



MessageBit

# Smart Contract Audit Report

# TABLE OF CONTENTS

## **|** [Audited Details](#)

- Audited Project
- Blockchain
- Addresses
- Project Website
- Codebase

## **|** [Summary](#)

- Contract Summary
- Audit Findings Summary
- Vulnerabilities Summary

## **|** [Conclusion](#)

## **|** [Audit Results](#)

## **|** [Smart Contract Analysis](#)

- Detected Vulnerabilities

## **|** [Disclaimer](#)

## **|** [About Us](#)

# 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 MessageBit project released on January 2023 to discover issues and identify potential security vulnerabilities in MessageBit 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 MessageBit 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 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 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 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
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
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
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

[illegible]

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 125

## low SEVERITY

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

## Source File

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

- MessageBit.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

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- MessaageBit.sol

### Locations

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1090
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