

# CFGNINJ

Security Assessment

**Sports Future** 

Exchange Token Token November 26, 2023

Audit Status: Pass

Audit Edition: Standard

SPOFU



# **Risk Analysis**

#### **Classifications of Manual Risk Results**

Classification	Description
<b>○</b> Critical	Danger or Potential Problems.
High	Be Careful or Fail test.
Low	Pass, Not-Detected or Safe Item.
■ Informational	Function Detected

#### **Manual Code Review Risk Results**

Contract Priviledge	Description
Buy Tax	0%
Sale Tax	6%
Cannot Buy	Pass
Cannot Sale	Pass
■ Max Tax	12%
■ Modify Tax	Yes
Fee Check	Pass
■ Is Honeypot?	Not Detected
Trading Cooldown	Not Detected
Can Pause Trade?	Fail





Contract Priviledge	Description
Pause Transfer?	Detected, Owner need to enable trade.
Max Tx?	Pass
Is Anti Whale?	Not Detected
■ Is Anti Bot?	Not Detected
■ Is Blacklist?	Not Detected
Blacklist Check	Pass
is Whitelist?	Detected
Can Mint?	Pass
■ Is Proxy?	Not Detected
Can Take Ownership?	Not Detected
Hidden Owner?	Not Detected
<ul><li>Owner</li></ul>	0x0Fb776Df3CB4A069640BdcA66dF4024a0CaE9494
Self Destruct?	Not Detected
External Call?	Not Detected
Other?	Not Detected
Holders	1
Auditor Confidence	Medium
■ KYC Completed	Yes
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The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.





# **Project Overview**

#### **Token Summary**

Parameter	Result
Address	0xd8C9091a2Bd78477bFeE618EAB5864715e405513
Name	Sports Future Exchange Token
Token Tracker	Sports Future Exchange Token (Spox)
Decimals	18
Supply	500,000,000
Platform	Binance Smart Chain
compiler	v0.8.19+commit.7dd6d404
Contract Name	Spox
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/token/0xd8C9091a2Bd78477bFeE618EA B5864715e405513#code
Payment Tx	Corporate





# **Project Overview**

#### **Simulation Summary**

Parameter	Result	
Transfer From Owner	Pass	
Transfer From Holder	Pass	
Add Liquidity	Pass	
RemoveLiquidity	Pass	
Buy from Owner	Pass	
Buy from Holder	Pass	
Sale from Owner	Pass	
Sale from Holder	Pass	
Remove Liquidity	Pass	
SwapAndLiquify	Pass	
SwapAndSale w/Fee	Pass	
SwapAndSale TX	https://testnet.bscscan.com/tx/0xba09e b98251920b3180c8bb29e3216ece1210c0 d63c29cd899acec5141e2f9c4	
SwapAndSaleNoFee	Pass	
SwapAndSale No/Fee TX	https://testnet.bscscan.com/tx/0x4ee0 e7af62eb27553310c7deaa33b4e91c7ab b22f1b3fca85dc0c4bfeb6f4867	





Parameter	Result
ExcludeFromFees	Pass
LaunchPad	PinkSale
Pool Creation	N/A
Pool Creation TX	
Pool Finalize	N/A
Pool Finalize TX	
Enable	Pass, https://testnet.bscscan.com/tx/0x 0697b0c1ced17c040600cab96fc2c37b1 2b5184d563a0016cf96ccf6f003f613

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# Main Contract Assessed Contract Name

Name	Contract	Live
Sports Future Exchange Token	Oxd8C9091a2Bd78477bFeE618EAB5864715e405513	Yes

# TestNet Contract Assessed Contract Name

Name	Contract	Live
Sports Future Exchange Token	0x6d38FD50D519b26eF00B011Adb7938A0227DF122	Yes

#### **Solidity Code Provided**

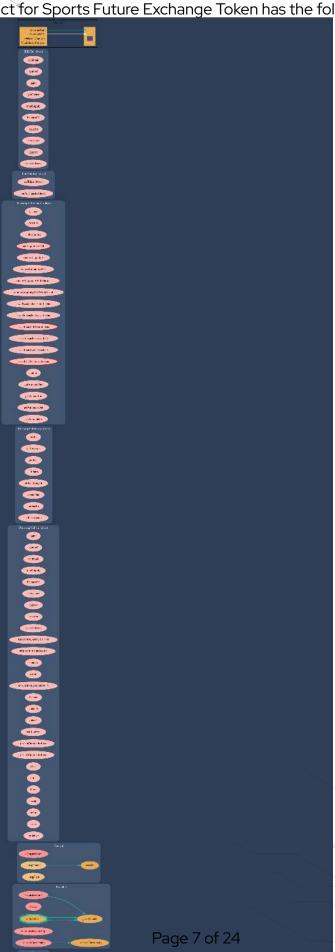
SolID	File Sha-1	FileName
Sporx	ac405da9976ce1826fe7c016cc4f49abb4f311d2	Sporx.sol





# Call Graph

The contract for Sports Future Exchange Token has the following call graph structure.







# Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

File location ID Severity Name SWC-100 **Pass** Function Default Visibility Sporx.sol L: 0 C: 0 SWC-101 Integer Overflow and L: 0 C: 0 **Pass** Sporx.sol Underflow. L: 0 C: 0 SWC-102 **Pass Outdated Compiler** Sporx.sol Version file. SWC-103 **Pass** A floating pragma is set. Sporx.sol L: 2 C: 0 **Unchecked Call Return** Sporx.sol L: 0 C: 0 SWC-104 **Pass** Value. SWC-105 **Pass Unprotected Ether** Sporx.sol L: 0 C: 0 Withdrawal. SWC-106 L: 0 C: 0 **Pass** Unprotected Sporx.sol **SELFDESTRUCT** Instruction SWC-107 **Pass** Read of persistent state Sporx.sol L: 0 C: 0 following external call. SWC-108 **Pass** State variable visibility is Sporx.sol L: 0 C: 0 not set.. SWC-109 **Pass** Uninitialized Storage Sporx.sol L: 0 C: 0 Pointer. Assert Violation. L: 0 C: 0 SWC-110 **Pass** Sporx.sol





ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	Sporx.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	Sporx.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	Sporx.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	Sporx.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	Sporx.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	Sporx.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	Sporx.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	Sporx.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	Sporx.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randonmness.	Sporx.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	Sporx.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	Sporx.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	Sporx.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	Sporx.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	Sporx.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-126	Pass	Insufficient Gas Griefing.	Sporx.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	Sporx.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	Sporx.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	Sporx.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	Sporx.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	Sporx.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	Sporx.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	Sporx.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	Sporx.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	Sporx.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	Sporx.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





# **Inheritance**

The contract for Sports Future Exchange Token has the following inheritance structure.





#### Spox-03 | Lack of Input Validation.

Category	Severity	Location	Status
Volatile Code	Low	Sporx.sol: L: 0 C: 0	Detected

#### **Description**

The given input is missing the check for the non-zero address.

The given input is missing the check for the .

#### Recommendation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
...
require(receiver!= address(0), "Receiver is the zero address");
...
...
require(value X limitation, "Your not able to do this function");
...
```

We also recommend customer to review the following function that is missing a required validation. .

#### Mitigation

#### References:

Zero Address check. The danger!!!





#### Spox-05 | Missing Event Emission.

Category	Severity	Location	Status
Volatile Code	Low	Sporx.sol: L: 0 C: 0	Detected

#### **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. The linked code does not create an event for the transfer.

#### Recommendation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.

#### Mitigation

#### References:

Understanding Events in Smart Contracts





#### Spox-13 | Extra Gas Cost For User.

Category	Severity	Location	Status
Logical Issue	1 Informational	Sporx.sol: L: 153 C: 17	Detected

#### **Description**

The user may trigger a tax distribution during the transfer process, which will cost a lot of gas and it is unfair to let a single user bear it.

#### Recommendation

We advise the client to make the owner responsible for the gas costs of the tax distribution.

#### Mitigation

#### References:

Writing Clean Code for Solidity: Best Practices for Solidity Development





#### Spox-18 | Stop Transactions by using Enable Trade.

Category	Severity	Location	Status
Logical Issue	Critical	Sporx.sol: L: 262 C: 14	Detected

#### **Description**

Enable Trade is present on the following contract and when combined with Exclude from fees it can be considered a whitelist process, this will allow anyone to trade before others and can represent and issue for the holders.

#### Recommendation

We recommend the project owner to carefully review this function and avoid problems when performing both actions.

#### Mitigation

#### References:

Writing Clean Code for Solidity: Best Practices for Solidity Development





### Spox-19 | Centralization Privileges of Spox

Category	Severity	Location	Status
Coding Style	Medium	Sporx.sol: L: 0 C: 0	Detected

#### **Description**

Centralized Privileges are found on the following functions.

Certifalized Frivileges are found on the	Tollowing functions.	
Function Name	Parameters	Visibility
renounceOwnership		Public
transferOwnership	address newOwner	Public
clearStuckBalance		External
clearStuckSpox		External
updateSellFee		External
updateSwapPercentages		External
openTrading		External
authorize Wallet		External
excludedFromFee		External
authorizeAddress		External
setMKFeeReceivers		External
setPBFeeReceiver		External
setSwapBackSettings		External





#### Recommendation

Inheriting from Ownable and calling its constructor on yours ensures that the address deploying your contract is registered as the owner. The onlyOwner modifier makes a function revert if not called by the address registered as the owner. It is important that deployr or owner secure the credentials that has owner priviledge to ensure the security of the project.

#### Mitigation

#### References:

Guide to Ownership and Access Control in Solidity

Writing Clean Code for Solidity: Best Practices for Solidity Development





# Technical Findings Summary

#### **Classification of Risk**

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
High	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
○ Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
Low	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
1 Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

#### **Findings**

Severity	Found	Pending	Resolved
Critical	1	0	0
High	0	0	0
○ Medium	1	0	0
Low	2	0	0
■ Informational	1	0	0
Total	5	0	0





# **Social Media Checks**

Social Media	URL	Result
Twitter	https://t.me/paxuecosystem	Pass
Other		Fail
Website	https://spox.exchange/	Pass
Telegram	https://t.me/paxuecosystem	Pass

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:** 

**Auditor Notes: undefined** 

**Project Owner Notes:** 







#### **Assessment Results**

#### **Score Results**

Review	Score
Overall Score	96/100
Auditor Score	90/100
Review by Section	Score
Manual Scan Score	40
SWC Scan Score	37
Advance Check Score	19

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

#### **Audit Passed**







#### **Assessment Results**

#### **Important Notes:**

- The contract needs optimization and fixes.
- The contract has an Open Trade function, however, it has a validation not to close the function.

# Auditor Score = 90 Audit Passed







## **Appendix**

#### **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.





#### **Coding Best Practices**

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.





#### Disclaimer

CFGNINJA has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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