



# Star World Token

RugfreeCoins Verified on December 22nd, 2023

#### **Overview**

- No mint function found, the owner cannot mint tokens after initial deployment.
- The owner can't set a max transaction limit.
- The owner can't pause trading once it's enabled
- The owner can't change fees over 6%.
- The owner can't blacklist wallets.
- The owner can't set a max wallet limit
- The owner can't claim the contract's balance of its own token.

#### HIGH SEVERITY ISSUES

The owner can adjust the swap point up to the total supply. If the owner sets the swap point to a significantly large amount, the swap may fail due to price impact issues.

```
function updateSwapTokensAtAmount(
    uint256 _swapTokensAtAmount
) external onlyOwner returns (bool) {
    require(
        _swapTokensAtAmount < totalSupply(),
        "Swap amount cannot be higher than total supply."
    );
    require(
        _swapTokensAtAmount >= (totalSupply() * 1) / 100000,
        "Swap amount cannot be lower than 0.001% total supply."
    );
    swapTokensAtAmount = _swapTokensAtAmount;
    return true;
}
```

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### **Audit details**



**Audited project** 

Star World Token



**Contract Address** 

0xa33C428DFD77c2b35ab2B5839ce39ec8e91C46B3



**Client contact** 

Star World Token Team



Blockchain

Binance Smart chain



**Project website** 

https://starwar.app/

#### **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

### **Background**

RugfreeCoins was commissioned by the Star World Token Team to perform an audit of the smart contract.

#### https://bscscan.com/token/0xa33C428DFD77c2b35ab2B5839ce39ec8e91C46B3

This audit focuses on verifying that the smart contract is secure, resilient, and working according to the specifications.

The information in this report should be used to understand the risk exposure of the smart contract, project feasibility, and long-term sustainability, and as a guide to improving the smart contract's security posture by remediating the identified issues.

# **Tokenomics**

#### ▲ 3% tax when buying & selling

3% of trade goes to the marketing wallet in  $\ensuremath{\mathsf{BNB}}$ 

### Target market and the concept

- Anyone who's interested in the Crypto space with long-term investment plans.
- Anyone who's ready to earn a passive income by holding tokens.
- Anyone who's interested in trading tokens.
- Anyone who's interested in taking part in the Star World token ecosystem.
- Anyone who's interested in taking part in the future plans of Star World Token.
- Anyone who's interested in making financial transactions with any other party using Star World Token as the currency.

# Potential to grow with score points

→ Project efficiency	8 / 10
* Project uniqueness	8 / 10
Information quality	8 / 10
Service quality	8 / 10
System quality	8 / 10
Mark on the community	8 / 10
impact on the business	9 / 10
Preparing for the future	8 / 10
☐ Smart contract security	9/ 10
	9 / 10
▼ Total Score	8.3/ 10

# **Contract details**

Token contract details for 22nd of December 2023

Contract name	Star World
Contract address	0xa33C428DFD77c2b35ab2B5839ce39ec8e91C46B3
Token supply	1,000,000,000
Token ticker	STW
Decimals	18
Token holders	1
Transaction count	1
Contract deployer address	0x349BB193Cf7588cA07233Cf80d964885B73FaBa2
Contract's current owner address	0x349BB193Cf7588cA07233Cf80d964885B73FaBa2
Fee wallet	0x349BB193Cf7588cA07233Cf80d964885B73FaBa2

# **Contract code function details**

Nº	Category	Item	Result
		ERC20 Token standards	PASS -
		Compile errors	PASS -
		Compiler version security	PASS -
		Visibility specifiers	PASS -
		Gas consumption	PASS -
1	Coding conventions	SafeMath features	PASS +
		Fallback usage	PASS +
		tx.origin usage	PASS +
		Deprecated items	PASS +
		Redundant code	LOW -
		Overriding variables	PASS +
		Authorization of function call	PASS +
2	Function call audit	Low level function (call/delegate call) security	PASS +
_		Returned value security	PASS +
		Self destruct function security	PASS +
		Access control of owners	HIGH •
3	Business security & centralisation	Business logics	PASS +
		Business implementation	PASS +
4	Integer overflow/underflow		PASS +
5	Reentrancy		PASS +
6	Exceptional reachable state		PASS +
7	Transaction ordering dependence		PASS +
8	Block properties dependence		PASS +
9	Pseudo random number generator (PRI	NG)	PASS +
10	DoS (Denial of Service)		PASS +
11	Token vesting implementation		PASS +
12	Fake deposit		PASS +
13	Event security		PASS -

# **Contract description table**

The below table represents the summary of the contracts and methods in the token contract. We scanned the whole contract and listed down all the Interfaces, functions, and implementations with their visibility and mutability.

