HackSafe

Smart Contract Security Audit Report

SwiftCoin

April **2022**

Security Status

★★★★½

www.hacksafe.io

Audit Details

Audited project
SwiftCoin

Deployer address
0xe80AcFea15985Ac064DA023dc784346B74AE8c7A

Client contacts
SwiftCoin team

Blockchain
Binance Smart Chain

Website
https://www.swft.pro/#/

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

HeckSafe was commissioned by SwiftCoin to perform an audit of smart contracts:

- https://bscscan.com/address/0xe64e30276c2f826febd3784958d6da7b55dfbad3#code

Contract Details

Token contract details for 19.04.2022

Contract name	: BEP20SWFTC
Contract address	: 0xe64e30276c2f826febd3784958d6da7b55dfbad3
Total supply	: 200 million
Token Ticker	: SWFTC
Decimals	: 18
Token Holders	: 801
Transactions count	: 8,859
Contract deployer address	: 0xe80AcFea15985Ac064DA023dc784346B74AE8c7A
Owner address	: 0xe80AcFea15985Ac064DA023dc784346B74AE8c7A

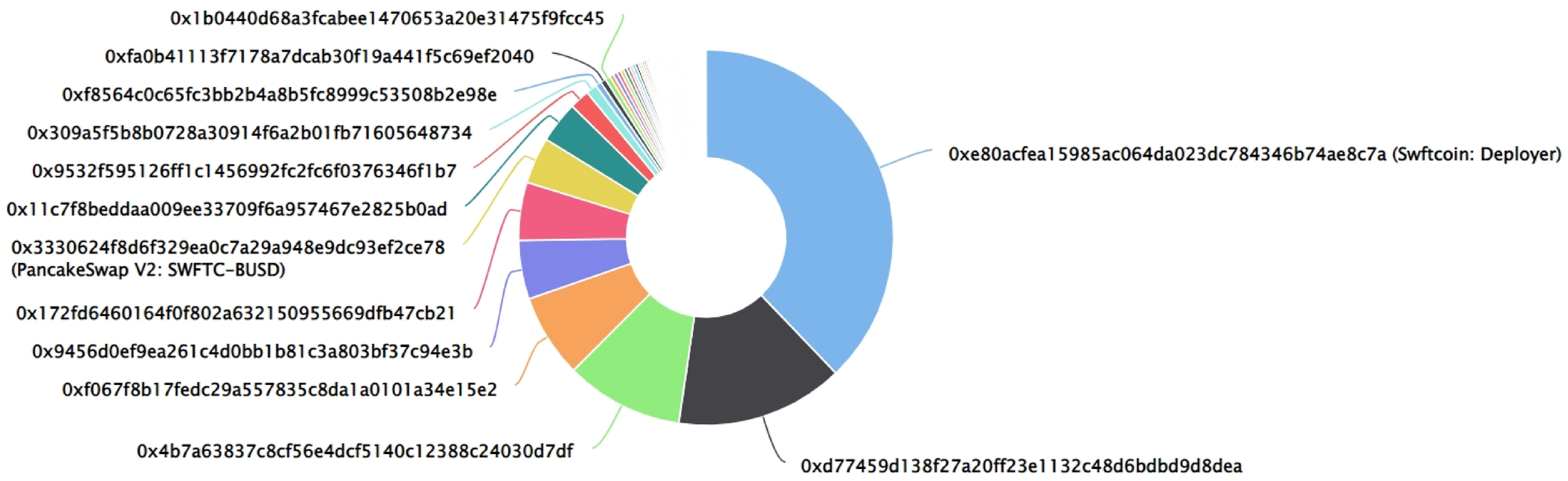
SwiftCoin Token Distribution

The top 500 holders collectively own 99.96% (199,914,437.93 Tokens) of SwftCoin

Token Total Supply: 200,000,000.00 Token | Total Token Holders: 801

SwftCoin Top 500 Token Holders

Source: BscScan.com



SwiftCoin Top 10 Token Holders

(A total of 180,003,285.39 tokens held by the top 10 accounts from the total supply of 200,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	Swftcoin: Deployer	75,677,773.004026531766711414	37.8389%
2	0xd77459d138f27a20ff23e1132c48d6bdbd9d8dea	29,000,000	14.5000%
3	0x4b7a63837c8cf56e4dcf5140c12388c24030d7df	20,339,190.259810091732781813	10.1696%
4	0xf067f8b17fedc29a557835c8da1a0101a34e15e2	14,396,385.110495	7.1982%
5	0x9456d0ef9ea261c4d0bb1b81c3a803bf37c94e3b	10,110,426.61998779887984113	5.0552%
6	0x172fd6460164f0f802a632150955669dfb47cb21	10,000,000.000001	5.0000%
7	PancakeSwap V2: SWFTC-BUSD	7,988,372.336764864241958431	3.9942%
8	0x11c7f8beddaa009ee33709f6a957467e2825b0ad	7,178,101.253210000000929792	3.5891%
9	0x9532f595126ff1c1456992fc2fc6f0376346f1b7	3,431,485.371664	1.7157%
10	0x309a5f5b8b0728a30914f6a2b01fb71605648734	1,881,551.430001	0.9408%

Contract functions details

+ [Int] IBEP20
    -[Ext] totalSupply
    -[Ext] decimals
    -[Ext] symbol
    -[Ext] name
    -[Ext] getOwner
    -[Ext] balanceOf
    -[Ext] transfer #
    -[Ext] allowance
    -[Ext] approve #
    -[Ext] transferFrom #

+ Context
    -[Int] _msgSender
    -[Int] _msgData

+ [Lib] SafeMath
    - [Int] add
    - [Int] sub
    - [Int] sub
    - [Int] mul
    - [Int] div
    - [Int] div
    - [Int] mod
    - [Int] mod

+ Ownable (Context)
    -[Int] <Constructor> #
    -[Pub] owner
    -[Pub] renounceOwnership #
      -modifiers: onlyOwner
    -[Pub] transferOwnership #
      -modifiers: onlyOwner
    -[Int] _transferOwnership #

Contract functions details

+ BEP20SWFTC (Context, IBEP20, Ownable)
