

# RugFreeCoins Audit



# EJECT Token Smart Contract Security Audit June 16, 2021

## **Contents**

Audit details	1
Disclaimer	2
Background	3
About the project	4
Target market and the concept	5
Potential to grow with score points	9
Total Points	g
Contract details	10
Top token holders	11
Token distribution	12
Contract interaction details	12
Contract code function details	13
Contracts description table	14
Security issue checking status	22
Owner privileges	23
Audit conclusion	25

## **Audit details**





#### **Contract Address**

0x2d43Dfe648Bb8C9c22f9FFcD1937369a9Fdd0eBc



#### **Client contact**

**EJECT Token Team** 



#### **Blockchain**

Binance smart chain



## **Project website**

https://www.eject.space/

## **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

DISCLAIMER: By reading this report or any part of it, you agree to the terms of this disclaimer. If you do not agree to the terms, then please immediately cease reading this report, and delete and destroy any and all copies of this report downloaded and/or printed by you. This report is provided for information purposes only and on a non-reliance basis, and does not constitute investment advice. No one shall have any right to rely on the report or its contents, and Rugfreecoins and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers and other representatives) (Rugfreecoins) owe no duty of care towards you or any other person, nor does Rugfreecoins make any warranty or representation to any person on the accuracy or completeness of the report. The report is provided "as is", without any conditions, warranties or other terms of any kind except as set out in this disclaimer, and Rugfreecoins hereby excludes all representations, warranties, conditions and other terms (including, without limitation, the warranties implied by law of satisfactory quality, fitness for purpose and the use of reasonable care and skill) which, but for this clause, might have effect in relation to the report. Except and only to the extent that it is prohibited by law, Rugfreecoins hereby excludes all liability and responsibility, and neither you nor any other person shall have any claim against Rugfreecoins, for any amount or kind of loss or damage that may result to you or any other person (including without limitation, any direct, indirect, special, punitive, consequential or pure economic loss or damages, or any loss of income, profits, goodwill, data, contracts, use of money, or business interruption, and whether in delict, tort (including without limitation negligence), contract, breach of statutory duty, misrepresentation (whether innocent or negligent) or otherwise under any claim of any nature whatsoever in any jurisdiction) in any way arising from or connected with this report and the use, inability to use or the results of use of this report, and any reliance on this report. The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

# **Background**

Rugfreecoins was commissioned by EJECT Token to perform an audit of the smart contract.

#### https://bscscan.com/address/0x2d43Dfe648Bb8C9c22f9FFcD1937369a9Fdd0eBc

The focus of this audit is to verify that the smart contract is secure, resilient and working according to the specifications.

The information in this report should be used to understand the risk exposure of the smart contract, project feasibility, long term sustainability and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

# **About the project**

The EJECT Token was created on the 20th of May 2021, and held a private sale on the 26th, the presale happendon the 28th on the platform DxSale, and launched on PancakeSwap on the 30th of May to be publicly traded. Initially called "EJECTElon" and it has now been rebranded to EJECT.

EJECT aims to become the first crowdfunding platform for upcoming projects on the Binance Smart Chain. The expected date for the launch is in late Q3 2021. the EJECT team is working to develop a marketplace where investors can meet and find legit projects with actual and strong use cases. The EJECT team also aims to support any project developers from the inception of a project to its launch through the platform. EJECT will host the most promising upcoming projects on the BSC and will offer the guarantee that all projects that make it to the platform are safe to invest in.

#### **Current tokenomics**

- > 2% of token trade goes holders pockets.
- 2% of token trades goes to liquidity pool.

## **Future tokenomics (planned)**

- > 0% of token trade will go to holders pockets.
- > 3% of token trades will go to liquidity pool.

# Target market and the concept

#### **Target market**

- Project developers from BSC projects with long term sustainable use cases.
- Investors to find legit, long term projects.
- Long term Eject token holders to benefit from the platform growth and traction.
- New crypto entries to be educated about crypto through the platform.
- Traders to balance the market.

#### **Core concept**

- A platform to find legit projects with strong use cases for the investors in a very early stage.
- A platform to list projects and reach potential long-term investors for the developers.

