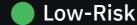


Advanced Manual Smart Contract Audit



Project: Roronoazoroinu

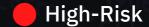
Website: http://roronoazoroinu.xyz/



9 low-risk code issues found



0 medium-risk code issues found



0 high-risk code issues found

Contract Address

0x24F8A91E806Fb6ed5b78d7557DBf7e549464A92a

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

Disclaimer

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.

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Tokenomics

Rank	Address	Quantity (Token)	Percentage
1	0xa0a395fc31ea853a15a1d29e46ab5162916402d1	999,997,913.2	99.9998%
2	0x3880df40b788eedda1f0e6fcd813fac6f8c22ade	2,036.8	0.0002%
3	0x24f8a91e806fb6ed5b78d7557dbf7e549464a92a	50	0.0000%

Source Code

Coinsult was comissioned by Roronoazoroinu to perform an audit based on the following smart contract:

https://bscscan.com/address/0x24f8a91e806fb6ed5b78d7557dbf7e549464a92a#code

Manual Code Review

In this audit report we will highlight all these issues:



9 low-risk code issues found



0 medium-risk code issues found



0 high-risk code issues found

The detailed report continues on the next page...

Contract contains Reentrancy vulnerabilities

Additional information: This combination increases risk of malicious intent. While it may be justified by some complex mechanics (e.g. rebase, reflections, buyback).

More information: Slither

```
function _transferFrom(address sender, address recipient, uint256 amount) internal returns (bool) {
   if(inSwap){ return _basicTransfer(sender, recipient, amount); }

   if(blacklistMode){
        require(!isBlacklisted[sender] && !isBlacklisted[recipient],"Blacklisted");
   }

   checkTxLimit(sender, amount);

   if(shouldSwapBack()){ swapBack(); }

   if(shouldAutoBuyback()){ triggerAutoBuyback(); }

   if(!launched() && recipient == pair){ require(_balances[sender] > 0); launch(); }

   _balances[sender] = _balances[sender].sub(amount, "Insufficient Balance");

   uint256 amountReceived = shouldTakeFee(sender) ? takeFee(sender, recipient, amount) : amount;
   _balances[recipient] = _balances[recipient].add(amountReceived);

   if(!isDividendExempt[sender]){ try distributor.setShare(sender, _balances[sender]) {} catch {} }

   if(!isDividendExempt[recipient]){ try distributor.setShare(recipient, _balances[recipient]) {} catch {} }

   if(!isDividendExempt[recipient]) { try distributor.setShare(recipient, _balances[recipient]) {} catch {} }
}
```

Recommendation

Apply the check-effects-interactions pattern.

Exploit scenario

```
function withdrawBalance(){
    // send userBalance[msg.sender] Ether to msg.sender
    // if mgs.sender is a contract, it will call its fallback function
    if( ! (msg.sender.call.value(userBalance[msg.sender])() ) ){
        throw;
    }
    userBalance[msg.sender] = 0;
}
```

Bob uses the re-entrancy bug to call withdrawBalance two times, and withdraw more than its initial deposit to the contract.

Avoid relying on block.timestamp

block.timestamp can be manipulated by miners.

Recommendation

Do not use block.timestamp, now or blockhash as a source of randomness

Exploit scenario

```
contract Game {
    uint reward_determining_number;
    function guessing() external{
        reward_determining_number = uint256(block.blockhash(10000)) % 10;
    }
}
```

Eve is a miner. Eve calls guessing and re-orders the block containing the transaction. As a result, Eve wins the game.

Too many digits

Literals with many digits are difficult to read and review.

```
uint256 _totalSupply = 1000000000 * (10 ** _decimals);
```

Recommendation

Use: Ether suffix, Time suffix, or The scientific notation

Exploit scenario

While 1_ether looks like 1 ether, it is 10 ether. As a result, it's likely to be used incorrectly.

No zero address validation for some functions

Detect missing zero address validation.

```
function setFeeReceivers(address _autoLiquidityReceiver, address _marketingFeeReceiver) external autoLiquidityReceiver = _autoLiquidityReceiver;
    marketingFeeReceiver = _marketingFeeReceiver;
}
```

Recommendation

Check that the new address is not zero.

Exploit scenario

```
contract C {

modifier onlyAdmin {
   if (msg.sender != owner) throw;
   _;
  }

function updateOwner(address newOwner) onlyAdmin external {
   owner = newOwner;
  }
}
```

Bob calls updateOwner without specifying the newOwner, soBob loses ownership of the contract.

Functions that send Ether to arbitrary destinations

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

```
try distributor.deposit{value: amountBNBReflection}() {} catch {}
     (bool success, /* bytes memory data */) = payable(marketingFeeReceiver).call{value: amountBNI
     require(success, "receiver rejected ETH transfer");
```

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.

Unchecked transfer

The return value of an external transfer/transferFrom call is not checked.

```
function distributeDividend(address shareholder) internal {
   if(shares[shareholder].amount == 0){ return; }

   uint256 amount = getUnpaidEarnings(shareholder);
   if(amount > 0){
      totalDistributed = totalDistributed.add(amount);
      USDT.transfer(shareholder, amount);
      shareholderClaims[shareholder] = block.timestamp;
      shares[shareholder].totalRealised = shares[shareholder].totalRealised.add(amount);
      shares[shareholder].totalExcluded = getCumulativeDividends(shares[shareholder].amount);
   }
}
```

Recommendation

Use SafeERC20, or ensure that the transfer/transferFrom return value is checked.

