

Audit Report

CryptoTrains

January 2022

Type	BEP20
Network	BSC
Address	0x0367035F7114C72141589058d09F11D0E76988E9
Audited by	© coinscope

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Contract Review

Contract Name	ENMT
Compiler Version	v0.8.1+commit.df193b15
Optimization	200 runs
Licence	MIT
Explorer	https://bscscan.com/token/0x0367035F7114C72141589058d09F11D0E76988E9
Symbol	CTRAIN
Decimals	18
Total Supply	30,000,000
Source	contract.sol
Domain	crypto-trains.me

Audit Updates

Initial Audit	10th January 2022
Corrected	

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
	L01	Public Function could be Declared External
	L02	State Variables could be Declared Constant
	L04	Conformance to Solidity Naming Conventions
	L09	Dead Code Elimination

L01 - Public Function could be Declared External

Criticality	minor
Location	ENMT.sol#L190,L171,L149 and 9 more

Description

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

```
decreaseAllowance
increaseAllowance
transferFrom
...
```

Recommendation

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

L02 - State Variables could be Declared Constant

Criticality	minor
Location	ENMT.sol#L20

Description

Constant state variables should be declared constant to save gas.

```
TOKEN_TYPE
```

Recommendation

Add the constant attribute to state variables that never change.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	ENMT.sol#L27,L20

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.

```
INFO
TOKEN_TYPE
```

Recommendation

Follow the Solidity naming convention.
https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions

L09 - Dead Code Elimination

Criticality	minor
Location	Context.sol#L22

Description

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

```
_msgData
```

Recommendation

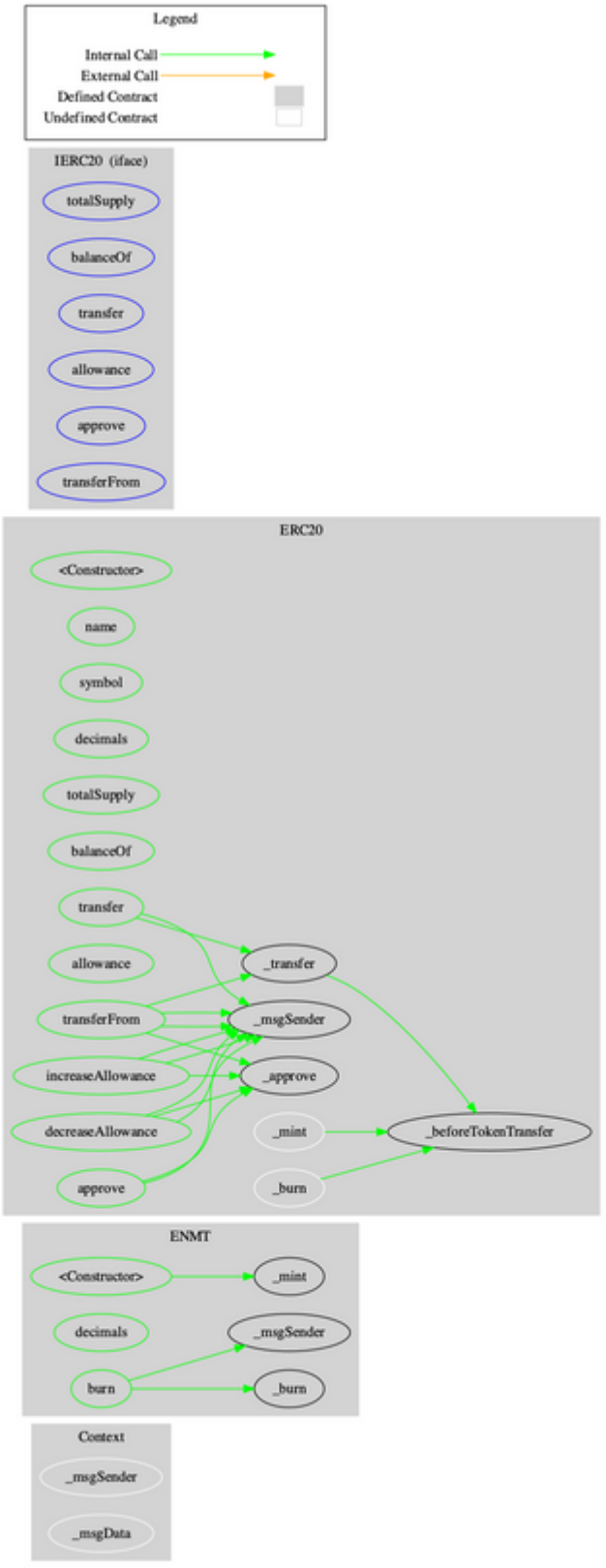
Remove unused functions.

Contract Functions

Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
ENMT	Implementation	ERC20		
	<Constructor>	Public	✓	ERC20
	decimals	Public		-
	burn	Public	✓	-
ERC20	Implementation	Context, IERC20		
	<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	✓	

	_beforeTokenTransfer	Internal	✓	
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-

Contract Flow



Domain Info

Domain Name	crypto-trains.me
Registry Domain ID	D425500000338514426-AGRS
Creation Date	2021-12-25T21:18:01Z
Updated Date	2021-12-28T14:51:37Z
Registry Expiry Date	2022-12-25T21:18:01Z
Registrar WHOIS Server	whois.namecheap.com
Registrar URL	www.namecheap.com
Registrar	NameCheap, Inc.
Registrar IANA ID	1068

The domain has been created 16 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

CryptoTrains $CTRAIN is an interesting project focused on METAVERSE, NFT and games. The project has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can not access any malicious owner-only functions to disturb the users' transactions.

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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