



Cyberscope

Audit Report GateSwap

January 2022

Type	BEP20
Network	BSC
Address	0x70617Fe606b22B5684a298A5B470c6209D63c555
Audited by	© cyberscope



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Contract Review

Contract Name	GateSwap Audit
Compiler Version	v0.8.17+commit.8df45f5f
Optimization	5000 runs
Licence	MIT
Explorer	https://bscscan.com/address/0xB9EcA12763776C23cd8abd419e8747F338AfaB4c#code
Symbol	\$GATE
Decimals	18
Total Supply	50,000,000
Domain	https://gateswap.net/

Source Files

Filename	SHA256
contract.sol	4bded89932c8814a77cabf4e04fef2ef817c6da28ad9ef7fc7aba557e6eb9a0

Audit Updates

Initial Audit	November 23, 2022
Corrected	20th October 2022



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
●	L01	Public Function could be Declared External	Unresolved
●	L02	State Variables could be Declared Constant	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L05	Unused State Variable	Unresolved
●	L07	Missing Events Arithmetic	Unresolved
●	L12	Using Variables before Declaration	Unresolved
●	L14	Uninitialized Variables in Local Scope	Unresolved



L01 - Public Function could be Declared External

Criticality	minor / informative
Location	contract.sol#L223,276,377
Status	Unresolved

Description

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

```
transfer  
getCirculatingSupply  
enableTrading
```

Recommendation

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



L02 - State Variables could be Declared Constant

Criticality	minor / informative
Location	contract.sol#L115,102
Status	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

Criticality	minor / informative
Location	contract.sol#L33,284,109,110,111,112,113,124
Status	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
_antiSnipe
_antiBlock
startingSupply
_name
_symbol
_decimals
_tTotal
_hasLiqBeenAdded
```

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 / informative
Location	contract.sol#L102
Status	Unresolved

Description

There are segments that contain unused state variables.

```
timeSinceLastPair
```

Recommendation

Remove unused state variables.



L07 - Missing Events Arithmetic

Criticality	minor / informative
Location	contract.sol#L288,293
Status	Unresolved

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.

