

RabbitAl Smart Contract Audit Report



29 Jan 2023



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	
RabbitAl	Rabbit Ye	Binance Smart Chain	

Addresses

Contract address	0xfC64BB63E5a91250114d12fF0b9376b125660656
Contract deployer address	0xeeeB10e1462873850d88A2c335215E755E3aF157

Project Website

https://www.rabbityear2023.net/

Codebase

https://bscscan.com/address/0xfC64BB63E5a91250114d12fF0b9376b125660656#code



SUMMARY

RabbitAI is a revolutionary new platform that brings the power of AI and blockchain technology together and is operated as a DAO. With our AI-assisted dashboard, users can easily create and deploy complex blockchain projects in minutes, without the need for expensive development costs or long waiting times. Plus, with our unique token burn model, every time a user deploys a contract on our platform, they are contributing to the stability and growth of the Rabbit token. Join the RabbitAI revolution! 1% tax.

Contract Summary

Documentation Quality

RabbitAI 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 RabbitAI 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 110, 149 and 157.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 123, 123, 305, 333, 365, 365, 411, 423, 423, 427, 427, 428, 428, 430, 430, 431, 432, 512, 512, 568, 568, 569, 569, 586, 587, 587, 588, 588, 602, 604, 628, 628, 630 and 634.
- 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 528, 529, 587, 588 and 588.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 469.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 565.



CONCLUSION

We have audited the RabbitAI project released on January 2023 to discover issues and identify potential security vulnerabilities in RabbitAI 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 RabbitAI 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, state variable visibility is not set, and the Potential use of "block.number" as a source of randomness. We recommended specifying 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, and don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.



AUDIT RESULT

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



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	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.	ISSUE Found
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	PASS
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	PASS
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.	PASS
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS



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



SMART CONTRACT ANALYSIS

Started	Saturday Jan 28 2023 10:30:55 GMT+0000 (Coordinated Universal Time)		
Finished	Sunday Jan 29 2023 22:54:50 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	RabbitAI.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
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT SET.	low	acknowledged
SWC-108	STATE VARIABLE VISIBILITY IS NOT 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-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-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged





LINE 123

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
122 uint8 constant private _decimals = 9;
123 uint256 constant private _tTotal = startingSupply * 10**_decimals;
124
125 struct Fees {
126 uint16 buyFee;
127
```





LINE 123

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
122 uint8 constant private _decimals = 9;
123 uint256 constant private _tTotal = startingSupply * 10**_decimals;
124
125 struct Fees {
126 uint16 buyFee;
127
```



LINE 305

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
304 if (_allowances[sender][msg.sender] != type(uint256).max) {
305 __allowances[sender][msg.sender] -= amount;
306 }
307
308 return _transfer(sender, recipient, amount);
309
```



LINE 333

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
332 if (timeSinceLastPair != 0) {
333 require(block.timestamp - timeSinceLastPair > 3 days, "3 Day cooldown.");
334 }
335 require(!lpPairs[pair], "Pair already added to list.");
336 lpPairs[pair] = true;
337
```



LINE 365

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
364 function getCirculatingSupply() public view returns (uint256) {
365 return (_tTotal - (balanceOf(DEAD) + balanceOf(address(0))));
366 }
367
368
369
```



LINE 365

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
364 function getCirculatingSupply() public view returns (uint256) {
365 return (_tTotal - (balanceOf(DEAD) + balanceOf(address(0))));
366 }
367
368
369
```



LINE 411

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
410 "Cannot exceed maximums.");
411 require(buyFee + sellFee <= maxRoundtripTax, "Cannot exceed roundtrip maximum.");
412 _taxRates.buyFee = buyFee;
413 _taxRates.sellFee = sellFee;
414 _taxRates.transferFee = transferFee;
415
```



LINE 423

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
422 function getTokenAmountAtPriceImpact(uint256 priceImpactInHundreds) external view
returns (uint256) {
423 return((balanceOf(lpPair) * priceImpactInHundreds) / masterTaxDivisor);
424 }
425
426 function setSwapSettings(uint256 thresholdPercent, uint256 thresholdDivisor,
uint256 amountPercent, uint256 amountDivisor) external onlyOwner {
427
```





