

Liverpool Fan Token Smart Contract Security Audit

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.

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 TechRate and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers and other representatives) (TechRate) owe no duty of care towards you or any other person, nor does TechRate 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 TechRate 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, TechRate hereby excludes all liability and responsibility, and neither you nor any other person shall have any claim against TechRate, 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

TechRate was commissioned by Liverpool Fan Token to perform an audit of smart contracts:

https://bscscan.com/address/0x27A801ba58644D93A939daA506A56f95c351Eddc#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.

101000001

1.0

10111010001100000001111101100101011011

1010110101010100011010011000000111001100

100001000110101

011001000100000

0 100

10001101110110011011

10001010010001100

THE RESERVE THE RESERVE THE RESERVE THE RESERVE

Issues Checking Status

Issue d	lescription	Checking status
1. Compil	er errors.	Passed
2. Race condition	onditions and Reentrancy. Cross-function ra	ace Passed
3. Possibl	le delays in data delivery.	Passed
4. Oracle	calls.	Passed
5. Front re	unning.	Passed
6. Timesta	amp dependence.	Passed
7. Integer	Overflow and Underflow.	Passed
8. DoS wi	th Revert.	Passed
9. DoS wi	th block gas limit.	Passed
10. Method	ds execution permissions.	Passed
11. Econor	my model of the contract.	Medium issue
12. The imp	pact of the exchange rate on the logic.	Passed
13. Private	user data leaks.	Passed
14. Malicio	ous Event log.	Passed
15. Scopin	g and Declarations.	Passed
16. Uninitia	alized storage pointers.	Passed
17. Arithmo	etic accuracy.	Passed
18. Design	Logic.	Passed
19. Cross-f	function race conditions.	Passed
20. Safe O _l usage.	pen Zeppelin contracts implementation and	Passed
21. Fallbac	ck function security.	Passed

Security Issues

⊘ High Severity Issues

No high severity issues found.

Medium Severity Issues

1. Exceeding the maximum total supply.

Issue:

• The function claim() increases totalSupply value after checking maximum allowed totalSupply.

Recommendation:

Add new value to current totalSupply in checking line and compare right totalSupply amount.

⊘ Low Severity Issues

No low severity issues found.

Conclusion

Smart contracts contain medium severity issues!

Liquidity locking details provided by the team: https://cryptexlock.me/pair/0x97438fe05fcde1b481e9d73441bb2f9d 4e5ed403

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.

