



# **RugFreeCoins Audit**



**Sports Verse Token  
Smart Contract Security Audit**

**September 13 2022**



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# Audit details



**Audited project**  
Sportsverse Token



**Contract Address**  
0x374827A70f08805650f2408B4aaC1B490275eF0B



**Client contact**  
Sportsverse Team



**Blockchain**  
Binance smart chain



**Project website**  
<https://sportsverse.me/>

# 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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# Overview

- ✓ No mint function found; the owner cannot mint tokens after initial deployment.
- ✓ There are no max tx limits and max wallet limits in the contract.
- ✓ The owner can't pause trading.
- ✓ The owner can't set fees over 25%.
- ✓ Owner can't blacklist wallets.
- ✓ The owner can't claim the contract's balance of its own token.

# Background

Rugfreecoins was commissioned by the Sportsverse Team to perform an audit of the smart contract.

**<https://bscscan.com/token/0x374827A70f08805650f2408B4aaC1B490275eF0B>**

The focus of this audit is to verify 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 security posture of the smart contract by remediating the issues that were identified.

# Tokenomics

## **2% when buying**

- 2% of trade goes to the Ecosystem fund wallet in BNB.

## **3% when selling**

- 3% of trade goes to the Marketing, Maintenance & Management Wallet in BNB.

# Target market and the concept

## Target market

- 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 ready to take part in Sportverse game and receiving rewards.
- Anyone who's interested in taking part in the future plans of the Sportsverse.
- Anyone who's interested in making financial transactions with any other party using Sportsverse Token as the currency.



# Potential to grow with score points

1.	Project efficiency	9/10
2.	Project uniqueness	9/10
3	Information quality	9/10
4	Service quality	9/10
5	System quality	8/10
6	Impact on the community	8/10
7	Impact on the business	9/10
8	Preparing for the future	9/10
9	Smart contract security	10/10
10	Smart contract functionality assessment	10/10
Total Points		<b>9/10</b>

# Contract details

## Token contract details for 13<sup>th</sup> of September 2022

Contract name	Sportsverse
Contract address	0x374827A70f08805650f2408B4aaC1B490275eF0B
Token supply	1,000,000,000
Token ticker	SV
Decimals	18
Token holders	3
Transaction count	4
Ecosystem wallet	0xf1816468234d473d4bb581a2b9638613d57a7afb
Marketing wallet	0x45cb6fbbaca2951f57b384ffb1596b467516aaa8
Contract deployer address	0xb58ced7120dad8a6a04968577ec1daf00a707795
Contract's current owner address	0xb58ced7120dad8a6a04968577ec1daf00a707795









# Contract code function details

No	Category	Item	Result
1	Coding conventions	BRC20 Token standards	pass
		compile errors	pass
		Compiler version security	pass
		visibility specifiers	pass
		Gas consumption	pass
		SafeMath features	pass
		Fallback usage	pass
		tx.origin usage	pass
		deprecated items	pass
		Redundant code	pass
		Overriding variables	pass
2	Function call audit	Authorization of function call	pass
		Low level function (call/delegate call) security	pass
		Returned value security	pass
		Self-destruct function security	pass
3	Business security	Access control of owners	
		Business logics	pass
		Business implementations	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 (PRNG)		pass
10	DoS (Denial of Service)		pass
11	Token vesting implementation		pass
12	Fake deposit		pass

13	Event security		pass
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# 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	Type	Bases		
L	Function Name	Visibility	Mutability	Modifiers
Sportsverse	Implementation	IERC20, Ownable		
L		Public !		NO !
L		External !		NO !
L	totalSupply	External !		NO !
L	name	Public !		NO !
L	symbol	Public !		NO !
L	decimals	Public !		NO !
L	currentBalance	Public !		NO !
L	balanceOf	Public !		NO !
L	allowance	External !		NO !
L	approve	Public !		NO !
L	_approve	Internal 		
L	approveMax	External !		NO !
L	transfer	External !		NO !
L	transferFrom	External !		NO !

