

Cyberscope

Audit Report

Swap TC

May 2022

Type	BEP20
Network	BSC
Address	0x7Ad011d2d553Fd166b49bF3C7D1Ac99B7A6edEB8
Audited by	© cyberscope

Table of Contents

Table of Contents 1
Contract Review 3
Source Files 3
Audit Updates 3
Contract Analysis 4
BC - Blacklisted Contracts 5
Description 5
Recommendation 5
Contract Diagnostics 6
CO - Code Optimization 7
Description 7
Recommendation 7
L01 - Public Function could be Declared External 8
Description 8
Recommendation 8
L04 - Conformance to Solidity Naming Conventions 9
Description 9
Recommendation 9
L12 - Using Variables before Declaration 10
Description 10
Recommendation 10
L14 - Uninitialized Variables in Local Scope 11
Description 11
Recommendation 11
Contract Functions 12
Contract Flow 19

Domain Info 20

Summary 21

Disclaimer 22

About Cyberscope 23

Contract Review

Contract Name	BNBDividendPayingERC20Token
Compiler Version	v0.8.11+commit.d7f03943
Optimization	200 runs
Licence	MIT
Explorer	https://bscscan.com/token/0x7Ad011d2d553Fd166b49bF3C7D1Ac99B7A6edEB8
Symbol	SWAPTC
Decimals	9
Total Supply	1,000,000,000,000
Domain	swaptc.com

Source Files

Filename	**SHA256**
contract.sol	ba05a63f48ac7ec7a2031064d1507afe15352c7eaa790eb6eb30b2cd8736f2c1

Audit Updates

Initial Audit	13th April 2022
Corrected	15th May 2022

Contract Analysis

- The contract supports fees proportional to the weeks that have elapsed.
- It contains a default configuration of weekly fees from the first until the 19th week.
- The weekly basic fee is applied to the sell and transfer transactions.
- The buy transactions have a dedicated fee.
- The buy fees cannot be configured more than 5%.
- The weekly fees cannot be configured more than 30%.

Critical Medium Minor Pass

Severity	Code	Description
●	ST	Contract Owner is not able to stop or pause transactions
●	OCTD	Contract Owner is not able to transfer tokens from specific address
●	OTUT	Owner Transfer User's Tokens
●	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)
●	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
●	MT	Contract Owner is not able to mint new tokens
●	BT	Contract Owner is not able to burn tokens from specific wallet
●	BC	Contract Owner is not able to blacklist wallets from selling

BC - Blacklisted Contracts

Criticality	medium
Location	contract.sol#L1018

Description

The contract owner has the authority to stop contracts from transactions. The owner may take advantage of it by calling the `embargoAddress` function.

```
if (from != owner() && to != owner()) {
    require(!embargoedAddresses[from] && !embargoedAddresses[to], "Cannot
associate with embargoed users");
}
```

Recommendation

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

Contract Diagnostics

Critical Medium Minor

Severity	Code	Description
	CO	Code Optimization
	L01	Public Function could be Declared External
	L04	Conformance to Solidity Naming Conventions
	L12	Using Variables before Declaration
	L14	Uninitialized Variables in Local Scope

CO - Code Optimization

Criticality	minor
Location	contract.sol#L1059

Description

There are code segments that could be optimized. A segment may be optimized so that it becomes a smaller size, consumes less memory, executes more rapidly, or performs fewer operations.

The *currentFeeSet* variable is declared as *storage* but it is used as *memory* in the contract.

```
FeeSet storage currentFeeSet;

if (automatedMarketMakerPairs[from]) {
    currentFeeSet = buyFee;
} else {
    uint256 holdWeeks = (block.timestamp - effectiveObtainTime[from]) / oneWeek;
    if (holdWeeks >= weeklyFee.length) {
        holdWeeks = weeklyFee.length - 1;
    }
    currentFeeSet = weeklyFee[holdWeeks];
    emit FeeChargedAfterHoldingFor(from, holdWeeks, effectiveObtainTime[from],
block.timestamp);
}

uint256 burnFees = (amount * currentFeeSet.burnFee) / 1000;
uint256 liquidityFees = (amount * currentFeeSet.liquidityFee) / 1000;
uint256 holderFees = (amount * currentFeeSet.holderFee) / 1000;
```

Recommendation

Rewrite some code segments so the runtime will be more performant.

