



Boost

# Smart Contract Audit Report

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## Disclaimer

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# AUDITED DETAILS

## Audited Project

Project name	Token ticker	Blockchain
Boost	BOOST	Ethereum

## Addresses

Contract address	0x4e0fca55a6c3a94720ded91153a27f60e26b9aa8
Contract deployer address	0xEE72635914C510637c77B85232572d10f72b5A0E

## Project Website

<https://boostco.in/>

## Codebase

<https://etherscan.io/address/0x4e0fca55a6c3a94720ded91153a27f60e26b9aa8#code>

# SUMMARY

"Boost is a new Digital Ecosystem for the modern world. Its mission is to disrupt traditional forms of financial tools which provide liquidity to the broader economy. We believe that the power of finance should be in the hands of the many, not the few, and that technology should be optimized in the best interest of human beings, to work for us and not the other way around. Today, large corporations earn billions of dollars each year by leveraging the value of our collective earnings, which they risk by investing in ventures large and small, for the benefit of the few, not the many. "

## Contract Summary

### Documentation Quality

Boost 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 Boost 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 666.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 102, 134, 157, 158, 193, 229, 645, 645, 646, 646, 669, 669, 670, 670, 671, 671, 806, 808, 828, 830, 878, 1059, 808 and 830.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 6.
- 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 807, 808, 808, 829, 830, 830, 917, 918, 1060, 1060, 1061 and 1062.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 872.

## CONCLUSION

We have audited the Boost project released on August 2021 to discover issues and identify potential security vulnerabilities in Boost 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 Boost 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, tx.origin as a part of authorization control 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.	<b>ISSUE FOUND</b>
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	<b>ISSUE FOUND</b>
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	<b>PASS</b>
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	<b>ISSUE FOUND</b>
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	<b>PASS</b>
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	<b>PASS</b>
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	<b>PASS</b>
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	<b>PASS</b>
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	<b>PASS</b>
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.	<b>ISSUE FOUND</b>
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	<b>PASS</b>
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	<b>PASS</b>

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.	ISSUE FOUND
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 <code>abi.encodePacked()</code> with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS
Hardcoded gas amount	SWC-134	The <code>transfer()</code> and <code>send()</code> 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	Monday Aug 09 2021 03:13:45 GMT+0000 (Coordinated Universal Time)
Finished	Tuesday Aug 10 2021 11:53:02 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	BoostToken.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	COMPILER-REWRITABLE "<UINT> - 1" 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-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.	low	acknowledged



# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 102

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
101  function add(uint256 a, uint256 b) internal pure returns (uint256) {
102  uint256 c = a + b;
103  require(c >= a, "SafeMath: addition overflow");
104
105  return c;
106
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 134

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
133   require(b <= a, errorMessage);
134   uint256 c = a - b;
135
136   return c;
137   }
138
```

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

LINE 157

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
156
157  uint256 c = a * b;
158  require(c / a == b, "SafeMath: multiplication overflow");
159
160  return c;
161
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 158

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
157 uint256 c = a * b;
158 require(c / a == b, "SafeMath: multiplication overflow");
159
160 return c;
161 }
162
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 193

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
192   require(b > 0, errorMessage);
193   uint256 c = a / b;
194   // assert(a == b * c + a % b); // There is no case in which this doesn't hold
195
196   return c;
197
```



# SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 229

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
228     require(b != 0, errorMessage);
229     return a % b;
230 }
231 }
232
233
```

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

LINE 645

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
644 uint256 private constant MAX = ~uint256(0);
645 uint256 private constant _tTotal = 1000000000 * 10**18;
646 uint256 private _rTotal = (MAX - (MAX % _tTotal));
647 uint256 private _tFeeTotal;
648
649
```

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

LINE 645

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
644 uint256 private constant MAX = ~uint256(0);
645 uint256 private constant _tTotal = 1000000000 * 10**18;
646 uint256 private _rTotal = (MAX - (MAX % _tTotal));
647 uint256 private _tFeeTotal;
648
649
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 646

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
645 uint256 private constant _tTotal = 1000000000 * 10**18;  
646 uint256 private _rTotal = (MAX - (MAX % _tTotal));  
647 uint256 private _tFeeTotal;  
648  
649 string private constant _name = 'Boost';  
650
```

# SWC-101 | ARITHMETIC OPERATION "%" DISCOVERED

LINE 646

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
645 uint256 private constant _tTotal = 1000000000 * 10**18;  
646 uint256 private _rTotal = (MAX - (MAX % _tTotal));  
647 uint256 private _tFeeTotal;  
648  
649 string private constant _name = 'Boost';  
650
```

