

# CFG NINJA AUDITS

Security Assessment

**KENNY ERC20 Token** 

July 10, 2023

Audit Status: Pass

Audit Edition: Advance



3LADE POOL



# **Risk Analysis**

## **Classifications of Manual Risk Results**

| Classification    | Description                      |
|-------------------|----------------------------------|
| <b>○</b> Critical | Danger or Potential Problems.    |
| High              | Be Careful or Fail test.         |
| Low               | Pass, Not-Detected or Safe Item. |
| ■ Informational   | Function Detected                |

## **Manual Code Review Risk Results**

| Contract Priviledge | Description   |
|---------------------|---------------|
| Buy Tax             | 4%            |
| Sale Tax            | 4%            |
| Cannot Sale         | Pass          |
| Cannot Sale         | Pass          |
| ■ Max Tax           | 25%           |
|                     | Yes           |
| Fee Check           | Pass          |
| ☐ Is Honeypot?      | Not Detected  |
| Trading Cooldown    | Not Detected  |
| Can Pause Trade?    | Not Detected. |





| Contract Priviledge | Description                                |
|---------------------|--------------------------------------------|
| Pause Transfer?     | Not Detected                               |
| Max Tx?             | Fail                                       |
| Is Anti Whale?      | Detected                                   |
| ■ Is Anti Bot?      | Not Detected                               |
| ■ Is Blacklist?     | Not Detected                               |
| Blacklist Check     | Pass                                       |
| is Whitelist?       | Not Detected                               |
| Can Mint?           | Pass                                       |
| S Proxy?            | Not Detected                               |
| Can Take Ownership? | Not Detected                               |
| Hidden Owner?       | Not Detected                               |
| ① Owner             | 0xab9B1f6808aCd0Dc5D32E452fd7d7686342AB7f1 |
| Self Destruct?      | Not Detected                               |
| External Call?      | Not Detected                               |
| Other?              | Detected                                   |
| Holders             | 1                                          |
| Auditor Confidence  | low                                        |

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.





# **Project Overview**

# **Token Summary**

| Parameter     | Result                                                                         |
|---------------|--------------------------------------------------------------------------------|
| Address       | 0xBeB10836969b50e88d6a039ab8Ef83415041d7f9                                     |
| Name          | KENNY ERC20                                                                    |
| Token Tracker | KENNY ERC20 (\$KENNY)                                                          |
| Decimals      | 18                                                                             |
| Supply        | 420,069,420,069                                                                |
| Platform      | Ethereum                                                                       |
| compiler      | v0.8.18+commit.87f61d96                                                        |
| Contract Name | KENNY                                                                          |
| Optimization  | Yes with 200 runs                                                              |
| LicenseType   | MIT                                                                            |
| Language      | Solidity                                                                       |
| Codebase      | https://etherscan.io/token/0xbeb10836969b50e88d6a039ab<br>8ef83415041d7f9#code |
| Payment Tx    | Corporate                                                                      |





# **Project Overview**

# **Simulation Summary**

| Parameter             | Result |
|-----------------------|--------|
| Transfer From Owner   | Pass   |
| Transfer From Holder  | Pass   |
| Add Liquidity         | Pass   |
| RemoveLiquidity       | Pass   |
| Buy from Owner        | Pass   |
| Buy from Holder       | Pass   |
| Sale from Owner       | Pass   |
| Sale from Holder      | Pass   |
| Remove Liquidity      | Pass   |
| SwapAndLiquify        | Pass   |
| SwapAndSale w/Fee     | Pass   |
| SwapAndSale TX        |        |
| SwapAndSaleNoFee      | Pass   |
| SwapAndSale No/Fee TX |        |
| ExcludeFromFees       | Pass   |
| LaunchPad             | N/A    |





| Parameter        | Result      |
|------------------|-------------|
| Pool Creation    | Pass        |
| Pool Creation TX |             |
| Pool Finalize    | Pass        |
| Pool Finalize TX |             |
| Enable           | Not Present |

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.





