



<https://contractchecker.app/>



Contract Checker



SMART CONTRACT SECURITY AUDIT OF: SAFE PLUS DAPP



Project Summary

Project Name SAFE PLUS SWAP DAPP
DAPP Link <https://safeplus-swap.netlify.app>

Audit Result

✓ SAFE PLUS DAPP has successfully **PASSED** the security audit

CC Score

100

■ Passed 100 ■ High Risk 0 ■ Medium Risk 0 ■ Low Risk 0

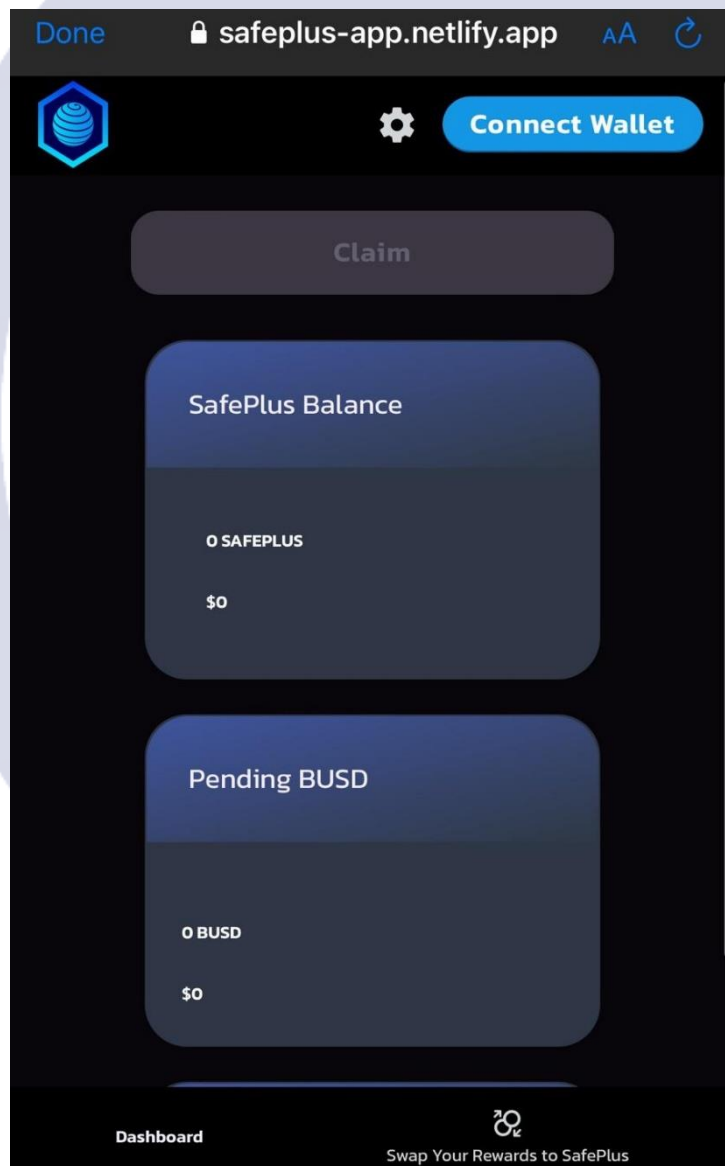
(Other unknown security vulnerabilities are not included in the audit responsibility scope)

Audit Result: **PASSED**
Audit Date: December 28, 2021
Audit Team: CONTRACTCHECKER



