

WeSendit

Smart Contract Audit Report





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AUDITED DETAILS

| Audited Project

Project name	Token ticker	Blockchain	
WeSendit	WSI	Binance Smart Chain	

Addresses

Contract address	0x837a130aed114300bab4f9f1f4f500682f7efd48
Contract deployer address	0x7D48d8F61b1038C2B53D5d157766C92e69ba2Ea7

Project Website

https://wesendit.io/

Codebase

https://bscscan.com/address/0x837a130aed114300bab4f9f1f4f500682f7efd48#code



SUMMARY

Since the launch of WeSendit.com in 2013, we have built a professional and efficient structure and analyzed – and evaluated – comprehensive fundamental data from centralized and decentralized application areas. We will develop our unique selling propositions and market them globally.

Contract Summary

Documentation Quality

WeSendit 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 WeSendit with the discovery of several low issues.

Test Coverage

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

Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 1062, 1063, 1067, 1068, 1068, 1069, 1084, 1094, 1094, 1097, 1097, 1097, 1454, 1455, 2223, 2224, 2236, 2247, 2310, 2377, 2377, 2654, 2668, 2706, 2711, 2714, 2721, 2752, 2794, 2882, 2882, 2939, 3160, 3183, 3216, 3218, 3239, 3240, 3265, 3267, 3316, 3396, 1454, 1455, 2654 and 2668.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 56, 760, 827, 919, 952, 980, 1009, 1040, 1119, 1368, 1739, 1805, 2953, 2983, 3368 and 3407.
- 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 1068, 1095, 1096, 1098, 1098, 1458, 1461, 1503, 2006, 2259, 2260, 2289, 2290, 2664, 2668, 2668, 2707, 2940, 2940, 3691, 3700 and 3710.



CONCLUSION

We have audited the WeSendit project released on October 2022 to discover issues and identify potential security vulnerabilities in WeSendit 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 WeSendit 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, and out-of-bounds array access which the index access expression can cause an exception in case an invalid array index value is used. The current pragma Solidity directive is ""^0.8.0"". Specifying a fixed compiler version is recommended 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.



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.	PASS	
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	Friday Oct 28 2022 12:50:09 GMT+0000 (Coordinated Universal Time)	
Finished	Saturday Oct 29 2022 22:54:19 GMT+0000 (Coordinated Universal Time)	
Mode	Standard	
Main Source File	WeSenditToken.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
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



low	acknowledged
low	acknowledged
	low



SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
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SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
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SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged



LINE 1062

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1061  while (temp != 0) {
1062  digits++;
1063  temp /= 10;
1064  }
1065  bytes memory buffer = new bytes(digits);
1066
```



LINE 1063

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1062 digits++;
1063 temp /= 10;
1064 }
1065 bytes memory buffer = new bytes(digits);
1066 while (value != 0) {
1067
```



LINE 1067

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1066  while (value != 0) {
1067   digits -= 1;
1068   buffer[digits] = bytes1(uint8(48 + uint256(value % 10)));
1069   value /= 10;
1070  }
1071
```



LINE 1068

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1067 digits -= 1;
1068 buffer[digits] = bytes1(uint8(48 + uint256(value % 10)));
1069 value /= 10;
1070 }
1071 return string(buffer);
1072
```



LINE 1068

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1067  digits -= 1;
1068  buffer[digits] = bytes1(uint8(48 + uint256(value % 10)));
1069  value /= 10;
1070  }
1071  return string(buffer);
1072
```



LINE 1069

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1068 buffer[digits] = bytes1(uint8(48 + uint256(value % 10)));
1069 value /= 10;
1070 }
1071 return string(buffer);
1072 }
1073
```



LINE 1084

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1083  while (temp != 0) {
1084  length++;
1085  temp >>= 8;
1086  }
1087  return toHexString(value, length);
1088
```



LINE 1094

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1093    function toHexString(uint256 value, uint256 length) internal pure returns (string
memory) {
1094    bytes memory buffer = new bytes(2 * length + 2);
1095    buffer[0] = "0";
1096    buffer[1] = "x";
1097    for (uint256 i = 2 * length + 1; i > 1; --i) {
1098
```