Exploit scenario

```
contract Token {
    function transferFrom(address _from, address _to, uint256 _value) public returns (bool success);
}
contract MyBank{
    mapping(address => uint) balances;
    Token token;
    function deposit(uint amount) public{
        token.transferFrom(msg.sender, address(this), amount);
        balances[msg.sender] += amount;
    }
}
```

Several tokens do not revert in case of failure and return false. If one of these tokens is used in MyBank, deposit will not revert if the transfer fails, and an attacker can call deposit for free..

Missing events arithmetic

Detect missing events for critical arithmetic parameters.

```
function setDistributionCriteria(uint256 _minPeriod, uint256 _minDistribution) external authorized {
    distributor.setDistributionCriteria(_minPeriod, _minDistribution);
}
```

Recommendation

Emit an event for critical parameter changes.

Exploit scenario

```
contract C {

modifier onlyAdmin {
   if (msg.sender != owner) throw;
   _;
}

function updateOwner(address newOwner) onlyAdmin external {
   owner = newOwner;
}
```

updateOwner() has no event, so it is difficult to track off-chain changes in the buy price.

Conformance to Solidity naming conventions

Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

```
IBEP20 USDT = IBEP20(0x55d398326f99059fF775485246999027B3197955);
address WBNB = 0xbb4CdB9CBd36B01bD1cBaEBF2De08d9173bc095c;
```

Recommendation

Follow the Solidity naming convention.

Rule exceptions

- Allow constant variable name/symbol/decimals to be lowercase (ERC20).
- Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

Costly operations inside a loop

Costly operations inside a loop might waste gas, so optimizations are justified.

```
function process(uint256 gas) external override onlyToken {
    uint256 shareholderCount = shareholders.length;

    if(shareholderCount == 0) { return; }

    uint256 gasUsed = 0;
    uint256 gasLeft = gasleft();

    uint256 iterations = 0;

    while(gasUsed < gas &amp;&amp; iterations = shareholderCount){
        currentIndex = 0;
    }

    if(shouldDistribute(shareholders[currentIndex])){
        distributeDividend(shareholders[currentIndex]);
    }
}
```

Recommendation

Use a local variable to hold the loop computation result.

Exploit scenario

```
contract CostlyOperationsInLoop{
   function bad() external{
        for (uint i=0; i < loop_count; i++){
            state_variable++;
        }
   }
}

function good() external{
   uint local_variable = state_variable;
   for (uint i=0; i < loop_count; i++){
        local_variable++;
      }
      state_variable = local_variable;
}</pre>
```

Incrementing state_variable in a loop incurs a lot of gas because of expensive SSTOREs, which might lead to an out-of-gas.

Owner privileges

- Owner cannot set fees higher than 25%
- Owner cannot change max transaction amount
- Owner can exclude from fees
- Owner can pause the contract
- Owner can blacklist addresses
- ⚠ Owner can exclude addresses from dividend
- Ownership is renounced

Extra notes by the team

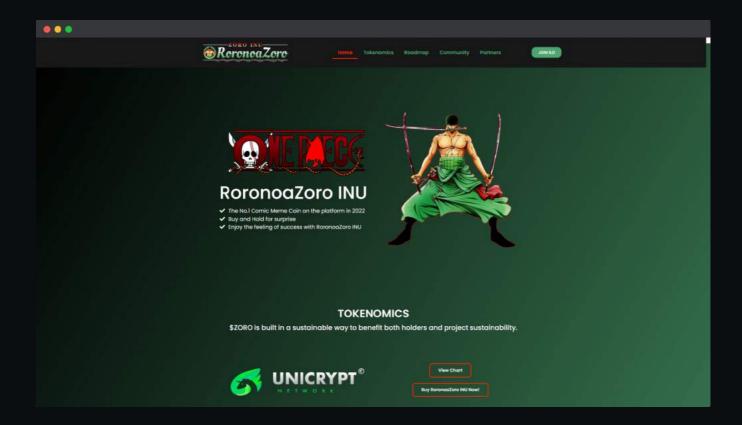
No notes

Contract Snapshot

```
contract RoronoaZoroINU is IBEP20, Auth {
using SafeMath for uint256;
address USDT = 0x55d398326f99059fF775485246999027B3197955;
address WBNB = 0xbb4CdB9CBd36B01bD1cBaEBF2De08d9173bc095c:
string constant _name = "RoronoaZoro INU";
string constant _symbol = "Zoro INU";
uint8 constant _decimals = 9;
uint256 totalSupply = 10000000000 * (10 ** decimals);
uint256 public _maxTxAmount = _totalSupply / 10;
uint256 public deadBlocks = 1;
mapping (address => uint256) _balances;
mapping (address => mapping (address => uint256)) allowances;
mapping (address => bool) isFeeExempt;
mapping (address => bool) isTxLimitExempt;
mapping (address => bool) isDividendExempt;
uint256 liquidityFee = 100;
uint256 buybackFee = 0;
uint256 reflectionFee = 100;
uint256 marketingFee = 300;
uint256 totalFee = 500;
uint256 feeDenominator = 10000;
```

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.



- Mobile Friendly
- Does not contain jQuery errors
- SSL Secured
- No major spelling errors

Note:

SSL Certificate is valid, but the team needs to force HTTP to HTTPS

Project Overview

Not KYC verified by Coinsult