EJECT platform is aiming to create a marketspace for the new crypto projects through a screening mechanism, that helps the projects with strong use cases to get recognized and get the visibility that they deserve regardless of the marketing, and helps the community to select the good legit projects.

#### **EJECT** business model

#### I. How will EJECT generate revenue?

Taking a small percentage of commission from the projects that the EJECT team assists and helps to sustain, and through the advertisements.

#### II. Token Buyback

25% of the company's annual profits will serve to buy circulating tokens and burn them. This will decrease the supply every year without impacting the price.

#### III. How will holders benefit from EJECT success?

When the platform grows and sustains in the industry, EJECT token value will eventually grow day by day. The share of the investors will also grow higher in the long run.

#### How the platform works

#### 1. Screening project application

- a) Project application submission with detailed project action plan, goals, long term plans and the budget strategies through the EJECT platform. The EJECT team will review them and assist project devs in terms of marketing and project launches.
- **b)** The EJECT team will classify the project into categories.
  - i. Meme/heavily marketed projects with no real use-case.
  - ii. Projects with promising ideas and use-cases.
  - iii. Hybrids with varying levels of marketing/value added.
- c) Developing teams will have to formulate a deadline for raising funds for their project.

#### 2. Assisting with contract creation and submission (optional service)

The EJECT team will assist the projects to code the contract aligning with the special project use cases. When coding the token, the EJECT team will guarantee that the contract is Rug-Proof and that it includes no "backdoors" or functionalities that might endanger potential holders. This will increase the legitimacy of the projects that are listed in our platform.

Tokens that are coded externally will have to go through a rigorous auditing process prior to being launched, which can be handled by the EJECT team or any third-party service.

#### 3. The Crowdfunding section: Allowing people to invest in projects

- a) Investors will be able to invest in the project of their choice. They will be able to see how much each project is trying to raise and invest their desired amount into that specific project. Investing in projects on the EJECT platform will be possible with BNB and the \$EJECT token. The choice will be at the discretion of developers. Choosing \$EJECT will yield significant advantages to the developers, as they will benefit from much lower fees, and exclusive extra assistance in making their project a success.
- **b)** These projects will feature in our day's releases and their ratings will be decided based on the below criteria;
  - i. Number of contributors.
  - ii. Total value backed.
  - iii. Number of video plays and the % of video watched.
  - iv. Click throughs.

c) The step-by-step funding unlock feature.

The EJECT team will set up milestones and KPIs for the projects and unlock the funds upon reaching the milestones step by step. This will happen within the system itself and the development teams will have to submit payment proofs that will be available in public. The step-by-step funding unlock feature guarantees that all of the early investors' money goes in the right places.

#### **d)** Rewarding investors

Investors will be rewarded with project's tokens that they selected, but through a carefully predetermined mechanism to keep the market healthy.

- Early investors will be awarded proportionally higher since the risk of getting in early is higher.
- A mechanism of locking the token purchases to avoid dumping the whole amount at once, which will damage the market and eventually the project.

#### e) Project launch and the development

- i. Make developers' identity known to the EJECT team to ensure the legitimacy of the project.
- ii. Set specific milestones of the projects and the progress will be publicly visible in the EJECT platform.
- iii. Launching the Token will be done through the EJECT team, via a fully integrated platform within EJECT (similar to DxSale, Unicrypt, etc.). The EJECT team will require ownership of the contract through launch. in order to guarantee that everything is done safely. EJECT will keep ownership of the contracts we code and ask for a transfer of ownership of pre-written contracts. After launch, the EJECT team will transfer the ownership. The EJECT team will guarantee that contracts do not include any feature that can potentially be harmful to investors.

#### **Additional services**

- For developers, EJECT will initiate and facilitate contact with influencers, and guarantee
  that the money is spent where it should be. EJECT team help with other marketing
  expenses and processes that might be unfamiliar to developing teams with lack of
  experience in that field.
- 2. For the community to communicate with developers, EJECT will have a TALK WITH THE TEAMS section on the platform, where developers can schedule voice and video chats with investors, or communicate through messages.

- 3. For investors that do NOT wish to invest money directly into a project, EJECT platform will offer the opportunity to "shill", or help in developing the project itself. Compensation for these efforts will be distributed in EJECT tokens that have been raised for the project and considered as a Marketing or developing expense. No 'project token' will be rewarded for these tasks. Other rewards, including merch, will also be given to top investors.
- 4. The distribution of tokens after the end of the funding period and prior to launch of the project.
- 5. The partnership with wholesale companies to create merch and distribute to people who complete tasks for a project.