LINE 1094

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1093    function toHexString(uint256 value, uint256 length) internal pure returns (string
memory) {
1094    bytes memory buffer = new bytes(2 * length + 2);
1095    buffer[0] = "0";
1096    buffer[1] = "x";
1097    for (uint256 i = 2 * length + 1; i > 1; --i) {
1098
```



LINE 1097

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1096 buffer[1] = "x";
1097 for (uint256 i = 2 * length + 1; i > 1; --i) {
1098 buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099 value >>= 4;
1100 }
1101
```



LINE 1097

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1096 buffer[1] = "x";
1097 for (uint256 i = 2 * length + 1; i > 1; --i) {
1098 buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099 value >>= 4;
1100 }
1101
```



LINE 1097

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1096 buffer[1] = "x";
1097 for (uint256 i = 2 * length + 1; i > 1; --i) {
1098 buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099 value >>= 4;
1100 }
1101
```



LINE 1454

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1453
1454  uint256 toDeleteIndex = valueIndex - 1;
1455  uint256 lastIndex = set._values.length - 1;
1456
1457  if (lastIndex != toDeleteIndex) {
1458
```



LINE 1455

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1454  uint256 toDeleteIndex = valueIndex - 1;
1455  uint256 lastIndex = set._values.length - 1;
1456
1457  if (lastIndex != toDeleteIndex) {
1458  bytes32 lastValue = set._values[lastIndex];
1459
```



LINE 2223

low SEVERITY

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

Source File

- WeSenditToken.sol

```
// split the contract balance into halves
uint256 half = amount / 2;
uint256 otherHalf = amount - half;

// capture the contract's current BNB balance.
```



LINE 2224

low SEVERITY

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

Source File

- WeSenditToken.sol

```
uint256 half = amount / 2;

uint256 otherHalf = amount - half;

2225

// capture the contract's current BNB balance.

// this is so that we can capture exactly the amount of BNB that the

2228
```



LINE 2236

low SEVERITY

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

Source File

- WeSenditToken.sol

```
// how much BNB did we just swap into?
uint256 newBalance = address(this).balance - initialBalance;

// add liquidity to uniswap
uint256 tokenLiquified = _addLiquidity(

2240
```



LINE 2247

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2246
2247 return half + tokenLiquified;
2248 }
2249
2250 /**
```



LINE 2310

low SEVERITY

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

Source File

- WeSenditToken.sol

```
// how much BUSD did we just swap into?
uint256 newBalance = IERC20(busdAddress()).balanceOf(destination) -
initialBalance;

and
emit SwapTokenForBusd(
2314
```



LINE 2377

low SEVERITY

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

Source File

- WeSenditToken.sol

```
// Calculate percentual amount of volume
uint256 percentualAmount = (pancakePairTokenBalance *
percentageVolume) / 100;

// Do not exceed swap or liquify amount from fee entry

uint256 percentualAmount = (pancakePairTokenBalance *
percentageVolume) / 100;

and
unit 2379

2381
```



LINE 2377

low SEVERITY

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

Source File

- WeSenditToken.sol

```
// Calculate percentual amount of volume
uint256 percentualAmount = (pancakePairTokenBalance *
percentageVolume) / 100;

// Do not exceed swap or liquify amount from fee entry

uint256 percentualAmount = (pancakePairTokenBalance *
percentageVolume) / 100;

and
unit 2379

2381
```



LINE 2654

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2653  // Return entry index
2654  return feeEntries.length - 1;
2655  }
2656
2657  function removeFee(uint256 index) external override onlyRole(ADMIN) {
2658
```



LINE 2668

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2667  // Remove fee entry from array
2668  feeEntries[index] = feeEntries[feeEntries.length - 1];
2669  feeEntries.pop();
2670
2671  emit FeeRemoved(id, index);
2672
```



SWC-101 | ARITHMETIC OPERATION "++" DISCOVERED

LINE 2706

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2705
2706 for (uint256 i = 0; i < feeAmount; i++) {
2707 FeeEntry memory fee = feeEntries[i];
2708
2709 if (_isFeeEntryValid(fee) && _isFeeEntryMatching(fee, from, to)) {
2710
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 2711

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2710  uint256 tFee = _calculateFee(amount, fee.percentage);
2711  uint256 tempPercentage = totalFeePercentage + fee.percentage;
2712
2713  if (tFee > 0 && tempPercentage <= txFeeLimit) {
2714   tFees = tFees + tFee;
2715</pre>
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 2714

low SEVERITY

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

Source File

- WeSenditToken.sol