L01 - Public Function could be Declared External

Criticality	minor
Location	contract.sol#L681

Description

Public functions that are never called by the contract should be declared external to save gas.

```
withdrawDividend
```

Recommendation

Use the external attribute for functions never called from the contract.

L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	contract.sol#L149,151,169,221,615,619,623,627,568,710,943,971

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.

```
_swapTokensAtAmount
_address
_account
magnitude
_owner
WETH
MINIMUM_LIQUIDITY
PERMIT_TYPEHASH
DOMAIN_SEPARATOR
...
```

Recommendation

Follow the Solidity naming convention.
https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions

L12 - Using Variables before Declaration

Criticality	minor
Location	contract.sol#L1089

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.

```
claims
lastProcessedIndex
iterations
```

Recommendation

The variables should be declared before any usage of them.

L14 - Uninitialized Variables in Local Scope

Criticality	minor
Location	contract.sol#L1089

Description

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

```
lastProcessedIndex
claims
iterations
```

Recommendation

All the local scoped variables should be initialized.

Contract Functions

Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
Ownable	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	External	✓	onlyOwner
	transferOwnership	External	✓	onlyOwner
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IERC20Metadata	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
SafeMathInt	Library			
	toUint256Safe	Internal		
SafeMathUint	Library			
	toInt256Safe	Internal		

StringTools	Library			
	appendString	Internal		
	appendString	Internal		
	appendString	Internal		
	toString	Internal		
IUniswapV2Pair	Interface			
	name	External		-
	symbol	External		-
	decimals	External		-
	totalSupply	External		-
	balanceOf	External		-
	allowance	External		-
	approve	External	✓	-
	transfer	External	✓	-
	transferFrom	External	✓	-
	DOMAIN_SEPARATOR	External		-
	PERMIT_TYPEHASH	External		-
	nonces	External		-
	permit	External	✓	-
	MINIMUM_LIQUIDITY	External		-
	factory	External		-
	token0	External		-
	token1	External		-
	getReserves	External		-
	price0CumulativeLast	External		-
	price1CumulativeLast	External		-
	kLast	External		-
	mint	External	✓	-
	burn	External	✓	-
	swap	External	✓	-
	skim	External	✓	-
	sync	External	✓	-
	initialize	External	✓	-

IUniswapV2Factory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
IUniswapV2Router01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-
	removeLiquidityWithPermit	External	✓	-
	removeLiquidityETHWithPermit	External	✓	-
	swapExactTokensForTokens	External	✓	-
	swapTokensForExactTokens	External	✓	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	✓	-
	swapExactTokensForETH	External	✓	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-
	getAmountIn	External		-
	getAmountsOut	External		-
	getAmountsIn	External		-
IUniswapV2Router02	Interface	IUniswapV2Router01		