Contract	Туре	Bases		
L	Function Name	Visibility	Mutability	Modifiers
Context	Implementation			
L	_msgSender	Internal 🔒		
L	_msgData	Internal 🔒		
IERC20	Interface			
L	totalSupply	External		NO !
L	balanceOf	External		NO !
L	transfer	External		NO !
L	allowance	External		NO !
L	approve	External		NO !
L	transferFrom	External		NO !
<u>'</u>		'	'	
Address	Library			
L	isContract	Internal 🔒		
L	sendValue	Internal 🔒		
L	functionCall	Internal 🔒		
L	functionCall	Internal 🔒		
L	functionCallWithValue	Internal 🔒		
L	functionCallWithValue	Internal 🔒		
L	functionStaticCall	Internal 🔒		
L	functionStaticCall	Internal 🔒		

L	functionDelegateCall	Internal 🔒 🧧	
L	functionDelegateCall	Internal 🔒 🛑	
L	verifyCallResultFromTarget	Internal 🔒	
L	verifyCallResult	Internal 🔒	
L	_revert	Private 🔐	
Ownable	Implementation	Context	
L		Public !	NO !
L	owner	Public !	NO !
L	_checkOwner	Internal 🔒	
L	renounceOwnership	Public !	onlyOwner
L	transferOwnership	Public !	onlyOwner
L	_transferOwnership	Internal 🔒	
'		'	'
UniswapV2 Factory	Interface		
L	feeTo	External !	NO !
L	feeToSetter	External !	NO !
L	getPair	External !	NO !
L	allPairs	External	NO !
L	allPairsLength	External	NO !
L	createPair	External !	NO !
L	setFeeTo	External	NO !
L	setFeeToSetter	External !	NO !
UniswapV2 Pair	Interface		
L	name	External !	NO !
L	symbol	External !	NO !

L	totalSupply	External !	NO !
L	balanceOf	External !	NO !
L	allowance	External !	NO !
L	approve	External !	NO !
L	transfer	External !	NO !
L	transferFrom	External !	NO !
L	DOMAIN_SEPARATOR	External !	NO !
L	PERMIT_TYPEHASH	External !	NO !
L	nonces	External !	NO !
L	permit	External !	NO !
L	MINIMUM_LIQUIDITY	External !	NO !
L	factory	External !	NO !
L	token0	External	NO !
L	token1	External !	NO !
L	getReserves	External !	NO !
L	price0CumulativeLast	External !	NO !
L	price1CumulativeLast	External !	NO !
L	kLast	External !	NO !
L	burn	External !	NO !
L	swap	External !	NO !
L	skim	External !	NO !
L	sync	External !	NO !
L	initialize	External !	NO !
		,	
UniswapV2 Router01	Interface		
L	factory	External !	NO !
L	WETH	External !	NO !
L	addLiquidity	External !	NO !
L	addLiquidityETH	External .	NO !

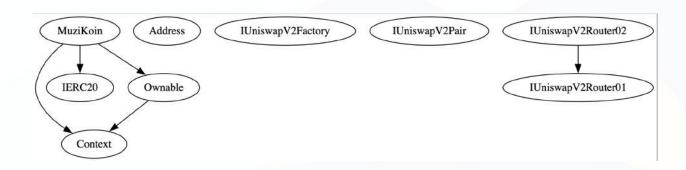
L	removeLiquidity	External		NO !
L	removeLiquidityETH	External		NO !
L	removeLiquidityWithPermit	External		NO !
L	removeLiquidityETHWithPermit	External !		NO !
L	swapExactTokensForTokens	External		NO !
L	swapTokensForExactTokens	External		NO !
L	swapExactETHForTokens	External	(S )	NO !
L	swapTokensForExactETH	External	•	NO !
L	swapExactTokensForETH	External		NO !
L	swapETHForExactTokens	External	(\$	NO !
L	quote	External !		NO !
L	getAmountOut	External		NO !
L	getAmountIn	External		NO !
L	getAmountsOut	External		NO !
L	getAmountsIn	External !		NO !
UniswapV2 Router02	Interface	IUniswapV2 Router01		
L	removeLiquidityETHSupportingFeeOnTran sferTokens	External !		NO !
L	removeLiquidityETHWithPermitSupporting FeeOnTransferTokens	External !	•	NO !
L	swapExactTokensForTokensSupportingFe eOnTransferTokens	External !		NO !
L	swapExactETHForTokensSupportingFeeOn TransferTokens	External !	(S. )	NO !
L	swapExactTokensForETHSupportingFeeOn TransferTokens	External !		NO !
MuziKoin	Implementation	Context, IERC20, Ownable		
L		Public !		NO !