# Main Contract Assessed Contract Name

| Name        | Contract                                   | Live |
|-------------|--------------------------------------------|------|
| KENNY ERC20 | 0xBeB10836969b50e88d6a039ab8Ef83415041d7f9 | Yes  |

# TestNet Contract Assessed Contract Name

| Name        | Contract                                   | Live |
|-------------|--------------------------------------------|------|
| KENNY ERC20 | 0x2a2E314e1F16aa1182fB31cED59F905d999aA91f | Yes  |

## **Solidity Code Provided**

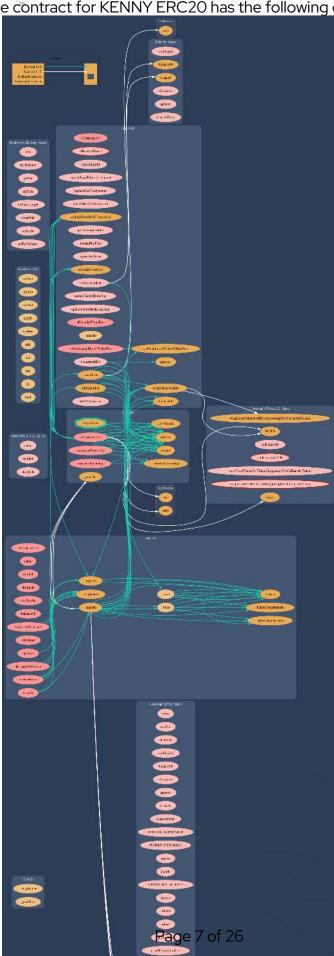
| SollD | File Sha-1                               | FileName           |
|-------|------------------------------------------|--------------------|
| Kenny | 4fce80371479217e431f98cbd4ebeeec782e225d | kennyPostAudit.sol |
| Kenny |                                          |                    |
| Kenny |                                          |                    |
| Kenny |                                          |                    |





# Call Graph

The contract for KENNY ERC20 has the following call graph structure.







# Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

| ID      | Severity | Name                                              | File               | location        |
|---------|----------|---------------------------------------------------|--------------------|-----------------|
| SWC-100 | Pass     | Function Default Visibility                       | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-101 | Pass     | Integer Overflow and Underflow.                   | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-102 | Pass     | Outdated Compiler<br>Version file.                | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-103 | Pass     | A floating pragma is set.                         | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-104 | Pass     | Unchecked Call Return<br>Value.                   | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-105 | Pass     | Unprotected Ether<br>Withdrawal.                  | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-106 | Pass     | Unprotected<br>SELFDESTRUCT<br>Instruction        | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-107 | Pass     | Read of persistent state following external call. | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-108 | Low      | State variable visibility is not set              | kennyPostAudit.sol | L: 728 C:<br>12 |
| SWC-109 | Pass     | Uninitialized Storage<br>Pointer.                 | kennyPostAudit.sol | L: 0 C: 0       |
| SWC-110 | Pass     | Assert Violation.                                 | kennyPostAudit.sol | L: 0 C: 0       |





| ID      | Severity | Name                                                                               | File               | location  |
|---------|----------|------------------------------------------------------------------------------------|--------------------|-----------|
| SWC-111 | Pass     | Use of Deprecated Solidity Functions.                                              | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-112 | Pass     | Delegate Call to<br>Untrusted Callee.                                              | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-113 | Pass     | Multiple calls are executed in the same transaction.                               | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-114 | Pass     | Transaction Order Dependence.                                                      | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-115 | Pass     | Authorization through tx.origin.                                                   | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-116 | Pass     | A control flow decision is made based on The block.timestamp environment variable. | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-117 | Pass     | Signature Malleability.                                                            | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-118 | Pass     | Incorrect Constructor<br>Name.                                                     | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-119 | Pass     | Shadowing State<br>Variables.                                                      | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-120 | Pass     | Potential use of block.number as source of randonmness.                            | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-121 | Pass     | Missing Protection against<br>Signature Replay Attacks.                            | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-122 | Pass     | Lack of Proper Signature<br>Verification.                                          | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-123 | Pass     | Requirement Violation.                                                             | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-124 | Pass     | Write to Arbitrary Storage<br>Location.                                            | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-125 | Pass     | Incorrect Inheritance<br>Order.                                                    | kennyPostAudit.sol | L: 0 C: 0 |





| ID      | Severity | Name                                                           | File               | location  |
|---------|----------|----------------------------------------------------------------|--------------------|-----------|
| SWC-126 | Pass     | Insufficient Gas Griefing.                                     | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-127 | Pass     | Arbitrary Jump with Function Type Variable.                    | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-128 | Pass     | DoS With Block Gas<br>Limit.                                   | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-129 | Pass     | Typographical Error.                                           | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-130 | Pass     | Right-To-Left-Override control character (U +202E).            | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-131 | Pass     | Presence of unused variables.                                  | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-132 | Pass     | Unexpected Ether balance.                                      | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-133 | Pass     | Hash Collisions with<br>Multiple Variable Length<br>Arguments. | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-134 | Pass     | Message call with hardcoded gas amount.                        | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-135 | Pass     | Code With No Effects<br>(Irrelevant/Dead Code).                | kennyPostAudit.sol | L: 0 C: 0 |
| SWC-136 | Pass     | Unencrypted Private Data<br>On-Chain.                          | kennyPostAudit.sol | L: 0 C: 0 |

