HackSafe

Smart Contract Security Audit Report

Rijent Coin

December 2023

Security Status

★★★★½

www.hacksafe.io

Audit Details

Audited project
Rijent Coin

Deployer address
0x6a6fb27d360e8b87980cabc251eb52d2530dbda2

Client contacts
Rijent Coin Team

Blockchain
Binance smart chain

Website
not provided

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.

Procedure

Step 1 - In-Depth Manual Review

Manual line-by-line code reviews to ensure the logic behind each function is sound and safe from various attack vectors. This is the most important and lengthy portion of the audit process (as automated tools often cannot find the nuances that lead to exploits such as flash loan attacks).

Step 2 - Automated Testing

Simulation of a variety of interactions with your Smart Contract on a test blockchain leveraging a combination of automated test tools and manual testing to determine if any security vulnerabilities exist.

Step 3 – Leadership Review

The engineers assigned to the audit will schedule meetings with our leadership team to review the contracts, any comments or findings, and ask questions to further apply adversarial thinking to discuss less common attack vectors.

Step 4 - Resolution of Issues

Consulting with the team to provide our recommendations to ensure the code's security and optimize its gas efficiency, if possible. We assist project team's in resolving any outstanding issues or implementing our recommendations.

Step 5 - Published Audit Report

Boiling down results and findings into an easy-to-read report tailored to the project. Our audit reports highlight resolved issues and any risks that exist to the project or its users, along with any remaining suggested remediation measures. Diagrams are included at the end of each report to help users understand the interactions which occur within the project.

Background

HackSafe was commissioned by Rijent Coin to perform an audit of smart contracts:

- https://bscscan.com/token/0x913aFbBA462d6ae230344209d0Bd11CE3CE92Ed1#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 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.

Contract Details

Token contract details for 02.01.2023

Token Type	: DEFI
Contract name	: RTC
Contract address	: 0x913aFbBA462d6ae230344209d0Bd11CE3CE92Ed1
Total supply	: 290,000,000
Token ticker	: RTC
Decimals	: 9
Token Holders	: 16,664
Transactions count	: 185,806
Compiler version	: v0.5.17+commit.d19bba13
Contract deployer address	: 0x6a6fb27d360e8b87980cabc251eb52d2530dbda2
Owner address	: 0x6a6fb27d360e8b87980cabc251eb52d2530dbda2

Audit Summary

According to the standard audit assessment, Customer`s solidity smart contracts are **“Secure”.** This token contract does contain owner control as ownership has not been renounced, which do not make it fully decentralized.

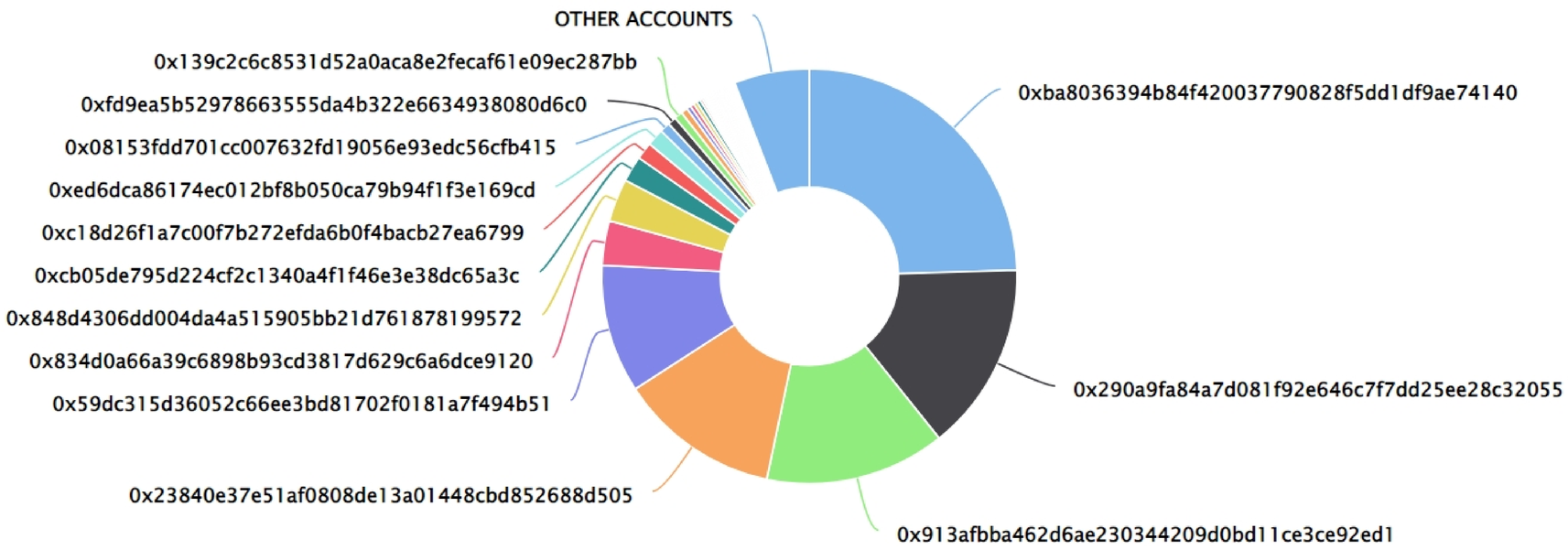
Insecure	Poor secured	Secure	Well-secured

You are here 

We used various tools like Slither, Mythril and Remix IDE. At the same time this finding is based on critical analysis of the manual audit. All issues found during automated analysis were manually reviewed and applicable vulnerabilities are presented in the issues checking status.

