



OLYXAI

# Smart Contract Audit Report

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## Disclaimer

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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<br>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<br>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<br>SWC-121<br>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 |
|---------|-------------------------------------|-----|--------------|

# 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
```

# 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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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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