



RugFreeCoins Audit



Connect Protocol Token Smart Contract Security Audit

September 21st, 2022

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Audit details



Audited project
Connect Protocol Token



Contract Address
[0x5Cb9606a9AE0b8A82Bbd7f36fa58149BC80eA8C7](https://connectprotocol.io/0x5Cb9606a9AE0b8A82Bbd7f36fa58149BC80eA8C7)



Client contact
Connect Team



Blockchain
Binance smart chain



Project website
<http://connectprotocol.io>

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.

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Overview

- ✓ No mint function found; the owner cannot mint tokens after initial deployment.
- ✓ There are no max tx limits and max wallet limits in the contract.
- ✓ The owner can't pause trading.
- ✓ The owner can't set fees over 25%.
- ✓ Owner can't blacklist wallets.
- ✓ The owner can't claim the contract's balance of its own token.

Background

Rugfreecoins was commissioned by the Connect Team to perform an audit of the smart contract.

<https://bscscan.com/address/0x5Cb9606a9AE0b8A82Bbd7f36fa58149BC80eA8C7>

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, and long-term sustainability, and as a guide to improving the security posture of the smart contract by remediating the issues that were identified.

Roadmap

Phase 01

- App Beta Unveil
- MetaConnect Unveil
- Security Audits
- Strategic Partnerships
- Targeted Marketing Campaign
- Bonus Referral Contest
- Community Event/Community building
- Bonus FairLaunch

Phase 02

- Launch on PancakeSwap
- Launch of the Connect-To-Earn Protocol
- Launch of MetaConnect Alpha
- Soulbound Token Integration
- Expansion to Ethereum, Avalanche, and Polygon Blockchains
- Mainstream Marketing Campaign
- TOP 15 Centralised Exchange Listing

Phase 03

- Connect App 2.0
- MetaConnect Beta
- Focus on User Growth
- Strategic Partnerships

Tokenomics

6% when buying

- 6% of trade goes to the marketing wallet in BNBs

9% when selling

- 9% of trade goes to the marketing wallet in BNBs

Target market and the concept

Target market

- Anyone who's interested in the Crypto space with long-term investment plans.
- Anyone who's ready to earn a passive income by holding tokens.
- Anyone who's interested in trading tokens.
- Anyone who's ready to staking and receive rewards.
- Anyone who's interested in taking part in the future plans of the Connect token.
- Anyone who's interested in making financial transactions with any other party using Connect Token as the currency.

Potential to grow with score points

1.	Project efficiency	9/10
2.	Project uniqueness	9/10
3	Information quality	9/10
4	Service quality	9/10
5	System quality	9/10
6	Impact on the community	9/10
7	Impact on the business	9/10
8	Preparing for the future	9/10
9	Smart contract security	10/10
10	Smart contract functionality assessment	10/10
Total Points		9.2/10

Contract details

Token contract details for 21st of September 2022

Contract name	ConnectProtocol
Contract address	0x5Cb9606a9AE0b8A82Bbd7f36fa58149BC80eA8C7
Token supply	77,777
Token ticker	\$CONNECT
Decimals	9
Token holders	1
Transaction count	1
Marketing wallet	0x42a66ebc3fc6c6dbddc9171a2d6e72f57ecd3c1d
Contract deployer address	0x9635986c4561b3CBB1f24aa34a318925aa13a639
Contract's current owner address	0x9635986c4561b3CBB1f24aa34a318925aa13a639









Contract code function details

No	Category	Item	Result
1	Coding conventions	BRC20 Token standards	pass
		compile errors	pass
		Compiler version security	pass
		visibility specifiers	pass
		Gas consumption	pass
		SafeMath features	pass
		Fallback usage	pass
		tx.origin usage	pass
		deprecated items	pass
		Redundant code	pass
		Overriding variables	pass
2	Function call audit	Authorization of function call	pass
		Low level function (call/delegate call) security	pass
		Returned value security	pass
		Self-destruct function security	pass
3	Business security	Access control of owners	
		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
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Contract description table

The 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 their visibility and mutability.

Contract	Type	Bases		
L	Function Name	Visibility	Mutability	Modifiers
ConnectProtocol	Implementation	IERC20, Ownable		
L		Public !		NO !
L		External !		NO !
L	totalSupply	External !		NO !
L	name	Public !		NO !
L	symbol	Public !		NO !
L	decimals	Public !		NO !
L	currentBalance	Public !		NO !
L	balanceOf	Public !		NO !
L	allowance	External !		NO !
L	approve	Public !		NO !
L	_approve	Internal 		
L	approveMax	External !		NO !
L	transfer	External !		NO !
L	transferFrom	External !		NO !



L	_transferFrom	Internal 🔒	🛑	
L	_basicTransfer	Internal 🔒	🛑	
L	shouldTakeFee	Internal 🔒		
L	takeFee	Internal 🔒	🛑	
L	changeFees	Public !	🛑	onlyOwner
L	shouldSwapBack	Internal 🔒		
L	clearStuckBalance	External !	🛑	onlyOwner
L	enableTrading	Public !	🛑	onlyOwner
L	whitelistPreSale	Public !	🛑	onlyOwner
L	swapBackInBnb	Internal 🔒	🛑	swapping
L	swapTokensForEth	Private 🗑️	🛑	
L	setIsFeeExempt	External !	🛑	onlyOwner
L	changeMarketingWallet	External !	🛑	onlyOwner
L	setSwapBackSettings	External !	🛑	onlyOwner
Ownable	Implementation	Context		
L		Public !	🛑	NO !
L	owner	Public !		NO !
L	_checkOwner	Internal 🔒		
L	renounceOwnership	Public !	🛑	onlyOwner
L	transferOwnership	Public !	🛑	onlyOwner

