



Cyberscope

# Audit Report

## **CRYA Token**

September 2022

Github <https://github.com/Eric0718/dao-governance/blob/master/contracts/CryaToken.sol>

commit [4b0c52b7d3cc75428b6ed52a999c31b5c3e79098](#)

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## Contract Review

<b>Contract Name</b>	CryaToken
<b>Compiler Version</b>	v0.8.11+commit.d7f03943
<b>Optimization</b>	0 runs
<b>Explorer</b>	<a href="https://testnet.bscscan.com/token/0xb992f9640d8fe499223bb82e3d01556c98a55952">https://testnet.bscscan.com/token/0xb992f9640d8fe499223bb82e3d01556c98a55952</a>
<b>Symbol</b>	CRYA
<b>Decimals</b>	18
<b>Total Supply</b>	2,000,000,000
<b>Domain</b>	cryptagende.com

## Audit Updates

<b>Initial Audit</b>	19th September 2022
<b>Corrected</b>	

## Source Files

Filename	SHA256
@openzeppelin/contracts/governance/utils/IVotes.sol	55fe90680900ea253e4e5b11d9b6ab5c4ff3e85e48ffb94c8b2c29694d01312b
@openzeppelin/contracts/token/ERC20/ERC20.sol	5031430cc2613c32736d598037d3075985a2a09e61592a013dbd09a5bc2041b8
@openzeppelin/contracts/token/ERC20/extensions/draft-ERC20Permit.sol	d070a08919d4a38aa08043c687d1fe1522098b212d2e185aedef2f37275b64087
@openzeppelin/contracts/token/ERC20/extensions/draft-IERC20Permit.sol	3e7aa0e0f69eec8f097ad664d525e7b3f0a3fda8dcdd97de5433ddb131db86ef
@openzeppelin/contracts/token/ERC20/extensions/ERC20Votes.sol	fb449cd9e8ce63e968e8b5c3d39e64f9928a854fcfa4db33d6a853f890e47fd6
@openzeppelin/contracts/token/ERC20/extensions/IERC20Metadata.sol	af5c8a77965cc82c33b7ff844deb9826166689e55dc037a7f2f790d057811990
@openzeppelin/contracts/token/ERC20/IERC20.sol	94f23e4af51a18c2269b355b8c7cf4db8003d075c9c541019eb8dcf4122864d5
@openzeppelin/contracts/utils/Context.sol	1458c260d010a08e4c20a4a517882259a23a4baa0b5bd9add9fb6d6a1549814a
@openzeppelin/contracts/utils/Counters.sol	2fdcb1343e5621385b62e57b5c7775607c272122b6f2dc77da8f84828aa40cd0

<b>@openzeppelin/contracts/utils/cryptography/draft-EIP712.sol</b>	fc0e6c5d7184bd03b8deae6ca9a48a1ea aecf9f5e4703611aabfb63401e6d43f
<b>@openzeppelin/contracts/utils/cryptography/ECDSA.sol</b>	4e45d53327d561848fbcf381262ec5c0a c91b2f1f06432210bf76db55279d945
<b>@openzeppelin/contracts/utils/math/Math.sol</b>	929523c09910460ad708c75878d89b9fb ed12b65cb5d8b670200c793131072f4
<b>@openzeppelin/contracts/utils/math/SafeCast.sol</b>	e44469cf1affcd59005dc9c69df91af9c7b 93e6bc4095148232f86ba9e7f749d
<b>@openzeppelin/contracts/utils/Strings.sol</b>	34127ad0054df5963b0fd694c1b313d17 e9114a2f426b85526d6d976210298ab
<b>contracts/CryaToken.sol</b>	1ee8c7d2845c0465e4f83fe5fb735f659c d7ba44f7a40b6587b3d3dcad10bbd2

# 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
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L09	Dead Code Elimination	Unresolved

## L04 - Conformance to Solidity Naming Conventions

<b>Criticality</b>	minor / informative
<b>Location</b>	contracts/CryaToken.sol#L7
<b>Status</b>	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.

```
_totalSupply
```

### Recommendation

Follow the Solidity naming convention.

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



## L09 - Dead Code Elimination

<b>Criticality</b>	minor / informative
<b>Location</b>	contracts/CryaToken.sol#L26
<b>Status</b>	Unresolved

### Description

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

```
_burn
```

### Recommendation

Remove unused functions.

# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>IVotes</b>	Interface			
	getVotes	External		-
	getPastVotes	External		-
	getPastTotalSupply	External		-
	delegates	External		-
	delegate	External	✓	-
	delegateBySig	External	✓	-
<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	✓	
	_spendAllowance	Internal	✓	
	_beforeTokenTransfer	Internal	✓	

	_afterTokenTransfer	Internal	✓	
<b>ERC20Permit</b>	Implementation	ERC20, IERC20Per mit, EIP712		
	<Constructor>	Public	✓	EIP712
	permit	Public	✓	-
	nonces	Public		-
	DOMAIN_SEPARATOR	External		-
	_useNonce	Internal	✓	
<b>IERC20Permit</b>	Interface			
	permit	External	✓	-
	nonces	External		-
	DOMAIN_SEPARATOR	External		-
<b>ERC20Votes</b>	Implementation	IVotes, ERC20Perm it		
	checkpoints	Public		-
	numCheckpoints	Public		-
	delegates	Public		-
	getVotes	Public		-
	getPastVotes	Public		-
	getPastTotalSupply	Public		-
	_checkpointsLookup	Private		
	delegate	Public	✓	-
	delegateBySig	Public	✓	-
	_maxSupply	Internal		
	_mint	Internal	✓	
	_burn	Internal	✓	
	_afterTokenTransfer	Internal	✓	
	_delegate	Internal	✓	
	_moveVotingPower	Private	✓	
	_writeCheckpoint	Private	✓	
	_add	Private		
	_subtract	Private		

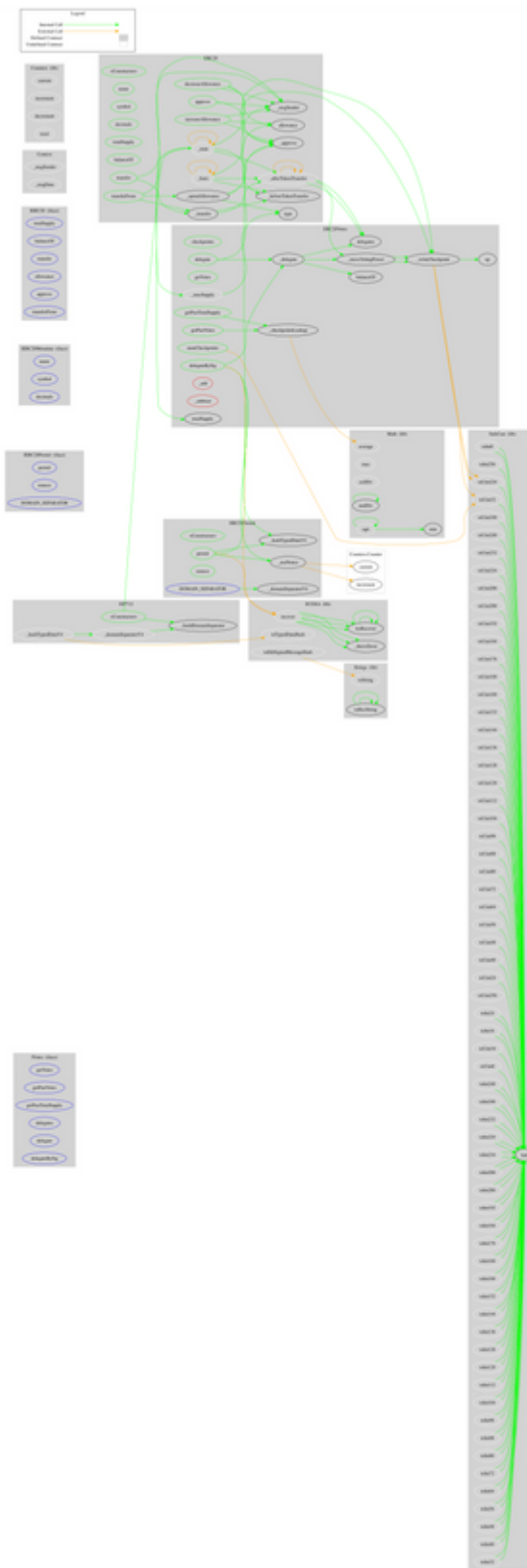
<b>IERC20Metadata</b>	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
<b>IERC20</b>	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>Context</b>	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
<b>Counters</b>	Library			
	current	Internal		
	increment	Internal	✓	
	decrement	Internal	✓	
	reset	Internal	✓	
<b>EIP712</b>	Implementation			
	<Constructor>	Public	✓	-
	_domainSeparatorV4	Internal		
	_buildDomainSeparator	Private		
	_hashTypedDataV4	Internal		
<b>ECDSA</b>	Library			
	_throwError	Private		
	tryRecover	Internal		
	recover	Internal		
	tryRecover	Internal		