L	_transferFrom	Internal 🔒	🛑	
L	_basicTransfer	Internal 🔒	🛑	
L	shouldTakeFee	Internal 🔒		
L	takeFee	Internal 🔒	🛑	
L	shouldSwapBack	Internal 🔒		
L	clearStuckBalance	External !	🛑	onlyOwner
L	updateFees	Public !	🛑	onlyOwner
L	updateSwapAmounts	Public !	🛑	onlyOwner
L	enableTrading	Public !	🛑	onlyOwner
L	whitelistPreSale	Public !	🛑	onlyOwner
L	swapBackInBnb	Internal 🔒	🛑	swapping
L	swapTokensForEth	Private 🔒	🛑	
L	setIsFeeExempt	External !	🛑	onlyOwner
L	changeMarketingWallet	External !	🛑	onlyOwner
L	changeEcosystemWallet	External !	🛑	onlyOwner
L	setSwapBackSettings	External !	🛑	onlyOwner
<b>Ownable</b>	<b>Implementation</b>	<b>Context</b>		
L		Public !	🛑	NO !
L	owner	Public !		NO !
L	_checkOwner	Internal 🔒		





L	renounceOwnership	Public !		onlyOwner
L	transferOwnership	Public !		onlyOwner
L	_transferOwnership	Internal 		
<b>IERC20</b>	<b>Interface</b>			
L	totalSupply	External !		NO !
L	balanceOf	External !		NO !
L	transfer	External !		NO !
L	allowance	External !		NO !
L	approve	External !		NO !
L	transferFrom	External !		NO !
<b>SafeMath</b>	<b>Library</b>			
L	tryAdd	Internal 		
L	trySub	Internal 		
L	tryMul	Internal 		
L	tryDiv	Internal 		
L	tryMod	Internal 		
L	add	Internal 		
L	sub	Internal 		
L	mul	Internal 		
L	div	Internal 		

L	mod	Internal 		
L	sub	Internal 		
L	div	Internal 		
L	mod	Internal 		
<b>IUniswapV2Router02</b>	<b>Interface</b>	<b>IUniswapV2Router01</b>		
L	removeLiquidityETHSupportingFeeOnTransferTokens	External 		NO 
L	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External 		NO 
L	swapExactTokensForTokensSupportingFeeOnTransferTokens	External 		NO 
L	swapExactETHForTokensSupportingFeeOnTransferTokens	External 		NO 
L	swapExactTokensForETHSupportingFeeOnTransferTokens	External 		NO 
<b>IUniswapV2Factory</b>	<b>Interface</b>			
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 

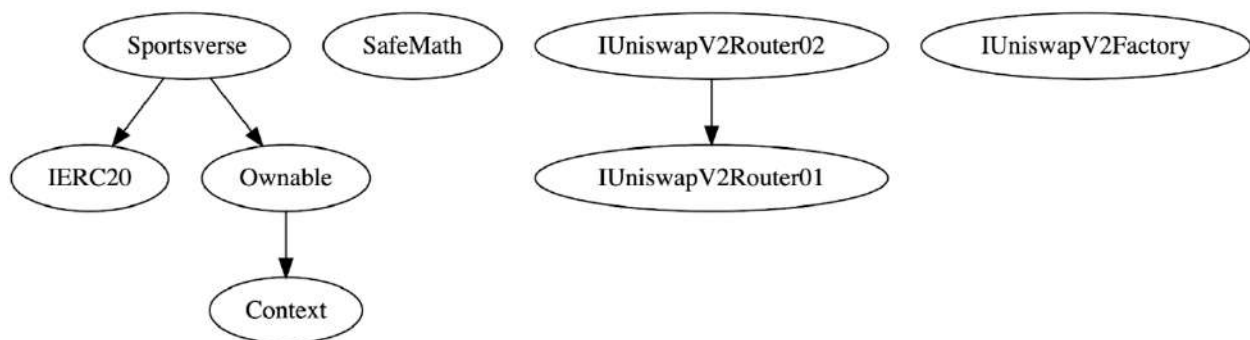
L	setFeeToSetter	External !		NO !
<b>Context</b>	<b>Implementation</b>			
L	_msgSender	Internal 		
L	_msgData	Internal 		
<b>IUniswapV2Router01</b>	<b>Interface</b>			
L	factory	External !		NO !
L	WETH	External !		NO !
L	addLiquidity	External !		NO !
L	addLiquidityETH	External !		NO !
L	removeLiquidity	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 !		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 !