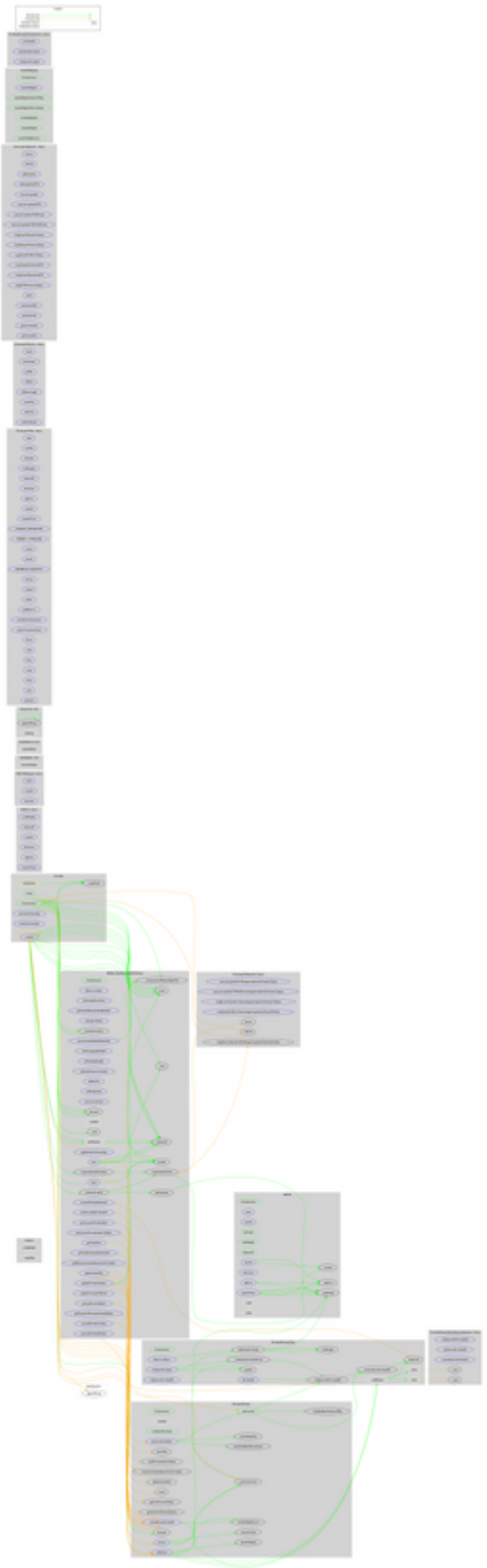
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
ERC20	Implementation	Context, IERC20, IERC20Metadata		
	<Constructor>	Public	✓	-
	name	External		-
	symbol	External		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	
	_approve	Internal	✓	
IterableMapping	Implementation			
	<Constructor>	Public	✓	-
	iterableMapGet	External		-
	iterableMapGetIndexOfKey	Public		-
	iterableMapGetKeyAtIndex	Public		-
	iterableMapSize	Public		-
	iterableMapSet	Public	✓	-

	iterableMapRemove	Public	✓	-
DividendPayingTokenOptionalInterface	Interface			
	withdrawableDividendOf	External		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	External		-
DividendPayingTokenInterface	Interface			
	dividendOf	External		-
	distributeDividends	External	Payable	-
	withdrawDividend	External	✓	-
DividendPayingToken	Implementation	ERC20, DividendPayingTokenInterface, DividendPayingTokenOptionalInterface		
	<Constructor>	Public	✓	ERC20
	<Receive Ether>	External	Payable	-
	distributeDividends	Public	Payable	-
	withdrawDividend	External	✓	-
	_withdrawDividendOfUser	Internal	✓	
	dividendOf	External		-
	withdrawableDividendOf	Public		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	Public		-
	_mint	Internal	✓	
	_burn	Internal	✓	
	_setBalance	Internal	✓	
DividendTracker	Implementation	DividendPayingToken, IterableMap		

		ping, Ownable		
	<Constructor>	Public	✓	DividendPayingToken
	_transfer	Internal		
	withdrawDividend	Public		-
	excludeFromDividends	External	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getLastProcessedIndex	External		-
	getNumberOfTokenHolders	External		-
	getAccount	Public		-
	getAccountAtIndex	External		-
	canAutoClaim	Private		
	setBalance	External	✓	onlyOwner
	process	External	✓	-
	processAccount	Public	✓	onlyOwner
BNBDividendPayingERC20Token	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	<Receive Ether>	External	Payable	-
	isExcludedFromFees	External		-
	getNumOfWeeksTokenHeldFor	External		-
	embargoAddress	External	✓	onlyOwner
	excludeFromFees	Public	✓	onlyOwner
	excludeFromDividends	External	✓	onlyOwner
	setIsSwappingEnabled	External	✓	onlyOwner
	setTradingEnabled	External	✓	onlyOwner
	setSwapTokensAtAmount	External	✓	onlyOwner
	setBuyFees	External	✓	onlyOwner
	setWeeklyFees	External	✓	onlyOwner
	recoverLostCoins	External	✓	onlyOwner
	subTransfer	Internal	✓	
	_transfer	Internal	✓	
	burn	External	✓	-
	updateDividendTracker	External	✓	onlyOwner

