

BabySpaceFlokiV2 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 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.

Purpose

This document details ApeAudits' findings and recommended solutions. This audit was performed on July 6, 2021. We audited an undeployed contract. If anything changes after deployment, we will update our report.

Token Name	BabySpaceFlokiV2
Token Symbol	BSF

Findings

NO.	Audit Items	Audit Subclass	Audit Subclass Result
1	Overflow Audit	N/A	Passed
2	Race Conditions Audit	N/A	Passed
3	Authority Control Audit	Permission Vulnerability Audit Excessive Auditing Authority	Passed Passed
4	Safe Design Audit	Zeppelin Module Safe Compiler Version Hard-coded Version Fallback Function Safeuse Show Coding Security Function Return Value Security Call Function Security	Passed Passed Passed Passed Passed Passed Passed Passed Passed
5	Denial of Service Audit	N/A	Passed
6	Gas Optimization Audit	N/A	Passed
7	Design Logic Audit	N/A	Passed
8	Malicious Event Log Audit	N/A	Passed
9	"False Deposit" Vulnerability Audit	N/A	Passed
10	Uninitialized Storage Pointers Audit	N/A	Passed
11	Arithmetic Accuracy Deviation Audit	N/A	Passed

High Severity Issues

None.

Medium Severity Issues

- Issue:

The function <code>setRouterAddress(address)</code> could be used to upgrade to a malicious router contract.

Comments:

The team has explained that they want this project to last long-term, so they want to be able to future-proof the contract. This is a valid reason to have this code. They always have the option to renounce management of the contract if this is needed.

Issue:

Liquidity from the contract's auto-liquidity feature is sent to the management address, which could be a security issue if the management wallet is ever compromised.

Recommendation:

We recommend using a multisig wallet to protect the management wallet.

Low Severity Issues

None.

Conclusion

One potential issue found. The manager role has the ability to change the router address, which is used for the contract's auto-liquidity feature. This could be a security issue in the wrong hands, but the team has explained that they have long-term plans for their token, so they want the ability to migrate to new PancakeSwap versions if they are released. We recommend protecting the management account with a multisig wallet.

ApeAudits note:

Please check the disclaimer above and note, the audit is provided 'as-is' and makes no statements or warranties whatsoever. The report is provided only for the contract(s) mentioned in the report.

Appendix

Because the call graph for this contract is too large to read comfortably in a document, all additional information from our audit can be found at https://github.com/ApeAudits1/babyspaceflokiv2-extras