

Security Assessment: Yieldrone Token





February 13, 2024

- Audit Status: **Pass**
- Audit Edition: **Standard**
































Risk Analysis

Classifications of Manual Risk Results

| Classification | Description |
|---|----------------------------------|
|  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 Privilege | Description |
|--|--------------|
|  Buy Tax | 3% |
|  Sale Tax | 3% |
|  Cannot Sale | Pass |
|  Cannot Sale | Pass |
|  Max Tax | 5% |
|  Modify Tax | Yes |
|  Fee Check | Pass |
|  Is Honeypot? | Not Detected |
|  Trading Cooldown | Not Detected |
|  Can Pause Trade? | Pass |
|  Pause Transfer? | Not Detected |
|  Max Tx? | Fail |
|  Is Anti Whale? | Detected |
|  Is Anti Bot? | Not-Detected |

| Contract Privilege | Description |
|--|--|
|  Is Blacklist? | Not Detected |
|  Blacklist Check | Pass |
|  is Whitelist? | Not Detected |
|  Can Mint? | Pass |
|  Is Proxy? | Not Detected |
|  Can Take Ownership? | Not Detected |
|  Hidden Owner? | Not Detected |
|  Owner | 0x7E7E01aAE6cB1d6f1f58D7EEC76D7CB9cA082D63 |
|  Self Destruct? | Not Detected |
|  External Call? | Detected |
|  Other? | Not Detected |
|  Holders | 1 |
|  Auditor Confidence | Medium Risk |
|  KYC Present | No |
|  KYC URL | |

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 | 0x376E23Eb751b4722ceEE123C924ACA46F23e1Ca1 |
| Name | Yieldrone |
| Token Tracker | Yieldrone (YDR) |
| Decimals | 18 |
| Supply | 1,000,000 |
| Platform | ETHEREUM |
| compiler | v0.8.22+commit.4fc1097e |
| Contract Name | Yieldrone |
| Optimization | Yes with 200 runs |
| LicenseType | MIT |
| Language | Solidity |
| Codebase | https://etherscan.io/address/0x376e23eb751b4722ceee123c924aca46f23e1ca1#code |
| Payment Tx | Corporate |

Main Contract Assessed Contract Name

| Name | Contract | Live |
|-----------|--|------|
| Yieldrone | 0x376E23Eb751b4722ceEE123C924ACA46F23e1Ca1 | Yes |

TestNet Contract Assessed Contract Name

| Name | Contract | Live |
|-----------|--|------|
| Yieldrone | 0x44FCb6eB101DeAcd7dDf6412d1A0fD7b8e885D74 | Yes |

Solidity Code Provided

| SOLID | File Sha-1 | FileName |
|-----------|--|---------------|
| Yieldrone | d42efc97bf94874d9870b125dcff148f4e9f5c90 | Yieldrone.sol |
| Yieldrone | | |
| Yieldrone | | |
| Yieldrone | | |
| Yieldrone | | |
| Yieldrone | undefined | |

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 | Yieldrone.sol | L: 0 C: 0 |
| SWC-101 | Pass | Integer Overflow and Underflow. | Yieldrone.sol | L: 0 C: 0 |
| SWC-102 | Pass | Outdated Compiler Version file. | Yieldrone.sol | L: 0 C: 0 |
| SWC-103 | Pass | A floating pragma is set. | Yieldrone.sol | L: 2 C: 0 |
| SWC-104 | Low | Unchecked Call Return Value. | Yieldrone.sol | L: 0 C: 0 |
| SWC-105 | Pass | Unprotected Ether Withdrawal. | Yieldrone.sol | L: 0 C: 0 |
| SWC-106 | Pass | Unprotected SELFDESTRUCT Instruction | Yieldrone.sol | L: 0 C: 0 |
| SWC-107 | Pass | Read of persistent state following external call. | Yieldrone.sol | L: 0 C: 0 |
| SWC-108 | Pass | State variable visibility is not set.. | Yieldrone.sol | L: 0 C: 0 |
| SWC-109 | Pass | Uninitialized Storage Pointer. | Yieldrone.sol | L: 0 C: 0 |
| SWC-110 | Pass | Assert Violation. | Yieldrone.sol | L: 0 C: 0 |
| SWC-111 | Pass | Use of Deprecated Solidity Functions. | Yieldrone.sol | L: 0 C: 0 |
| SWC-112 | Pass | Delegate Call to Untrusted Callee. | Yieldrone.sol | L: 0 C: 0 |
| SWC-113 | Pass | Multiple calls are executed in the same transaction. | Yieldrone.sol | L: 0 C: 0 |
| SWC-114 | Pass | Transaction Order Dependence. | Yieldrone.sol | L: 0 C: 0 |