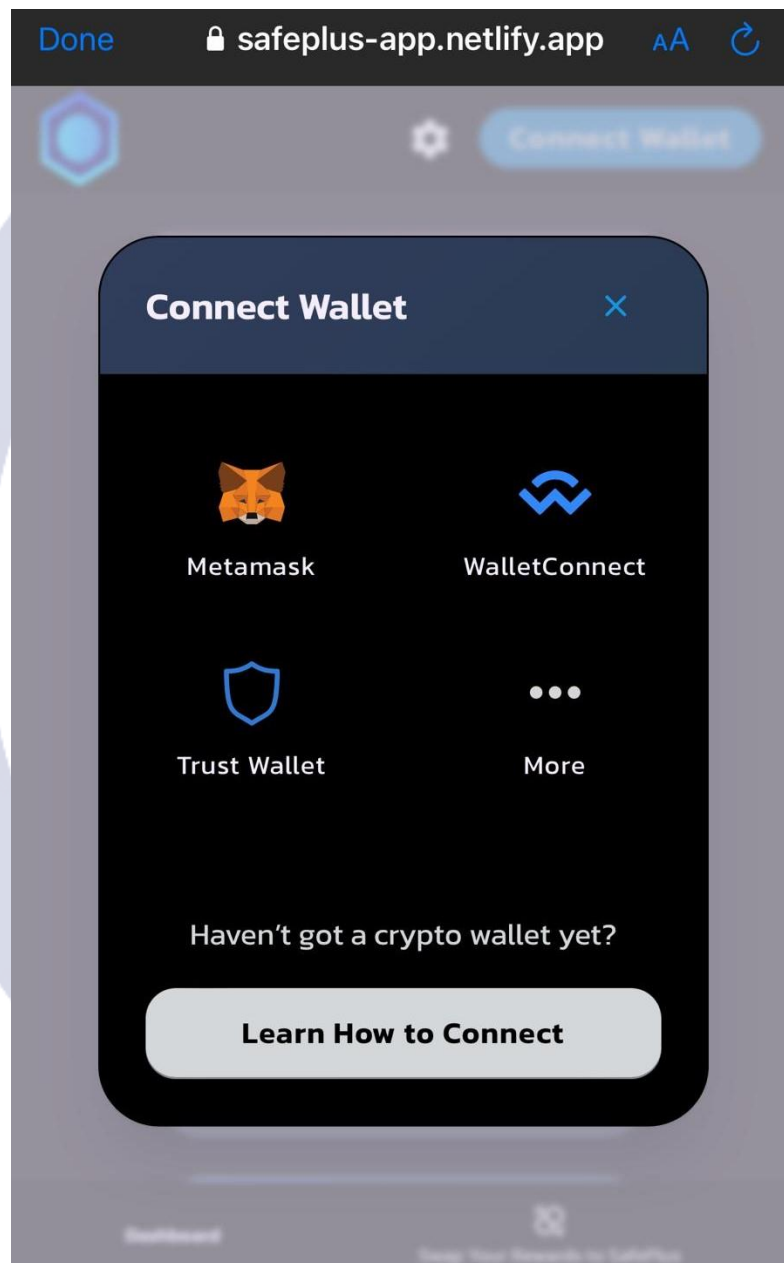
Functionality Analysis

Dashboard



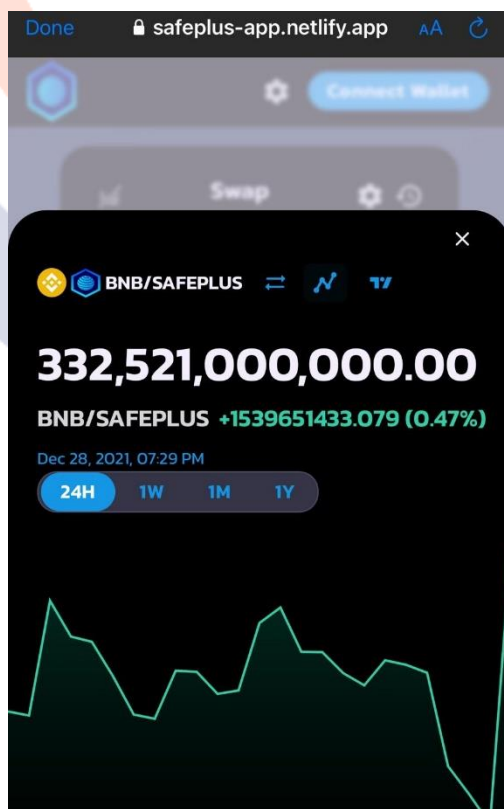
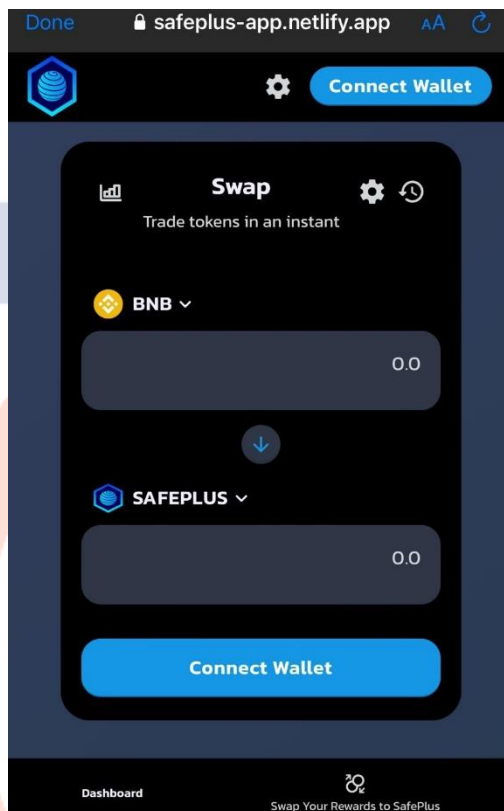
Wallet Connect

Wallet Connect function is working properly with fast connection establishment speed



