



# **Smart Contract Security Audit**

<u>TechRate</u> December, 2021

### **Audit Details**



**Audited project** 

Step



Deployer address

0x36477aad7056453b1e460dd8b7c8bff34491ae9d



**Client contacts:** 

Step team



Blockchain

**Binance Smart Chain** 



### **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 Step to perform an audit of smart contracts:

https://bscscan.com/address/0x94247b1ae45db201bfd97c26326215024391e835#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.

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## **Contracts Details**

#### Token contract details for 21.12.2021

Contract name	Step
Contract address	0x94247b1aE45Db201Bfd97c26326215024391E835
Total supply	1,000,000,000
Token ticker	STEP
Decimals	18
Token holders	432
Transactions count	446
Top 100 holders dominance	82.78%
Marketing wallet	0x7aa0a4d5ee74fe38646a96ca2d77aaabe815a16a
Reward share	500
Reward wallet	0x9a00ed0acd962c7cb0deab866d107deba51b5aeb
pair	0x70ace1b21d718fad8a753ace71c31261c9d5dc0f
Contract deployer address	0x36477aad7056453b1e460dd8b7c8bff34491ae9d
Contract's current owner address	0x0bbd2cf295ab343c2a33992d0d80c4959221f8c4

## **Step Token Distribution**

The top 100 holders collectively own 82.78% (827,829,642.05 Tokens) of Step

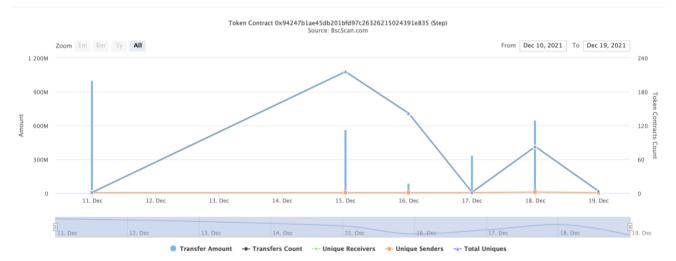
Token Total Supply: 1,000,000,000.00 Token | Total Token Holders: 43



(A total of 827,829,642.05 tokens held by the top 100 accounts from the total supply of 1,000,000,000.00 token)

# **Step Contract Interaction Details**

Time Series: Token Contract Overview Sat 11, Dec 2021 - Sun 19, Dec 2021



# **Step Top 10 Token Holders**

Rank	Address	Quantity (Token)	Percentage
1	0x7b93e0820c6bb384f671b60d304539f96ac074c2	439,189,991.3	43.9190%
2	☐ 0xf289727c66c452d7e56eb1e659440413db3ae9c9	289,025,000	28.9025%
3	0x7aa0a4d5ee74fe38646a96ca2d77aaabe815a16a	26,597,680.40998	2.6598%
4	0xd76f24f73fd2cc7fa4e1f69f9b7dd9246914ba99	1,838,833.333	0.1839%
5	0xff32c48559f085961479b795199d5303cf49a42d	1,650,000	0.1650%
6	0x20f720e82f586529566b5dea3378789c8ede8cf9	1,320,000	0.1320%
7	0xb8e31bfd4d8982972e0d7dfa055bf643b5df2e94	1,292,500	0.1293%
8	0xeffc052aa67326341275666dd7ac090162187bdd	1,292,500	0.1293%
9	0xbe471ba5ab296b56be3a44b0c4010fefdee43dfb	1,292,500	0.1293%
10	0xfe5ee6ae61e27d8318af62311953c9981a164247	1,292,500	0.1293%

### **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 #
+ Ownable
 - [Pub] <Constructor> #
 - [Pub] transferOwnership #
  - modifiers: onlyOwner
 - [Int] owner
+ BEP20 (IBEP20, Ownable)
 - [Pub] <Constructor> #
   - modifiers: Ownable
 - [Pub] getOwner
 - [Pub] decimals
 - [Ext] symbol
 - [Ext] name
 - [Ext] totalSupply
 - [Pub] balanceOf
 - [Ext] transfer #
 - [Ext] allowance
 - [Ext] approve #
 - [Ext] transferFrom #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
 - [Int] transfer #
 - [Int] approve #
+ [Int] IDexFactory
 - [Ext] createPair #
+ [Int] IDexRouter
 - [Ext] factory
 - [Ext] WETH
 - [Ext] swapExactTokensForETH #
 - [Ext] addLiquidityETH ($)
+ Step (BEP20)
 - [Pub] <Constructor>#
   - modifiers: BEP20
 - [Int] transfer #
 - [Pub] getDynamicSellTax
```

- [Ext] <Fallback> (\$)

- [Prv] \_takeTax #
- [Prv] \_getTotalTax
- [Prv] \_shouldSwapBack
- [Prv] \_swapBack #
  - modifiers: swapping
- [Ext] disableDumpProtection #
  - modifiers: onlyOwner
- [Ext] removeSniperTax #
- modifiers: onlyOwner
- [Ext] enableTrading #
- modifiers: onlyOwner
- [Ext] triggerSwapBack #
  - modifiers: onlyOwner
- [Ext] recoverBNB #
- modifiers: onlyOwner
- [Ext] recoverBEP20 #
- modifiers: onlyOwner
- [Ext] setIsWhitelisted #
- modifiers: onlyOwner
- [Ext] setIsCEX #
  - modifiers: onlyOwner
- [Ext] setIsMarketMaker #
- modifiers: onlyOwner
- [Ext] setTaxes #
- modifiers: onlyOwner
- [Ext] setShares #
  - modifiers: onlyOwner
- [Ext] setSwapBackSettings #
  - modifiers: onlyOwner
- [Ext] setTransferGas #
- modifiers: onlyOwner
- [Ext] setMarketingWallet #
  - modifiers: onlyOwner
- [Ext] setRewardWallet#
- modifiers: onlyOwner
- (\$) = 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.

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 disable dump protection.
- Owner can disable sniperTax.
- Owner can enable trading.
- Owner can manually trigger swap back.
- Owner can withdraw contract BNBs and BEP20 tokens.
- Owner can whitelist addresses.
- Owner can add CEX and market makers accounts.
- Owner can change taxes and shares.
- Owner can change swap back settings.
- Owner can change transfer gas.
- Owner can change marketing and reward wallets.

#### Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope.

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.