```
if (tFee > 0 && tempPercentage <= txFeeLimit) {
2714    tFees = tFees + tFee;
2715    totalFeePercentage = tempPercentage;
2716    _reflectFee(from, to, tFee, fee, bypassSwapAndLiquify);
2717  }
2718</pre>
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 2721

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2720
2721 tTotal = amount - tFees;
2722 require(tTotal > 0, "DynamicFeeManager: invalid total amount");
2723
2724 return (tTotal, tFees);
2725
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 2752

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2751 );
2752 feeEntryAmounts[fee.id] = feeEntryAmounts[fee.id] + tFee;
2753 } else {
2754 require(
2755 IWeSenditToken(address(token())).transferFromNoFees(
2756
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 2794

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2793  // Subtract amount of swapped token from fee entry amount
2794  feeEntryAmounts[fee.id] = feeEntryAmounts[fee.id] - tokenSwapped;
2795  }
2796
2797  // Check if callback should be called on destination
2798
```



SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 2882

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2881 {
2882    return (amount * percentage) / FEE_DIVIDER;
2883    }
2884
2885    /**
2886
```



SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 2882

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2881 {
2882    return (amount * percentage) / FEE_DIVIDER;
2883    }
2884
2885    /**
2886
```



SWC-101 | ARITHMETIC OPERATION "++" DISCOVERED

LINE 2939

low SEVERITY

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

Source File

- WeSenditToken.sol



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 3160

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3159 address owner = _msgSender();
3160 _approve(owner, spender, allowance(owner, spender) + addedValue);
3161 return true;
3162 }
3163
3164
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 3183

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3182 unchecked {
3183 _approve(owner, spender, currentAllowance - subtractedValue);
3184 }
3185
3186 return true;
3187
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 3216

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3215 unchecked {
3216  _balances[from] = fromBalance - amount;
3217 }
3218  _balances[to] += amount;
3219
3220
```



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 3218

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3217 }
3218 _balances[to] += amount;
3219
3220 emit Transfer(from, to, amount);
3221
3222
```



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 3239

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3238
3239  _totalSupply += amount;
3240  _balances[account] += amount;
3241  emit Transfer(address(0), account, amount);
3242
3243
```



SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 3240

low SEVERITY

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

Source File

- WeSenditToken.sol

```
__totalSupply += amount;

3240    _balances[account] += amount;

3241    emit Transfer(address(0), account, amount);

3242

3243    _afterTokenTransfer(address(0), account, amount);

3244
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 3265

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3264 unchecked {
3265  _balances[account] = accountBalance - amount;
3266  }
3267  _totalSupply -= amount;
3268
3269
```



SWC-101 | ARITHMETIC OPERATION "-=" DISCOVERED

LINE 3267

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3266  }
3267  _totalSupply -= amount;
3268
3269  emit Transfer(account, address(0), amount);
3270
3271
```



SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 3316

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3315 unchecked {
3316 _approve(owner, spender, currentAllowance - amount);
3317 }
3318 }
3319 }
3320
```



SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 3396

low SEVERITY

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

Source File

- WeSenditToken.sol

```
function _mint(address account, uint256 amount) internal virtual override {
  require(ERC20.totalSupply() + amount <= cap(), "ERC20Capped: cap exceeded");
  super._mint(account, amount);
}

3398 }
3399 }
3400</pre>
```



LINE 1454

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1453
1454  uint256 toDeleteIndex = valueIndex - 1;
1455  uint256 lastIndex = set._values.length - 1;
1456
1457  if (lastIndex != toDeleteIndex) {
1458
```



LINE 1455

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1454  uint256 toDeleteIndex = valueIndex - 1;
1455  uint256 lastIndex = set._values.length - 1;
1456
1457  if (lastIndex != toDeleteIndex) {
1458  bytes32 lastValue = set._values[lastIndex];
1459
```



