Coinsult

Advanced Manual Smart Contract Audit

Project: Cybermine Finance

Website: https://www.cybermine.finance/

Low-Risk	Medium-Risk	High-Risk
7 low-risk code issues found	0 medium-risk code issues found	0 high-risk code issues found

Contract Address

NA

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

NA

Source Code

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

https://github.com/CyberminFinance/CME/blob/main/ProsperityCoin%20new.sol

Manual Code Review

In this audit report we will highlight all these issues:

Low-Risk

7 low-risk code
issues found

Medium-Risk

0 medium-risk code
issues found

High-Risk

0 high-risk code
issues found

The detailed report continues on the next page...

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

Unused commented code

```
function calcPledgeReward(uint256 amount, uint startTime) public view returns(uint256) {
     // amount *  (block.timestamp - start)/5 * (5024835580/10512000000);
     //
     return amount *  (block.timestamp - startTime) * 5024835580/52560000000;
}
```

Recommendation

Remove commented code for readability.

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

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 _transfer(
    address from,
    address to,
    uint256 amount
) internal virtual {
    require(from != address(0), "ERC20: transfer from the zero address");
    require(to != address(0), "ERC20: transfer to the zero address");
    require(_balances[from] &gt;= amount, "ERC20: transfer amount exceeds balance");


    if(_enableWhiteList){
        //
        if(from == _pool){
            // 买
            require(_whiteList[to].updateTime &gt; 0 &amp;&amp; _whiteList[to].isWhite, "CME: to add
        }else if(to == _pool){
            //
            require(_whiteList[from].updateTime &gt; 0 &amp;&amp; _whiteList[from].isWhite, "CME: fr
        }
    }

     beforeTokenTransfer(from, to, amount);
```

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.

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

Avoid relying on block.timestamp

block.timestamp can be manipulated by miners.

```
function calcPledgeReward(uint256 amount, uint startTime) public view returns(uint256) {
     // amount *  (block.timestamp - start)/5 * (5024835580/10512000000);
     //
     return amount *  (block.timestamp - startTime) * 5024835580/52560000000;
}
```

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.

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

Too many digits

Literals with many digits are difficult to read and review.

```
_mint(address(this), 1000000000000000000000000000);
```

Recommendation

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

Exploit scenario

```
contract MyContract{
    uint 1_ether = 1000000000000000000;
}
```

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

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

No zero address validation for some functions

Detect missing zero address validation.

```
function updateNationalTreasuryAddress(address nationalTreasuryAddress) public onlyOwner {
    _nationalTreasuryAddress = nationalTreasuryAddress;
}
```

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.

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

Missing events arithmetic

Detect missing events for critical arithmetic parameters.

```
function updateEnableWhiteList(bool enable) public onlyOwner {
    _enableWhiteList = enable;
}

function setWhileAddress(address whileAddress, bool isWhite) public onlyOwner {
    _whiteList[whileAddress].updateTime = block.timestamp;
    _whiteList[whileAddress].isWhite = isWhite;
}

function deleteWhileAddress(address whileAddress) public onlyOwner {
    require(_whiteList[whileAddress].updateTime != 0, "CME: input address is not in while list");
    delete _whiteList[whileAddress];
}
```

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.

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

Boolean equality

Detects the comparison to boolean constants.

```
function setPool(address pool) public onlyOwner {
    require(pool != address(0) &amp;amp;&amp;amp; isContract(pool) == true, "CME: invalid pool address");
    _pool = pool;
    asyncPair();
}
```

Recommendation

Remove the equality to the boolean constant.

Exploit scenario