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

LINE 669

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
668
669  uint256 private _maxTxAmount = 5000000 * 10**18;
670  uint256 private constant _numOfTokensToExchangeForTeam = 5000 * 10**18;
671  uint256 private _maxWalletSize = 9500000 * 10**18;
672
673
```

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

LINE 669

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
668
669  uint256 private _maxTxAmount = 5000000 * 10**18;
670  uint256 private constant _numOfTokensToExchangeForTeam = 5000 * 10**18;
671  uint256 private _maxWalletSize = 9500000 * 10**18;
672
673
```

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

LINE 670

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
669 uint256 private _maxTxAmount = 5000000 * 10**18;
670 uint256 private constant _numOfTokensToExchangeForTeam = 5000 * 10**18;
671 uint256 private _maxWalletSize = 9500000 * 10**18;
672
673 event botAddedToBlacklist(address account);
674
```



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

LINE 670

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
669 uint256 private _maxTxAmount = 5000000 * 10**18;
670 uint256 private constant _numOfTokensToExchangeForTeam = 5000 * 10**18;
671 uint256 private _maxWalletSize = 9500000 * 10**18;
672
673 event botAddedToBlacklist(address account);
674
```

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

LINE 671

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
670 uint256 private constant _numOfTokensToExchangeForTeam = 5000 * 10**18;  
671 uint256 private _maxWalletSize = 9500000 * 10**18;  
672  
673 event botAddedToBlacklist(address account);  
674 event botRemovedFromBlacklist(address account);  
675
```

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

LINE 671

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
670 uint256 private constant _numOfTokensToExchangeForTeam = 5000 * 10**18;  
671 uint256 private _maxWalletSize = 9500000 * 10**18;  
672  
673 event botAddedToBlacklist(address account);  
674 event botRemovedFromBlacklist(address account);  
675
```

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

LINE 806

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
805   require (_isBlackListedBot[account], 'Account is not blacklisted');
806   for (uint256 i = 0; i < _blackListedBots.length; i++) {
807     if (_blackListedBots[i] == account) {
808       _blackListedBots[i] = _blackListedBots[_blackListedBots.length - 1];
809       _isBlackListedBot[account] = false;
810     }
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 808

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
807     if (_blackListedBots[i] == account) {  
808         _blackListedBots[i] = _blackListedBots[_blackListedBots.length - 1];  
809         _isBlackListedBot[account] = false;  
810         _blackListedBots.pop();  
811         break;  
812     }
```

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

LINE 828

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
827   require(!_isExcluded[account], "Account is not excluded");
828   for (uint256 i = 0; i < _excluded.length; i++) {
829     if (_excluded[i] == account) {
830       _excluded[i] = _excluded[_excluded.length - 1];
831       _tOwned[account] = 0;
832     }
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 830

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
829   if (_excluded[i] == account) {  
830     _excluded[i] = _excluded[_excluded.length - 1];  
831     _tOwned[account] = 0;  
832     _isExcluded[account] = false;  
833     _excluded.pop();  
834
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 878

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
877 uint256 tokenBalanceRecipient = balanceOf(recipient);
878 require(tokenBalanceRecipient + amount <= _maxWalletSize, "Recipient exceeds max
wallet size.");
879 }
880 // is the token balance of this contract address over the min number of
881 // tokens that we need to initiate a swap?
882
```



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

LINE 1059

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
1058 uint256 tSupply = _tTotal;
1059 for (uint256 i = 0; i < _excluded.length; i++) {
1060     if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
        (_rTotal, _tTotal);
1061     rSupply = rSupply.sub(_rOwned[_excluded[i]]);
1062     tSupply = tSupply.sub(_tOwned[_excluded[i]]);
1063 }
```

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

LINE 808

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
807     if (_blackListedBots[i] == account) {
808         _blackListedBots[i] = _blackListedBots[_blackListedBots.length - 1];
809         _isBlackListedBot[account] = false;
810         _blackListedBots.pop();
811         break;
812     }
```

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

LINE 830

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
829   if (_excluded[i] == account) {  
830     _excluded[i] = _excluded[_excluded.length - 1];  
831     _tOwned[account] = 0;  
832     _isExcluded[account] = false;  
833     _excluded.pop();  
834
```

## SWC-103 | A FLOATING PRAGMA IS SET.

LINE 6

### 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

- BoostToken.sol

### Locations