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





# Smart Contract Vulnerability Details

SWC-108 - State Variable Default Visibility

## **CWE-710: Improper Adherence to Coding Standards**

#### **Description:**

Labeling the visibility explicitly makes it easier to catch incorrect assumptions about who can access the variable.

#### Remediation:

Variables can be specified as being public, internal or private. Explicitly define visibility for all state variables.

#### **References:**

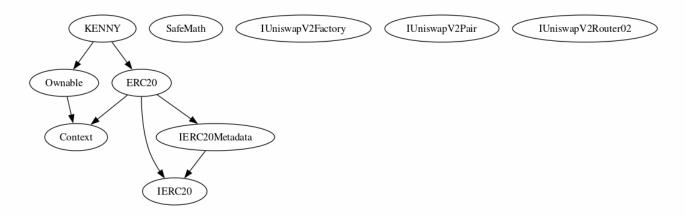
Ethereum Smart Contract Best Practices - Explicitly mark visibility in functions and state variables





# **Inheritance**

The contract for KENNY ERC20 has the following inheritance structure.





# **Smart Contract Advance Checks**

| ID         | Severity      | Name                                                       | Result | Status       |
|------------|---------------|------------------------------------------------------------|--------|--------------|
| \$KENNY-01 | Low           | Potential Sandwich<br>Attacks.                             | Pass   | Not Detected |
| \$KENNY-02 | Informational | Function Visibility Optimization                           | Fail   | Detected     |
| \$KENNY-03 | Low           | Lack of Input Validation.                                  | Fail   | Detected     |
| \$KENNY-04 | High          | Centralized Risk In addLiquidity.                          | Pass   | Not Detected |
| \$KENNY-05 | Low           | Missing Event Emission.                                    | Fail   | Detected     |
| \$KENNY-06 | Low           | Conformance with Solidity Naming Conventions.              | Pass   | Not Detected |
| \$KENNY-07 | Low           | State Variables could be Declared Constant.                | Pass   | Not Detected |
| \$KENNY-08 | Low           | Dead Code Elimination.                                     | Pass   | Not Detected |
| \$KENNY-09 | High          | Third Party Dependencies.                                  | Pass   | Not Detected |
| \$KENNY-10 | High          | Initial Token Distribution.                                | Pass   | Not Detected |
| \$KENNY-11 | High          | airdrop function found in contract.                        | Pass   | Not Detected |
| \$KENNY-12 | High          | Centralization Risks In The X Role                         | Pass   | Not Detected |
| \$KENNY-13 | Informational | Extra Gas Cost For User                                    | Fail   | Detected     |
| \$KENNY-14 | Medium        | Unnecessary Use Of<br>SafeMath                             | Fail   | Detected     |
| \$KENNY-15 | Medium        | Symbol Length Limitation due to Solidity Naming Standards. | Pass   | Not Detected |





| ID         | Severity      | Name                                     | Result | Status       |
|------------|---------------|------------------------------------------|--------|--------------|
| \$KENNY-16 | Medium        | Taxes can be up to 100%                  | Pass   | Not Detected |
| \$KENNY-17 | Logical Issue | Highly Permissive Role Access.,`         | Pass   | Not Detected |
| \$KENNY-18 | Critical      | Stop Transactions by using Enable Trade. | Pass   | Not Detected |



## **\$KENNY-02 | Function Visibility Optimization.**

| Category            | Severity        | Location                                                         | Status   |
|---------------------|-----------------|------------------------------------------------------------------|----------|
| Gas<br>Optimization | 1 Informational | kennyPostAudit.sol: L:<br>728 C: 12,L: 729 C: 12,L:<br>730 C: 12 | Detected |

#### **Description**

The following functions are declared as public and are not invoked in any of the contracts contained within the projects scope:

| Function Name             | Parameters | Visibility |
|---------------------------|------------|------------|
| tokensForMarketing        |            | internal   |
| tokensForSPEcosystem      |            | internal   |
| tokensForKennyBurn        |            | internal   |
| excludeFromFees           |            | public     |
| excludeFromMaxTransaction |            | public     |

The functions that are never called internally within the contract should have external visibility

#### Remediation

We advise that the function's visibility specifiers are set to external, and the array-based arguments change their data location from memory to calldata, optimizing the gas cost of the function.