L	<code>_transferOwnership</code>	Internal 		
IERC20	Interface			
L	<code>totalSupply</code>	External 		NO 
L	<code>balanceOf</code>	External 		NO 
L	<code>transfer</code>	External 		NO 
L	<code>allowance</code>	External 		NO 
L	<code>approve</code>	External 		NO 
L	<code>transferFrom</code>	External 		NO 
SafeMath	Library			
L	<code>tryAdd</code>	Internal 		
L	<code>trySub</code>	Internal 		
L	<code>tryMul</code>	Internal 		
L	<code>tryDiv</code>	Internal 		
L	<code>tryMod</code>	Internal 		
L	<code>add</code>	Internal 		
L	<code>sub</code>	Internal 		
L	<code>mul</code>	Internal 		
L	<code>div</code>	Internal 		
L	<code>mod</code>	Internal 		
L	<code>sub</code>	Internal 		

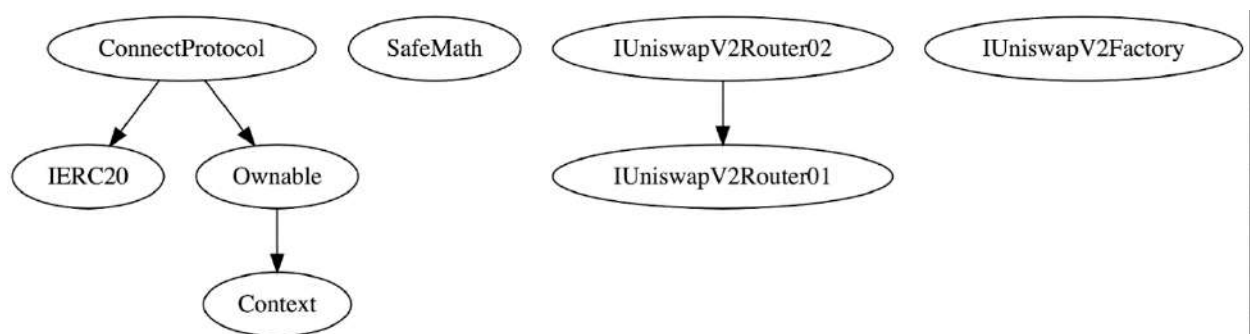
L	div	Internal 		
L	mod	Internal 		
IUniswapV2Router02	Interface	IUniswapV2Router01		
L	removeLiquidityETHSupportingFeeOnTransferTokens	External 		NO 
L	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External 		NO 
L	swapExactTokensForTokensSupportingFeeOnTransferTokens	External 		NO 
L	swapExactETHForTokensSupportingFeeOnTransferTokens	External 		NO 
L	swapExactTokensForETHSupportingFeeOnTransferTokens	External 		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 
Context	Implementation			

L	_msgSender	Internal 🔒		
L	_msgData	Internal 🔒		

Legend

Symbol	Meaning
	Function can modify state
	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

No low severity issues found

❖ Centralization Risk

No Centralization Risk found

Owner privileges

- ❖ The owner can change buy and sell fees, total fees maximum up to 25%

```
ftrace | funcSig
function changeFees(uint256 buyFee↑, uint256 sellFee↑) public onlyOwner {
    buyTotalFees = buyFee↑;
    sellTotalFees = sellFee↑;

    require(
        buyTotalFees.add(sellTotalFees) <= 25,
        "Total fees can not grater than 25%"
    );
}
```

- ❖ The owner can get BNB from contract to owner wallet

```
ftrace | funcSig
function clearStuckBalance(uint256 amountPercentage↑) external onlyOwner {
    uint256 amountBNB = address(this).balance;
    payable(msg.sender).transfer((amountBNB * amountPercentage↑) / 100);
}

// switch Trading
```

- ❖ The owner can enable trading, once enabled cannot disable again

```
// switch Trading
ftrace | funcSig
function enableTrading() public onlyOwner {
    tradingOpen = true;
}
```


- ❖ The owner can whitelist pre-sale address

```
ftrace | funcSig
function whitelistPreSale(address _preSale↑) public onlyOwner {
    isFeeExempt[_preSale↑] = true;
    isAuthorized[_preSale↑] = true;
}
```

- ❖ The owner can include/exclude wallets from fees

```
ftrace | funcSig
function setIsFeeExempt(address holder↑, bool exempt↑) external onlyOwner {
    isFeeExempt[holder↑] = exempt↑;
}
```

- ❖ The owner can change marketing wallet address

```
ftrace | funcSig
function changeMarketingWallet(address _marketingFeeReceiver↑)
    external
    onlyOwner
{
    marketingFeeReceiver = _marketingFeeReceiver↑;
}
```

- ❖ The owner can enable/disable swapping and can change swap threshold

```
ftrace | funcSig
function setSwapBackSettings(bool _enabled↑, uint256 _amount↑)
    external
    onlyOwner
{
    swapEnabled = _enabled↑;
    swapThreshold = _amount↑;
}
```

Audit conclusion

RugFreeCoins team has performed in-depth testings, line-by-line manual code review, and automated audit of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, manipulations, and hacks. According to the smart contract audit.

Smart contract functional Status: **PASS**

Number of risk issues: **0**

Solidity code functional issue level: **PASS**

Number of owner privileges: **7**

Centralization risk correlated to the active owner: **LOW**

Smart contract active ownership: **YES**