| ID | Severity | Name | File | location |
|---------|----------|--|---------------|-----------|
| SWC-115 | Pass | Authorization through tx.origin. | Yieldrone.sol | L: 0 C: 0 |
| SWC-116 | Pass | A control flow decision is made based on The block.timestamp environment variable. | Yieldrone.sol | L: 0 C: 0 |
| SWC-117 | Pass | Signature Malleability. | Yieldrone.sol | L: 0 C: 0 |
| SWC-118 | Pass | Incorrect Constructor Name. | Yieldrone.sol | L: 0 C: 0 |
| SWC-119 | Pass | Shadowing State Variables. | Yieldrone.sol | L: 0 C: 0 |
| SWC-120 | Pass | Potential use of block.number as source of randomness. | Yieldrone.sol | L: 0 C: 0 |
| SWC-121 | Pass | Missing Protection against Signature Replay Attacks. | Yieldrone.sol | L: 0 C: 0 |
| SWC-122 | Pass | Lack of Proper Signature Verification. | Yieldrone.sol | L: 0 C: 0 |
| SWC-123 | Pass | Requirement Violation. | Yieldrone.sol | L: 0 C: 0 |
| SWC-124 | Pass | Write to Arbitrary Storage Location. | Yieldrone.sol | L: 0 C: 0 |
| SWC-125 | Pass | Incorrect Inheritance Order. | Yieldrone.sol | L: 0 C: 0 |
| SWC-126 | Pass | Insufficient Gas Griefing. | Yieldrone.sol | L: 0 C: 0 |
| SWC-127 | Pass | Arbitrary Jump with Function Type Variable. | Yieldrone.sol | L: 0 C: 0 |
| SWC-128 | Pass | DoS With Block Gas Limit. | Yieldrone.sol | L: 0 C: 0 |
| SWC-129 | Pass | Typographical Error. | Yieldrone.sol | L: 0 C: 0 |
| SWC-130 | Pass | Right-To-Left-Override control character (U+202E). | Yieldrone.sol | L: 0 C: 0 |
| SWC-131 | Pass | Presence of unused variables. | Yieldrone.sol | L: 0 C: 0 |
| SWC-132 | Pass | Unexpected Ether balance. | Yieldrone.sol | L: 0 C: 0 |

| ID | Severity | Name | File | location |
|---------|----------|--|---------------|-----------|
| SWC-133 | Pass | Hash Collisions with Multiple Variable Length Arguments. | Yieldrone.sol | L: 0 C: 0 |
| SWC-134 | Pass | Message call with hardcoded gas amount. | Yieldrone.sol | L: 0 C: 0 |
| SWC-135 | Pass | Code With No Effects (Irrelevant/Dead Code). | Yieldrone.sol | L: 0 C: 0 |
| SWC-136 | Pass | Unencrypted Private Data On-Chain. | Yieldrone.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-104 - Unchecked Call Return Value.

CWE-252: Unchecked Return Value.

Description:

The return value of a message call is not checked. Execution will resume even if the called contract throws an exception. If the call fails accidentally or an attacker forces the call to fail, this may cause unexpected behaviour in the subsequent program logic.

Remediation:

If you choose to use low-level call methods, make sure to handle the possibility that the call will fail by checking the return value.

