

# CEGININJA AUDITS



Security Assessment

**Happy Exchange Token**

April 3, 2022

# Table of Contents

## **1 Audit Summary**

## **2 Project Overview**

### 2.1 Token Summary

### 2.2 Main Contract Assessed

## **3 Smart Contract Vulnerability Checks**

### 3.1 Mint Check

### 3.2 Fees Check

### 3.3 MaxTx Check

### 3.4 Pause Trade Check

## **4 Contract Ownership**

## **5 Liquidity Ownership**

## **6 Important Notes To The Users**

## **7 Social Media Check(Informational)**

## **8 Disclaimer**

# Audit Summary

This report has been prepared for Happy Exchange Token on the Binance Smart Chain network. CFGNINJA provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.

# Project Overview

## Token Summary

| Parameter     | Result                                                                                                                                                                   |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Address       | 0xfAE01c9404FB7D6588570e7537BA886eB747917B                                                                                                                               |
| Name          | Happy Exchange                                                                                                                                                           |
| Token Tracker | Happy Exchange (HEX)                                                                                                                                                     |
| Decimals      | 9                                                                                                                                                                        |
| Supply        | 100,000,000                                                                                                                                                              |
| Platform      | Binance Smart Chain                                                                                                                                                      |
| compiler      | v0.8.10+commit.fc410830                                                                                                                                                  |
| Contract Name | CoinToken                                                                                                                                                                |
| Optimization  | Yes with 200 runs                                                                                                                                                        |
| LicenseType   | Unlicense                                                                                                                                                                |
| Language      | Solidity                                                                                                                                                                 |
| Codebase      | <a href="https://www.bscscan.com/address/0x2272dA007d50736e89e2A61e3Aa29E82a0af7509">https://www.bscscan.com/<br/>address/0x2272dA007d50736e89e2A61e3Aa29E82a0af7509</a> |
| Url           | <a href="https://happy-ex.com/">https://happy-ex.com/</a>                                                                                                                |

## Main Contract Assessed Contract Name

| Name           | Contract                                   | Live |
|----------------|--------------------------------------------|------|
| Happy Exchange | OxfAE01c9404FB7D6588570e7537BA886eB747917B | Yes  |

## TestNet Contract Assessed Contract Name

| Name           | Contract                                   | Live |
|----------------|--------------------------------------------|------|
| Happy Exchange | OxfAE01c9404FB7D6588570e7537BA886eB747917B | Yes  |

## Solidity Code Provided

| SolID     | FileNameMD5                      | FileName      |
|-----------|----------------------------------|---------------|
| CoinToken | C4410B4EE756F135E70997AEDDFDDFAD | CoinToken.sol |



# Smart Contract Vulnerability Checks

| Vulnerability                                           | Automatic Scan | Manual Scan | Result        |
|---------------------------------------------------------|----------------|-------------|---------------|
| Unencrypted Private Data On-Chain                       | Complete       | Complete    | Low / No Risk |
| Code With No Effects                                    | Complete       | Complete    | Low / No Risk |
| Message call with hardcoded gas amount                  | Complete       | Complete    | Low / No Risk |
| Hash Collisions With Multiple Variable Length Arguments | Complete       | Complete    | Low / No Risk |
| Unexpected Ether balance                                | Complete       | Complete    | Low / No Risk |
| Presence of unused variables                            | Complete       | Complete    | Low / No Risk |
| Right-To-Left-Override control character (U+202E)       | Complete       | Complete    | Low / No Risk |
| Typographical Error                                     | Complete       | Complete    | Low / No Risk |
| DoS With Block Gas Limit                                | Complete       | Complete    | Low / No Risk |
| Arbitrary Jump with Function Type Variable              | Complete       | Complete    | Low / No Risk |
| Insufficient Gas Griefing                               | Complete       | Complete    | Low / No Risk |
| Incorrect Inheritance Order                             | Complete       | Complete    | Low / No Risk |
| Write to Arbitrary Storage Location                     | Complete       | Complete    | Low / No Risk |
| Requirement Violation                                   | Complete       | Complete    | Low / No Risk |
| Missing Protection against Signature Replay Attacks     | Complete       | Complete    | Low / No Risk |

| Vulnerability                                    | Automatic Scan | Manual Scan | Result        |
|--------------------------------------------------|----------------|-------------|---------------|
| Weak Sources of Randomness from Chain Attributes | Complete       | Complete    | Low / No Risk |

# Mint Check

The Project Owners of Happy Exchange does not have a mint function in the contract, owner cannot mint tokens after initial deploy

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The Project has a Total Supply of 100,000,000 and cannot mint any more than the Max Supply.