	updateGasForProcessing	External	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getClaimWait	External		-
	getTotalDividendsDistributed	External		-
	withdrawableDividendOf	External		-
	dividendTokenBalanceOf	External		-
	getAccountDividendsInfo	External		-
	getAccountDividendsInfoAtIndex	External		-
	processDividendTracker	External	✓	-
	claim	External	✓	-
	getLastProcessedIndex	External		-
	getNumberOfDividendTokenHolders	External		-
	getMinimumTokenBalanceForDividends	External		-
	swapAndSendDividends	Private	✓	
	updateUniswapV2Router	External	✓	onlyOwner
	setAutomatedMarketMakerPair	External	✓	onlyOwner
	_setAutomatedMarketMakerPair	Private	✓	
	swapAndLiquify	Private	✓	
	swapTokensForEth	Private	✓	
	addLiquidity	Private	✓	

Contract Flow



Domain Info

Domain Name	swaptc.com
Registry Domain ID	2672230778_DOMAIN_COM-VRSN
Creation Date	2022-01-31T22:36:29Z
Updated Date	2022-01-31T22:53:31Z
Registry Expiry Date	2023-01-31T22:36:29Z
Registrar WHOIS Server	whois.1api.net
Registrar URL	http://www.1api.net
Registrar	1API GmbH
Registrar IANA ID	1387

The domain has been 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

The Smart Contract analysis reported one medium severity issue. The contract owner has the authority to blacklist addresses. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats. There is also a limit of max 30% fees.

Disclaimer

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment.

Cyberscope team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document. Always Do your own research and protect yourselves from being scammed.

The Cyberscope team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools. Under no circumstances did Cyberscope receive a payment to manipulate those results or change the awarding badge that we will be adding in our website.

Always Do your own research and protect yourselves from scams. This document should not be presented as a reason to buy or not buy any particular token.

The Cyberscope team disclaims any liability for the resulting losses.

About Cyberscope

Coinscope audit and K.Y.C. service has been rebranded to Cyberscope.

Coinscope is the leading early coin listing, voting and auditing authority firm. The audit process is analyzing and monitoring many aspects of the project. That way, it gives the community a good sense of security using an informative report and a generic score.

Cyberscope and Coinscope are aiming to make crypto discoverable and efficient globally. They provides all the essential tools to assist users draw their own conclusions.



The Cyberscope team

https://www.cyberscope.io

Cyberscope

Audit Report

Swap TC

April 2022

Type	BEP20
Network	BSC
Address	0x2E1EfFAd54bE5013A6b7DD0a6D26fB21d0e8f7A0
Audited by	© cyberscope

Table of Contents

Table of Contents 1
Contract Review 3
Source Files 3
Audit Updates 3
Contract Analysis 4
ST - Stop Transactions 5
Description 5
Recommendation 5
Contract Diagnostics 6
L01 - Public Function could be Declared External 7
Description 7
Recommendation 7
L04 - Conformance to Solidity Naming Conventions 8
Description 8
Recommendation 8
L05 - Unused State Variable 9
Description 9
Recommendation 9
L07 - Missing Events Arithmetic 10
Description 10
Recommendation 10
L08 - Tautology or Contradiction 11
Description 11
Recommendation 11
L09 - Dead Code Elimination 12
Description 12

Recommendation 12
L12 - Using Variables before Declaration 13
Description 13
Recommendation 13
L14 - Uninitialized Variables in Local Scope 14
Description 14
Recommendation 14
L15 - Local Scope Variable Shadowing 15
Description 15
Recommendation 15
Contract Functions 16
Contract Flow 24
Domain Info 25
Summary 26
Disclaimer 27
About Cyberscope 28