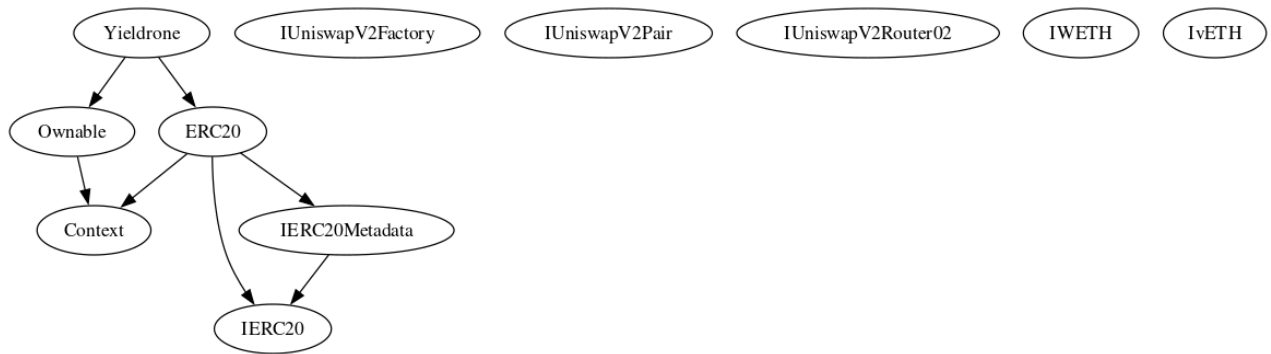
References:

Ethereum Smart Contract Best Practices - Handle errors in external calls.

Inheritance

The contract for Yieldrone has the following inheritance structure.

The Project has a Total Supply of 1,000,000





Privileged Functions (onlyOwner)

Please Note if the contract is Renounced none of this functions can be executed.

| Function Name | Parameters | Visibility |
|---------------------------|------------------|------------|
| renounceOwnership | | Public |
| transferOwnership | address newOwner | Public |
| withdrawStuckEth | | External |
| withdrawStuckToken | | External |
| updateTeamWallet | | External |
| excludeFromMaxTransaction | | External |
| excludeFromFees | | External |
| updateSellFees | | External |
| updateBuyFees | | External |
| updateSwapEnabled | | External |
| updateSwapTokensAtPercent | | External |

YDR-03 | Lack of Input Validation.

| Category | Severity | Location | Status |
|---------------|---|---|--|
| Volatile Code |  Low | Yieldrone.sol: L: 1212, C: 14,L: 1206, C: 14,L: 1200, 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 missing required function.



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. missing required function.

YDR-05 | Missing Event Emission.

| Category | Severity | Location | Status |
|---------------|---|--|--|
| Volatile Code |  Low | Yieldrone.sol: L: 1229, C: 14,L: 1219, C: 14,L: 1229, C: 14,L: 1184, C: 14,L: 1172, C: 14, L: 1163, C: 14,L: 1142, C: 14,L: 1139, C: 14,L: 908, 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.

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. |
|  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 | 1 | 0 |
|  High | 0 | 0 | 0 |
|  Medium | 0 | 0 | 0 |
|  Low | 2 | 2 | 0 |
|  Informational | 0 | 0 | 0 |
| Total | 2 | 2 | 1 |

Social Media Checks

| Social Media | URL | Result |
|--------------|---|--------|
| Twitter | https://x.com/Yieldrone | Pass |
| Other | https://github.com/Yieldrone | Pass |
| Website | https://yieldrone.xyz | Pass |
| Telegram | https://t.me/YieldroneCommunity | 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 | 89/100 |
| Auditor Score | 85/100 |
| Review by Section | Score |
| Manual Scan Score | 20 |
| SWC Scan Score | 35 |
| Advance Check Score | 34 |

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below.

Audit Passed



Assessment Results

Important Notes:

- The Contract has been renounced.

Auditor Score =85
Audit Passed



Appendix

Finding Categories

Centralization / Privilege

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

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimal EVM 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 how `block.timestamp` works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functions being 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 may result in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to make the 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 requirements on the input variables than a setter function.

Coding Best Practices

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

Disclaimer

Assure Defi 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 advocacy 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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