Coinsult

Advanced Manual Smart Contract Audit

Project: Sodatsu

Website: https://www.sokuswap.com/

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

Contract Address

0xed641273b0c9dd7bc89f0cd4c3bd58770b662d63

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

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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	Unicrypt : Token Vesting	17,000,000	76.5000%
2	0xfd73751077c2b1f871b7d12538b181e4eb80b156	4,914,420	22.1149%
3	0xff1b8770501a2ce0e0a2fc1ae3d0e13bf441ab1b	136,982.018564977420973407	0.6164%
4	0xa3ab0167a0ab940f16f633a7ef582879b7b14d0c	111,111	0.5000%
5	0xaa3d85ad9d128dfecb55424085754f6dfa643eb1	53,738.083291520321123934	0.2418%

Source Code

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

https://etherscan.io/address/0xed641273b0c9dd7bc89f0cd4c3bd58770b662d63#code

Manual Code Review

In this audit report we will highlight all these issues:

🟢 Low-Risk

4 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.

Avoid relying on block.timestamp

block.timestamp can be manipulated by miners.

```
function addLiquidity(uint256 tokenAmount, uint256 ethAmount) private {
    // approve token transfer to cover all possible scenarios
    _approve(address(this), address(uniswapV2Router), tokenAmount);

    // add the liquidity
    uniswapV2Router.addLiquidityETH{value: ethAmount}(
        address(this),
        tokenAmount,
        0, // slippage is unavoidable
        0, // slippage is unavoidable
        address(0),
        block.timestamp
    );
}
```

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.

```
function updateGasForProcessing(uint256 newValue) public onlyOwner {
    require(
        newValue &gt;= 200000 &amp;&amp; newValue &lt;= 500000,
        &quot;SODATSUTOKEN: gasForProcessing must be between 200,000 and 500,000&quot;
    );
    require(
        newValue != gasForProcessing,
        &quot;SODATSUTOKEN: Cannot update gasForProcessing to same value&quot;
    );
    emit GasForProcessingUpdated(newValue, gasForProcessing);
    gasForProcessing = newValue;
}
```

Recommendation

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

Exploit scenario

```
contract MyContract{
    uint 1_ether = 10000000000000000000;
}
```

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 setMarketingWallet(address payable wallet) external onlyOwner {
    _marketingWalletAddress = wallet;
}
```

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 setMarketingWallet(address payable wallet) external onlyOwner {
    _marketingWalletAddress = wallet;
}
```

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.

Owner privileges

- 🟢 Owner cannot set fees higher than 25%
- 🟢 Owner cannot pause trading
- 🟢 Owner cannot change max transaction amount
- 🟡 Owner can exclude from fees

⚠️ Owner can exclude addresses from dividend
⚠️ Owner can disable antibot
⚠️ Owner can update claimwait (between 1 and 24 hours)
⚠️ Owner can update minimum token balance to be eligible for dividends

Extra notes by the team

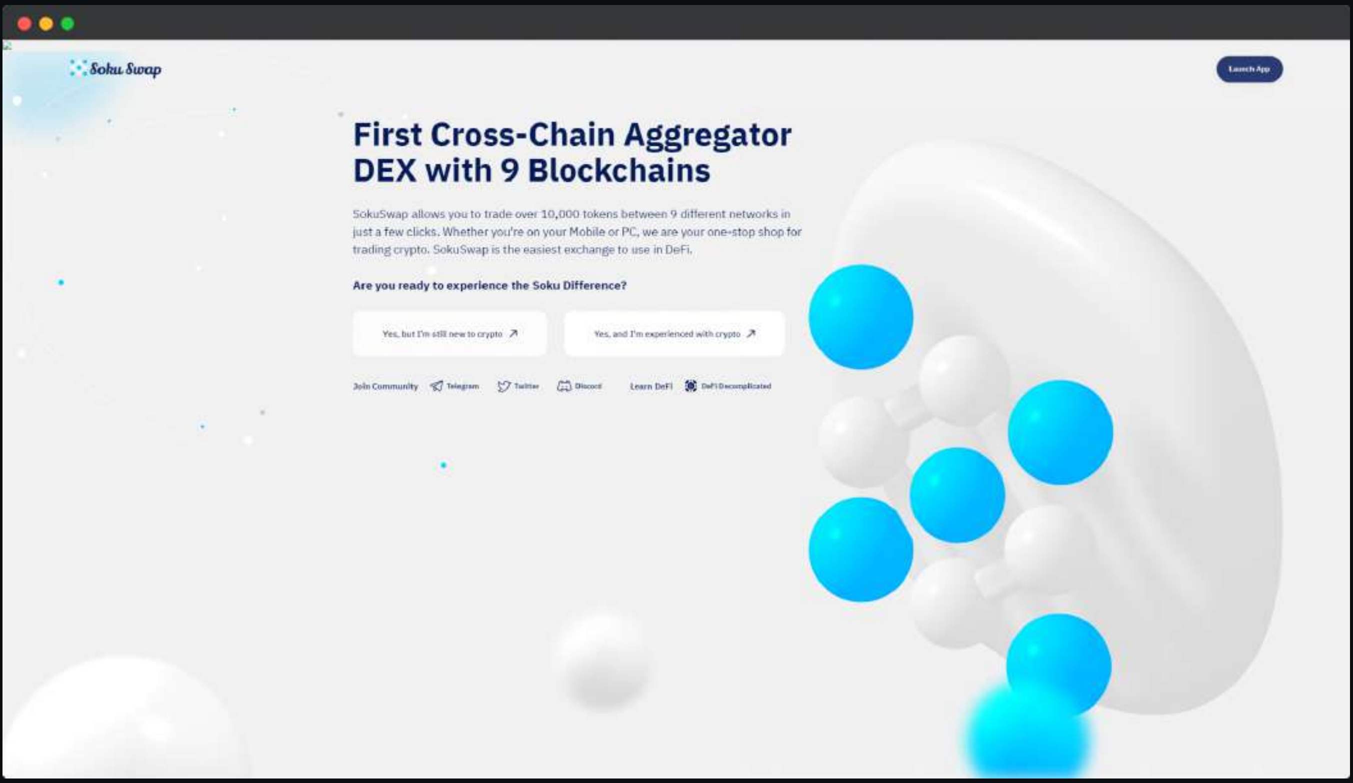
No notes

Contract Snapshot

```
contract Sodatsu_Token is ERC20, Ownable, BaseToken {
using SafeMath for uint256;

uint256 public constant VERSION = 1;

IUniswapV2Router02 public uniswapV2Router;
address public uniswapV2Pair;

bool private swapping;

SODATSUTOKENDividendTracker public dividendTracker;

address public rewardToken;

uint256 public swapTokensAtAmount;

uint256 public tokenRewardsFee;
uint256 public liquidityFee;
uint256 public marketingFee;
uint256 public totalFees;
```

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.



First Cross-Chain Aggregator DEX with 9 Blockchains

SokuSwap allows you to trade over 10,000 tokens between 9 different networks in just a few clicks. Whether you're on your Mobile or PC, we are your one-stop shop for trading crypto. SokuSwap is the easiest exchange to use in DeFi.

Are you ready to experience the Soku Difference?

Yes, but I'm still new to crypto ↗
Yes, and I'm experienced with crypto ↗
Join Community
Telegram
Twitter
Discord
Learn DeFi
DeFi Decomplicated

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

Project Overview

● Not KYC verified by Coinsult

Sodatsu

Audited by Coinsult.net

Date: 21 August 2022

✓ Advanced Manual Smart Contract Audit