```
_maxTxAmount = (_tTotal * percent) / divisor  
_maxWalletSize = (_tTotal * percent) / divisor
```

Recommendation

Emit an event for critical parameter changes.



L12 - Using Variables before Declaration

Criticality	minor / informative
Location	contract.sol#L403
Status	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

Criticality	minor / informative
Location	contract.sol#L403,402
Status	Unresolved

Description

The 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

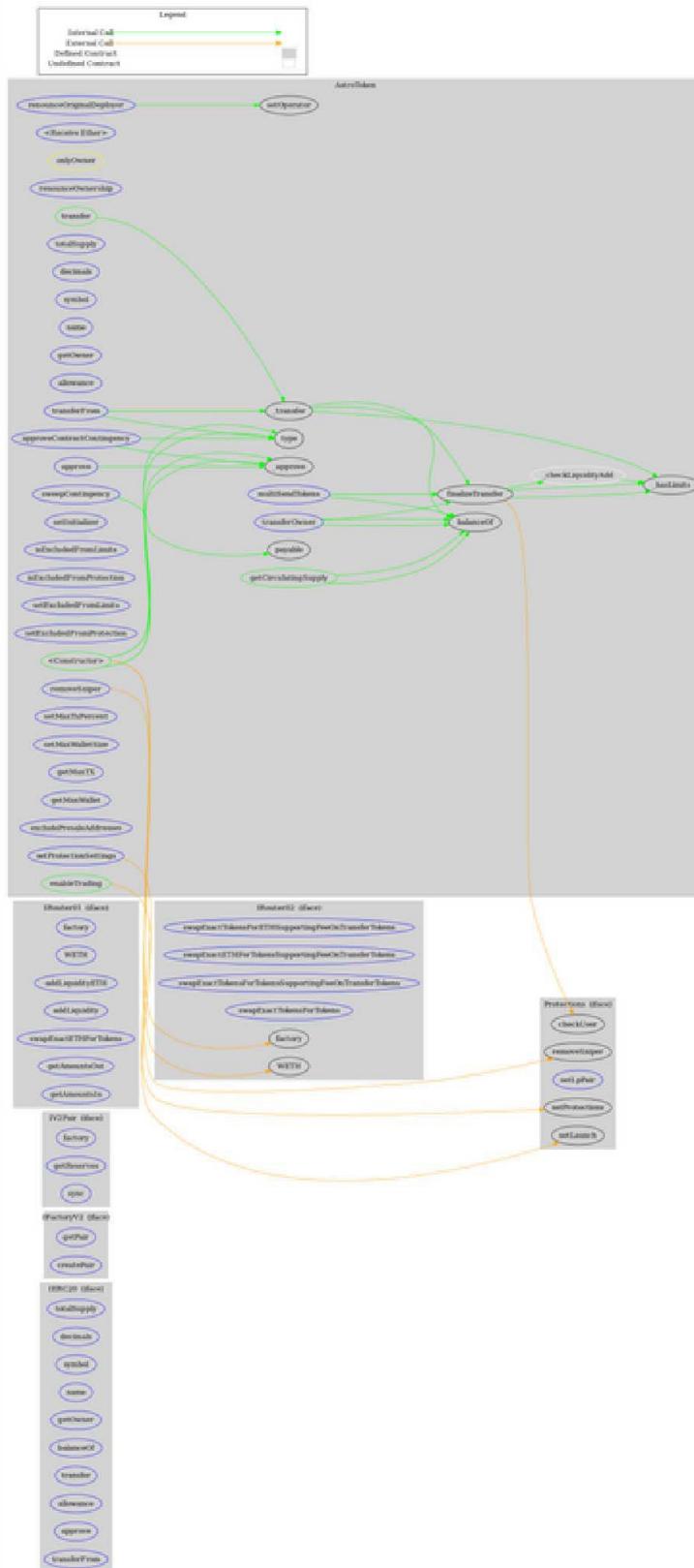
Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
	totalSupply	External	-	
	decimals	External	-	
	symbol	External	-	
	name	External	-	
	getOwner	External	-	
	balanceOf	External	-	
	transfer	External	✓	-
	allowance	External	-	
	approve	External	✓	-
	transferFrom	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	-	

IRouter02	Interface	IRouter01		
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokens	External	✓	-
Protections	Interface			
	checkUser	External	✓	-
	setLaunch	External	✓	-
	setLpPair	External	✓	-
	setProtections	External	✓	-
	removeSniper	External	✓	-
AstroToken	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
	isExcludedFromLimits	External	-	-
	isExcludedFromProtection	External	-	-
	setExcludedFromLimits	External	✓	onlyOwner
	setExcludedFromProtection	External	✓	onlyOwner
	getCirculatingSupply	Public	-	-
	removeSniper	External	✓	onlyOwner
	setProtectionSettings	External	✓	onlyOwner
	setMaxTxPercent	External	✓	onlyOwner
	setMaxWalletSize	External	✓	onlyOwner
	getMaxTX	External	-	-
	getMaxWallet	External	-	-
	excludePresaleAddresses	External	✓	onlyOwner
	_hasLimits	Internal	-	-
	_transfer	Internal	✓	-
	_checkLiquidityAdd	Internal	✓	-
	enableTrading	Public	✓	onlyOwner
	sweepContingency	External	✓	onlyOwner
	multiSendTokens	External	✓	onlyOwner
	finalizeTransfer	Internal	✓	-

Contract Flow



Domain Info

Domain Name	https://gateswap.net/
Registry Domain ID	4a9c7e203ac04bd38b4b85fb8ed73813-DONUTS
Creation Date	2021-09-11T15:22:26Z
Updated Date	2022-09-12T15:31:32Z
Registry Expiry Date	2023-09-11T15:22:26Z
Registrar WHOIS Server	whois.godaddy.com/
Registrar URL	http://www.godaddy.com/domains/search.aspx?ci=8990
Registrar	GoDaddy.com, LLC
Registrar IANA ID	146

The domain was created about 1 year before the creation of the audit. It will expire in 11 months.

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



Summary

GateSwap 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 disrupt the users' transactions.



Disclaimer

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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 provide all the essential tools to assist users draw their own conclusions.



The Cyberscope team

<https://www.cyberscope.io>