#### References:

external vs public best practices.





## **\$KENNY-03 | Lack of Input Validation.**

| Category         | Severity | Location                                                            | Status   |
|------------------|----------|---------------------------------------------------------------------|----------|
| Volatile<br>Code | Low      | kennyPostAudit.sol: L:<br>1132 C: 14, L: 913 C: 14, L:<br>906 C: 14 | Detected |

#### **Description**

The given input is missing the check for the non-zero address.

The given input is missing the check for the KENNYbooster,updateSouthParkEcosystem,updateKennyMarketing .

#### Remediation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
...
require(receiver!= address(0), "Receiver is the zero address");
...
...
require(value X limitation, "Your not able to do this function");
```

We also recommend customer to review the following function that is missing a required validation. KENNYbooster,updateSouthParkEcosystem,updateKennyMarketing .





# **\$KENNY-05 | Missing Event Emission.**

| Category         | Severity | Location                             | Status   |
|------------------|----------|--------------------------------------|----------|
| Volatile<br>Code | Low      | kennyPostAudit.sol: L:<br>1132 C: 14 | Detected |

#### **Description**

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes. The linked code does not create an event for the transfer.

#### Remediation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.





# **\$KENNY-13 | Extra Gas Cost For User.**

| Category         | Severity        | Location                            | Status   |
|------------------|-----------------|-------------------------------------|----------|
| Logical<br>Issue | 1 Informational | kennyPostAudit.sol: L:<br>988, C: 0 | Detected |

### **Description**

The user may trigger a tax distribution during the transfer process, which will cost a lot of gas and it is unfair to let a single user bear it.

#### Remediation

We advise the client to make the owner responsible for the gas costs of the tax distribution.

### **Project Action**

swapBack();





# \$KENNY-14 | Unnecessary Use Of SafeMath

| Category         | Severity | Location                           | Status   |
|------------------|----------|------------------------------------|----------|
| Logical<br>Issue | Medium   | kennyPostAudit.sol: L: 371<br>C: 0 | Detected |

#### **Description**

The SafeMath library is used unnecessarily. With Solidity compiler versions 0.8.0 or newer, arithmetic operations

will automatically revert in case of integer overflow or underflow.

library SafeMath {

An implementation of SafeMath library is found.

using SafeMath for uint256;

SafeMath library is used for uint256 type in contract.

#### Remediation

We advise removing the usage of SafeMath library and using the built-in arithmetic operations provided by the

Solidity programming language

#### **Project Action**





# Technical Findings Summary

## **Classification of Risk**

| Severity        | Description                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Critical        | Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.            |
| High            | Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.                   |
| ○ Medium        | Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform                                                                            |
| Low             | Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.      |
| 1 Informational | Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code. |

## **Findings**

| Severity        | Found | Pending | Resolved |
|-----------------|-------|---------|----------|
| Critical        | 0     | 0       | 0        |
| High            | 0     | 0       | 0        |
| ○ Medium        | 1     | 0       | 0        |
| Low             | 2     | 0       | 0        |
| 1 Informational | 2     | 0       | 0        |
| Total           | 5     | 0       | 0        |





# **Social Media Checks**

| Social<br>Media | URL                                 | Result |
|-----------------|-------------------------------------|--------|
| Twitter         | https://twitter.com/kennyerc20token | Pass   |
| Other           |                                     | Fail   |
| Website         | https://kennyisdead.wtf/            | Pass   |
| Telegram        | https://t.me/Kenny_ERC20            | 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:** 







# **Assessment Results**

#### **Score Results**

| Review              | Score  |
|---------------------|--------|
| Overall Score       | 85/100 |
| Auditor Score       | 80/100 |
| Review by Section   | Score  |
| Manual Scan Score   | 23/33  |
| SWC Scan Score      | 35/37  |
| Advance Check Score | 27/30  |

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

## **Audit Passed**







## **Assessment Results**

# **Important Notes:**

- The contract has maxWallet and other anti-whale functions.
- recommend reviewing and testing again.

# Auditor Score =80 Audit Passed







# **Appendix**

# **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.





## **Coding Best Practices**

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.





### Disclaimer

CFGNINJA has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this 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 the Project in question may pursue, and 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 entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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