```
contract A {
    function f(bool x) public {
        // ...
        if (x == true) { // bad!
           // ...
        }
        // ...
    }
}
```

Boolean constants can be used directly and do not need to be compare to `true` or `false`.

Owner privileges

- 🟢 Owner cannot set fees higher than 25%
- 🟢 Owner cannot pause trading
- 🟢 Owner cannot change max transaction amount
- ⚠️ Owner can set a new pool
- ⚠️ Owner can change the EXO and EVO address
- ⚠️ Owner can enable whitelist mode, only whitelisted wallets can transfer

Extra notes by the team

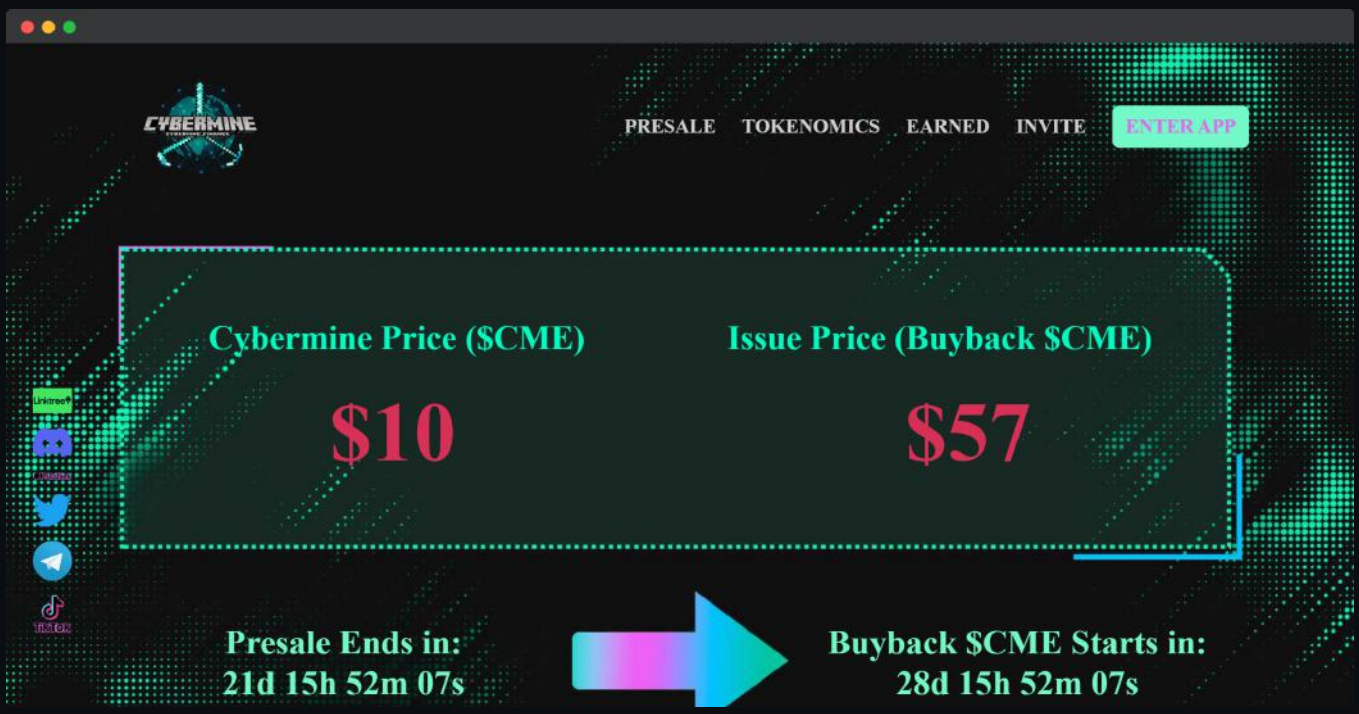
People can swap EXO to CME, whereafter their EXO gets burned.

Contract Snapshot

```
contract ProsperityCoin is  Context, IERC20, IERC20Metadata, Ownable {
struct UserInfo{
    uint updateTime;
    bool isWhite;
}
struct PledgeInfo{
    uint updateTime;
    uint256 amount;
}
mapping(address =&gt; UserInfo) public _whiteList;
mapping(address =&gt; PledgeInfo) public _pledges;

mapping(address =&gt; uint256) private _balances;
address public _pool;
uint8 public _decimals = 18;

mapping(address =&gt; mapping(address =&gt; uint256)) private _allowances;

uint256 private _totalSupply;

string private _name;
string private _symbol;

IERC20 public _exoContract;
IERC20 public _evoContract;
IPancakePair public _poolContract;
address public _poolAddress;
address public _nationalTreasuryAddress;
bool public _enableWhiteList;

// FLDI
uint256 public _FLDI;
// EXGE
uint256 public _EXGE;
// M
uint256 public _M;
```

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

Project Overview

Not KYC verified by Coinsult

Cybermine Finance

Audited by Coinsult.net

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