



MetaRabbit

# Smart Contract Audit Report

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## Disclaimer

## About Us

# AUDITED DETAILS

## Audited Project

Project name	Token ticker	Blockchain
MetaRabbit	MetaRabbit	Binance Smart Chain

## Addresses

Contract address	0x290e896B78Ec40c5D165C7d397A1AeB240B52023
Contract deployer address	0xa33f375b2E645Aec0312bcdBCc31AB5f8fECDceF

## Project Website

[https://t.me/MetaRabbit\\_office](https://t.me/MetaRabbit_office)

## Codebase

<https://bscscan.com/address/0x290e896B78Ec40c5D165C7d397A1AeB240B52023#code>

# SUMMARY

The strongest ip of the year, the meta rabbit strikes. Last year, a sentence about selling dogs in the metaverse became popular in the entire currency circle. We are going to sell rabbits in Yuan Universe this year, and the cute and sassy Yuan Rabbit is here. We hope you can join us.

## Contract Summary

### Documentation Quality

MetaRabbit 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 MetaRabbit 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 517.
- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 201, 201, 202, 202, 202, 203, 203, 203, 222, 222, 282, 306, 306, 323, 323, 323, 328, 328, 368, 373, 377, 379, 381, 381, 383, 388, 399, 399, 399, 415, 441, 492, 549, 566, 586, 586, 592, 592, 594 and 595.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 7.
- 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 515, 421, 422, 423, 493, 528 and 583.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 481, 549 and 598.

## CONCLUSION

We have audited the MetaRabbit project released on January 2023 to discover issues and identify potential security vulnerabilities in MetaRabbit 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 MetaRabbit 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, a public state variable with array type causing reachable exception by default, Out of bounds array access, and weak sources of randomness. We recommend using The current pragma Solidity directive is `^0.8.14`. 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 and Don't use any of those environment variables as sources of randomness and be aware that the 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.	<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>
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>
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	Delegate calls 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.	<b>PASS</b>
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	<b>PASS</b>

Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	ISSUE FOUND
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	PASS

# SMART CONTRACT ANALYSIS

Started	Tuesday Jan 10 2023 01:31:47 GMT+0000 (Coordinated Universal Time)
Finished	Wednesday Jan 11 2023 11:01:48 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	MetaRabbit.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-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-110	PUBLIC STATE VARIABLE WITH ARRAY TYPE CAUSING REACHABLE EXCEPTION BY DEFAULT.	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
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged

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

LINE 201

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
200
201  uint256 total = Supply * 10**Decimals;
202  maxTXAmount = (Supply / 100) * 10**Decimals;
203  maxWalletAmount = (Supply / 100) * 10**Decimals;
204  _tTotal = total;
205
```

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

LINE 201

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
200
201 uint256 total = Supply * 10**Decimals;
202 maxTXAmount = (Supply / 100) * 10**Decimals;
203 maxWalletAmount = (Supply / 100) * 10**Decimals;
204 _tTotal = total;
205
```

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

LINE 202

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
201 uint256 total = Supply * 10**Decimals;
202 maxTXAmount = (Supply / 100) * 10**Decimals;
203 maxWalletAmount = (Supply / 100) * 10**Decimals;
204 _tTotal = total;
205
206
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 202

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
201 uint256 total = Supply * 10**Decimals;
202 maxTXAmount = (Supply / 100) * 10**Decimals;
203 maxWalletAmount = (Supply / 100) * 10**Decimals;
204 _tTotal = total;
205
206
```

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

LINE 202

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
201 uint256 total = Supply * 10**Decimals;
202 maxTXAmount = (Supply / 100) * 10**Decimals;
203 maxWalletAmount = (Supply / 100) * 10**Decimals;
204 _tTotal = total;
205
206
```

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

LINE 203

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
202     maxTXAmount = (Supply / 100) * 10**Decimals;
203     maxWalletAmount = (Supply / 100) * 10**Decimals;
204     _tTotal = total;
205
206     _balances[ReceiveAddress] = total;
207
```



# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 203

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
202     maxTXAmount = (Supply / 100) * 10**Decimals;
203     maxWalletAmount = (Supply / 100) * 10**Decimals;
204     _tTotal = total;
205
206     _balances[ReceiveAddress] = total;
207
```

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

LINE 203

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
202     maxTXAmount = (Supply / 100) * 10**Decimals;
203     maxWalletAmount = (Supply / 100) * 10**Decimals;
204     _tTotal = total;
205
206     _balances[ReceiveAddress] = total;
207
```

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

LINE 222

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
221
222 holderRewardCondition = 0 * 10**IERC20(USDTAddress).decimals();
223
224 _tokenDistributor = new TokenDistributor(USDTAddress);
225 }
226
```

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

LINE 222

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
221
222 holderRewardCondition = 0 * 10**IERC20(USDTAddress).decimals();
223
224 _tokenDistributor = new TokenDistributor(USDTAddress);
225 }
226
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 282

