TechRate
March, 2024

SMART CONTRACTS SECURITY AUDIT REPORT

Audit Details

Audited project

Sync Node

Deployer address

0xA70bb015563E5be9f450E9abcFFA65D2E8FBF473

Client contacts:

Sync Node team

Blockchain

Binance Smart Chain

Project website:

https://sync-node.org

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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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

TechRate was commissioned by Sync Node to perform an audit of smart contracts:
https://bscscan.com/address/0x3872a54400ab74adc8fdb881f22e0b3377ea7ac5#code

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

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

Issues Checking Status

	Issue description	Checking status
1.	**Compiler errors.**	Passed
2.	**Race conditions and Reentrancy. Cross-function race conditions.**	Passed
3.	**Possible delays in data delivery.**	Passed
4.	**Oracle calls.**	Passed
5.	**Front running.**	Passed
6.	**Timestamp dependence.**	Passed
7.	**Integer Overflow and Underflow.**	Passed
8.	**DoS with Revert.**	Passed
9.	**DoS with block gas limit.**	Passed
10.	**Methods execution permissions.**	Passed
11.	**Economy model of the contract.**	Passed
12.	**The impact of the exchange rate on the logic.**	Passed
13.	**Private user data leaks.**	Passed
14.	**Malicious Event log.**	Passed
15.	**Scoping and Declarations.**	Passed
16.	**Uninitialized storage pointers.**	Passed
17.	**Arithmetic accuracy.**	Passed
18.	**Design Logic.**	Passed
19.	**Cross-function race conditions.**	Passed
20.	**Safe Open Zeppelin contracts implementation and usage.**	Passed
21.	**Fallback function security.**	Passed

Security Issues

High Severity Issues

No high severity issues found.

Medium Severity Issues

No medium severity issues found.

Low Severity Issues

No low severity issues found.

Owner privileges (In the period when the owner is not renounced)

- Owner can include in and exclude from fees.
- Owner can change sell and buy fees.
- Owner can change dev wallet address.
- Owner can enable / disable swap and liquify.
- Owner can change number of transaction before liquify trigger.
- Owner can enable / disable transfer fees.
- Owner can change maximum transaction amount.
- Owner can change maximum tokens amount per wallet.
- Owner can manually process swap and liquify.
- Owner can change uniswapV2pair and router

Testnet deployment

Contracts Description Table

Contract	Type	Bases		
└	**Function Name**	**Visibility**	**Mutability**	**Modifiers**
Sync Node	Implementation	Context, IERC20, Ownable		
└	transfer	Public ❗	🛑	NO❗
└	approve	Public ❗	🛑	NO❗
└	transferFrom	Public ❗	🛑	NO❗
└	increaseAllowance	Public ❗	🛑	NO❗
└	decreaseAllowance	Public ❗	🛑	NO❗
└	excludeTax	Public ❗	🛑	onlyOwner
└	includeTax	Public ❗	🛑	onlyOwner
└	taxSet	External ❗	🛑	onlyOwner
└	Wallet_Update	Public ❗	🛑	onlyOwner
└	set_Swap_And_Liquify_Enabled	Public ❗	🛑	onlyOwner
└	set_Number_Of_Transactions_Before_Liquify_Trigger	Public ❗	🛑	onlyOwner
└	noFee_Set	External ❗	🛑	onlyOwner
└	setMax_Buy	External ❗	🛑	onlyOwner
└	setMax_Wallet	External ❗	🛑	onlyOwner

Legend

Symbol	Meaning
🛑	Function can modify state
💵	Function is payable

Contract testing:

✓ should deploy the token with the correct name and symbol (1942ms)

✓ should assign the initial supply to the deployer (1845ms)

✓ should exclude an account from fees (7914ms)

✓ should include an account in fees (6400ms)

✓ should set buy and sell fees (6441ms)

✓ should update the development wallet (5964ms)

✓ should toggle swap and liquify (47663ms)

✓ should set the number of transactions before liquify trigger (8485ms)

✓ should set transfers without fees option (11883ms)

✓ should set max transaction percent (7329ms)

✓ should set max wallet percent (6574ms)

✓ should transfer tokens between accounts (7659ms)

✓ should allow approvals and transfers from (13778ms)

✓ should increase and decrease allowances (12193ms)

14 passing (3m)

Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details are provided by the team:
https://www.pinksale.finance/pinklock/record/1216131?chain=BSC

Security score: 87.

TechRate note:
Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.