We found 0 critical, 0 high, 0 medium and 1 low.

Rijent Coin Token Distribution



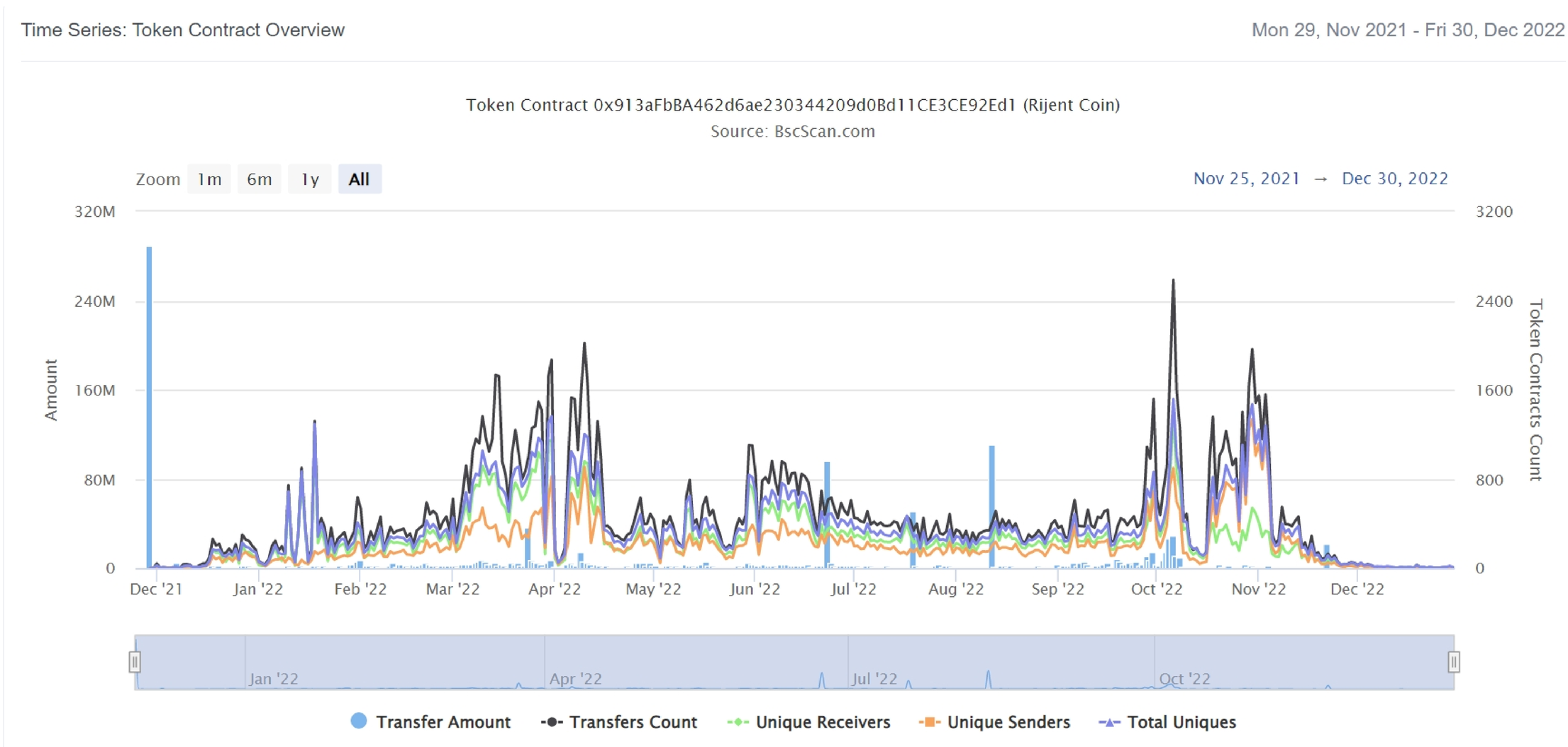
Rijent Coin Top 20Token Holders

(A total of 272,995,179.47 tokens held by the top 100 accounts from the total supply of 290,000,000.00 token)