Contract Review

Contract Name	BNBDividendPayingERC20Token
Compiler Version	v0.8.11+commit.d7f03943
Optimization	1000 runs
Licence	MIT
Explorer	https://bscscan.com/token/0x2E1EfFAd54bE5013A6b7DD0a6D26fB21d0e8f7A0
Symbol	SWAPTC
Decimals	9
Total Supply	1,000,000,000,000
Domain	swaptc.com

Source Files

Filename	**SHA256**
contract.sol	7f3f6d216b98924dc40ce78a48e26dac4da8727cd1e8907fd62bede985554d18

Audit Updates

Initial Audit	13th April 2022
Corrected	

Contract Analysis

- The contract supports fees proportional to the weeks that have elapsed.
- It contains a default configuration of weekly fees from the first until the 19th week.
- The weekly basic fee is applied to the sell and transfer transactions.
- The buy transactions have a dedicated fee.
- The buy fees cannot be configured more than 5%.
- The weekly fees cannot be configured more than 30%.

Critical Medium Minor Pass

Severity	Code	Description
●	ST	Contract Owner is not able to stop or pause transactions
●	OCTD	Contract Owner is not able to transfer tokens from specific address
●	OTUT	Owner Transfer User's Tokens
●	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)
●	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
●	MT	Contract Owner is not able to mint new tokens
●	BT	Contract Owner is not able to burn tokens from specific wallet
●	BC	Contract Owner is not able to blacklist wallets from selling

ST - Stop Transactions

Criticality	minor
Location	contract.sol#L1

Description

The contract owner has the authority to stop transactions for all users excluding the owner. The owner may take advantage of it by setting the `gasForProcessing` to a high value. As a result, the callers will be unable to pay the fee for the transfer.

```
uint256 requiredGasValue = gasForProcessing + 400000;
require(
    gasleft() >= requiredGasValue,
    "Insufficient Gas. Try again with gasLimt of at least
".appendString((requiredGasValue + 100000).toString())
);
```

Recommendation

The contract could embody a check for not allowing setting the _maxTxAmount less than a reasonable amount. A suggested implementation could check that the maximum amount should be more than a fixed percentage of the total supply.

The team should carefully manage the private keys of the owner’s account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

Contract Diagnostics

Critical Medium Minor

Severity	Code	Description
	L01	Public Function could be Declared External
	L04	Conformance to Solidity Naming Conventions
	L05	Unused State Variable
	L07	Missing Events Arithmetic
	L08	Tautology or Contradiction
	L09	Dead Code Elimination
	L12	Using Variables before Declaration
	L14	Uninitialized Variables in Local Scope
	L15	Local Scope Variable Shadowing

L01 - Public Function could be Declared External

Criticality	minor
Location	contract.sol#L36,41,479,483,499,504,508,513,589,694,716,724,851,879,1053,1057,1201,1219,1237,1241,1288,1294

Description

Public functions that are never called by the contract should be declared external to save gas.

```
setAutomatedMarketMakerPair
updateUniswapV2Router
dividendTokenBalanceOf
withdrawableDividendOf
updateGasForProcessing
updateDividendTracker
getNumOfWeeksTokenHeldFor
isExcludedFromFees
process
...
```

Recommendation

Use the external attribute for functions never called from the contract

L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	contract.sol#L239,241,259,311,716,720,724,728,669,826,1057,1077

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.

```
_swapTokensAtAmount
_address
_account
magnitude
_owner
WETH
MINIMUM_LIQUIDITY
PERMIT_TYPEHASH
DOMAIN_SEPARATOR
...
```

Recommendation

Follow the Solidity naming convention.
https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions

L05 - Unused State Variable

Criticality	minor
Location	contract.sol#L79

Description

There are segments that contain unused state variables.

```
MAX_INT256
```

Recommendation

Remove unused state variables.

L07 - Missing Events Arithmetic

Criticality	minor
Location	contract.sol#L1077

Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
swapTokensAtAmount = _swapTokensAtAmount
```

Recommendation

Emit an event for critical parameter changes.

L08 - Tautology or Contradiction

Criticality	minor
Location	contract.sol#L1081,1090

Description

Detects expressions that are tautologies or contradictions. For instance, an uint variable will always be greater than or equal to zero.