```
5 // SPDX-License-Identifier: Unlicensed
6 pragma solidity ^0.6.12;
7
8 abstract contract Context {
9     function _msgSender() internal view virtual returns (address payable) {
10
```

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

LINE 666

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
665
666  bool inSwap = false;
667  bool public swapEnabled = true;
668
669  uint256 private _maxTxAmount = 5000000 * 10**18;
670
```

# SWC-115 | USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 872

## low SEVERITY

Using "tx.origin" as a security control can lead to authorization bypass vulnerabilities. Consider using "msg.sender" unless you really know what you are doing.

## Source File

- BoostToken.sol

## Locations

```
871 require(!_isBlackListedBot[msg.sender], "You are blacklisted");
872 require(!_isBlackListedBot[tx.origin], "You are blacklisted");
873 if(sender != owner() && recipient != owner()) {
874     require(amount <= _maxTxAmount, "Transfer amount exceeds the maxTxAmount.");
875 }
876
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 807

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
806   for (uint256 i = 0; i < _blackListedBots.length; i++) {
807     if (_blackListedBots[i] == account) {
808       _blackListedBots[i] = _blackListedBots[_blackListedBots.length - 1];
809       _isBlackListedBot[account] = false;
810       _blackListedBots.pop();
811     }
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 808

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
807  if (_blackListedBots[i] == account) {  
808  _blackListedBots[i] = _blackListedBots[_blackListedBots.length - 1];  
809  _isBlackListedBot[account] = false;  
810  _blackListedBots.pop();  
811  break;  
812
```



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 808

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
807  if (_blackListedBots[i] == account) {  
808  _blackListedBots[i] = _blackListedBots[_blackListedBots.length - 1];  
809  _isBlackListedBot[account] = false;  
810  _blackListedBots.pop();  
811  break;  
812
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 829

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
828   for (uint256 i = 0; i < _excluded.length; i++) {  
829     if (_excluded[i] == account) {  
830       _excluded[i] = _excluded[_excluded.length - 1];  
831       _tOwned[account] = 0;  
832       _isExcluded[account] = false;  
833     }
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 830

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
829   if (_excluded[i] == account) {  
830     _excluded[i] = _excluded[_excluded.length - 1];  
831     _tOwned[account] = 0;  
832     _isExcluded[account] = false;  
833     _excluded.pop();  
834
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 830

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
829   if (_excluded[i] == account) {  
830     _excluded[i] = _excluded[_excluded.length - 1];  
831     _tOwned[account] = 0;  
832     _isExcluded[account] = false;  
833     _excluded.pop();  
834
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 917

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
916 address[] memory path = new address[](2);
917 path[0] = address(this);
918 path[1] = uniswapV2Router.WETH();
919
920 _approve(address(this), address(uniswapV2Router), tokenAmount);
921
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 918

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
917 path[0] = address(this);
918 path[1] = uniswapV2Router.WETH();
919
920 _approve(address(this), address(uniswapV2Router), tokenAmount);
921
922
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1060

## low SEVERITY

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

## Source File

- BoostToken.sol

## Locations

```
1059   for (uint256 i = 0; i < _excluded.length; i++) {
1060     if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
        (_rTotal, _tTotal);
1061     rSupply = rSupply.sub(_rOwned[_excluded[i]]);
1062     tSupply = tSupply.sub(_tOwned[_excluded[i]]);
1063   }
1064
```

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1062     tSupply = tSupply.sub(_tOwned[_excluded[i]]);
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1064
```



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1061

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
1060  if (_rOwned[_excluded[i]] > rSupply || _tOwned[_excluded[i]] > tSupply) return
      (_rTotal, _tTotal);
1061  rSupply = rSupply.sub(_rOwned[_excluded[i]]);
1062  tSupply = tSupply.sub(_tOwned[_excluded[i]]);
1063  }
1064  if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
1065
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1062

### low SEVERITY

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

### Source File

- BoostToken.sol

### Locations

```
1061   rSupply = rSupply.sub(_rOwned[_excluded[i]]);
1062   tSupply = tSupply.sub(_tOwned[_excluded[i]]);
1063   }
1064   if (rSupply < _rTotal.div(_tTotal)) return (_rTotal, _tTotal);
1065   return (rSupply, tSupply);
1066
```

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