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
281  _allowances[sender][msg.sender] =  
282  _allowances[sender][msg.sender] -  
283  amount;  
284  }  
285  return true;  
286
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 306

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
305  if (!_feeWhiteList[from] && !_feeWhiteList[to]) {  
306  uint256 maxSellAmount = (balance * 999) / 1000;  
307  if (amount > maxSellAmount) {  
308  amount = maxSellAmount;  
309  }  
310
```

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

LINE 306

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
305  if (!_feeWhiteList[from] && !_feeWhiteList[to]) {  
306  uint256 maxSellAmount = (balance * 999) / 1000;  
307  if (amount > maxSellAmount) {  
308  amount = maxSellAmount;  
309  }  
310
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 323

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
322     if (contractTokenBalance > 0) {
323         uint256 swapFee = _buyFundFee +
324             _buyLPDividendFee +
325             _sellFundFee +
326             _sellLPDividendFee;
327     }
```



# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 323

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
322     if (contractTokenBalance > 0) {
323         uint256 swapFee = _buyFundFee +
324             _buyLPDividendFee +
325             _sellFundFee +
326             _sellLPDividendFee;
327     }
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 323

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
322     if (contractTokenBalance > 0) {
323         uint256 swapFee = _buyFundFee +
324             _buyLPDividendFee +
325             _sellFundFee +
326             _sellLPDividendFee;
327     }
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 328

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
327
328 uint256 numTokensSellToFund = (amount * swapFee) /
329 5000;
330 if (numTokensSellToFund > contractTokenBalance) {
331 numTokensSellToFund = contractTokenBalance;
332
```

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

LINE 328

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
327
328  uint256 numTokensSellToFund = (amount * swapFee) /
329  5000;
330  if (numTokensSellToFund > contractTokenBalance) {
331  numTokensSellToFund = contractTokenBalance;
332
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 368

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
367     ) private {
368         _balances[sender] = _balances[sender] - tAmount;
369         uint256 feeAmount;
370
371         if (takeFee) {
372
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 373

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
372  if (!_swapPairList[recipient])
373  require(tAmount + balanceOf(recipient) <= maxWalletAmount);
374  require(tAmount <= maxTXAmount);
375  uint256 swapFee;
376  if (isSell) {
377
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 377

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
376     if (isSell) {
377         swapFee = _sellFundFee + _sellLPDividendFee;
378     } else {
379         swapFee = _buyFundFee + _buyLPDividendFee;
380     }
381
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 379

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
378     } else {  
379         swapFee = _buyFundFee + _buyLPDividendFee;  
380     }  
381     uint256 swapAmount = (tAmount * swapFee) / 10000;  
382     if (swapAmount > 0) {  
383
```



# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 381

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
380     }
381     uint256 swapAmount = (tAmount * swapFee) / 10000;
382     if (swapAmount > 0) {
383         feeAmount += swapAmount;
384         _takeTransfer(sender, address(this), swapAmount);
385     }
```

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

LINE 381

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
380     }
381     uint256 swapAmount = (tAmount * swapFee) / 10000;
382     if (swapAmount > 0) {
383         feeAmount += swapAmount;
384         _takeTransfer(sender, address(this), swapAmount);
385     }
```

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

LINE 383

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
382     if (swapAmount > 0) {
383         feeAmount += swapAmount;
384         _takeTransfer(sender, address(this), swapAmount);
385     }
386 }
387
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 388

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
387
388     _takeTransfer(sender, recipient, tAmount - feeAmount);
389     }
390
391     function swapTokenForFund(uint256 tokenAmount, uint256 swapFee)
392
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 399

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
398 uint256 USDTBalance = USDT.balanceOf(address(_tokenDistributor));
399 uint256 marketingAmount = USDTBalance * (_buyFundFee + _sellFundFee) / swapFee;
400
401 if (marketingAmount > USDTBalance)
402     marketingAmount = USDTBalance;
403
```

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

LINE 399

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
398 uint256 USDTBalance = USDT.balanceOf(address(_tokenDistributor));
399 uint256 marketingAmount = USDTBalance * (_buyFundFee + _sellFundFee) / swapFee;
400
401 if (marketingAmount > USDTBalance)
402     marketingAmount = USDTBalance;
403
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 399

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
398 uint256 USDTBalance = USDT.balanceOf(address(_tokenDistributor));
399 uint256 marketingAmount = USDTBalance * (_buyFundFee + _sellFundFee) / swapFee;
400
401 if (marketingAmount > USDTBalance)
402     marketingAmount = USDTBalance;
403
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 415

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
414     address(this),  
415     USDTBalance - marketingAmount  
416     );  
417     }  
418  
419
```



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

LINE 441

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
440     ) private {
441         _balances[to] = _balances[to] + tAmount;
442         emit Transfer(sender, to, tAmount);
443     }
444
445
```

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

LINE 492

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
491  {  
492  for (uint256 i = 0; i < addr.length; i++)  
493  _feeWhiteList[addr[i]] = enable;  
494  }  
495  
496
```