Exchange

Exchange functions are working properly and easy to operate



Settings

Settings menu is functioning properly and easy to use

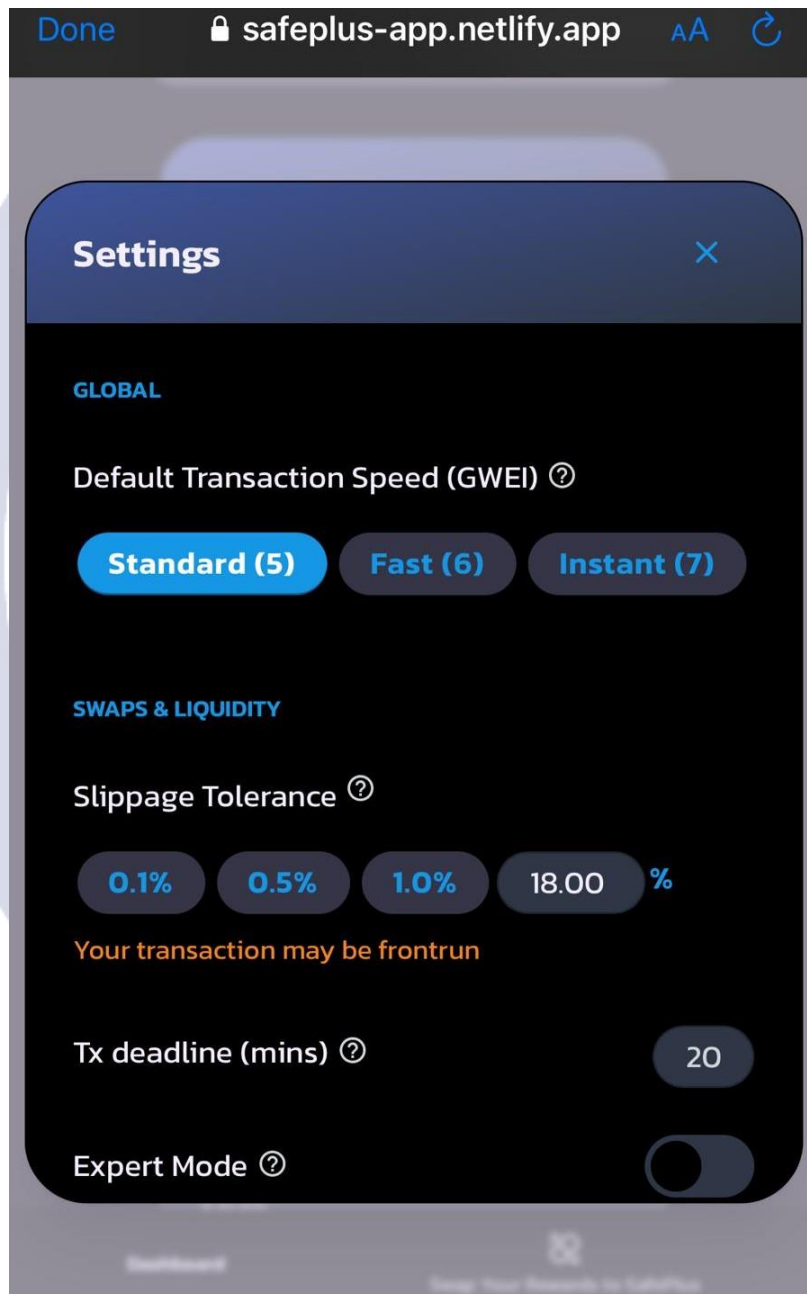


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SUMMARY

CONTRACTCHECKER received an application for DAPP security audit of SAFE PLUS SWAP DAPP on December 28, 2021, from the project team to discover if any vulnerability in the functionality of the SAFE PLUS SWAP DAPP project. Standard tests have been performed using Static Analysis and Manual Review techniques.

The auditing process focuses to the following considerations with collaboration of an expert team

- Functionality test to determine if proper logic has been followed throughout the whole process.
- Manually detailed examination of the code line by line by experts.
- Live test by multiple clients using Testnet.
- Analysing failure preparations to check how App performs in case of any bugs and vulnerabilities.
- Checking whether all the libraries used in the code are on the latest version.
- Analysing the security of the on-chain data.

OVERVIEW

This Audit Report mainly focuses on overall security of SAFE PLUS SWAP DAPP. Contractchecker team scanned the application and assessed overall system architecture and vulnerabilities, exploits, hacks, and back-doors to ensure its reliability and correctness.

Auditing Approach and Applied Methodologies

Contractchecker team has performed rigorous test procedures of the project

- Code design patterns analysis in which architecture is reviewed to ensure it is structured according to industry standards.
- Line-by-line inspection to find any potential vulnerability
- Unit testing Phase, we coded/conducted custom unit tests written for each function to verify that each function works as expected.
- Automated Test performed with our in-house developed tools to identify vulnerabilities and security flaws.

