	Context, IERC20, Ownable		
	<Constructor>	Public	✓	-
	getOwner	External		-

	name	External		-
	decimals	External		-
	symbol	External		-
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
	increaseAllowance	External	✓	-
	decreaseAllowance	External	✓	-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	
	_approve	Internal	✓	
	_burnFrom	Internal	✓	
SantaDoge	Implementation	ERC20		
	<Constructor>	Public	✓	ERC20
	setTax	External	✓	onlyOwner
	addExcludeFee	External	✓	onlyOwner
	_transfer	Internal	✓	

Contract Flow



Domain Info

Domain Name	santadoge.cash
Registry Domain ID	313b4ed0f02a482cbc7aaafe1359b208-DONUTS
Creation Date	2022-12-03T16:32:03Z
Updated Date	2022-12-04T14:02:44Z
Registry Expiry Date	2023-12-03T16:32:03Z
Registrar WHOIS Server	whois.namecheap.com
Registrar URL	https://www.namecheap.com/
Registrar	NameCheap, Inc.
Registrar IANA ID	1068

The domain was created 4 days before the creation of the audit. It will expire in 12 months.

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

Summary

Santa Doge 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 4% buy/sell fees.

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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>