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# FINAL REPORT

Mira

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By engaging in a smart contract audit, the contract owner acknowledges and agrees to the terms of this disclaimer.

## 1. Project Details

Important:

Please ensure that the deployed contract matches the source-code of the last commit hash.

| Project           | Mira — ERC20  |
|-------------------|---|
| Website           | ---   |
| Language          | Solidity  |
| Methods           | Manual Analysis   |
| Github repository | <a href="https://etherscan.io/token/0xef854c7c0c31f12acc615f1ec200360512ca8ef6#code">https://etherscan.io/token/0xef854c7c0c31f12acc615f1ec200360512ca8ef6#code</a> |
| Resolution 1      |   |

## 2. Detection Overview

| Severity      | Found | Resolved | Partially Resolved | Acknowledged (no change made) |
|---------------|-------|----------|--------------------|-------------------------------|
| High          |       |          |                    |                               |
| Medium        |       |          |                    |                               |
| Low           |       |          |                    |                               |
| Informational |       |          |                    |                               |
| Governance    |       |          |                    |                               |
| Total         |       |          |                    |                               |

### 2.1 Detection Definitions

| Severity             | Description  |
|----------------------|--|
| <b>High</b>          | The problem poses a significant threat to the confidentiality of a considerable number of users' sensitive data. It also has the potential to cause severe damage to the client's reputation or result in substantial financial losses for both the client and the affected users. |
| <b>Medium</b>        | While medium level vulnerabilities may not be easy to exploit, they can still have a major impact on the execution of a smart contract. For instance, they may allow public access to critical functions, which could lead to serious consequences.                                |
| <b>Low</b>           | Poses a very low-level risk to the project or users. Nevertheless the issue should be fixed immediately  |
| <b>Informational</b> | Effects are small and do not post an immediate danger to the project or users  |
| <b>Governance</b>    | Governance privileges which can directly result in a loss of funds or other potential undesired behavior   |

### 3. Detection

#### Mira

The **Mira** contract is a simple **ERC20** contract with permit functionality, extended with **ERC20Votes** which allows for the delegation of voting power.

The following contracts are inherited in an effort to support the **ERC20Votes** module:

- ERC20Votes
- Votes
- Checkpoints
- Math
- Time
- Panic

The following contracts are inherited in an effort to support the permit functionality:

- Nonces
- ERC20Permit
- ShortStrings
- ECDSA
- EIP712
- MessageHashUtils
- Strings
- StorageSlot

All files originate from OpenZeppelin and are not modified.

## Appendix: ERC20Votes

ERC20Votes is an OpenZeppelin extension that adds governance voting capabilities to a standard ERC20 token.

It keeps a historical record of each account's voting power and makes that power available for on-chain governance processes.

Users can delegate their votes to themselves or another address, which allows flexible representation in governance decisions.

Voting units typically map 1:1 to token balances, but only delegated balances actively count in voting outcomes.

The module limits total token supply to `type(uint208).max` by default, preventing overflows and ensuring accurate checkpoint math.

### Deployed Blockchain:

Ethereum

### Trust Assumptions:

This contract is permissionless

### Decimals:

18

### Initial mint:

10000000000

### Minting occasions:

Minting only happens during the deployment

### Privileged Functions

- none

No issues found. All contracts are 1:1 OpenZeppelin contracts.