#### Safety features EJECT offers

- Project identity checks and screening process.
- Audit requirements and ownership transfer feature.
- Early investor lock feature.
- Step by step unlock feature.
- ❖ A required liquidity lock of 100 years for all projects' tokens that are launched through EJECT platform.
- Constant monitoring of activities from our EJECT team, and direct communication with developing teams.
- ❖ A monitored dev wallet, locked for 1 year, and with the same progressive unlocking feature as large pre-launch investors.
- The breakdown of projects through crowdfunding page into 2 sections: Doxxed and non-Doxxed.

# Potential to grow with score points

1.	Project efficiency	9/10
2.	Project uniqueness	9/10
3	Information quality	8/10
4	Service quality	9/10
5	System quality	8/10
6	Impact on the community	10/10
7	Impact on the business	9/10
8	8 Preparing for the future	
Total	8.75/10	

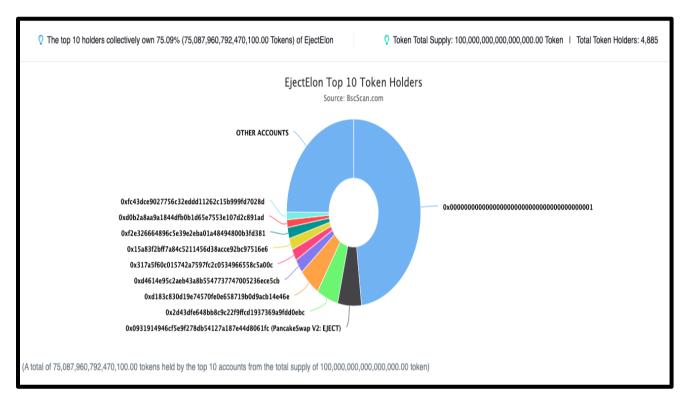
# **Contract details**

## Token contract details for 16th June 2021

Contract name	EjectElon
Contract address	0x2d43Dfe648Bb8C9c22f9FFcD1937369a9Fdd0eBc
Token supply	100,000,000,000,000
Token ticker	EJECT
Decimals	9
Token holders	4,694
Transaction count	23,614
Top 100 holders dominance	91.30%
Contract deployer address	0x168026A30ce69C3313A97CB3d519829C03E72438
Contract's current owner address	0x9f75cd5865736253d9c37f82b3c3e200938d96c4

