

# Audit Report Justice Legends

December 2021

Type BEP20

Address 0x23189B77FF454C0F20835aA02B481D029701b707

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## **Contract Review**

Contract Name	JusticeLegends
Compiler Version	v0.6.12+commit.27d51765
Optimization	200 runs
Licence	Unlicense
Explorer	https://bscscan.com/token/0x23189B77FF454C0F208 35aA02B481D029701b707
Symbol	JUS
Decimals	9
Total Supply	1,000,000,000
Source	contract.sol
Domain	justicelegends.io

# **Audit Updates**

Initial Audit	23rd December 2021
Corrected	



# **Contract Analysis**

Severity	Code	Description
•	MT	Contract Owner is not able to mint new tokens
•	ВТ	Contract Owner is not able to burn tokens from specific wallet
•	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)
•	ST	Contract Owner is not able to pause transactions for everyone else except him
•	OCTD	Contract Owner is not able to transfer tokens from specific address
•	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
•	ВС	Contract Owner is not able to blacklist wallets from selling



## ST - Stop Transactions

Criticality	medium
Location	https://bscscan.com/address/0x23189B77FF454C0F20835aA02B481D029701b7 07#code#L715

#### 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 \_maxTxAmount to zero.

```
if(from != owner() && to != owner())
    require(amount <= _maxTxAmount, "Transfer amount exceeds the maxTxAmount.");</pre>
```

#### 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.



## ELFM - Exceed Limit Fees Manipulation

Criticality	critical
Location	https://bscscan.com/address/0x23189B77FF454C0F20835aA02B481D029701b7 07#code#L594,L598

#### Description

The contract owner has the authority to increase over the allowed limit of 25%. The owner may take advantage of it by calling the setTaxFeePercent function with a high percentage value.

```
function setTaxFeePercent(uint256 taxFee) external onlyOwner() {
    _taxFee = taxFee;
}
```

#### Recommendation

The contract could embody a check for the maximum acceptable value.

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**

Pass	Name
✓	Integer Underflow
✓	Parity Multisig Bug
✓	Callstack Depth Attack
1	Transaction-Ordering Dependency
✓	Timestamp Dependency
✓	Re-Entrancy



# **Contract Functions**

Contract	Туре	Bases		
	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	<b>√</b>	-
SafeMath	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		
	mod	Internal		
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
Address	Library			
	isContract	Internal		
	sendValue	Internal	<b>✓</b>	
	functionCall	Internal	<b>√</b>	
	functionCall	Internal	<b>√</b>	
	functionCallWithValue	Internal	<b>✓</b>	
	functionCallWithValue	Internal	✓	



	_functionCallWithValue	Private	1	
Ownable	Implementation	Context		
	<constructor></constructor>	Internal	1	
	owner	Public		-
	renounceOwnership	Public	1	onlyOwner
	transferOwnership	Public	1	onlyOwner
	geUnlockTime	Public		-
	lock	Public	1	onlyOwner
	unlock	Public	1	-
IUniswapV2Fa ctory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	1	-
	setFeeToSetter	External	✓	-
IUniswapV2Pai	Interface			
	name	External		-
	symbol	External		-
	decimals	External		-
	totalSupply	External		-
	balanceOf	External		-
	allowance	External		-
	approve	External	✓	-
	transfer	External	✓	-
	transferFrom	External	1	-
	DOMAIN_SEPARATOR	External		-
	PERMIT_TYPEHASH	External		-
	nonces	External		-



	permit	External	1	-
	MINIMUM_LIQUIDITY	External		-
	factory	External		-
	token0	External		-
	token1	External		_
	getReserves	External		_
	price0CumulativeLast	External		_
	price1CumulativeLast	External		_
	kLast			
		External	,	-
	mint	External	<b>✓</b>	-
	burn	External	<b>✓</b>	-
	swap	External	<b>✓</b>	-
	skim	External	✓	-
	sync	External	✓	-
	initialize	External	✓	-
IUniswapV2Ro uter01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	1	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-
	removeLiquidityWithPermit	External	1	-
	removeLiquidityETHWithPermit	External	1	-
	swapExactTokensForTokens	External	<b>✓</b>	-
	swapTokensForExactTokens	External	✓	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	1	-
	swapExactTokensForETH	External	1	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-
	getAmountIn	External		-
	getAmountsOut	External		-



