OLYXAI

Smart Contract Audit Report

SYSFIXED

03 Feb 2023

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AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
OLYXAI	OLYX	BSC

Addresses

Contract address	0x18606a5312870d2e0d1891868Fe6236713EdDD9C
Contract deployer address	0xA794933925856F85c75C8a81c378eb3F7F188Cd3

Project Website

https://olyx.ai/

Codebase

https://bscscan.com/address/0x18606a5312870d2e0d1891868Fe6236713EdDD9C#code

SUMMARY

Olyx is a revolutionary new cryptocurrency that combines the power of Artificial Intelligence(AI) with the speed and security of the Binance Smart Chain. But that's not all - the Olyx team is also offering a unique crowdfunding trade feature, allowing investors to contribute to a trading vault and reap the rewards of successful trades. The advantage is audited, 3% low buy tax, has no unlocked tokens, lp locked for 1 year, has no dev wallet, staking live, dapp ready, and multisig.

Contract Summary

Documentation Quality

OLYXAI 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.

- Standart solidity basecode and rules are already followed with OLYXAI 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 497, 501, 515, 534, 535, 546, 546, 564, 564, 654, 655, 656, 721, 742, 742, 743 and 754.
- SWC-110 | It is recommended to use use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 764 and 764.

CONCLUSION

We have audited the Olyx which has released on January 2023 to discover issues and identify potential security vulnerabilities in Olyx Project. This process is used to find bugs, technical issues, and security loopholes that find some common issues in the code.

The security audit report produced satisfactory results with a low risk issue on the contract project.

The most common issue found in writing code on contracts that do not pose a big risk, writing on contracts is close to the standard of writing contracts in general. Some of the low issues that were found were just arithmetic operations discovered. We recommended using recommended standard solidity arithmetic operation.

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.	PASS
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	PASS
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS
Assert Violation	SWC-110	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 Caller	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
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	PASS
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	PASS

SMART CONTRACT ANALYSIS

Started	Sun Jan 8 2023 11:10:11GMT+0000 (Coordinated Universal Time)
Finished	Mon Jan 9 2023 12:11:10 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	OLYX.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 |

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SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 497

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

Source File
- OLYX.Sol

Locations

```
496
497   function decreaseAllowance(address spender, uint256 subtractedValue) public virtual
returns (bool) {
498   uint256 currentAllowance = _allowances[_msgSender()][spender];
499   require(currentAllowance >= subtractedValue, "ERC20: decreased allowance below
zero");
500   unchecked {
501
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED
LINE 501

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

Source File
- OLYX.Sol

Locations

```
500    unchecked {
501    _approve(_msgSender(), spender, currentAllowance - subtractedValue);
502    }
503
504    return true;
505
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 515

low SEVERITY

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

Source File

- OLYX.Sol

Locations

```
514
515    _beforeTokenTransfer(sender, recipient, amount);
516
517    uint256 senderBalance = _balances[sender];
518    require(senderBalance >= amount, "ERC20: transfer amount exceeds balance");
519
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 534

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

Source File
- OLYX.Sol

Locations

```
533
534    _totalSupply += amount;
535    _balances[account] += amount;
536    emit Transfer(address(0), account, amount);
537
538
```

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SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED
LINE 535

low SEVERITY

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

Source File

- OLYX.Sol

Locations

```
534    _totalSupply += amount;
535    _balances[account] += amount;
536    emit Transfer(address(0), account, amount);
537
538    _afterTokenTransfer(address(0), account, amount);
539
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED
LINE 546

low SEVERITY

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

Source File

- OLYX.Sol

Locations

```
545
546   uint256 accountBalance = _balances[account];
547   require(accountBalance >= amount, "ERC20: burn amount exceeds balance");
548   unchecked {
549   _balances[account] = accountBalance - amount;
550
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 564

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

Source File
- OLYX.Sol

Locations

```
563    require(owner != address(0), "ERC20: approve from the zero address");
564    require(spender != address(0), "ERC20: approve to the zero address");
565
566    _allowances[owner][spender] = amount;
567    emit Approval(owner, spender, amount);
568
```

SWC-101 | ARITHMETIC OPERATION "-=" DISCOVERED
LINE 564

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

Source File
- OLYX.Sol

Locations

```
563    require(owner != address(0), "ERC20: approve from the zero address");
564    require(spender != address(0), "ERC20: approve to the zero address");
565
566    _allowances[owner][spender] = amount;
567    emit Approval(owner, spender, amount);
568
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED
LINE 654

low SEVERITY

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

Source File

- OLYX.Sol

Locations

```
653    require(token != address(this), "Owner cannot claim contract's balance of its own
tokens");
654    if (token == address(0x0)) {
655    payable(msg.sender).sendValue(address(this).balance);
656    return;
657    }
658
```

SWC-101 | ARITHMETIC OPERATION "**" DISCOVERED
LINE 655

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

Source File
- OLYX.Sol

Locations

```
654    if (token == address(0x0)) {
655    payable(msg.sender).sendValue(address(this).balance);
656    return;
657    }
658    IERC20 ERC20token = IERC20(token);
659
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED
LINE 656

low SEVERITY

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

Source File

- OLYX.Sol

Locations

```
655    payable(msg.sender).sendValue(address(this).balance);
656    return;
657    }
658    IERC20 ERC20token = IERC20(token);
659    uint256 balance = ERC20token.balanceOf(address(this));
660
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED
LINE 721

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

Source File
- OLYX.Sol

Locations

```
720    } else if (from == uniswapV2Pair) {
721    _totalFees = marketingFeeOnBuy;
722    } else if (to == uniswapV2Pair) {
723    _totalFees = marketingFeeOnSell;
724    } else {
725
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED
LINE 742

low SEVERITY

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

Source File

- OLYX.Sol

Locations

```
741
742   function setSwapTokensAtAmount(uint256 newAmount) external onlyOwner{
743   require(newAmount > totalSupply() / 1_000_000, "SwapTokensAtAmount must be greater
than 0.0001% of total supply");
744   swapTokensAtAmount = newAmount;
745
746
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 743

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

Source File
- OLYX.Sol

Locations

```
742    function setSwapTokensAtAmount(uint256 newAmount) external onlyOwner{
743    require(newAmount > totalSupply() / 1_000_000, "SwapTokensAtAmount must be greater
than 0.0001% of total supply");
744    swapTokensAtAmount = newAmount;
745
746    emit SwapTokensAtAmountUpdated(swapTokensAtAmount);
747
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED
LINE 754

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

Source File
- OLYX.Sol

Locations

```
753
754    uniswapV2Router.swapExactTokensForTokens(
755    tokenAmount,
756    0,
757    path,
758
```

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