



Cyberscope

# Audit Report

## **Artlux**

December 2022

SHA256 14b7d3ce9617dc4c00e58c726758bcf5329211e83e6e06ddb3be0dd1e10a5afa

Audited by © cyberscope

# Table of Contents

<b>Table of Contents</b>	<b>1</b>
<b>Contract Review</b>	<b>2</b>
<b>Source Files</b>	<b>2</b>
<b>Audit Updates</b>	<b>2</b>
<b>Contract Analysis</b>	<b>3</b>
<b>Contract Diagnostics</b>	<b>4</b>
<b>L02 - State Variables could be Declared Constant</b>	<b>5</b>
Description	5
Recommendation	5
<b>L04 - Conformance to Solidity Naming Conventions</b>	<b>6</b>
Description	6
Recommendation	6
<b>L05 - Unused State Variable</b>	<b>7</b>
Description	7
Recommendation	7
<b>L12 - Using Variables before Declaration</b>	<b>8</b>
Description	8
Recommendation	8
<b>L14 - Uninitialized Variables in Local Scope</b>	<b>9</b>
Description	9
Recommendation	9
<b>Contract Functions</b>	<b>10</b>
<b>Contract Flow</b>	<b>13</b>
<b>Summary</b>	<b>14</b>
<b>Disclaimer</b>	<b>15</b>
<b>About Cyberscope</b>	<b>16</b>

## Contract Review

<b>Contract Name</b>	Artlux
<b>Compiler Version</b>	v0.8.17+commit.8df45f5f
<b>Optimization</b>	200 runs
<b>Test Deploy</b>	<a href="https://testnet.bscscan.com/token/0x441f6ad303De9fB0BeC66AeBe436df3D91E1AA51">https://testnet.bscscan.com/token/0x441f6ad303De9fB0BeC66AeBe436df3D91E1AA51</a>
<b>Symbol</b>	ATX
<b>Decimals</b>	18
<b>Total Supply</b>	1,000,000

## Source Files

<b>Filename</b>	<b>SHA256</b>
<b>contract.sol</b>	14b7d3ce9617dc4c00e58c726758bcf5329211e83e6e06ddb3be0dd1e10a5afa

## Audit Updates

<b>Initial Audit</b>	12th December 2022
<b>Corrected</b>	

# Contract Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OCTD	Transfers Contract's Tokens	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	ULTW	Transfers Liquidity to Team Wallet	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

# Contract Diagnostics

● Critical   ● Medium   ● Minor / Informative

Severity	Code	Description	Status
●	L02	State Variables could be Declared Constant	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L05	Unused State Variable	Unresolved
●	L12	Using Variables before Declaration	Unresolved
●	L14	Uninitialized Variables in Local Scope	Unresolved

## L02 - State Variables could be Declared Constant

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L115,102
<b>Status</b>	Unresolved

### Description

Constant state variables should be declared constant to save gas.

```
taxesAreLocked  
timeSinceLastPair
```

### Recommendation

Add the constant attribute to state variables that never change.

## L04 - Conformance to Solidity Naming Conventions

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L33,109,121,112,111,273,113,110
<b>Status</b>	Unresolved

### Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow `_` at the beginning of the `mixed_case` match for private variables and unused parameters.

```
WETH
startingSupply
_hasLiqBeenAdded
_decimals
_symbol
_antiSnipe
_tTotal
_name
_antiBlock
```

### Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-conventions>.

## L05 - Unused State Variable

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L106,102
<b>Status</b>	Unresolved

### Description

There are segments that contain unused state variables.

```
_isExcludedFromLimits  
timeSinceLastPair
```

### Recommendation

Remove unused state variables.



## L12 - Using Variables before Declaration

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L368
<b>Status</b>	Unresolved

### Description

The contract is using a variable before the declaration. This is usually happening either if it has not been declared yet or the variable has been declared in a different scope.

```
check
```

### Recommendation

The variables should be declared before any usage of them.

## L14 - Uninitialized Variables in Local Scope

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L368,367
<b>Status</b>	Unresolved

### Description

There are variables that are defined in the local scope and are not initialized.

check  
checked

### Recommendation

All the local scoped variables should be initialized.

