TrusterCoin

Smart Contract Audit Report

SYSFIXED

11 Jul 2021

TABLE OF CONTENTS

AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
TrusterCoin	TSC	Binance Smart Chain

Addresses

Contract address	0xa2a26349448ddafae34949a6cc2cecf78c0497ac
Contract deployer address	0x177079C15e50D1a880861622B1c0B2Fbe30F78AD

Project Website

https://trustercoin.finance/

Codebase

https://bscscan.com/address/0xa2a26349448ddafae34949a6cc2cecf78c0497ac#code

SUMMARY

TrusterCoin is a utility token for use on tokenization platforms at a time when business people face one of the greatest challenges in history. The platform will allow the creation of new tokenization of small, medium to large companies through blockchain technology.

Contract Summary

Documentation Quality

TrusterCoin provides a very good documentation with standard of solidity base code.

- The technical description is provided clearly and structured and also dont have any high risk issue.

Code Quality

The Overall quality of the basecode is standard.

- Standard solidity basecode and rules are already followed by TrusterCoin with the discovery of several low issues.

Test Coverage

Test coverage of the project is 100% (Through Codebase)

Audit Findings Summary

- SWC-100 SWC-108 | Explicitly define visibility for all state variables on lines 731.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 119, 151, 174, 175, 210, 246, 473, 714, 714, 714, 714, 715, 715, 734, 734, 734, 734, 734, 735, 735, 735, 735, 735, 868, 870, 907, 953, 972, 978 and 870.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 20.
- SWC-110 SWC-123 | It is recommended to use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 869, 870, 870, 954, 954, 955, 956, 1081 and 1082.

CONCLUSION

We have audited the TrusterCoin project released on July 2021 to discover issues and identify potential security vulnerabilities in TrusterCoin Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides satisfactory results with low-risk issues.

The issues found in the TrusterCoin smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues, a floating pragma is set, a state variable visibility is not set, and out-of-bounds array access which the index access expression can cause an exception in case of the use of an invalid array index value. The current pragma Solidity directive is ""^0.6.12"". 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. It is best practice to set the visibility of state variables explicitly. The default visibility for "inSwapAndLiquify" is internal. Other possible visibility settings are public and private.

AUDIT RESULT

Article	Category	Description	Result
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.	ISSUE FOUND
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	ISSUE FOUND
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	PASS
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	PASS
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	PASS
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	PASS
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.	ISSUE FOUND
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	PASS
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS

DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	PASS
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	PASS
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	PASS
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	PASS
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.	PASS
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS

Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	PASS
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	PASS
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	PASS
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.	PASS
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	PASS
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS

SMART CONTRACT ANALYSIS

Started	Saturday Jul 10 2021 04:45:25 GMT+0000 (Coordinated Universal Time)
Finished	Sunday Jul 11 2021 10:17:20 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	TrusterCoin.sol

Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
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SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
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SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "++" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "++" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged

SWC-101	ARITHMETIC OPERATION "**" DISCOVERED	low	acknowledged
SWC-101	COMPILER-REWRITABLE "<UINT> - 1" DISCOVERED	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
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SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 119

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
118   function add(uint256 a, uint256 b) internal pure returns (uint256) {
119   uint256 c = a + b;
120   require(c >= a, "SafeMath: addition overflow");
121
122   return c;
123
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 151

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
150   require(b <= a, errorMessage);
151   uint256 c = a - b;
152
153   return c;
154   }
155
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 174

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
173
174   uint256 c = a * b;
175   require(c / a == b, "SafeMath: multiplication overflow");
176
177   return c;
178
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 175

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
174   uint256 c = a * b;
175   require(c / a == b, "SafeMath: multiplication overflow");
176
177   return c;
178   }
179
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 210

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
209   require(b > 0, errorMessage);
210   uint256 c = a / b;
211   // assert(a == b * c + a % b); // There is no case in which this doesn't hold
212
213   return c;
214
```

SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 246

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
245   require(b != 0, errorMessage);
246   return a % b;
247   }
248   }
249
250
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 473

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
472   _owner = address(0);
473   _lockTime = now + time;
474   emit OwnershipTransferred(_owner, address(0));
475   }
476
477
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 714

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
713   uint256 private constant MAX = ~uint256(0);
714   uint256 private _tTotal = 3000 * 10**6 * 10**9;
715   uint256 private _rTotal = (MAX - (MAX % _tTotal));
716   uint256 private _tFeeTotal;
717
718
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 714

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
713   uint256 private constant MAX = ~uint256(0);
714   uint256 private _tTotal = 3000 * 10**6 * 10**9;
715   uint256 private _rTotal = (MAX - (MAX % _tTotal));
716   uint256 private _tFeeTotal;
717
718
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 714

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
713   uint256 private constant MAX = ~uint256(0);
714   uint256 private _tTotal = 3000 * 10**6 * 10**9;
715   uint256 private _rTotal = (MAX - (MAX % _tTotal));
716   uint256 private _tFeeTotal;
717
718
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 714

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
713   uint256 private constant MAX = ~uint256(0);
714   uint256 private _tTotal = 3000 * 10**6 * 10**9;
715   uint256 private _rTotal = (MAX - (MAX % _tTotal));
716   uint256 private _tFeeTotal;
717
718
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 715

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
714   uint256 private _tTotal = 3000 * 10**6 * 10**9;
715   uint256 private _rTotal = (MAX - (MAX % _tTotal));
716   uint256 private _tFeeTotal;
717
718   string private _name = "TrusterCoin";
719
```

SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 715

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
714   uint256 private _tTotal = 3000 * 10**6 * 10**9;
715   uint256 private _rTotal = (MAX - (MAX % _tTotal));
716   uint256 private _tFeeTotal;
717
718   string private _name = "TrusterCoin";
719
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 734

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
733
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 734

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
733
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 734

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
733
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 734

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
733
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 734

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
733
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 735

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738   event SwapAndLiquifyEnabledUpdated(bool enabled);
739
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 735

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738   event SwapAndLiquifyEnabledUpdated(bool enabled);
739
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 735

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738   event SwapAndLiquifyEnabledUpdated(bool enabled);
739
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 735

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738   event SwapAndLiquifyEnabledUpdated(bool enabled);
739
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 735

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735   uint256 private numTokensSellToAddToLiquidity = (3000 / 2000) * 10**6 * 10**9;
736
737   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
738   event SwapAndLiquifyEnabledUpdated(bool enabled);
739
```

SWC-101 | ARITHMETIC OPERATION "++" DISCOVERED

LINE 868

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
867   require(_isExcluded[account], "Account is already excluded");
868   for (uint256 i = 0; i < _excluded.length; i++) {
869   if (_excluded[i] == account) {
870   _excluded[i] = _excluded[_excluded.length - 1];
871   _tOwned[account] = 0;
872
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 870

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
869   if (_excluded[i] == account) {
870   _excluded[i] = _excluded[_excluded.length - 1];
871   _tOwned[account] = 0;
872   _isExcluded[account] = false;
873   _excluded.pop();
874
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 907

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
906   _maxTxAmount = _tTotal.mul(maxTxPercent).div(
907   10**2
908   );
909   }
910
911
```

SWC-101 | ARITHMETIC OPERATION "++" DISCOVERED

LINE 953

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
952   uint256 tSupply = _tTotal;
953   for (uint256 i = 0; i < _excluded.length; i++) {
954   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
955   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
956   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
957
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 972

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
971   return _amount.mul(_taxFee).div(
972   10**2
973   );
974   }
975
976
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 978

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
977   return _amount.mul(_liquidityFee).div(
978   10**2
979   );
980   }
981
982
```

SWC-101 | COMPILER-REWRITABLE "<UINT> - 1" DISCOVERED

LINE 870

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- TrusterCoin.sol

Locations

```
869   if (_excluded[i] == account) {
870   _excluded[i] = _excluded[_excluded.length - 1];
871   _tOwned[account] = 0;
872   _isExcluded[account] = false;
873   _excluded.pop();
874
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 20

low SEVERITY

The current pragma Solidity directive is ""^0.6.12"". 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

- TrusterCoin.sol

Locations

```
19
20   pragma solidity ^0.6.12;
21   // SPDX-License-Identifier: Unlicensed
22   interface IERC20 {
23
24
```

SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 731

low SEVERITY

It is best practice to set the visibility of state variables explicitly. The default visibility for "inSwapAndLiquify" is internal. Other possible visibility settings are public and private.

Source File

- TrusterCoin.sol

Locations

```
730
731   bool inSwapAndLiquify;
732   bool public swapAndLiquifyEnabled = true;
733
734   uint256 public _maxTxAmount = (3000 / 200) * 10**6 * 10**9;
735
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 869

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- TrusterCoin.sol

Locations

```
868   for (uint256 i = 0; i < _excluded.length; i++) {
869   if (_excluded[i] == account) {
870   _excluded[i] = _excluded[_excluded.length - 1];
871   _tOwned[account] = 0;
872   _isExcluded[account] = false;
873
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 870

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

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- TrusterCoin.sol

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869   if (_excluded[i] == account) {
870   _excluded[i] = _excluded[_excluded.length - 1];
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874
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SWC-110 | OUT OF BOUNDS ARRAY ACCESS

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872   _isExcluded[account] = false;
873   _excluded.pop();
874
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 954

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- TrusterCoin.sol

Locations

```
953   for (uint256 i = 0; i < _excluded.length; i++) {
954   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
955   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
956   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
957   }
958
```

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Locations

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(_rTotal, _tTotal);
955   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
956   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
957   }
958   if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
959
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 956

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- TrusterCoin.sol

Locations

```
955   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
956   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
957   }
958   if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
959   return (rSupply, tSupply);
960
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1081

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- TrusterCoin.sol

Locations

```
1080   address[] memory path = new address[](2);
1081   path[0] = address(this);
1082   path[1] = uniswapV2Router.WETH();
1083
1084   _approve(address(this), address(uniswapV2Router), tokenAmount);
1085
```

SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1082

low SEVERITY

The index access expression can cause an exception in case of use of invalid array index value.

Source File

- TrusterCoin.sol

Locations

```
1081   path[0] = address(this);
1082   path[1] = uniswapV2Router.WETH();
1083
1084   _approve(address(this), address(uniswapV2Router), tokenAmount);
1085
1086
```

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