Rank	Address	Quantity (Token)	Percentage
1	0xba8036394b84f420037790828f5dd1df9ae74140	71,207,008.059635315	24.5541%
2	0x290a9fa84a7d081f92e646c7f7dd25ee28c32055	42,666,324.568855867	14.7125%
3	0x913afbba462d6ae230344209d0bd11ce3ce92ed1	40,756,746.05694687	14.0541%
4	0x23840e37e51af0808de13a01448cbd852688d505	36,346,251.006	12.5332%
5	0x59dc315d36052c66ee3bd81702f0181a7f494b51	29,000,000	10.0000%
6	0x834d0a66a39c6898b93cd3817d629c6a6dce9120	10,022,600	3.4561%
7	0x848d4306dd004da4a515905bb21d761878199572	9,700,000	3.3448%
8	0xcb05de795d224cf2c1340a4f1f46e3e38dc65a3c	5,820,000	2.0069%
9	0xc18d26f1a7c00f7b272efda6b0f4bacb27ea6799	3,899,630.631945965	1.3447%
10	0xed6dca86174ec012bf8b050ca79b94f1f3e169cd	3,880,000	1.3379%
11	0x08153fdd701cc007632fd19056e93edc56cfb415	2,276,380.4047	0.7850%
12	0xfd9ea5b52978663555da4b322e6634938080d6c0	1,960,000	0.6759%
13	0x139c2c6c8531d52a0aca8e2fecaf61e09ec287bb	1,863,947.880091211	0.6427%
14	0xb02a90bcb447736bde2cbca4102d49dc6f727f7b	1,510,260.066481905	0.5208%
15	0x4289058e2ed80639c71bc14336838733d9f806f6	918,857.5953	0.3168%
16	0x0870c78081e28b82a1392845b52a9eac9a41ae53	876,942	0.3024%
17	0x27091b0f6482432412d9b97159f2a256a99db372	846,681.429909252	0.2920%
18	0x3833da99f8287b0d3132a02640e16850b6dad91b	830,879.875214212	0.2865%
19	0xc01dd09a665d6dff278392313c70ea95cbaa1219	548,301.118009787	0.1891%
20	0x41ea1c662e0326b271a5c68a8a8219fce642ca82	501,000	0.1728%

Rijent Coin Token Distribution

Rijent Coin Contract Overview



Contract functions details

+[Int] IBEP20
    -[Ext] totalSupply
    -[Ext] balanceOf
    -[Ext] transfer #
    -[Ext] allowance
    -[Ext] approve #
    -[Ext] transferFrom #

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

+Context
    -[Int] <constructor>
    -[Int] _msgSender
    -[Int] _msgData

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

+Pausable (Ownable)
    -[Pub] pause #
    -[Pub] transferFrom #
    -[Pub] approve #

+BasicToken (ERC20Basic)
    -[Pub] transfer #
      -modifiers: onlyOwner, whenNotPaused

Contract functions details

-[Pub] unpause #
-modifiers: onlyOwner, whenNotPaused

+BEP20 (Context, IBEP20, Pausable)
-[Pub] totalSuppl
-[Pub] balanceOf
-[Pub] transfer #
-modifiers: whenNotPaused
-[Pub] allowance
-[Pub] approve #
-modifiers: whenNotPaused
-[Pub] transferFrom #
-modifiers: whenNotPaused
-[Pub] increaseAllowance #
-modifiers: whenNotPaused
-[Pub] decreaseAllowance #
-modifiers: whenNotPaused
-[Int] _transfer #
-[Int] _mint #
-[Int] _burn #
-[Int] _approve #
-[Int] _burnFrom #

+BEP20Detailed (IBEP20)
-[Pub] <constructor>
-[Pub] name
-[Pub] symbol
-[Pub] allowance
-[Pub] decimals

+RTC (BEP20Detailed, BEP20)
-[Pub] <constructor> #
-[Pub] transfer #
-[Pub] transferFrom #
-[Pub] getBurnedAmountTotal
-[Pub] burn #
-[Ext] $

($) = payable function
= non-constant function

Issues Checking Status

No.	Title	Status
1.	Compiler error	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.	Passed
15.	Uninitialized storage pointers.	Passed
16.	Arithmetic accuracy.	Passed
17.	Design Logic.	Passed
18.	Safe Open Zeppelin contracts implementation and usage.	Passed
19.	Incorrect Naming State Variable	Passed
20.	Too old version	Low issue

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 issue found.
- **Low Severity Issues**
  One low severity issue found.

1. Old compiler version

- **Description**
  Contract has been deployed using too old solidity version.
- **Recommendation**
  It is advisable to deploy contract using any of the latest version of solidity.

Centralization

Owner privileges :

- ArcBlock Contract:
    - Owner Can Transfer/Renounce Ownership.
    - Owner Can Pause/Pause Transfer.

This smart contract has some functions which can be executed by the admin (Owner) only.
If the admin wallet private key would be compromised, then it would create trouble, as smart contract ownership has not been renounced.

- renounceownership
- transferownership
- pause
- unpause

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.