

Slither Audit Report

This report was generated from **Slither**'s JSON output. It aims to provide detailed information on all detected issues, contracts analyzed, and recommended fixes.

1. Contracts Analyzed

No contracts were reported.

2. Summary of Detectors

Number of Detectors (categories): 9

Total Issues Found: 23

Distribution by Impact:

- **Informational:** 5 detectors
- **Low:** 4 detectors

Distribution by Confidence:

- **High:** 6 detectors
- **Medium:** 3 detectors

3. Detailed Detectors & Issues

Detector: shadowing-local

- **Impact:** Low
- **Confidence:** High

Description:

Token.constructor(string,string,uint256).totalSupply shadows: - ERC20.totalSupply()
(function) - IERC20.totalSupply() (function)

Recommended Fix: Variables or functions are shadowing existing names (e.g., from parents). Consider renaming your local variables or parameters to avoid confusion.

Issues:

- **Issue Type:** variable
 - **Name / Signature:** totalSupply
 - **Parent:** function constructor
 - **Location:** L647
- **Issue Type:** function
 - **Name / Signature:** totalSupply
 - **Parent:** contract ERC20
 - **Location:** L233-L235

- **Issue Type:** function
 - **Name / Signature:** totalSupply
 - **Parent:** contract IERC20
 - **Location:** L27

Detector: shadowing-local

- **Impact:** Low
- **Confidence:** High

Description:

Token.constructor(string,string,uint256).symbol shadows: - ERC20.symbol()
(function) - IERC20Metadata.symbol() (function)

Recommended Fix: Variables or functions are shadowing existing names (e.g., from parents). Consider renaming your local variables or parameters to avoid confusion.

Issues:

- **Issue Type:** variable
 - **Name / Signature:** symbol
 - **Parent:** function constructor
 - **Location:** L646
- **Issue Type:** function
 - **Name / Signature:** symbol
 - **Parent:** contract ERC20
 - **Location:** L209-L211
- **Issue Type:** function
 - **Name / Signature:** symbol
 - **Parent:** contract IERC20Metadata
 - **Location:** L105

Detector: shadowing-local

- **Impact:** Low
- **Confidence:** High

Description:

Token.constructor(string,string,uint256).name shadows: - ERC20.name() (function) - IERC20Metadata.name() (function)

Recommended Fix: Variables or functions are shadowing existing names (e.g., from parents). Consider renaming your local variables or parameters to avoid confusion.

Issues:

- **Issue Type:** variable

- **Name / Signature:** name
- **Parent:** function constructor
- **Location:** L645
- **Issue Type:** function
 - **Name / Signature:** name
 - **Parent:** contract ERC20
 - **Location:** L201-L203
- **Issue Type:** function
 - **Name / Signature:** name
 - **Parent:** contract IERC20Metadata
 - **Location:** L100

Detector: events-maths

- **Impact:** Low
- **Confidence:** Medium

Description:

Token.setMode(uint256) should emit an event for: - _mode = v

Recommended Fix: State-changing functions or arithmetic operations may need event emissions or additional checks. Emitting events helps track off-chain changes.

Issues:

- **Issue Type:** function
 - **Name / Signature:** setMode
 - **Parent:** contract Token
 - **Location:** L666-L670
- **Issue Type:** node
 - **Name / Signature:** _mode = v
 - **Parent:** function setMode
 - **Location:** L668

Detector: dead-code

- **Impact:** Informational
- **Confidence:** Medium

Description:

ERC20._burn(address,uint256) is never used and should be removed

Recommended Fix: Unused code found. Remove or justify the presence of code that isn't called.

Issues:

- **Issue Type:** function

- **Name / Signature:** `_burn`
- **Parent:** contract `ERC20`
- **Location:** L424-L440

Detector: dead-code

- **Impact:** Informational
- **Confidence:** Medium

Description:

`Context._msgData()` is never used and should be removed

Recommended Fix: Unused code found. Remove or justify the presence of code that isn't called.

Issues:

- **Issue Type:** function
 - **Name / Signature:** `_msgData`
 - **Parent:** contract `Context`
 - **Location:** L135-L137

Detector: solc-version

- **Impact:** Informational
- **Confidence:** High

Description:

Version constraint `^0.8.19` contains known severe issues (<https://solidity.readthedocs.io/en/latest/bugs.html>)

- `VerbatimInvalidDeduplication` - `FullInlinerNonExpressionSplitArgumentEvaluationOrder` - `MissingSideEffectsOnSelectorAccess`. It is used by: - `[^0.8.19](gtrx.sol#L4)` - `[^0.8.19](gtrx.sol#L89)` - `[^0.8.19](gtrx.sol#L118)` - `[^0.8.19](gtrx.sol#L145)` - `[^0.8.19](gtrx.sol#L535)` - `[^0.8.19](gtrx.sol#L617)` - `[^0.8.19](gtrx.sol#L629)` - `[^0.8.19](gtrx.sol#L639)`

Recommended Fix: Multiple or incorrect Solidity versions are used. Align all contracts to a single, newer compiler version (e.g., `^0.8.19`).

Issues:

- **Issue Type:** pragma
 - **Name / Signature:** `^0.8.19`
 - **Parent:** `UnknownParentType UnknownParentName`
 - **Location:** L4
- **Issue Type:** pragma
 - **Name / Signature:** `^0.8.19`
 - **Parent:** `UnknownParentType UnknownParentName`
 - **Location:** L89
- **Issue Type:** pragma

- **Name / Signature:** ^0.8.19
- **Parent:** UnknownParentType UnknownParentName
- **Location:** L118
- **Issue Type:** pragma
 - **Name / Signature:** ^0.8.19
 - **Parent:** UnknownParentType UnknownParentName
 - **Location:** L145
- **Issue Type:** pragma
 - **Name / Signature:** ^0.8.19
 - **Parent:** UnknownParentType UnknownParentName
 - **Location:** L535
- **Issue Type:** pragma
 - **Name / Signature:** ^0.8.19
 - **Parent:** UnknownParentType UnknownParentName
 - **Location:** L617
- **Issue Type:** pragma
 - **Name / Signature:** ^0.8.19
 - **Parent:** UnknownParentType UnknownParentName
 - **Location:** L629
- **Issue Type:** pragma
 - **Name / Signature:** ^0.8.19
 - **Parent:** UnknownParentType UnknownParentName
 - **Location:** L639

Detector: naming-convention

- **Impact:** Informational
- **Confidence:** High

Description:

Variable TokenStorage.__mode is not in mixedCase

Recommended Fix: Some names do not follow best practices (mixedCase, etc.). Use standardized naming conventions for clarity and maintenance.

Issues:

- **Issue Type:** variable
 - **Name / Signature:** __mode
 - **Parent:** contract TokenStorage
 - **Location:** L623

Detector: naming-convention

- **Impact:** Informational
- **Confidence:** High

Description:

Function `IProxy._acceptImplementation()` is not in mixedCase

Recommended Fix: Some names do not follow best practices (mixedCase, etc.). Use standardized naming conventions for clarity and maintenance.

Issues:

- **Issue Type:** function
 - **Name / Signature:** `_acceptImplementation`
 - **Parent:** contract `IProxy`
 - **Location:** L632