



Cyberscope

# Audit Report

# **Ethereal**

November 2022

SHA256 6c4d5e1068015140bd1ca98a1a73a8da1a19a655bb5265407612fec088f82a8

# Table of Contents

<b>Table of Contents</b>	<b>1</b>
<b>Contract Review</b>	<b>3</b>
<b>Source Files</b>	<b>3</b>
<b>Audit Updates</b>	<b>3</b>
<b>Contract Analysis</b>	<b>4</b>
<b>Contract Diagnostics</b>	<b>5</b>
<b>L02 - State Variables could be Declared Constant</b>	<b>6</b>
Description	6
Recommendation	6
<b>L04 - Conformance to Solidity Naming Conventions</b>	<b>7</b>
Description	7
Recommendation	7
<b>L05 - Unused State Variable</b>	<b>8</b>
Description	8
Recommendation	8
<b>L12 - Using Variables before Declaration</b>	<b>9</b>
Description	9
Recommendation	9
<b>L14 - Uninitialized Variables in Local Scope</b>	<b>10</b>
Description	10
Recommendation	10
<b>Contract Functions</b>	<b>11</b>
<b>Contract Flow</b>	<b>14</b>
<b>Domain Info</b>	<b>15</b>
<b>Summary</b>	<b>16</b>
<b>Disclaimer</b>	<b>17</b>



## Contract Review

<b>Contract Name</b>	Ethereal
<b>Compiler Version</b>	v0.8.17+commit.8df45f5f
<b>Testing Deploy</b>	<a href="https://testnet.bscscan.com/token/0xcaF7105D6e36Ee824aa0C278F56A2738069df711">https://testnet.bscscan.com/token/0xcaF7105D6e36Ee824aa0C278F56A2738069df711</a>
<b>Symbol</b>	2Real
<b>Decimals</b>	18
<b>Total Supply</b>	660,000,000
<b>Domain</b>	etherealnodelist.io

## Source Files

<b>Filename</b>	<b>SHA256</b>
<b>contract.sol</b>	6c4d5e1068015140bd1ca98a1a73a8da1a19a655bb5265407612fec088f82a8

## Audit Updates

<b>Initial Audit</b>	20th November 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#L114,102
<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#L109,33,112,111,120,110,108,268
<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.

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

### Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions>.



## L05 - Unused State Variable

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L102
<b>Status</b>	Unresolved

### Description

There are segments that contain unused state variables.

```
timeSinceLastPair
```

### Recommendation

Remove unused state variables.

## L12 - Using Variables before Declaration

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L363
<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#L363,362
<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.

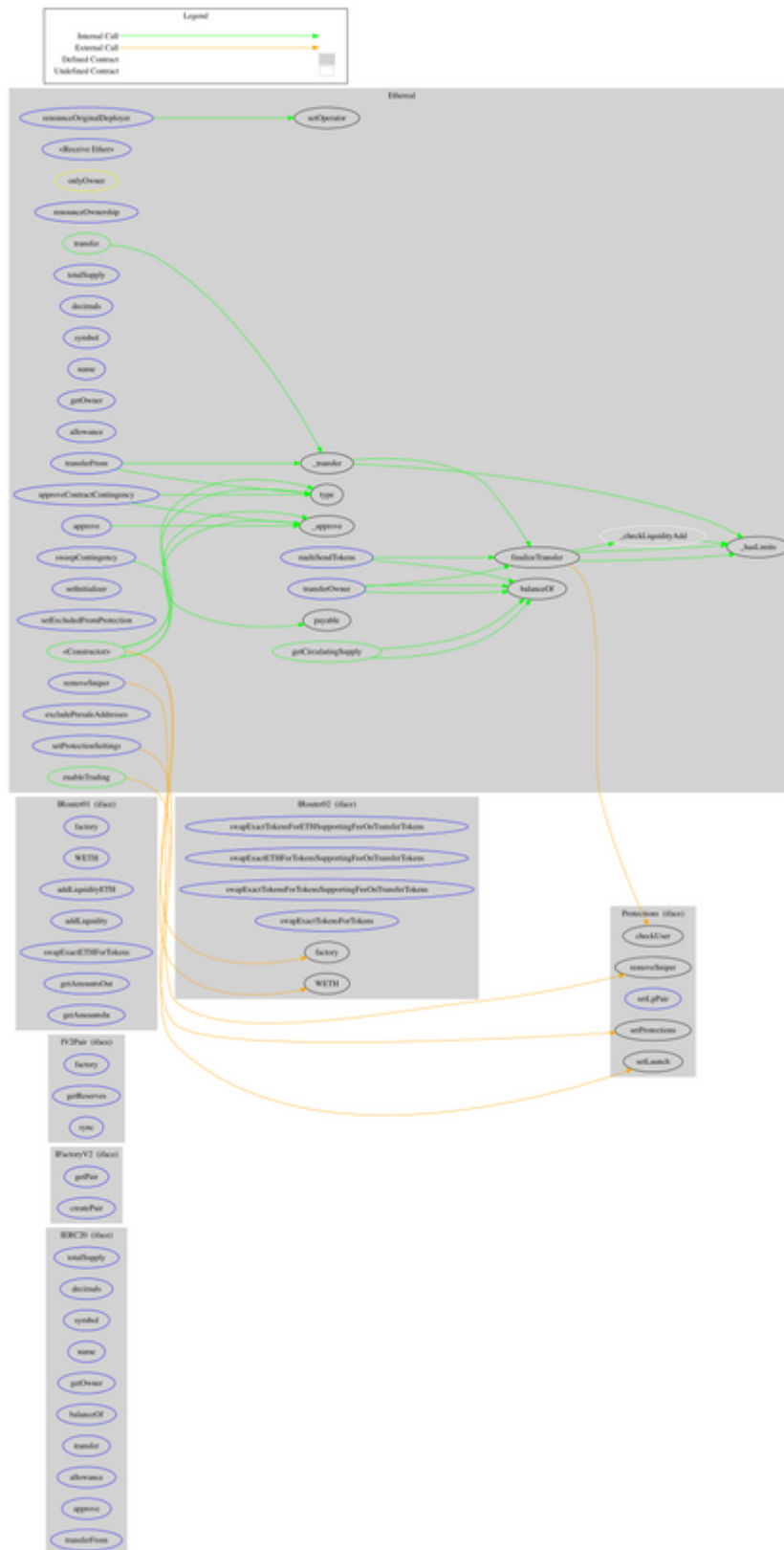
# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	getOwner	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IFactoryV2	Interface			
	getPair	External		-
	createPair	External	✓	-
IV2Pair	Interface			
	factory	External		-
	getReserves	External		-
	sync	External	✓	-
IRouter01	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>Ethereal</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
	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



## Domain Info

<b>Domain Name</b>	etherealnodez.io
<b>Registry Domain ID</b>	5a003bb06fc3406293c6bdee753f47b8-DONUTS
<b>Creation Date</b>	2022-09-16T02:20:31Z
<b>Updated Date</b>	2022-10-19T23:16:40Z
<b>Registry Expiry Date</b>	2023-09-16T02:20:31Z
<b>Registrar WHOIS Server</b>	whois.godaddy.com/
<b>Registrar URL</b>	<a href="http://www.godaddy.com/domains/search.aspx?ci=8990">http://www.godaddy.com/domains/search.aspx?ci=8990</a>
<b>Registrar</b>	GoDaddy.com, LLC
<b>Registrar IANA ID</b>	146

The domain was created 2 months before the creation of the audit. It will expire in 10 months.

There is no public billing information, the creator is protected by the privacy settings.



## Summary

Ethereal 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

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## 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>