



Infini DAO Smart Contract Security Audit

<u>TechRate</u>

December, 2021

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 below 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 Infini DAO to perform an audit of smart contracts:

https://bscscan.com/address/0x53d78521e6bced797cfde3e45fbfa0db319fafb0#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.

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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.	Low issues
	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

Passed

21. Fallback function security.

Security Issues

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.
- The function _getCurrentSupply also uses the loop for evaluating total supply. It also could be aborted with OUT_OF_GAS exception if there will be a long excluded addresses list.

Recommendation:

Check that the excluded array length is not too big.

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

- Owner can lock and unlock. By the way, using these functions the owner could retake privileges even after the ownership was renounced.
- Owner can include in and exclude from reward.
- Owner can include in and exclude from the fee.
- Owner can change the tax and liquidity fee.
- Owner can change numTokensSellToAddToLiquidity value.
- Owner can change the maximum transaction amount.
- Owner can enable / disable swap and liquify.
- Owner can withdraw contract BNBs.

Conclusion

Smart contracts contain low severity issues and owner privileges.

Liquidity Token Burn details provided by the team.

https://bscscan.com/tx/0xc3b9990a99824b825ee8b7784ff1f6e2bac 9be2376144166127ca87c791ee993

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.

