

# OLYXAI Smart Contract Audit Report



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# AUDITED DETAILS

### Audited Project

Project name	Token ticker	Blockchain	
OLYXAI	OLYX	BSC	

### Addresses

<b>Contract address</b> 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







**LINE 497** 

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

```
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** 

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

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



**LINE 515** 

#### **Iow 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



**LINE 534** 

#### **Iow 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



**LINE 535** 

#### **Iow 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



**LINE 546** 

#### **Iow 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



**LINE 564** 

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

```
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
```



**LINE 564** 

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

```
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
```



**LINE 654** 

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

```
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
```



LINE 655

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

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



LINE 656

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

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



**LINE 721** 

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

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



LINE 742

#### **Iow SEVERITY**

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

#### Source File

- OLYX.Sol

```
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
```



**LINE 743** 

#### **Iow 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



**LINE 754** 

#### **Iow 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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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.

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