  -[Pub] <constructor> #
  -[Ext] getOwner
  -[Ext] decimals
  -[Ext] symbol
  -[Ext] name
  -[Ext] totalSupply
  -[Ext] balanceOf
  -[Ext] transfer #
  -[Ext] allowance
  -[Ext] approve #
  -[Ext] transferFrom #
  -[Pub] increaseAllowance #
  -[Pub] decreaseAllowance #
  -[Pub] mint #
    -modifiers: onlyOwner
  -[Pub] burn #
  -[Int] _transfer #
  -[Int] _mint #
  -[Int] _burn #
  -[Int] _approve #
  -[Int] _burnFrom

Issues Checking Status

No.	Title	Status
1.	Unlocked Compiler Version	Passed
2.	Missing Input Validation	Passed
3.	Race conditions and Reentrancy. Cross-function race conditions.	Passed
4.	Possible delays in data delivery	Passed
5.	Oracle calls.	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.	Private use data leaks.	Passed
13.	Malicious Event log.	Passed
14.	Scoping and Declarations.	Low issue
15.	Uninitialized storage pointers.	Passed
16.	Arithmetic accuracy.	Passed
17.	Design Logic.	Low issue
18.	Safe Open Zeppelin contracts implementation and usage.	Passed
19.	Incorrect Naming State Variable	Passed

Severity Definitions

Risk Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to assets loss or data manipulations.
High	High-level vulnerabilities are difficult to exploit; however, they also have a significant impact on smart contract execution, e.g., public access to crucial functions
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to assets loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution.

Security Issues

- **Critical Severity Issues**
  No critical severity issue found.

- **High Severity Issues**
  No high severity issue found.

- **Medium Severity Issues**
  No medium severity issues found.

- **Low Severity Issues**
  Two low severity issues found.

1. Scoping and Declarations.

Unused function.

- **Description**
  The div, div, mod, mod, mul, _msgData _burnFrom functions do nothing.

- **Location**
  div, div, mod, mod, mul _msgData, _burnFrom functions

- **Recommendation:**
  We advise to remove unused code which can help you to develop clean coding style and save some computational gas too.

2. Design Logic

Same return value functions

- **Description**
  Function owner and getOwner returns same value.

- **Location**
  Owner and getOwner functions.

- **Recommendation**
  We advise to declare owner function private or remove it in order to make code clean which can also help to save some computational gas cost.

Owner Privileges

Owner Privileges (in the period when the owner is not renounced) :

- SwiftCoin Contract:
    - Owner can transfer ownership.
    - Owner can renounce ownership.
    - Owner can mint new tokens.

Conclusion

Smart contract contains low severity issues! The further transfer and operations with the fund raised are not related to this particular contract.

HackSafe 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.