L	balanceOf	Public !		NO !
		•		
L	transfer	Public		NO
L	allowance	Public !		NO !
L	approve	Public		NO !
L	transferFrom	Public !		NO !
L	increaseAllowance	Public !		NO !
L	decreaseAllowance	Public !		NO !
L	_approve	Private 🔐		
L	_transfer	Private 🔐		
L	swapAndLiquify	Public !		lockTheSwap
L	swapTokensForEth	Private 🔐		
L	_tokenTransfer	Private 🔐		
L	isExcludedFromFees	External !		NO !
L	setExcludeFromFees	External !		onlyOwner
L	setTokensToSwap	External !		onlyOwner
L	setSwapAndLiquifyEnabled	External !		onlyOwner
L	setMarketingWallet	External !		onlyOwner
L	setBuyFee	External !		onlyOwner
L	setSellFee	External !		onlyOwner
L	transferToAddressETH	Private 🔐		
L		External !	(\$	NO !
L	swapETHForTokens	Private 🔐		
L	recoverETHfromContract	External !		onlyOwner
L	recoverTokensFromContract	External		onlyOwner

#### Legend

Symbol	Meaning
	Function can modify state
<b>(\$</b>	Function is payable

# **Inheritance Hierarchy**



### Security issue checking status

#### High severity issues

The owner can adjust the swap point up to the total supply. If the owner sets the swap point to a significantly large amount, the swap may fail due to price impact issues.

```
function updateSwapTokensAtAmount(
    uint256 _swapTokensAtAmount
) external onlyOwner returns (bool) {
    require(
        _swapTokensAtAmount < totalSupply(),
        "Swap amount cannot be higher than total supply."
);
    require(
        _swapTokensAtAmount >= (totalSupply() * 1) / 100000,
        "Swap amount cannot be lower than 0.001% total supply."
);
    swapTokensAtAmount = _swapTokensAtAmount;
    return true;
}
```

#### Medium severity issues

No medium severity issues found

#### Low severity issues

The contract does not check for maximum transaction limits, rendering all functions related to the maximum transaction limit redundant.

```
_excludeFromMaxTransactionAmount(address(0xdead), true);
_excludeFromMaxTransactionAmount(address(this), true);
_excludeFromMaxTransactionAmount(address(_uniswapV2Router), true);
_excludeFromMaxTransactionAmount(address(uniswapV2Pair), true);
_excludeFromMaxTransactionAmount(owner(), true);
```

### **Owner privileges**

Owner can change fee wallet

```
function updateFeeWallet(address _feeWallet) external onlyOwner {
    _updateFeeWallet(_feeWallet);
}
```

Owner can change buy and sell fees up-to to 6% (each 3%)

```
function updateFees(uint256 _buyFee, uint256 _sellFee) public onlyOwner {
    _updateFees(_buyFee, _sellFee);
}

function _updateFees(uint256 _buyFee, uint256 _sellFee) private {
    require(_buyFee <= 30 && _sellFee <= 30, "Invalid fees"); // _buyFee and
    _sellFee <= 3%
        buyFee = _buyFee;
        sellFee = _sellFee;
}</pre>
```

Owner can include/exclude wallets from fees

```
function excludeFromFees(address account, bool excluded) public onlyOwner {
    _excludeFromFees(account, excluded);
}
```

Owner can add/remove new lp pairs

```
function setAutomatedMarketMakerPair(
   address pair,
   bool value
) public onlyOwner {
   require(
      pair != uniswapV2Pair,
      "The pair cannot be removed from automatedMarketMakerPairs"
);
   require(pair != address(0), "Zero address");
   _excludeFromMaxTransactionAmount(pair, value);
   _setAutomatedMarketMakerPair(pair, value);
}
```

Owner can change swap point

```
function updateSwapTokensAtAmount(
    uint256 _swapTokensAtAmount
) external onlyOwner returns (bool) {
    require(
        _swapTokensAtAmount < totalSupply(),
        "Swap amount cannot be higher than total supply."
);
    require(
        _swapTokensAtAmount >= (totalSupply() * 1) / 100000,
        "Swap amount cannot be lower than 0.001% total supply."
);
    swapTokensAtAmount = _swapTokensAtAmount;
    return true;
}
```

#### **Audit conclusion**

RugFreeCoins team has performed in-depth testing, line-by-line manual code review, and automated audit of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, manipulations, and hacks. According to the smart contract audit.