# Top token holders

## Top 10 Token Holders as at 16th June 2021

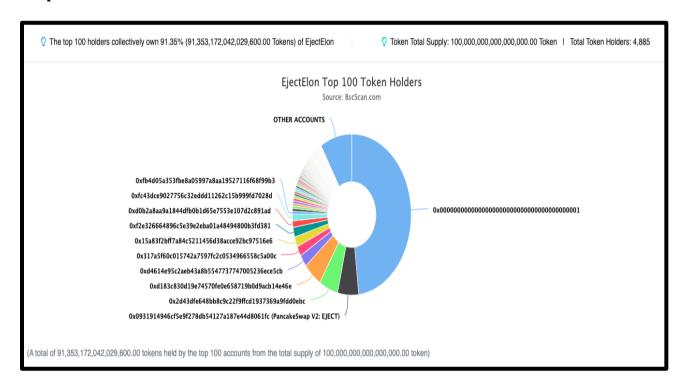


(A total of 75	107 000 709 470 100 00 takana hald hu tha tan 10 appaunts from the total arrests of 100 000 000 000	0.000.000.00 tokon)	
(A total of 75,	087,960,792,470,100.00 tokens held by the top 10 accounts from the total supply of 100,000,000,000	,,000,000.00 token)	
Rank	Address	Quantity (Token)	Percentage
1	0x0000000000000000000000000000000000000	48,131,253,894,943,900.426561792	48.1313%
2	PancakeSwap V2: EJECT	5,730,937,611,131,950.197003607	5.7309%
3	■ 0x2d43dfe648bb8c9c22f9ffcd1937369a9fdd0ebc	5,180,984,526,795,600.494736374	5.1810%
4	0xd183c830d19e74570fe0e658719b0d9acb14e46e	5,000,000,000,000,000.000350748	5.0000%
5	0xd4614e95c2aeb43a8b5547737747005236ece5cb	2,433,129,592,809,760.80011661	2.4331%
6	0x317a5f60c015742a7597fc2c0534966558c5a00c	2,015,139,553,438,870.133821725	2.0151%
7	0x15a83f2bff7a84c5211456d38acce92bc97516e6	2,015,139,513,670,690.596786513	2.0151%
8	0xf2e326664896c5e39e2eba01a48494800b3fd381	1,938,759,877,312,740.365925921	1.9388%
9	0xd0b2a8aa9a1844dfb0b1d65e7553e107d2c891ad	1,342,019,083,245,750.686508375	1.3420%
10	0xfc43dce9027756c32eddd11262c15b999fd7028d	1,300,597,139,120,710.433320652	1.3006%

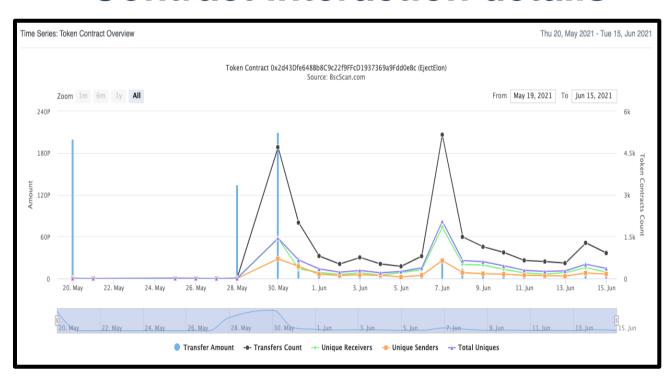
## **Token distribution**

Token will be distributed as follows:

### Top 100 Token Holders as at 16th June 2021



## **Contract interaction details**



# **Contract code function details**

No	Category	Item	Result
		BRC20 Token standards	pass
		compile errors	pass
		Compiler version security	pass
		visibility specifiers	pass
		Gas consumption	low issue
1	Coding conventions	SafeMath features	pass
		Fallback usage	pass
		tx.origin usage	pass
		deprecated items	pass
		Redundant code	pass
		Overriding variables	pass
		Authorization of function call	pass
2	Function call audit	Low level function (call/delegate call) security	pass
		Returned value security	pass
		Selfdestruct function security	pass
		Access control of owners	pass
3	Business security	Business logics	pass
		Business implementations	pass
4	Integer overflow/underflow		pass
5	Reentrancy		pass
6	Exceptional reachable state		pass
7	Transaction ordering dependence		pass
8	Block properties dependence		pass
9	Pseudo random number generator (PRNG)		pass
10	DoS (Denial of Service)		pass
11	Token vesting implementation		pass
12	Fake deposit		pass
13	Event security		pass

# **Contracts description table**

Below table represents the summary of the contracts and methods in the token contract. We scanned the whole contract and listed down all the Interfaces, functions and implementations with its visibility and mutability.

Contract	Туре	Bases		
L	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
L	totalSupply	External [		NO
L	balanceOf	External [		NO
L	transfer	External [		NO
L	allowance	External [		NO
L	approve	External [		NO
L	transferFrom	External [		NO
SafeMath	Library			
L	add	Internal 🖺		
L	sub	Internal 🦺		
L	sub	Internal 🖺		
L	mul	Internal 🦺		
L	div	Internal 🖺		
L	div	Internal 🖺		
L	mod	Internal 🖺		
L	mod	Internal 🖺		

Context	Implementation			
L	_msgSender	Internal 🦲		
L	_msgData	Internal 🦲		
Address	Library			
L	isContract	Internal 🦺		
L	sendValue	Internal 🦺		
L	functionCall	Internal <u></u>		
L	functionCall	Internal 🦲		
L	functionCallWith Value	Internal <u></u>		
L	functionCallWith Value	Internal <u></u>		
L	_functionCallWit hValue	Private P		
				•
Ownable	Implementation	Context		
L		Internal 🦲		
L	owner	Public		NO
L	renounceOwner ship	Public		onlyOwner
L	transferOwnersh ip	Public .		onlyOwner
L	geUnlockTime	Public		NO.
L	lock	Public		onlyOwner
L	unlock	Public		NO
			,	,
IUniswapV2Factory	Interface			
L	feeTo	External		NO