```
require(bool,string)((total >= 0) && (total <= 300),Invalid total week fee.)
require(bool,string)((total >= 0) && (total <= 50),Invalid total buy fee.)
```

Recommendation

Fix the incorrect comparison by changing the value type or the comparison.

L09 - Dead Code Elimination

Criticality	minor
Location	contract.sol#L733,105,208

Description

Functions that are not used in the contract, and make the code's size bigger.

```
toString
abs
_transfer
```

Recommendation

Remove unused functions.

L12 - Using Variables before Declaration

Criticality	minor
Location	contract.sol#L1191

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.

```
lastProcessedIndex
iterations
claims
```

Recommendation

The variables should be declared before any usage of them.

L14 - Uninitialized Variables in Local Scope

Criticality	minor
Location	contract.sol#L1191

Description

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

```
lastProcessedIndex
claims
iterations
```

Recommendation

All the local scoped variables should be initialized.

L15 - Local Scope Variable Shadowing

Criticality	minor
Location	contract.sol#L678,786,982,983

Description

The are variables that are defined in the local scope containing the same name from an upper scope.

```
_totalSupply
_decimals
_symbol
_name
```

Recommendation

The local variables should have different names from the upper scoped variables.

Contract Functions

Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
Ownable	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IERC20Metadata	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
SafeMathInt	Library			
	mul	Internal		
	div	Internal		
	sub	Internal		
	add	Internal		

	abs	Internal		
	toUint256Safe	Internal		
SafeMathUint	Library			
	toInt256Safe	Internal		
SafeMath	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		
	mod	Internal		
StringTools	Library			
	appendString	Internal		
	appendString	Internal		
	appendString	Internal		
	toString	Internal		
	toString	Internal		
IUniswapV2Pair	Interface			
	name	External		-
	symbol	External		-
	decimals	External		-
	totalSupply	External		-
	balanceOf	External		-
	allowance	External		-
	approve	External	✓	-
	transfer	External	✓	-
	transferFrom	External	✓	-
	DOMAIN_SEPARATOR	External		-
	PERMIT_TYPEHASH	External		-

	nonces	External		-
	permit	External	✓	-
	MINIMUM_LIQUIDITY	External		-
	factory	External		-
	token0	External		-
	token1	External		-
	getReserves	External		-
	price0CumulativeLast	External		-
	price1CumulativeLast	External		-
	kLast	External		-
	mint	External	✓	-
	burn	External	✓	-
	swap	External	✓	-
	skim	External	✓	-
	sync	External	✓	-
	initialize	External	✓	-
IUniswapV2Factory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
