MessaageBit

# Smart Contract Audit Report

SYSFIXED

11 Jan 2023

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# AUDITED DETAILS

## Audited Project

| Project name | Token ticker | Blockchain |
|---|---|---|
| MessaageBit | MB | Binance Smart Chain |

## Addresses

| | |
|---|---|
| **Contract address** | 0xb6e751BDD09d2d91452A1082D5D0f31cCd260924 |
| **Contract deployer address** | 0xBDfF438acc08065daB973B088e4dd7af7f0C45A4 |

## Project Website

**https://www.messaagebit.com/**

## Codebase

**https://bscscan.com/address/0xb6e751BDD09d2d91452A1082D5D0f31cCd260924#code**

# SUMMARY

MessaageBit provides Messages App, crypto analytics and portfolio management for the BNB Chain tokens and aims to improve crypto Apps experience. Comming products: - Bridge - App - Swap - Lending Dapps: - CMC & CG - Big call & AMA groups been onboarded. Onder, Caesar, Gollum, VatorCapital, Cryptocat, Bossy, Future Lounge, Procify Ads, DefiApetalk, Sherlock, Shadowcall, HulkGems, Phoniex, Doxxed Always, PythagorasDev

## Contract Summary

**Documentation Quality**

MessaageBit 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 MessaageBit 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 737.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 125, 157, 180, 181, 216, 252, 479, 720, 720, 720, 720, 721, 721, 740, 740, 740, 740, 741, 741, 741, 741, 872, 874, 911, 957, 976, 982 and 874.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 26.
- 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 873, 874, 874, 958, 958, 959, 960, 1085 and 1086.

# CONCLUSION

We have audited the MessaageBit project released on January 2023 to discover issues and identify potential security vulnerabilities in MessaageBit 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 a satisfactory result with some low-risk issues.

The issues found in the MessaageBit 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.

# AUDIT RESULT

| Article | Category | Description | Result |
|---|---|---|---|
| Default Visibility | SWC-100<br>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 |
| 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 |
| Assert Violation | SWC-110<br>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 | Delegate calls should only be allowed to trusted addresses. | PASS |
| DoS (Denial of Service) | SWC-113<br>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<br>SWC-121<br>SWC-122 | Signed messages should always have a unique id. A transaction hash should not be used as a unique id. | 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 |
| 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 |

# SMART CONTRACT ANALYSIS

| | |
|---|---|
| **Started** | Tuesday Jan 10 2023 03:23:11 GMT+0000 (Coordinated Universal Time) |
| **Finished** | Wednesday Jan 11 2023 08:18:58 GMT+0000 (Coordinated Universal Time) |
| **Mode** | Standard |
| **Main Source File** | MessaageBit.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 |
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| 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 |

| | | | |
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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 | 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 125

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
124   function add(uint256 a, uint256 b) internal pure returns (uint256) {
125   uint256 c = a + b;
126   require(c >= a, "SafeMath: addition overflow");
127
128   return c;
129
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 157

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
156   require(b <= a, errorMessage);
157   uint256 c = a - b;
158
159   return c;
160   }
161
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 180

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
179
180   uint256 c = a * b;
181   require(c / a == b, "SafeMath: multiplication overflow");
182
183   return c;
184
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 181

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
180   uint256 c = a * b;
181   require(c / a == b, "SafeMath: multiplication overflow");
182
183   return c;
184   }
185
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 216

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
215   require(b > 0, errorMessage);
216   uint256 c = a / b;
217   // assert(a == b * c + a % b); // There is no case in which this doesn't hold
218
219   return c;
220
```

# SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 252

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
251   require(b != 0, errorMessage);
252   return a % b;
253   }
254   }
255
256
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 479

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
478   _owner = address(0);
479   _lockTime = now + time;
480   emit OwnershipTransferred(_owner, address(0));
481   }
482
483
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 720

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
719   uint256 private constant MAX = ~uint256(0);
720   uint256 private _tTotal = 1000000000 * 10**6 * 10**9;
721   uint256 private _rTotal = (MAX - (MAX % _tTotal));
722   uint256 private _tFeeTotal;
723
724
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 720

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
719   uint256 private constant MAX = ~uint256(0);
720   uint256 private _tTotal = 1000000000 * 10**6 * 10**9;
721   uint256 private _rTotal = (MAX - (MAX % _tTotal));
722   uint256 private _tFeeTotal;
723
724
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 720

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
719   uint256 private constant MAX = ~uint256(0);
720   uint256 private _tTotal = 1000000000 * 10**6 * 10**9;
721   uint256 private _rTotal = (MAX - (MAX % _tTotal));
722   uint256 private _tFeeTotal;
723
724
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 720

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
719   uint256 private constant MAX = ~uint256(0);
720   uint256 private _tTotal = 1000000000 * 10**6 * 10**9;
721   uint256 private _rTotal = (MAX - (MAX % _tTotal));
722   uint256 private _tFeeTotal;
723
724
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 721

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
720   uint256 private _tTotal = 1000000000 * 10**6 * 10**9;
721   uint256 private _rTotal = (MAX - (MAX % _tTotal));
722   uint256 private _tFeeTotal;
723
724   string private _name = "MessaageBit";
725
```

# SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 721

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
720   uint256 private _tTotal = 1000000000 * 10**6 * 10**9;
721   uint256 private _rTotal = (MAX - (MAX % _tTotal));
722   uint256 private _tFeeTotal;
723
724   string private _name = "MessaageBit";
725
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 740

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
739
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 740

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
739
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 740

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
739
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 740

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
739
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 741

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744   event SwapAndLiquifyEnabledUpdated(bool enabled);
745
```

# SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 741

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744   event SwapAndLiquifyEnabledUpdated(bool enabled);
745
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 741

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744   event SwapAndLiquifyEnabledUpdated(bool enabled);
745
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 741

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741   uint256 private numTokensSellToAddToLiquidity = 500000 * 10**6 * 10**9;
742
743   event MinTokensBeforeSwapUpdated(uint256 minTokensBeforeSwap);
744   event SwapAndLiquifyEnabledUpdated(bool enabled);
745
```

# SWC-101 | ARITHMETIC OPERATION "++" DISCOVERED

LINE 872

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
871   require(_isExcluded[account], "Account is already excluded");
872   for (uint256 i = 0; i < _excluded.length; i++) {
873   if (_excluded[i] == account) {
874   _excluded[i] = _excluded[_excluded.length - 1];
875   _tOwned[account] = 0;
876
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 874

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
873   if (_excluded[i] == account) {
874   _excluded[i] = _excluded[_excluded.length - 1];
875   _tOwned[account] = 0;
876   _isExcluded[account] = false;
877   _excluded.pop();
878
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 911

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
910   _maxTxAmount = _tTotal.mul(maxTxPercent).div(
911   10**2
912   );
913   }
914
915
```

# SWC-101 | ARITHMETIC OPERATION "++" DISCOVERED

LINE 957

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
956   uint256 tSupply = _tTotal;
957   for (uint256 i = 0; i < _excluded.length; i++) {
958   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
959   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
960   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
961
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 976

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
975   return _amount.mul(_taxFee).div(
976   10**2
977   );
978   }
979
980
```

# SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED

LINE 982

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
981   return _amount.mul(_liquidityFee).div(
982   10**2
983   );
984   }
985
986
```

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

LINE 874

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
873   if (_excluded[i] == account) {
874   _excluded[i] = _excluded[_excluded.length - 1];
875   _tOwned[account] = 0;
876   _isExcluded[account] = false;
877   _excluded.pop();
878
```

# SWC-103 | A FLOATING PRAGMA IS SET.

LINE 26

## 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

- MessaageBit.sol

## Locations

```
25
26   pragma solidity ^0.6.12;
27   // SPDX-License-Identifier: Unlicensed
28   interface IERC20 {
29
30
```

# SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 737

## 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

- MessaageBit.sol

## Locations

```
736
737   bool inSwapAndLiquify;
738   bool public swapAndLiquifyEnabled = true;
739
740   uint256 public _maxTxAmount = 5000000 * 10**6 * 10**9;
741
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 873

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
872   for (uint256 i = 0; i < _excluded.length; i++) {
873   if (_excluded[i] == account) {
874   _excluded[i] = _excluded[_excluded.length - 1];
875   _tOwned[account] = 0;
876   _isExcluded[account] = false;
877
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 874

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
873   if (_excluded[i] == account) {
874   _excluded[i] = _excluded[_excluded.length - 1];
875   _tOwned[account] = 0;
876   _isExcluded[account] = false;
877   _excluded.pop();
878
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 874

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
873   if (_excluded[i] == account) {
874   _excluded[i] = _excluded[_excluded.length - 1];
875   _tOwned[account] = 0;
876   _isExcluded[account] = false;
877   _excluded.pop();
878
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 958

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
957   for (uint256 i = 0; i < _excluded.length; i++) {
958   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
959   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
960   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
961   }
962
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 958

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
957   for (uint256 i = 0; i < _excluded.length; i++) {
958   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
959   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
960   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
961   }
962
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 959

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
958   if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
(_rTotal, _tTotal);
959   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
960   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
961   }
962   if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
963
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 960

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
959   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
960   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
961   }
962   if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
963   return (rSupply, tSupply);
964
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1085

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
1084   address[] memory path = new address[](2);
1085   path[0] = address(this);
1086   path[1] = uniswapV2Router.WETH();
1087
1088   _approve(address(this), address(uniswapV2Router), tokenAmount);
1089
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1086

## low SEVERITY

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

## Source File

- MessaageBit.sol

## Locations

```
1085   path[0] = address(this);
1086   path[1] = uniswapV2Router.WETH();
1087
1088   _approve(address(this), address(uniswapV2Router), tokenAmount);
1089
1090
```

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