

Advanced Manual Smart Contract Audit

October 4, 2022

Audit requested by





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Audit Summary

Audit Scope

Report2Earn
https://report2earn.io/
Binance Smart Chain
Solidity
0x40432962CC6b012591aCd386523C85B79d756823
Static Analysis, Manual Review
4 October 2022

This audit report has been prepared by Coinsult's experts at the request of the client. In this audit, the results of the static analysis and the manual code review will be presented. The purpose of the audit is to see if the functions work as intended, and to identify potential security issues within the smart contract.

The information in this report should be used to understand the risks associated with the smart contract. This report can be used as a guide for the development team on how the contract could possibly be improved by remediating the issues that were identified.



Tokenomics

Rank	Address	Quantity (Token)	Percentage
1	0x9dd73fcfeac1a687bf2011985ef0ef5b42a1e0f4	100,000	100.0000%

Source Code

Coinsult was comissioned by Report2Earn to perform an audit based on the following code:

https://bscscan.com/address/0x40432962CC6b012591aCd386523C85B79d756823#code

SAFU By contractchecker



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The information in this report should be used to understand the risks associated with the smart contract. This report can be used as a guide for the development team on how the contract could possibly be improved by remediating the issues that were identified.

Coinsult is not responsible if a project turns out to be a scam, rug-pull or honeypot. We only provide a detailed analysis for your own research.

Coinsult is not responsible for any financial losses. Nothing in this contract audit is financial advice, please do your own research.

The information provided in this audit is for informational purposes only and should not be considered investment advice. Coinsult does not endorse, recommend, support or suggest to invest in any project.

Coinsult can not be held responsible for when a project turns out to be a rug-pull, honeypot or scam.



Global Overview

Manual Code Review

In this audit report we will highlight the following issues:

Vulnerability Level	Total	Pending	Acknowledged	Resolved
Informational	0	0	0	0
Low-Risk	1	1	0	0
Medium-Risk	0	0	0	0
High-Risk	0	0	0	0

Privilege Overview

Coinsult checked the following privileges:

Contract Privilege	Description
Owner can mint?	Owner cannot mint new tokens
Owner can blacklist?	Owner cannot blacklist addresses
Owner can set fees > 25%?	Owner cannot set the sell fee to 25% or higher
Owner can exclude from fees?	Owner can exclude from fees
Owner can pause trading?	Owner cannot pause the contract
Owner can set Max TX amount?	Owner cannot set max transaction amount

More owner priviliges are listed later in the report.



Low-Risk: Could be fixed, will not bring problems.

Functions that send Ether to arbitrary destinations

Unprotected call to a function sending Ether to an arbitrary address.

```
uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
   tokenAmount,
   0, // accept any amount of ETH
   path,
   address(this),
   block.timestamp);

uint256 newBalance = address(this).balance - initialBalance;

payable(marketingWallet).sendValue(newBalance);
```

Recommendation

Ensure that an arbitrary user cannot withdraw unauthorized funds.

Exploit scenario

```
contract ArbitrarySend{
   address destination;
   function setDestination(){
       destination = msg.sender;
   }

   function withdraw() public{
       destination.transfer(this.balance);
   }
}
```

Bob calls setDestination and withdraw. As a result he withdraws the contract's balance.



Max buy fee

Max sell fee

Contract Privileges

Maximum Fee Limit Check

Coinsult tests if the owner of the smart contract can set the transfer, buy or sell fee to 25% or more. It is bad practice to set the fees to 25% or more, because owners can prevent healthy trading or even stop trading when the fees are set too high.

Description
Owner cannot set the transfer fee to 25% or higher
Owner cannot set the buy fee to 25% or higher
Owner cannot set the sell fee to 25% or higher
Description
0%

25%

25%



Contract Pausability Check

Coinsult tests if the owner of the smart contract has the ability to pause the contract. If this is the case, users can no longer interact with the smart contract; users can no longer trade the token.

Privilege Check	Description
Can owner pause the contract?	Owner cannot pause the contract



Max Transaction Amount Check

Coinsult tests if the owner of the smart contract can set the maximum amount of a transaction. If the transaction exceeds this limit, the transaction will revert. Owners could prevent normal transactions to take place if they abuse this function.