L	feeToSetter	External	NO
L	getPair	External	NO.
L	allPairs	External	NO
L	allPairsLength	External	NO.
L	createPair	External .	NO.
L	setFeeTo	External .	NO
L	setFeeToSetter	External	NO.
IUniswapV2Pair	Interface		
L	name	External	NO
L	symbol	External	NO
L	decimals	External .	NO
L	totalSupply	External	NO
L	balanceOf	External .	NO
L	allowance	External .	NO
L	approve	External	NO
L	transfer	External .	NO
L	transferFrom	External	NO
L	DOMAIN_SEPA RATOR	External	NO
L	PERMIT_TYPE HASH	External .	NO.
L	nonces	External	NO.
L	permit	External	NO.
L	MINIMUM_LIQU IDITY	External	NO.
L	factory	External	NO
L	token0	External	NO

L	token1	External		NO.
L	getReserves	External		NO.
L	price0Cumulativ eLast	External [		NO
L	price1Cumulativ eLast	External [		NO
L	kLast	External [		NO
L	mint	External [		NO
L	burn	External		NO
L	swap	External [		NO
L	skim	External		NO
L	sync	External .		NO.
L	initialize	External .		NO
IUniswapV2Router01	Interface			
L	factory	External		NO.
L	WETH	External		NO.
L	addLiquidity	External		NO
L	addLiquidityETH	External .	<u>u</u> D	NO
L	removeLiquidity	External .		NO
L	removeLiquidity ETH	External [		NO.
L	removeLiquidity WithPermit	External		NO.
L	removeLiquidity ETHWithPermit	External		NO.
L	swapExactToke nsForTokens	External		NO
L	swapTokensFor ExactTokens	External		NO

L	swapExactETHF orTokens	External	<b>6</b> 1	NO
L	swapTokensFor	External		NO
	ExactETH	External 8		1108
L	swapExactToke nsForETH	External		NO
L	swapETHForExa ctTokens	External	<b>GD</b>	NO.
L	quote	External		NO
L	getAmountOut	External .		NO
L	getAmountIn	External		NO
L	getAmountsOut	External		NO
L	getAmountsIn	External		NO
IUniswapV2Router02	Interface	IUniswapV2Router01		
L	removeLiquidity ETHSupportingF eeOnTransferTo kens	External		NO
L	ETHSupportingF eeOnTransferTo	External .		NO.
	ETHSupportingF eeOnTransferTo kens  removeLiquidity ETHWithPermitS upportingFeeOn			
L	ETHSupportingF eeOnTransferTo kens  removeLiquidity ETHWithPermitS upportingFeeOn TransferTokens  swapExactToke nsForTokensSu pportingFeeOnT	External .		NO.
L	ETHSupportingF eeOnTransferTo kens  removeLiquidity ETHWithPermitS upportingFeeOn TransferTokens  swapExactToke nsForTokensSu pportingFeeOnT ransferTokens  swapExactETHF orTokensSuppor tingFeeOnTransf	External .		NO.

EjectElon	Implementation	Context, IERC20, Ownable	
L		Public	NO
L	name	Public	NO
L	symbol	Public	NO
L	decimals	Public	NO
L	totalSupply	Public	NO
L	balanceOf	Public	NO
L	transfer	Public	NO
L	allowance	Public	NO
L	approve	Public	NO
L	transferFrom	Public	NO
L	increaseAllowan ce	Public .	NO.
L	decreaseAllowa nce	Public	NO.
L	isExcludedFrom Reward	Public	NO.
L	totalFees	Public	NO
L	deliver	Public	NO
L	reflectionFromTo ken	Public .	NO.
L	tokenFromRefle ction	Public	NO.
L	excludeFromRe ward	Public	onlyOwner
L	includeInReward	External	onlyOwner
L	_transferBothEx cluded	Private 🖺	
L	excludeFromFee	Public	onlyOwner
L	includeInFee	Public	onlyOwner