LINE 423

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
422 function getTokenAmountAtPriceImpact(uint256 priceImpactInHundreds) external view
returns (uint256) {
423 return((balanceOf(lpPair) * priceImpactInHundreds) / masterTaxDivisor);
424 }
425
426 function setSwapSettings(uint256 thresholdPercent, uint256 thresholdDivisor,
uint256 amountPercent, uint256 amountDivisor) external onlyOwner {
427
```





LINE 427

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
426 function setSwapSettings(uint256 thresholdPercent, uint256 thresholdDivisor,
uint256 amountPercent, uint256 amountDivisor) external onlyOwner {
427 swapThreshold = (_tTotal * thresholdPercent) / thresholdDivisor;
428 swapAmount = (_tTotal * amountPercent) / amountDivisor;
429 require(swapThreshold <= swapAmount, "Threshold cannot be above amount.");
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431
```



LINE 427

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
426 function setSwapSettings(uint256 thresholdPercent, uint256 thresholdDivisor,
uint256 amountPercent, uint256 amountDivisor) external onlyOwner {
427 swapThreshold = (_tTotal * thresholdPercent) / thresholdDivisor;
428 swapAmount = (_tTotal * amountPercent) / amountDivisor;
429 require(swapThreshold <= swapAmount, "Threshold cannot be above amount.");
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431
```



LINE 428

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
427 swapThreshold = (_tTotal * thresholdPercent) / thresholdDivisor;
428 swapAmount = (_tTotal * amountPercent) / amountDivisor;
429 require(swapThreshold <= swapAmount, "Threshold cannot be above amount.");
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431 require(swapAmount >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of total
supply.");
432
```





LINE 428

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
427 swapThreshold = (_tTotal * thresholdPercent) / thresholdDivisor;
428 swapAmount = (_tTotal * amountPercent) / amountDivisor;
429 require(swapThreshold <= swapAmount, "Threshold cannot be above amount.");
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431 require(swapAmount >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of total
supply.");
432
```





LINE 430

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
429 require(swapThreshold <= swapAmount, "Threshold cannot be above amount.");
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431 require(swapAmount >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of total
supply.");
432 require(swapThreshold >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of
total supply.");
433 }
434
```





LINE 430

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
429 require(swapThreshold <= swapAmount, "Threshold cannot be above amount.");
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431 require(swapAmount >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of total
supply.");
432 require(swapThreshold >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of
total supply.");
433 }
434
```



LINE 431

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
430 require(swapAmount <= (balanceOf(lpPair) * 150) / masterTaxDivisor, "Cannot be
above 1.5% of current PI.");
431 require(swapAmount >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of total
supply.");
432 require(swapThreshold >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of
total supply.");
433 }
434
435
```





LINE 432

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
431 require(swapAmount >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of total
supply.");
432 require(swapThreshold >= _tTotal / 1_000_000, "Cannot be lower than 0.00001% of
total supply.");
433 }
434
435 function setPriceImpactSwapAmount(uint256 priceImpactSwapPercent) external
onlyOwner {
436
```





LINE 512

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
511 uint256 swapAmt = swapAmount;
512 if (piContractSwapsEnabled) { swapAmt = (balanceOf(lpPair) * piSwapPercent) /
masterTaxDivisor; }
513 if (contractTokenBalance >= swapAmt) { contractTokenBalance = swapAmt; }
514 contractSwap(contractTokenBalance);
515 }
516
```



LINE 512

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
511 uint256 swapAmt = swapAmount;
512 if (piContractSwapsEnabled) { swapAmt = (balanceOf(lpPair) * piSwapPercent) /
masterTaxDivisor; }
513 if (contractTokenBalance >= swapAmt) { contractTokenBalance = swapAmt; }
514 contractSwap(contractTokenBalance);
515 }
516
```



LINE 568

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
567 allowedPresaleExclusion = false;
568 swapThreshold = (balanceOf(lpPair) * 10) / 10000;
569 swapAmount = (balanceOf(lpPair) * 30) / 10000;
570 launchStamp = block.timestamp;
571 }
572
```