Privilege Check	Description
Can owner set max tx amount?	Owner cannot set max transaction amount



Exclude From Fees Check

Coinsult tests if the owner of the smart contract can exclude addresses from paying tax fees. If the owner of the smart contract can exclude from fees, they could set high tax fees and exclude themselves from fees and benefit from 0% trading fees. However, some smart contracts require this function to exclude routers, dex, cex or other contracts / wallets from fees.

Privilege Check	Description
Can owner exclude from fees?	Owner can exclude from fees



Ability To Mint Check

Coinsult tests if the owner of the smart contract can mint new tokens. If the contract contains a mint function, we refer to the token's total supply as non-fixed, allowing the token owner to "mint" more tokens whenever they want.

A mint function in the smart contract allows minting tokens at a later stage. A method to disable minting can also be added to stop the minting process irreversibly.

Minting tokens is done by sending a transaction that creates new tokens inside of the token smart contract. With the help of the smart contract function, an unlimited number of tokens can be created without spending additional energy or money.

Privilege Check	Description
Can owner mint?	Owner cannot mint new tokens



Ability To Blacklist Check

Coinsult tests if the owner of the smart contract can blacklist accounts from interacting with the smart contract. Blacklisting methods allow the contract owner to enter wallet addresses which are not allowed to interact with the smart contract.

This method can be abused by token owners to prevent certain / all holders from trading the token. However, blacklists might be good for tokens that want to rule out certain addresses from interacting with a smart contract.

Privilege Check	Description
Can owner blacklist?	Owner cannot blacklist addresses



Other Owner Privileges Check

Coinsult lists all important contract methods which the owner can interact with.

✓ No other important owner privileges to mention.



Notes

Notes by Report2Earn

No notes provided by the team.

Notes by Coinsult

✓ No notes provided by Coinsult



Contract Snapshot

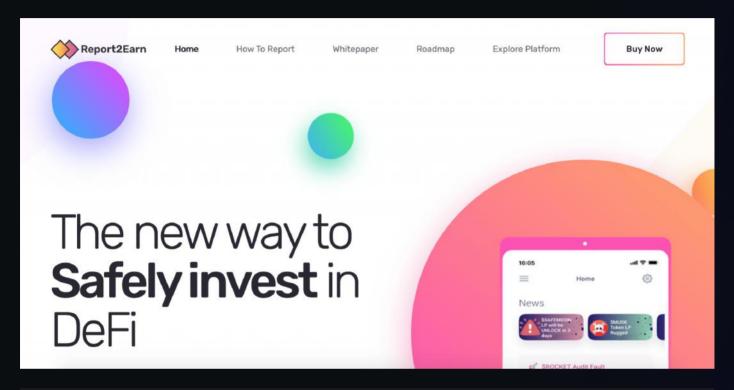
This is how the constructor of the contract looked at the time of auditing the smart contract.

```
contract R2E is ERC20, Ownable {
using Address for address payable;
using Address for address;
IUniswapV2Router02 public uniswapV2Router;
address public uniswapV2Pair;
mapping (address => bool) private _isExcludedFromFees;
uint256 public totalFeesOnBuy;
uint256 public totalFeesOnSell;
address public marketingWallet;
address private DEAD;
uint256 public swapTokensAtAmount;
bool private swapping;
uint256 public launchTime;
event ExcludeFromFees(address indexed account, bool isExcluded);
event MarketingWalletChanged(address marketingWallet);
event SwapAndSendMarketing(uint256 tokensSwapped, uint256 bnbSend);
event SwapTokensAtAmountUpdated(uint256 swapTokensAtAmount);
event FeesChanged(uint256 totalFeesOnBuy, uint256 totalFeesOnSell);
enum Status{
   Default,
   AddedLiquidity,
   ChangedFee
Status private status;
```



Website Review

Coinsult checks the website completely manually and looks for visual, technical and textual errors. We also look at the security, speed and accessibility of the website. In short, a complete check to see if the website meets the current standard of the web development industry.



Type of check	Description
Mobile friendly?	The website is mobile friendly
Contains jQuery errors?	The website does not contain jQuery errors
Is SSL secured?	The website is SSL secured
Contains spelling errors?	The website does not contain spelling errors



Certificate of Proof

Not KYC verified by Coinsult

Report2Earn

Audited by Coinsult.net



Date: 4 October 2022

✓ Advanced Manual Smart Contract Audit



End of report Smart Contract Audit