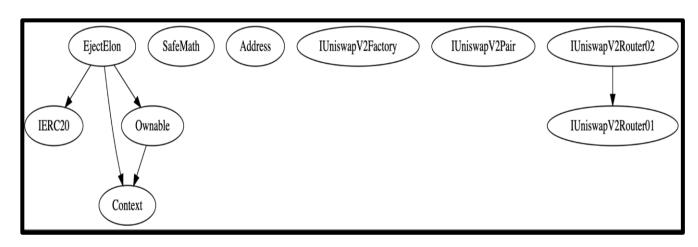
L	setTaxFeePerce nt	External	onlyOwner
L	setLiquidityFeeP ercent	External .	onlyOwner
L	setMaxTxPercen t	External	onlyOwner
L	setSwapAndLiqu ifyEnabled	Public	onlyOwner
L		External .	NO
L	_reflectFee	Private P	
L	_getValues	Private P	
L	_getTValues	Private P	
L	_getRValues	Private 🖺	
L	_getRate	Private P	
L	_getCurrentSup ply	Private P	
L	_takeLiquidity	Private P	
L	calculateTaxFee	Private P	
L	calculateLiquidit yFee	Private P	
L	removeAllFee	Private P	
L	restoreAllFee	Private P	
L	isExcludedFrom Fee	Public	NO
L	_approve	Private P	
L	_transfer	Private P	
L	swapAndLiquify	Private P	lockTheSwap
L	swapTokensFor Eth	Private P	
L	addLiquidity	Private P	
L	_tokenTransfer	Private 🖺	

L	_transferStandar d	Private 🕙	
L	_transferToExclu ded	Private 🕙	
L	_transferFromEx cluded	Private 🕙	

#### Legend

Symbol	Meaning	
	Function can modify state	
g <sub>E</sub>	Function is payable	

## **Inheritance Hierarchy**



# Security issue checking status

#### High severity issues

No high severity issues found

#### Medium severity issues

No medium severity issues found

#### Low severity issues

#### 1. Out of gas

#### Issue:

➤ The function includeInReward() uses the loop to find and remove addresses from the \_excluded list. Function will be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.

```
ftrace|funcSig

function _getCurrentSupply() private view returns(uint256, uint256) {

    uint256 rSupply = _rTotal;
    uint256 tSupply = _tTotal;

    for (uint256 i = 0; i < _excluded.length; i++) {

        if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return (_rTotal, _tTotal);
        rSupply = rSupply.sub(_rOwned[_excluded[i]]);
        tSupply = tSupply.sub(_tOwned[_excluded[i]]);
    }

    if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
    return (rSupply, tSupply);
}</pre>
```

#### **Recommendation:**

Check that the excluded array length is not too big.

# **Owner privileges**

## (In the period when the owner is not renounced)

Owner can transfer the contract and renounce the ownership.

```
ftrace|funcSig
function renounceOwnership() public virtual onlyOwner {
    emit OwnershipTransferred(_owner, address(0));
    _owner = address(0);
}

ftrace|funcSig
function transferOwnership(address newOwner1) public virtual onlyOwner {
    require(newOwner1 != address(0), "Ownable: new owner is the zero address");
    emit OwnershipTransferred(_owner, newOwner1);
    _owner = newOwner1;
}
```

❖ The contract will lock for the owner after transferring the ownership by specifying a period, and the contract will get unlocked once the specified period is over.

• Owner can swap and liquify (owner can enable and disable this).

```
ftrace|funcSig

function setSwapAndLiquifyEnabled(bool _enabled 1) public onlyOwner {
    swapAndLiquifyEnabled = _enabled 1;
    emit SwapAndLiquifyEnabledUpdated(_enabled 1);
}
```

❖ Owner can change maximum transaction amount.

Owner can change Liquidity Fee percentage.

Owner can change tax fee percentage

Owner can Include and Exclude accounts from Fees.

```
ftrace|funcSig
    function excludeFromFee(address account 1) public onlyOwner {
        isExcludedFromFee[account 1] = true;
}

ftrace|funcSig
    function includeInFee(address account 1) public onlyOwner {
        isExcludedFromFee[account 1] = false;
}
```

## **Audit conclusion**

While conducting the audit of the EJECT smart contract, it was observed that there is nothing alarming with the code and the contract contains only low severity issues.