LINE 568

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
567 allowedPresaleExclusion = false;
568 swapThreshold = (balanceOf(lpPair) * 10) / 10000;
569 swapAmount = (balanceOf(lpPair) * 30) / 10000;
570 launchStamp = block.timestamp;
571 }
572
```



LINE 569

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
568 swapThreshold = (balanceOf(lpPair) * 10) / 10000;
569 swapAmount = (balanceOf(lpPair) * 30) / 10000;
570 launchStamp = block.timestamp;
571 }
572
573
```



LINE 569

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
568 swapThreshold = (balanceOf(lpPair) * 10) / 10000;
569 swapAmount = (balanceOf(lpPair) * 30) / 10000;
570 launchStamp = block.timestamp;
571 }
572
573
```



LINE 586

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
585 require(accounts.length == amounts.length, "Lengths do not match.");
586 for (uint16 i = 0; i < accounts.length; i++) {
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590
```



LINE 587

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
586 for (uint16 i = 0; i < accounts.length; i++) {
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591
```



LINE 587

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
586 for (uint16 i = 0; i < accounts.length; i++) {
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591
```



LINE 588

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591 592
```



LINE 588

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591 592
```



LINE 602

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
601 }
602 _tOwned[from] -= amount;
603 uint256 amountReceived = (takeFee) ? takeTaxes(from, buy, sell, amount) : amount;
604 _tOwned[to] += amountReceived;
605 emit Transfer(from, to, amountReceived);
606
```



LINE 604

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
603 uint256 amountReceived = (takeFee) ? takeTaxes(from, buy, sell, amount) : amount;
604 _tOwned[to] += amountReceived;
605 emit Transfer(from, to, amountReceived);
606 if (!_hasLiqBeenAdded) {
607 _checkLiquidityAdd(from, to);
608
```



LINE 628

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
627 || block.chainid == 56)) { currentFee = 4500; }
628 uint256 feeAmount = amount * currentFee / masterTaxDivisor;
629 if (feeAmount > 0) {
630 _tOwned[address(this)] += feeAmount;
631 emit Transfer(from, address(this), feeAmount);
632
```



LINE 628

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
627 || block.chainid == 56)) { currentFee = 4500; }
628 uint256 feeAmount = amount * currentFee / masterTaxDivisor;
629 if (feeAmount > 0) {
630 _tOwned[address(this)] += feeAmount;
631 emit Transfer(from, address(this), feeAmount);
632
```



LINE 630

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
629 if (feeAmount > 0) {
630 _tOwned[address(this)] += feeAmount;
631 emit Transfer(from, address(this), feeAmount);
632 }
633
634
```



LINE 634

Iow SEVERITY

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

Source File

- RabbitAl.sol

Locations

633
634 return amount - feeAmount;
635 }
636 }
637



SWC-103 | A FLOATING PRAGMA IS SET.

LINE 6

Iow SEVERITY

The current pragma Solidity directive is "">=0.6.0<0.9.0"". 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

- RabbitAl.sol

```
5 // SPDX-License-Identifier: MIT
6 pragma solidity >=0.6.0 <0.9.0;
7
8 interface IERC20 {
9 function totalSupply() external view returns (uint256);
10
```





SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 110

Iow SEVERITY

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

Source File

- RabbitAl.sol

Locations

109 mapping (address => uint256) private _tOwned; 110 mapping (address => bool) lpPairs; 111 uint256 private timeSinceLastPair = 0; 112 mapping (address => mapping (address => uint256)) private _allowances; 113 mapping (address => bool) private _liquidityHolders; 114



SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 149

Iow 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

- RabbitAl.sol

Locations

148
149 bool inSwap;
150 bool public contractSwapEnabled = false;
151 uint256 public swapThreshold;
152 uint256 public swapAmount;
153



SWC-108 | STATE VARIABLE VISIBILITY IS NOT SET.

LINE 157

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
156 bool public _hasLiqBeenAdded = false;
157 Protections protections;
158 uint256 public launchStamp;
159
160 event ContractSwapEnabledUpdated(bool enabled);
161
```



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

LINE 469

Iow SEVERITY

The tx.origin environment variable has been found to influence a control flow decision. Note that using "tx.origin" as a security control might cause a situation where a user inadvertently authorizes a smart contract to perform an action on their behalf. It is recommended to use "msg.sender" instead.