IUniswapV2Router01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-

	removeLiquidityWithPermit	External	✓	-
	removeLiquidityETHWithPermit	External	✓	-
	swapExactTokensForTokens	External	✓	-
	swapTokensForExactTokens	External	✓	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	✓	-
	swapExactTokensForETH	External	✓	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-
	getAmountIn	External		-
	getAmountsOut	External		-
	getAmountsIn	External		-
IUniswapV2Router02	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
ERC20	Implementation	Context, IERC20, IERC20Metadata		
	<Constructor>	Public	✓	-
	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-

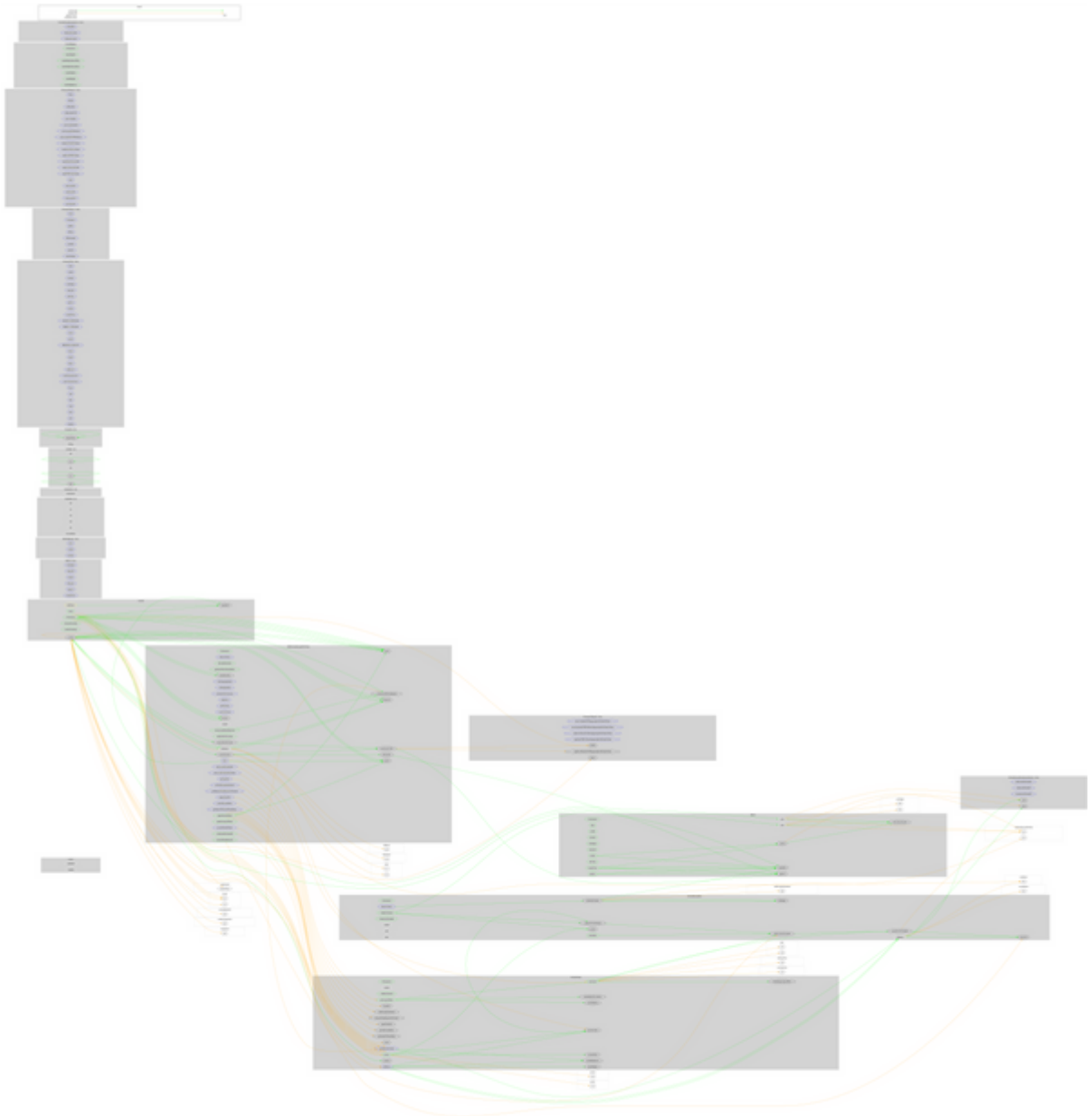
	allowance	Public		-
	approve	Public	✓	-
	transferFrom	Public	✓	-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	
	_approve	Internal	✓	
	_beforeTokenTransfer	Internal	✓	
IterableMapping	Implementation			
	<Constructor>	Public	✓	-
	iterableMapGet	Public		-
	iterableMapGetIndexOfKey	Public		-
	iterableMapGetKeyAtIndex	Public		-
	iterableMapSize	Public		-
	iterableMapSet	Public	✓	-
	iterableMapRemove	Public	✓	-
DividendPayingTokenOptionalInterface	Interface			
	withdrawableDividendOf	External		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	External		-
DividendPayingTokenInterface	Interface			
	dividendOf	External		-
	distributeDividends	External	Payable	-
	withdrawDividend	External	✓	-
DividendPayingToken	Implementation	ERC20, DividendPayingTokenInterface, DividendPayingTokenOp		

		tionalInterface		
	<Constructor>	Public	✓	ERC20
	<Receive Ether>	External	Payable	-
	distributeDividends	Public	Payable	-
	withdrawDividend	Public	✓	-
	_withdrawDividendOfUser	Internal	✓	
	dividendOf	Public		-
	withdrawableDividendOf	Public		-
	withdrawnDividendOf	Public		-
	accumulativeDividendOf	Public		-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_burn	Internal	✓	
	_setBalance	Internal	✓	
DividendTracker	Implementation	DividendPayingToken, IterableMapping, Ownable		
	<Constructor>	Public	✓	DividendPayingToken
	_transfer	Internal		
	withdrawDividend	Public		-
	excludeFromDividends	External	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getLastProcessedIndex	External		-
	getNumberOfTokenHolders	External		-
	getAccount	Public		-
	getAccountAtIndex	Public		-
	canAutoClaim	Private		
	setBalance	External	✓	onlyOwner
	process	Public	✓	-
	processAccount	Public	✓	onlyOwner

BNBDividendPayingERC20Token	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	<Receive Ether>	External	Payable	-
	isExcludedFromFees	Public		-
	getNumOfWeeksTokenHeldFor	Public		-
	excludeFromFees	Public	✓	onlyOwner
	setIsSwappingEnabled	External	✓	onlyOwner
	setTradingEnabled	External	✓	onlyOwner
	setSwapTokensAtAmount	External	✓	onlyOwner
	setBuyFees	External	✓	onlyOwner
