TechRate
August, 2022

SMART CONTRACTS SECURITY AUDIT REPORT

Techrate_audits Techrate Techrate1

Audit Details

Audited project

MotionToken

Deployer address

Not deployed

Client contacts:

MotionToken team

Blockchain

Not provided

Project website:

Not provided

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 MotionToken to perform an audit of smart contracts on commit:
https://github.com/amanskyadavq/MotionToken/commit/e007c3a7bf0ad0e4a814bbcb1f7bd9d283d3b9f9

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.

Notes:

- _tokenTransfer() emits s.tMarketing fee on treasury block.
- Burner contract is not used in Motion contract.
- router02 variable is unused.

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

- Saita:
    - Owner can exclude from the fee.
    - Owner can change taxes.
    - Owner can add/remove pairs.
    - Owner can change ETH splits.
    - Owner can change treasury, burn and marketing addresses.
    - Owner can change the maximum transaction amount.
    - Owner can change swapTokensAtAmount.
    - Owner can change cooldown settings.
    - Owner can mark addresses as bots.
    - Owner can change router and pair addresses.
    - Owner can withdraw contract tokens and native tokens.

- Motion:
    - Owner can enable/disable saita tax.
    - Owner can exclude from the fee.
    - Owner can add/remove pairs.
    - Owner can change taxes.
    - Owner can change treasury, burn, USDT and marketing addresses.
    - Owner can change the maximum transaction amount.
    - Owner can change swapTokensAtAmount.
    - Owner can change cooldown settings.
    - Owner can mark addresses as bots.
    - Owner can change router and pair addresses.
    - Owner can airdrop tokens.
    - Owner can withdraw contract tokens and native tokens.

Testnet deployment

Contracts Description Table

Contract	Type	Bases		
└	**Function Name**	**Visibility**	**Mutability**	**Modifiers**
Motion	Implementation	IERC20, Ownable		
└	transfer	Public ❗	🛑	NO❗
└	approve	Public ❗	🛑	NO❗
└	transferFrom	Public ❗	🛑	NO❗
└	enableSaitaTax	Public ❗	🛑	onlyOwner
└	disableSaitaTax	Public ❗	🛑	onlyOwner
└	setTaxes	Public ❗	🛑	onlyOwner

Legend

Symbol	Meaning
🛑	Function can modify state
💵	Function is payable

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 NOT provided by the team.

Security score: 83.

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.