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

LINE 549

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
548     function processReward(uint256 gas) private {
549         if (progressRewardBlock + rewardBlock > block.number) {
550             return;
551         }
552     }
553 }
```

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

LINE 566

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
565     holdTokenTotal =
566     holdToken.totalSupply() -
567     holdToken.balanceOf(deadAddress);
568
569     address shareHolder;
570
```

# SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 586

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
585     if (tokenBalance > rewardThreshold && !excludeHolder[shareHolder]) {  
586         amount = (balance * tokenBalance) / holdTokenTotal;  
587         if (amount > 0) {  
588             USDT.transfer(shareHolder, amount);  
589         }  
590     }
```

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

LINE 586

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
585     if (tokenBalance > rewardThreshold && !excludeHolder[shareHolder]) {  
586         amount = (balance * tokenBalance) / holdTokenTotal;  
587         if (amount > 0) {  
588             USDT.transfer(shareHolder, amount);  
589         }  
590     }
```

# SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 592

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
591
592   gasUsed = gasUsed + (gasLeft - gasleft());
593   gasLeft = gasleft();
594   currentIndex++;
595   iterations++;
596
```

# SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 592

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
591
592   gasUsed = gasUsed + (gasLeft - gasleft());
593   gasLeft = gasleft();
594   currentIndex++;
595   iterations++;
596
```



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

LINE 594

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
593 gasLeft = gasleft();
594 currentIndex++;
595 iterations++;
596 }
597
598
```

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

LINE 595

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
594     currentIndex++;
595     iterations++;
596   }
597
598   progressRewardBlock = block.number;
599
```

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

LINE 7

### low SEVERITY

The current pragma Solidity directive is `^0.8.14`. 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

- MetaRabbit.sol

### Locations

```
6
7  pragma solidity ^0.8.14;
8
9  interface IERC20 {
10     function decimals() external view returns (uint8);
11
```

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

LINE 517

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
516 mapping(address => uint256) public holderIndex;
517 mapping(address => bool) excludeHolder;
518
519 function addHolder(address adr) private {
520     uint256 size;
521 }
```

## SWC-110 | PUBLIC STATE VARIABLE WITH ARRAY TYPE CAUSING REACHABLE EXCEPTION BY DEFAULT.

LINE 515

### low SEVERITY

The public state variable "holders" in "AbsToken" contract has type "address[]" and can cause an exception in case of use of invalid array index value.

### Source File

- MetaRabbit.sol

### Locations

```
514
515 address[] public holders;
516 mapping(address => uint256) public holderIndex;
517 mapping(address => bool) excludeHolder;
518
519
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 421

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
420 address[] memory path = new address[](3);
421 path[0] = address(this);
422 path[1] = _swapRouter.WETH();
423 path[2] = _USDT;
424
425
```

# SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 422

## low SEVERITY

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

## Source File

- MetaRabbit.sol

## Locations

```
421 path[0] = address(this);
422 path[1] = _swapRouter.WETH();
423 path[2] = _USDT;
424
425 _approve(address(this), address(_swapRouter), tokenAmount);
426
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 423

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
422     path[1] = _swapRouter.WETH();
423     path[2] = _USDT;
424
425     _approve(address(this), address(_swapRouter), tokenAmount);
426
427
```



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 493

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
492     for (uint256 i = 0; i < addr.length; i++)
493         _feeWhiteList[addr[i]] = enable;
494     }
495
496     function setSwapPairList(address addr, bool enable) external onlyOwner {
497
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 528

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
527   if (0 == holderIndex[adr]) {  
528     if (0 == holders.length || holders[0] != adr) {  
529       holderIndex[adr] = holders.length;  
530       holders.push(adr);  
531     }  
532   }
```

## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 583

### low SEVERITY

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

### Source File

- MetaRabbit.sol

### Locations

```
582     }  
583     shareHolder = holders[currentIndex];  
584     tokenBalance = holdToken.balanceOf(shareHolder);  
585     if (tokenBalance > rewardThreshold && !excludeHolder[shareHolder]) {  
586         amount = (balance * tokenBalance) / holdTokenTotal;  
587     }
```

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

LINE 481

### low 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

- MetaRabbit.sol

### Locations

```
480  require(0 == startTradeBlock, "trading");
481  startTradeBlock = block.number;
482  }
483
484  function setFeeWhiteList(address addr, bool enable) external onlyOwner {
485
```

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

LINE 549

### low 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

- MetaRabbit.sol

### Locations

```
548 function processReward(uint256 gas) private {
549     if (progressRewardBlock + rewardBlock > block.number) {
550         return;
551     }
552
553
```

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

LINE 598

### low 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

- MetaRabbit.sol

### Locations

```
597
598   progressRewardBlock = block.number;
599   }
600
601   function setHolderRewardCondition(uint256 amount) external onlyOwner {
602
```

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