

# MythX Report

# Overview

Project Name	zkSwap Finance
Auditor	MythX.io
Source Code	https://github.com/ZkSwapFinance/zf- periphery/tree/main/contracts/token
Mode	Deep
Time	Fri Dec 22 <sup>nd</sup> 2023
DETECTED VULNERABILITIES	6

# Summary

Done	Contract	High Risk Issues	Medium Risk Issues	Low Risk Issues
$\checkmark$	yZFToken.sol	0	0	6

# Reference

yZFToken.sol	https://github.com/ZkSwapFinance/Audit- Reports/blob/main/Original MythX yZFToken.pdf	
MythX Passed Badge on Github		
mainnet-contracts	https://github.com/ZkSwapFinance/zf-periphery	
ZkSwap Finance Mainnet contracts		



## REPORT 658501DEF1BCF1001A61D178

Created Fri Dec 22 2023 03:26:22 GMT+0000 (Coordinated Universal Time)

Number of analyses 1

User 648fc02af4bf584372592643

# **REPORT SUMMARY**

Analyses ID Main source file Detected vulnerabilities

528c1eda-0006-4fb5-b2c9-4a6994a7b5b5

/governance/yzftoken.sol

6

Started Fri Dec 22 2023 03:26:30 GMT+0000 (Coordinated Universal Time)

Finished Fri Dec 22 2023 04:12:04 GMT+0000 (Coordinated Universal Time)

Mode Deep

Client Tool Mythx-Vscode-Extension

Main Source File /Governance/Yzftoken.Sol

## **DETECTED VULNERABILITIES**

(HIGH	(MEDIUM	(LOW	
0	0	6	

#### **ISSUES**

LOW A floating pragma is set.

SWC-103

The current pragma Solidity directive is ""^0.8.0"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

Source file

/governance/yzftoken.sol

Locations

```
1  // SPDX-License-Identifier: MIT
2  pragma solidity ^0.8.0
4  import "@openzeppelin/contracts/utils/math/SafeMath.sol";
```

LOW A control flow decision is made based on The block.timestamp environment variable.

The block timestamp environment variable is used to determine a control flow decision. Note that the values of variables like coinbase, gaslimit, block number and timestamp are SWC-116

SWC-116

The block timestamp environment variable is used to determine a control flow decision. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source file

/governance/yzftoken.sol

Locations

```
require(signatory != address(0), "Uni::delegateBySig: invalid signature");
require(nonce == nonces[signatory]++, "Uni::delegateBySig: invalid nonce");
require(block.timestamp <= expiry, "Uni::delegateBySig: signature expired");
return _delegate signatory delegatee

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298

/**

* @notice Gets the current votes balance for `account`

* @param account The address to get votes balance
```

LOW

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SWC-116

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Source file

/governance/yzftoken.sol

Locations

```
require(signatory != address(0), "Uni::permit: invalid signature");
require(signatory == owner, "Uni::permit: unauthorized");
require(block.timestamp <= deadline, "Uni::permit: signature expired")

allowances owner | spender | = amount

emit Approval(owner, spender, amount);
}
```

## LOW

Potential use of "block.number" as source of randonmness.

SWC-120

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source file

/governance/yzftoken.sol

Locations

```
require(blockNumber < block.number, "Uni::getPriorVotes: not yet determined");

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```

### LOW

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Source file

/governance/yzftoken.sol

Locations

```
function _writeCheckpoint(address delegatee, uint32 nCheckpoints, uint96 oldVotes, uint96 newVotes) internal {
    uint32 blockNumber = safe32(block.number, "Uni::_writeCheckpoint: block number exceeds 32 bits"

    if nCheckpoints > 0 86 checkpoints delegatee nCheckpoints - 11 fromBlock == blockNumber)

    if (nCheckpoints > 0 85 checkpoints[delegatee][nCheckpoints - 1].fromBlock == blockNumber) {
        checkpoints[delegatee][nCheckpoints - 1].votes = newVotes;
    } else {
```

LOW

A control flow decision is made based on The block.number environment variable.

The block.number environment variable is used to determine a control flow decision. Note that the values of variables like coinbase, gaslimit, block number and timestamp are SWC-120 predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source file

/governance/yzftoken.sol

Locations

```
314 */
     function\ getPriorVotes(address\ account,\ uint\ blockNumber)\ public\ view\ returns\ (uint96)\ \{
315
316
     require(blockNumber < block.number, "Uni::getPriorVotes: not yet determined");</pre>
317
     uint32 nCheckpoints = numCheckpoints[account];
318
     if (nCheckpoints == 0) {
319
     if (nCheckpoints == 0) {
320
     return 0;
321
322
```