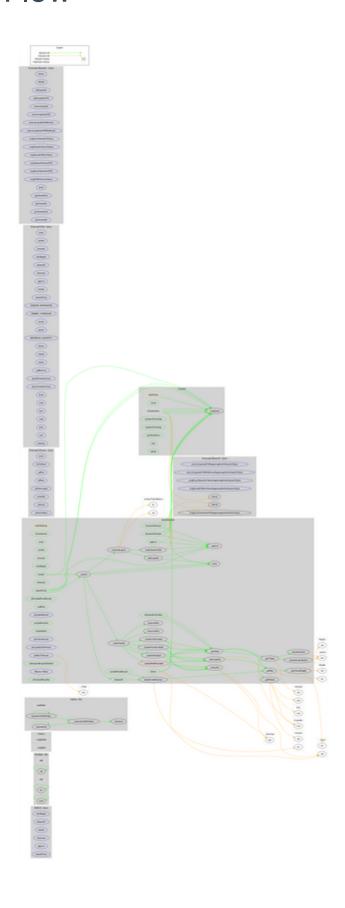
	getAmountsIn	External		-
IUniswapV2Ro uter02	Interface	IUniswapV2 Router01		
	removeLiquidityETHSupportingFeeOn TransferTokens	External	1	-
	removeLiquidityETHWithPermitSuppor tingFeeOnTransferTokens	External	1	-
	swapExactTokensForTokensSupportin gFeeOnTransferTokens	External	<b>✓</b>	-
	swapExactETHForTokensSupportingF eeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingF eeOnTransferTokens	External	✓	-
JusticeLegend s	Implementation	Context, IERC20, Ownable		
	<constructor></constructor>	Public	1	-
	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	1	-
	allowance	Public		-
	approve	Public	1	-
	transferFrom	Public	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	isExcludedFromReward	Public		-
	totalFees	Public		-
	deliver	Public	✓	-
	reflectionFromToken	Public		-
	tokenFromReflection	Public		-
	excludeFromReward	Public	1	onlyOwner
	includeInReward	External	1	onlyOwner
	_transferBothExcluded	Private	1	



excludeFromFee	Public	✓	onlyOwner
includeInFee	Public	<b>✓</b>	onlyOwner
setTaxFeePercent	External	✓	onlyOwner
setLiquidityFeePercent	External	✓	onlyOwner
setMaxTxPercent	External	1	onlyOwner
setSwapAndLiquifyEnabled	Public	1	onlyOwner
<receive ether=""></receive>	External	Payable	-
_reflectFee	Private	1	
_getValues	Private		
_getTValues	Private		
_getRValues	Private		
_getRate	Private		
_getCurrentSupply	Private		
_takeLiquidity	Private	1	
calculateTaxFee	Private		
calculateLiquidityFee	Private		
removeAllFee	Private	1	
restoreAllFee	Private	✓	
isExcludedFromFee	Public		-
_approve	Private	1	
_transfer	Private	1	
swapAndLiquify	Private	1	lockTheSwap
swapTokensForEth	Private	1	
addLiquidity	Private	1	
_tokenTransfer	Private	1	
_transferStandard	Private	1	
_transferToExcluded	Private	1	
_transferFromExcluded	Private	1	



# **Contract Flow**





## Domain Info

Domain Name	justicelegends.io
Registry Domain ID	0c8346e1e723487fae5d69040856cf71-DONUTS
Creation Date	2021-12-09T15:13:01Z
Updated Date	2021-12-16T12:14:37Z
Registry Expiry Date	2022-12-09T15:13:01Z
Registrar WHOIS Server	whois.namecheap.com
Registrar URL	https://www.namecheap.com/
Registrar	NameCheap, Inc.
Registrar IANA ID	1068

The domain has been created 14 days before the creation of the audit. It will expire in 12 months.

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



## Summary

Justice Legends is a metaverse project based on binance smart chain. It is aiming to build a free-to-earn game. The token has a friendly and growing community. There are some functions that can be abused by the owner, like manipulating fees and indirectly stopping the transaction. The contract could embody some checks to address these issues. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats.



## Disclaimer

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## **About Coinscope**

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.

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



The Coinscope.co team

https://www.coinscope.co