LINE 2654

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2653  // Return entry index
2654  return feeEntries.length - 1;
2655  }
2656
2657  function removeFee(uint256 index) external override onlyRole(ADMIN) {
2658
```



LINE 2668

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2667  // Remove fee entry from array
2668  feeEntries[index] = feeEntries[feeEntries.length - 1];
2669  feeEntries.pop();
2670
2671  emit FeeRemoved(id, index);
2672
```



LINE 56

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
55
56 pragma solidity ^0.8.0;
57
58 /**
59 * @dev Interface of the ERC20 standard as defined in the EIP.
60
```



LINE 760

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
759
760 pragma solidity ^0.8.0;
761
762 /**
763 * @dev Contract module that helps prevent reentrant calls to a function.
764
```



LINE 827

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
826
827 pragma solidity ^0.8.0;
828
829 /**
830 * @dev External interface of AccessControl declared to support ERC165 detection.
831
```



LINE 919

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
918
919 pragma solidity ^0.8.0;
920
921 /**
922 * @dev External interface of AccessControlEnumerable declared to support ERC165 detection.
923
```



LINE 952

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
951
952 pragma solidity ^0.8.0;
953
954 /**
955 * @dev Provides information about the current execution context, including the
956
```



LINE 980

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
979

980 pragma solidity ^0.8.0;

981

982 /**

983 * @dev Interface of the ERC165 standard, as defined in the

984
```



LINE 1009

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
1008
1009 pragma solidity ^0.8.0;
1010
1011 /**
1012 * @dev Implementation of the {IERC165} interface.
1013
```



LINE 1040

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
1039

1040 pragma solidity ^0.8.0;

1041

1042 /**

1043 * @dev String operations.

1044
```



LINE 1119

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
1118
1119 pragma solidity ^0.8.0;
1120
1121
1122
1123
```



LINE 1368

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
1367
1368 pragma solidity ^0.8.0;
1369
1370 /**
1371 * @dev Library for managing
1372
```



LINE 1739

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
1738
1739 pragma solidity ^0.8.0;
1740
1741
1742
1743
```



LINE 1805

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
1804
1805 pragma solidity ^0.8.0;
1806
1807 /**
1808 * @dev Contract module which provides a basic access control mechanism, where
1809
```



LINE 2953

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
2952
2953 pragma solidity ^0.8.0;
2954
2955 /**
2956 * @dev Interface for the optional metadata functions from the ERC20 standard.
2957
```



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 2983

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
2982
2983 pragma solidity ^0.8.0;
2984
2985
2986
2987
```



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 3368

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
3367
3368 pragma solidity ^0.8.0;
3369
3370 /**
3371 * @dev Extension of {ERC20} that adds a cap to the supply of tokens.
3372
```



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 3407

low SEVERITY

The current pragma Solidity directive is ""^0.8.0"". 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

- WeSenditToken.sol

```
3406
3407 pragma solidity ^0.8.0;
3408
3409
3410 /**
```



LINE 1068

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1067  digits -= 1;
1068  buffer[digits] = bytes1(uint8(48 + uint256(value % 10)));
1069  value /= 10;
1070  }
1071  return string(buffer);
1072
```



LINE 1095

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1094 bytes memory buffer = new bytes(2 * length + 2);
1095 buffer[0] = "0";
1096 buffer[1] = "x";
1097 for (uint256 i = 2 * length + 1; i > 1; --i) {
1098 buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099
```



LINE 1096

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1095 buffer[0] = "0";
1096 buffer[1] = "x";
1097 for (uint256 i = 2 * length + 1; i > 1; --i) {
1098 buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099 value >>= 4;
1100
```



LINE 1098

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1097    for (uint256 i = 2 * length + 1; i > 1; --i) {
1098        buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099        value >>= 4;
1100     }
1101     require(value == 0, "Strings: hex length insufficient");
1102
```



LINE 1098

low SEVERITY

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

Source File

- WeSenditToken.sol

```
1097    for (uint256 i = 2 * length + 1; i > 1; --i) {
1098        buffer[i] = _HEX_SYMBOLS[value & 0xf];
1099        value >>= 4;
1100     }
1101     require(value == 0, "Strings: hex length insufficient");
1102
```



LINE 1458

low SEVERITY

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

Source File

- WeSenditToken.sol