## Legend

Symbol	Meaning
	Function can modify state
	Function is payable

## Inheritance Hierarchy



# Security issue checking status

❖ **High severity issues**

No High severity issues found

❖ **Medium severity issues**

No medium severity issues found

❖ **Low severity issues**

No low severity issues found

❖ **Centralization Risk**

No Centralization Risk found

# Owner privileges

- ❖ Owner can get contract bnb balance to owner wallet

```
ftrace | funcSig
function clearStuckBalance(uint256 amountPercentage↑) external onlyOwner {
    uint256 amountBNB = address(this).balance;
    payable(msg.sender).transfer((amountBNB * amountPercentage↑) / 100);
}
```

- ❖ Owner can update buy and sell fees, total fees maximum up to 25%

```
ftrace | funcSig
function updateFees(uint256 buyFee↑, uint256 sellFee↑) public onlyOwner {
    buyTotalFees = buyFee↑;
    sellTotalFees = sellFee↑;

    require(
        buyTotalFees.add(sellTotalFees) <= 25,
        "Total Fees can not be grater than 25%"
    );
}
```

- ❖ Owner can change all swap percentages

```
ftrace | funcSig
function updateSwapAmounts(uint256 _ecosystemSwap↑, uint256 _marketingSwap↑)
    public
    onlyOwner
{
    ecosystemSwap = _ecosystemSwap↑;
    marketingSwap = _marketingSwap↑;

    totalSwap = _ecosystemSwap↑.add(_marketingSwap↑);
}
```



- ❖ Owner can enable trading, once enabled cannot disable again

```
// switch Trading
ftrace | funcSig
function enableTrading() public onlyOwner {
    tradingOpen = true;
}
```

- ❖ Owner can whitelist pre-sale address

```
ftrace | funcSig
function whitelistPreSale(address _preSale) public onlyOwner {
    isFeeExempt[_preSale] = true;
    isAuthorized[_preSale] = true;
}
```

- ❖ Owner can exclude/include wallets from fees

```
ftrace | funcSig
function setIsFeeExempt(address holder, bool exempt) external onlyOwner {
    isFeeExempt[holder] = exempt;
}
```

- ❖ Owner can change marketing wallet

```
ftrace | funcSig
function changeMarketingWallet(address _marketingFeeReceiver)
    external
    onlyOwner
{
    marketingFeeReceiver = _marketingFeeReceiver;
}
```

- ❖ Owner can change eco system wallet

```
ftrace | funcSig
function changeEcosystemWallet(address newWallet↑) external onlyOwner {
    ecoSystemWallet = newWallet↑;
}
```

- ❖ Owner can enable/disable swapping and can change swap point

```
ftrace | funcSig
function setSwapBackSettings(bool _enabled↑, uint256 _amount↑)
    external
    onlyOwner
{
    swapEnabled = _enabled↑;
    swapThreshold = _amount↑;
}
```

# Audit conclusion

RugFreeCoins team has performed in-depth testings, 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.

Smart contract functional Status: **PASS**

Number of risk issues: **0**

Solidity code functional issue level: **PASS**

Number of owner privileges:

Centralization risk correlated to the active owner: **LOW**

Smart contract active ownership: **YES**