.



**Owner can't mint new coins**



# Fees Check

The Project Owners of Happy Exchange has the ability to set fees to 100%  
We Recommend the team to create a new contract with fees restrictions to avoid any problems, as alternative the team can use multi signature wallet to ensure the project is safe from a potential fee increase.



# MaxTx Check

The Project Owners of Happy Exchange can set max tx amount.

The ability to set MaxTx can be used as bad actor, this can limit the ability of investors to sale their tokens at any given time if is set too low..

We recommend the project to set MaxTx to Total Supply or simiar to avoid swap or transfer from failures



# Pause Trade Check

The Project Owners of Happy Exchange Owner can pause trading but he can't move tokens (Owner can't pause trading)

The Team has done a great job to avoid stop trading, and investors has the ability to trade at any given time without any problems

Pause Trade Notes:

Auditor Notes:

Project Owner Notes:



**Owner can't pause trading**



# Contract Ownership

The contract ownership of Happy Exchange is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address `0xd98ca363ecae66cf203bc7e9888b0be7c7eb782a` which can be viewed from:  
[HERE](#)

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.

We recommend the team to use a Multisignature Wallet if contract is not going to be renounced, this will give the ability to the team to have more control over the contract.

# Liquidity Ownership

The token does not have liquidity at the moment of the audit, block 16517926



# KYC Information

The Project Owners of Happy Exchange is not KYC. .

The project owner has not KYC with our team during the time of the audit. .

We recommend the team to do at least one KYC with either Pinksale or with us, they can do this at any time and we can update the audit with the KYC block or link..

KYC Information Notes:

Auditor Notes: Auditor asked project owner if there was any plans to KYC.

Project Owner Notes: Project Owner, KYC in progress by pinksale



## Privileged Functions (onlyOwner)

| Function Name                    | Parameters                         | Visibility |
|----------------------------------|------------------------------------|------------|
| renounceOwnership                | none                               | public     |
| transferOwnership                | address newOwner                   | public     |
| lock                             | (uint256 time)                     | public     |
| excludeFromFee                   | address account                    | public     |
| includeInFee                     | address account                    | public     |
| setTaxFee                        | (uint256 taxFee)                   | external   |
| setBuybackFee                    | (uint256 _buybackFee)              | external   |
| setMaxTxAmount                   | (uint256 maxTxAmount)              | external   |
| setMarketingFee                  | (uint256 _marketingFee)            | external   |
| setNumTokensSellToAddToLiquidity | (uint256 _minimumTokensBeforeSwap) | external   |
| setBuybackUpperLimit             | (uint256 buyBackLimit)             | external   |
| setMarketingAddress              | (address _marketingAddress)        | external   |
| setSwapAndLiquifyEnabled         | (bool _enabled)                    | public     |
| setBuyBackEnabled                | (bool _enabled)                    | public     |
| presale                          | (bool _presale)                    | external   |

## Important Notes To The Users:

- The team has not provided a KYC Link during the time of assessment and can be found in the Audit.
- No mint function found, owner cannot mint tokens after initial deploy.
- Owner can change fees up to 100%.
- Owner can set max tx amount.
- Owner can't pause trading.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.
- The following contract is a cointool.app generated contract.
- cointool.app also do an assessment of it's tokens and we have validated it.
- You can review their audit in the following link <https://cointool.app/audit/contract?chainId=56&address=0x2272dA007d50736e89e2A61e3Aa29E82a0af7509> .

## Audit Passed



# Social Media Checks

| Social Media | URL                                                                                   | Result |
|--------------|---------------------------------------------------------------------------------------|--------|
| Twitter      | <a href="https://twitter.com/HappyExOfficial">https://twitter.com/HappyExOfficial</a> | Pass   |
| Instagram    |                                                                                       | NA     |
| Website      | <a href="https://happy-ex.com/">https://happy-ex.com/</a>                             | Pass   |
| Telegram     | <a href="https://t.me/happyexchangeofficial">https://t.me/happyexchangeofficial</a>   | Pass   |

We recommend to have 3 or more social media sources including a completed working websites.

Social Media Information Notes:

Auditor Notes: undefined

Project Owner Notes:



# Disclaimer

CFGNINJA has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocacy for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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