The focus of the audit was to verify that the DAPP System is secure, resilient, and working according to the specifications. The audit activities can be grouped in the following three categories:



Security

Identifying security related issues within functionalities.

Sound Architecture

Evaluation of the architecture of this system through the lens of DAPP best practices and general software best practices.

Code Correctness and Quality

A full review of the source code. The primary areas of focus include:

- Accuracy
- Readability
- Sections of code with high complexity
- Quantity and quality of test coverage

Risk Classification

Vulnerabilities are classified in 3 main levels as below based on possible effect to the DAPP functionality.

High level vulnerability

Vulnerabilities on this level must be fixed immediately as they might lead to fund and data loss and open to manipulation. Any High-level finding will be highlighted with **RED** text

Medium level vulnerability

Vulnerabilities on this level also important to fix as they have potential risk of future exploit and manipulation. Any Medium-level finding will be highlighted with **ORANGE** text

Low level vulnerability

Vulnerabilities on this level are minor and may not affect the functions execution. Any Low-level finding will be highlighted with **BLUE** text

Manual Audit:

For this section the code was tested/read line by line by our developers. Additionally, Remix IDE's JavaScript VM and Kovan networks used to test the functionality.



SWC Attack Test

SWC attack test is not in scope of standard audit process

Automated Audit

Automated Audit is not in scope of standard audit process



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 DAPP, 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 DAPP alone. No applications or operations were reviewed for security. No product code has been reviewed.