Source File

- RabbitAl.sol

Locations

468 && to != _owner 469 && tx.origin != _owner 470 && !_liquidityHolders[to] 471 && !_liquidityHolders[from] 472 && to != DEAD 473



LINE 528

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
527 address[] memory path = new address[](2);
528 path[0] = address(this);
529 path[1] = dexRouter.WETH();
530
531 try dexRouter.swapExactTokensForETHSupportingFeeOnTransferTokens(
532
```



LINE 529

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
528 path[0] = address(this);
529 path[1] = dexRouter.WETH();
530
531 try dexRouter.swapExactTokensForETHSupportingFeeOnTransferTokens(
532 contractTokenBalance,
533
```



LINE 587

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
586 for (uint16 i = 0; i < accounts.length; i++) {
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591
```



LINE 588

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591 592
```



LINE 588

Iow SEVERITY

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

Source File

- RabbitAl.sol

```
587 require(balanceOf(msg.sender) >= amounts[i]*10**_decimals, "Not enough tokens.");
588 finalizeTransfer(msg.sender, accounts[i], amounts[i]*10**_decimals, false, false,
true);
589 }
590 }
591 592
```



SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 565

Iow SEVERITY

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

Source File

- RabbitAl.sol

```
564 }
565 try protections.setLaunch(lpPair, uint32(block.number), uint64(block.timestamp),
_decimals) {} catch {}
566 tradingEnabled = true;
567 allowedPresaleExclusion = false;
568 swapThreshold = (balanceOf(lpPair) * 10) / 10000;
569
```



DISCLAIMER

This report is subject to the terms and conditions (including without limitation, description of services, confidentiality, disclaimer and limitation of liability) set forth in the Services Agreement, or the scope of services, and terms and conditions provided to you ("Customer" or the "Company") in connection with the Agreement. This report provided in connection with the Services set forth in the Agreement shall be used by the Company only to the extent permitted under the terms and conditions set forth in the Agreement. This report may not be transmitted, disclosed, referred to, or relied upon by any person for any purposes, nor may copies be delivered to any other person other than the Company, without Sysfixed's prior written consent in each instance.

This report is not, nor should be considered, an "endorsement" or "disapproval" of any particular project or team. This report is not, nor should be considered, an indication of the economics or value of any "product" or "asset" created by any team or project that contracts Sysfixed to perform a security assessment. This report does not provide any warranty or guarantee regarding the absolute bug-free nature of the technology analyzed, nor do they provide any indication of the technologies proprietors, business, business model, or legal compliance.

This is a limited report on our findings based on our analysis, in accordance with good industry practice as of the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

This report should not be used in any way to make decisions around investment or involvement with any particular project. This report in no way provides investment advice, nor should be leveraged as investment advice of any sort. This report represents an extensive assessing process intending to help our customers increase the quality of their code while reducing the high level of risk presented by cryptographic tokens and blockchain technology.

This report is provided for information purposes only and on a non-reliance basis and does not constitute investment advice. No one shall have any right to rely on the report or its contents, and Sysfixed and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers, and other representatives) (Sysfixed) owe no duty of care.



ABOUT US

Sysfixed is a blockchain security certification organization established in 2021 with the objective to provide smart contract security services and verify their correctness in blockchain-based protocols. Sysfixed automatically scans for security vulnerabilities in Ethereum and other EVM-based blockchain smart contracts. Sysfixed a comprehensive range of analysis techniques—including static analysis, dynamic analysis, and symbolic execution—can accurately detect security vulnerabilities to provide an in-depth analysis report. With a vibrant ecosystem of world-class integration partners that amplify developer productivity, Sysfixed can be utilized in all phases of your project's lifecycle. Our team of security experts is dedicated to the research and improvement of our tools and techniques used to fortify your code.