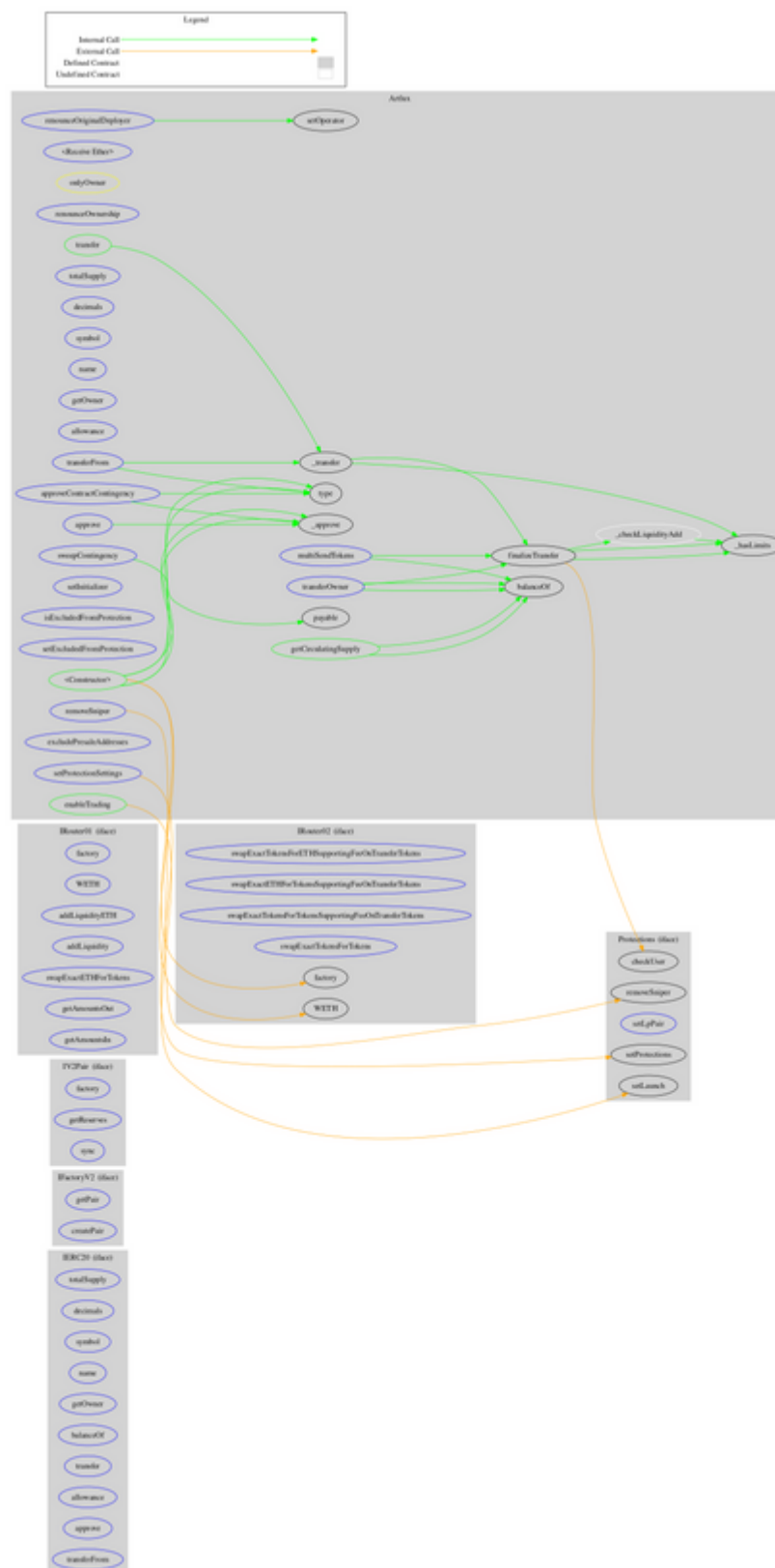
# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>IERC20</b>	Interface			
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>IFactoryV2</b>	Interface			
	getPair	External		-
	createPair	External	✓	-
<b>IV2Pair</b>	Interface			
	factory	External		-
	getReserves	External		-
	sync	External	✓	-
<b>IRouter01</b>	Interface			
	factory	External		-
	WETH	External		-
	addLiquidityETH	External	Payable	-
	addLiquidity	External	✓	-
	swapExactETHForTokens	External	Payable	-
	getAmountsOut	External		-
	getAmountsIn	External		-

<b>IRouter02</b>	Interface	IRouter01		
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokens	External	✓	-
<b>Protections</b>	Interface			
	checkUser	External	✓	-
	setLaunch	External	✓	-
	setLpPair	External	✓	-
	setProtections	External	✓	-
	removeSniper	External	✓	-
<b>Artlux</b>	Implementation	IERC20		
	<Constructor>	Public	Payable	-
	<Receive Ether>	External	Payable	-
	transferOwner	External	✓	onlyOwner
	renounceOwnership	External	✓	onlyOwner
	setOperator	Public	✓	-
	renounceOriginalDeployer	External	✓	-
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	allowance	External		-
	balanceOf	Public		-
	transfer	Public	✓	-
	approve	External	✓	-
	_approve	Internal	✓	
	approveContractContingency	External	✓	onlyOwner
	transferFrom	External	✓	-

	setInitializer	External	✓	onlyOwner
	isExcludedFromProtection	External		-
	setExcludedFromProtection	External	✓	onlyOwner
	getCirculatingSupply	Public		-
	removeSniper	External	✓	onlyOwner
	setProtectionSettings	External	✓	onlyOwner
	excludePresaleAddresses	External	✓	onlyOwner
	_hasLimits	Internal		
	_transfer	Internal	✓	
	_checkLiquidityAdd	Internal	✓	
	enableTrading	Public	✓	onlyOwner
	sweepContingency	External	✓	onlyOwner
	multiSendTokens	External	✓	onlyOwner
	finalizeTransfer	Internal	✓	

# Contract Flow



## Summary

Artlux is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.

## Disclaimer

The information provided in this report does not constitute investment, financial or trading advice and you should not treat any of the document's content as such. 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 Cyberscope's prior written consent. 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 regarded as an indication of the economics or value of any "product" or "asset" created by any team or project that contracts Cyberscope to perform a security assessment. This document 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 report should not be used in any way to make decisions around investment or involvement with any particular project. This report represents an extensive assessment 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.

Blockchain technology and cryptographic assets present a high level of ongoing risk. Cyberscope's position is that each company and individual are responsible for their own due diligence and continuous security. Cyberscope's goal is to help reduce the attack vectors and the high level of variance associated with utilizing new and consistently changing technologies and in no way claims any guarantee of security or functionality of the technology we agree to analyze. The assessment services provided by Cyberscope are subject to dependencies and are under continuing development. You agree that your access and/or use including but not limited to any services reports and materials will be at your sole risk on an as-is where-is and as-available basis. Cryptographic tokens are emergent technologies and carry with them high levels of technical risk and uncertainty. The assessment reports could include false positives, false negatives and other unpredictable results. The services may access and depend upon multiple layers of third parties.



## About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



The Cyberscope team

<https://www.cyberscope.io>