```
if (lastIndex != toDeleteIndex) {
    1458     bytes32 lastValue = set._values[lastIndex];
    1459
    1460     // Move the last value to the index where the value to delete is
    1461     set._values[toDeleteIndex] = lastValue;
    1462
```



LINE 1461

low SEVERITY

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

Source File

- WeSenditToken.sol

```
// Move the last value to the index where the value to delete is
set._values[toDeleteIndex] = lastValue;
// Update the index for the moved value
set._indexes[lastValue] = valueIndex; // Replace lastValue's index to valueIndex
}

1465
```



LINE 1503

low SEVERITY

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

Source File

- WeSenditToken.sol

```
function _at(Set storage set, uint256 index) private view returns (bytes32) {
  return set._values[index];
  }
  1504  }
  1505
  1506  /**
  1507
```



LINE 2006

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2005 {
2006  return feeEntries[index];
2007 }
2008
2009  function getFeeAmount(bytes32 id)
2010
```



LINE 2259

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2258    address[] memory path = new address[](2);
2259    path[0] = address(token());
2260    path[1] = pancakeRouter().WETH();
2261
2262    require(
2263
```



LINE 2260

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2259 path[0] = address(token());
2260 path[1] = pancakeRouter().WETH();
2261
2262 require(
2263 token().approve(address(pancakeRouter()), amount),
2264
```



LINE 2289

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2288    address[] memory path = new address[](2);
2289    path[0] = address(token());
2290    path[1] = busdAddress();
2291
2292    require(
2293
```



LINE 2290

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2289 path[0] = address(token());
2290 path[1] = busdAddress();
2291
2292 require(
2293 token().approve(address(pancakeRouter()), amount),
2294
```



LINE 2664

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2663  // Reset current amount for liquify or swap
2664  bytes32 id = feeEntries[index].id;
2665  feeEntryAmounts[id] = 0;
2666
2667  // Remove fee entry from array
2668
```



LINE 2668

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2667  // Remove fee entry from array
2668  feeEntries[index] = feeEntries[feeEntries.length - 1];
2669  feeEntries.pop();
2670
2671  emit FeeRemoved(id, index);
2672
```



LINE 2668

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2667  // Remove fee entry from array
2668  feeEntries[index] = feeEntries[feeEntries.length - 1];
2669  feeEntries.pop();
2670
2671  emit FeeRemoved(id, index);
2672
```



LINE 2707

low SEVERITY

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

Source File

- WeSenditToken.sol

```
for (uint256 i = 0; i < feeAmount; i++) {
    FeeEntry memory fee = feeEntries[i];
    if (_isFeeEntryValid(fee) && _isFeeEntryMatching(fee, from, to)) {
        uint256 tFee = _calculateFee(amount, fee.percentage);
        2711</pre>
```



LINE 2940

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2939    for (uint256 i = 0; i < addresses.length; i++) {
2940        require(_token.transfer(addresses[i], amounts[i]));
2941    }
2942
2943    return true;
2944</pre>
```



LINE 2940

low SEVERITY

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

Source File

- WeSenditToken.sol

```
2939    for (uint256 i = 0; i < addresses.length; i++) {
2940        require(_token.transfer(addresses[i], amounts[i]));
2941    }
2942
2943    return true;
2944</pre>
```



LINE 3691

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3690 ) public {
3691   IERC20(path[0]).transferFrom(msg.sender, _pair, amountIn);
3692 }
3693
3694   function swapExactETHForTokensSupportingFeeOnTransferTokens(
3695
```



LINE 3700

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3699  ) public payable {
3700    MockPancakePair(_pair).swap(path[1], msg.sender, amountOutMin);
3701  }
3702
3703    function swapExactTokensForTokensSupportingFeeOnTransferTokens(
3704
```



LINE 3710

low SEVERITY

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

Source File

- WeSenditToken.sol

```
3709  ) public {
3710    IERC20(path[0]).transferFrom(msg.sender, _pair, amountIn);
3711  }
3712  }
3713
```



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