	recover	Internal		
	tryRecover	Internal		
	recover	Internal		
	toEthSignedMessageHash	Internal		
	toEthSignedMessageHash	Internal		
	toTypedDataHash	Internal		
<b>Math</b>	Library			
	max	Internal		
	min	Internal		
	average	Internal		
	ceilDiv	Internal		
	mulDiv	Internal		
	mulDiv	Internal		
	sqrt	Internal		
	sqrt	Internal		
<b>SafeCast</b>	Library			
	toUint248	Internal		
	toUint240	Internal		
	toUint232	Internal		
	toUint224	Internal		
	toUint216	Internal		
	toUint208	Internal		
	toUint200	Internal		
	toUint192	Internal		
	toUint184	Internal		
	toUint176	Internal		
	toUint168	Internal		
	toUint160	Internal		
	toUint152	Internal		
	toUint144	Internal		
	toUint136	Internal		
	toUint128	Internal		
	toUint120	Internal		

	toUint112	Internal		
	toUint104	Internal		
	toUint96	Internal		
	toUint88	Internal		
	toUint80	Internal		
	toUint72	Internal		
	toUint64	Internal		
	toUint56	Internal		
	toUint48	Internal		
	toUint40	Internal		
	toUint32	Internal		
	toUint24	Internal		
	toUint16	Internal		
	toUint8	Internal		
	toUint256	Internal		
	toInt248	Internal		
	toInt240	Internal		
	toInt232	Internal		
	toInt224	Internal		
	toInt216	Internal		
	toInt208	Internal		
	toInt200	Internal		
	toInt192	Internal		
	toInt184	Internal		
	toInt176	Internal		
	toInt168	Internal		
	toInt160	Internal		
	toInt152	Internal		
	toInt144	Internal		
	toInt136	Internal		
	toInt128	Internal		
	toInt120	Internal		
	toInt112	Internal		
	toInt104	Internal		
	toInt96	Internal		

	toInt88	Internal		
	toInt80	Internal		
	toInt72	Internal		
	toInt64	Internal		
	toInt56	Internal		
	toInt48	Internal		
	toInt40	Internal		
	toInt32	Internal		
	toInt24	Internal		
	toInt16	Internal		
	toInt8	Internal		
	toInt256	Internal		
<b>Strings</b>	Library			
	toString	Internal		
	toHexString	Internal		
	toHexString	Internal		
	toHexString	Internal		
<b>CryaToken</b>	Implementation	ERC20Votes		
	<Constructor>	Public	✓	ERC20 ERC20Permit
	_afterTokenTransfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	

# Contract Flow





## Domain Info

<b>Domain Name</b>	cryptagende.com
<b>Registry Domain ID</b>	2671644488_DOMAIN_COM-VRSN
<b>Creation Date</b>	2022-01-29T07:00:00Z
<b>Updated Date</b>	2022-08-30T07:00:00Z
<b>Registry Expiry Date</b>	2027-01-29T07:00:00Z
<b>Registrar WHOIS Server</b>	whois.namesilo.com
<b>Registrar URL</b>	<a href="https://www.namesilo.com/">https://www.namesilo.com/</a>
<b>Registrar</b>	NameSilo, LLC
<b>Registrar IANA ID</b>	1479

The domain was created 8 months before the creation of the audit. It will expire in over 4 years.

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

## Summary

CRYA 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. The contract implements the ERC20 interface without additional custom logic.

# 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.

Cyberscope team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document. Always Do your own research and protect yourselves from being scammed.

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



The Cyberscope team

<https://www.cyberscope.io>