	setWeeklyFees	External	✓	onlyOwner
	recoverLostCoins	External	✓	onlyOwner
	subTransfer	Internal	✓	
	_transfer	Internal	✓	
	updateDividendTracker	Public	✓	onlyOwner
	updateGasForProcessing	Public	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getClaimWait	External		-
	getTotalDividendsDistributed	External		-
	withdrawableDividendOf	Public		-
	dividendTokenBalanceOf	Public		-
	getAccountDividendsInfo	External		-
	getAccountDividendsInfoAtIndex	External		-
	processDividendTracker	External	✓	-
	claim	External	✓	-
	getLastProcessedIndex	External		-
	getNumberOfDividendTokenHolders	External		-
	getMinimumTokenBalanceForDividends	External		-
	swapAndSendDividends	Private	✓	
	updateUniswapV2Router	Public	✓	onlyOwner
	setAutomatedMarketMakerPair	Public	✓	onlyOwner
	_setAutomatedMarketMakerPair	Private	✓	
	swapAndLiquify	Private	✓	

	swapTokensForEth	Private	✓	
	addLiquidity	Private	✓	

Contract Flow



Domain Info

Domain Name	swaptc.com
Registry Domain ID	2672230778_DOMAIN_COM-VRSN
Creation Date	2022-01-31T22:36:29Z
Updated Date	2022-01-31T22:53:31Z
Registry Expiry Date	2023-01-31T22:36:29Z
Registrar WHOIS Server	whois.1api.net
Registrar URL	http://www.1api.net
Registrar	1API GmbH
Registrar IANA ID	1387

The domain has been 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

Swap TC 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 has the ability to stop the transactions for everybody. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions. There is also a limit of max 30% fees.

Disclaimer

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment.

Cyberscope team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document. Always Do your own research and protect yourselves from being scammed.

The Cyberscope team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools. Under no circumstances did Cyberscope receive a payment to manipulate those results or change the awarding badge that we will be adding in our website.

Always Do your own research and protect yourselves from scams. This document should not be presented as a reason to buy or not buy any particular token.

The Cyberscope team disclaims any liability for the resulting losses.

About Cyberscope

Coinscope audit and K.Y.C. service has been rebranded to Cyberscope.

Coinscope is the leading early coin listing, voting and auditing authority firm. The audit process is analyzing and monitoring many aspects of the project. That way, it gives the community a good sense of security using an informative report and a generic score.

Cyberscope and Coinscope are aiming to make crypto discoverable and efficient globally. They provides all the essential tools to assist users draw their own conclusions.



The Cyberscope team

https://www.cyberscope.io