

1inch Multi-Farming Audit

27 Feb 2021, Igor Gulamov

Introduction

Igor Gulamov conducted the audit of 1inch exchange smart contracts.

This review was performed by an independent reviewer under fixed rate.

Scope

[Diff](#)

[BaseRewards.sol](#)

[FarmingRewards.sol](#)

Issues

We found no critical and major issues.

We consider the commit [a89675ed3eee3c93f503e5d19ef15a3eb6797c1c](#) as a safe version from the informational security point of view.

Critical

Major

Warnings

1. <https://github.com/1inch-exchange/1inch-liquidity-protocol/blob/a89675ed3eee3c93f503e5d19ef15a3eb6797c1c/contracts/utils/BaseRewards.sol#L28>

We recommend avoiding lists in solidity, because lists consume a lot off additional `SLOAD`s, and replace the list with hashmap with separated storage variable for the length.

2. <https://github.com/1inch-exchange/1inch-liquidity-protocol/blob/a89675ed3eee3c93f503e5d19ef15a3eb6797c1c/contracts/utils/BaseRewards.sol#L12-L13>

We propose adding token index or address to the events.

Fixed at [1c6f1d613b7397453ff599c4813901184db7464e](#)

Comments

Severity Terms

Comment

Comment issues are generally subjective in nature, or potentially deal with topics like "best practices" or "readability". Comment issues in general will not indicate an actual problem or bug in code.

The maintainers should use their own judgment as to whether addressing these issues improves the codebase.

Warning

Warning issues are generally objective in nature but do not represent actual bugs or security problems.

These issues should be addressed unless there is a clear reason not to.

Major

Major issues will be things like bugs or security vulnerabilities. These issues may not be directly exploitable, or may require a certain condition to arise in order to be exploited.

Left unaddressed these issues are highly likely to cause problems with the operation of the contract or lead to a situation which allows the system to be exploited in some way.

Critical

Critical issues are directly exploitable bugs or security vulnerabilities.

Left unaddressed these issues are highly likely or guaranteed to cause major problems or potentially a full failure in the operations of the contract.