



TechRate

AUDIT COMPANY

Smart Contract Security Audit

[TechRate](#)

September, 2021

Audit Details



Audited project

SmartyPay



Deployer address

0xfc093f0cc0242eea4973ade04033218a3dd42913



Client contacts:

SmartyPay team



Blockchain

Binance Smart Chain



Project website:

Not provided by SmartyPay team



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

TechRate was commissioned by SmartyPay to perform an audit of smart contracts:

<https://bscscan.com/address/0x17fd3caa66502c6f1cbd5600d8448f3af8f2aba1#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.

Contracts Details

Token contract details for 02.09.2021

Contract name SmartyPay

Contract address 0x17fd3cAa66502C6F1CbD5600D8448f3aF8f2ABA1

Total supply 100,000,000

Token ticker SPY

Decimals 0

Token holders 2,311

Transactions count 15,277

Top 100 holders dominance 99.82%

Contract deployer address 0xfc093f0cc0242eea4973ade04033218a3dd42913

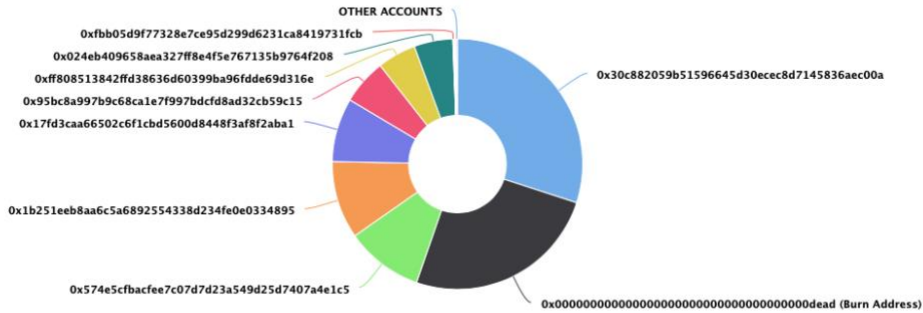
Contract's current owner address 0x95bc8a997b9c68ca1e7f997bdcfd8ad32cb59c15

SmartyPay Token Distribution

The top 100 holders collectively own 99.82% (99,823,724.00 Tokens) of Smarty Pay

Token Total Supply: 100,000,000.00 Token | Total Token Holders: 2,311

Smarty Pay Top 100 Token Holders
Source: BscScan.com



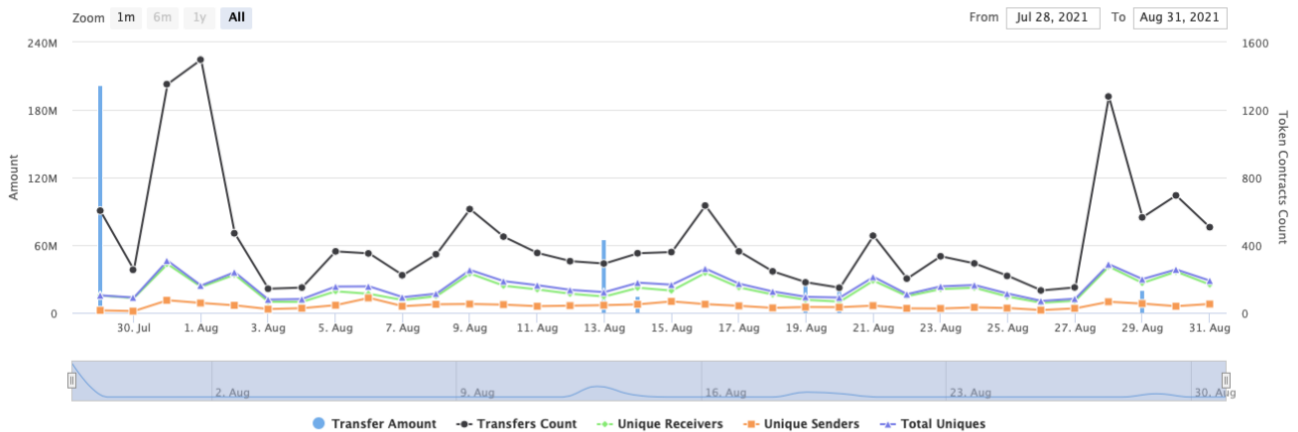
(A total of 99,823,724.00 tokens held by the top 100 accounts from the total supply of 100,000,000.00 token)

SmartyPay Contract Interaction Details

Time Series: Token Contract Overview

Thu 29, Jul 2021 - Tue 31, Aug 2021

Token Contract 0x17fd3caa66502c6f1cbd5600d8448f3af8f2aba1 (Smarty Pay)
Source: BscScan.com



SmartyPay Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x30c882059b51596645d30ecec8d7145836aec00a	30,000,000	30.0000%
2	Burn Address	25,320,270	25.3203%
3	0x574e5cfbacfee7c07d7d23a549d25d7407a4e1c5	10,000,000	10.0000%
4	0x1b251eeb8aa6c5a6892554338d234fe0e0334895	10,000,000	10.0000%
5	0x17fd3caa66502c6f1cbd5600d8448f3af8f2aba1	8,233,544	8.2335%
6	0x95bc8a997b9c68ca1e7f997bdcfd8ad32cb59c15	5,851,952	5.8520%
7	0xff808513842ffd38636d60399ba96fde69d316e	5,000,000	5.0000%
8	0x024eb409658aea327ff8e4f5e767135b9764f208	5,000,000	5.0000%
9	0xfbb05d9f77328e7ce95d299d6231ca8419731fcb	69,690	0.0697%
10	0xd53402da4bb18eabf8b0f9a516402f436814f63a	48,751	0.0488%



Contract functions details

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

- + BEP20Interface
 - [Pub] totalSupply
 - [Pub] balanceOf
 - [Pub] allowance
 - [Pub] transfer #
 - [Pub] approve #
 - [Pub] transferFrom #

- + ApproveAndCallFallback
 - [Pub] receiveApproval #

- + Owned
 - [Pub] <Constructor> #
 - [Pub] transferOwnership #
 - modifiers: onlyOwner
 - [Pub] acceptOwnership #

- + TokenBEP20 (BEP20Interface, Owned)
 - [Pub] <Constructor> #
 - [Pub] totalSupply
 - [Pub] balanceOf
 - [Pub] transfer #
 - [Pub] approve #
 - [Pub] transferFrom #
 - [Pub] allowance
 - [Pub] approveAndCall #
 - [Ext] <Fallback> (\$)

- + SmartyPay (TokenBEP20)
 - [Pub] getAirdrop #
 - [Pub] tokenSale (\$)
 - [Pub] viewAirdrop
 - [Pub] viewSale
 - [Pub] startAirdrop #
 - modifiers: onlyOwner
 - [Pub] startSale #
 - modifiers: onlyOwner
 - [Pub] clearETH #
 - modifiers: onlyOwner
 - [Ext] <Fallback> (\$)

(\$) = payable function

= non-constant function

Issues Checking Status

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	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. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

Security Issues

✔ High Severity Issues

No high severity issues found.

✔ Medium Severity Issues

No medium severity issues found.

✔ Low Severity Issues

No low severity issues found.

Owner privileges (In the period when the owner is not renounced)

- Owner can start airdrop.
- Owner can start sale.
- Owner can withdraw BNBs from the contract(Not an issue as this is the sale contract).

Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope. Audited only sale contract. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details NOT provided by the team.

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.