

# Aura Smart Contract Audit Report



21 Mar 2022



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## AUDITED DETAILS

### Audited Project

Project name	Token ticker	Blockchain	
Aura	AURA	Binance Smart Chain	

### Addresses

Contract address 0x23c5d1164662758b3799103effe19cc064d897d6	
Contract deployer address	0x6891A2fE9C99d8a7DB60Ff04449Ad2cf90828796

### Project Website

https://github.com/aura-nw

### Codebase

https://bscscan.com/address/0x23c5d1164662758b3799103effe19cc064d897d6#code



## SUMMARY

We introduce Aura Network, an NFT-centric, layer-1 blockchain that focuses on expanding the use of NFT across various industries. Our vision is to create a one-stop destination for minting, evaluating, querying, and transacting NFT, to become a pioneer NFT infrastructure for the future. Aura Network focuses on building a sovereign blockchain optimized for NFT use cases. This section provides a high-level view of the vision of Aura Network.

### Contract Summary

#### **Documentation Quality**

Aura provides a very good documentation with standard of solidity base code.

• The technical description is provided clearly and structured and also dont have any high risk issue.

#### **Code Quality**

The Overall quality of the basecode is standard.

• Standard solidity basecode and rules are already followed by Aura with the discovery of several low issues.

#### **Test Coverage**

Test coverage of the project is 100% (Through Codebase)

### Audit Findings Summary

• SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 6.



## CONCLUSION

We have audited the Aura project released on March 2022 to discover issues and identify potential security vulnerabilities in Aura Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides satisfactory results with low-risk issues.

The issues found in the Aura smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues are some arithmetic operation issues, and a floating pragma is set. The current pragma Solidity directive is "">=0.6.00.8.0"". Specifying a fixed compiler version is recommended to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.



## AUDIT RESULT

Article	Category	Description	Result	
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.		
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	PASS	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.	PASS	
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	ISSUE FOUND	
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS	
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.	PASS	
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.	<sup>it</sup> PASS	
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.	PASS	
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.	PASS	
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.		
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used.	PASS	
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS	



DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.		
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS	
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	PASS	
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	e used for time calculations. PASS	
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS	
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	Ily once PASS	
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS	
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	ed from Chain PASS	
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.		
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.		
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.	-	
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS	



Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.		
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	er to force RTL text rendering and confuse users as PASS	
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	PASS	
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.		
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS	
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	fixed amount PASS	
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS	



## **SMART CONTRACT ANALYSIS**

Started	Sunday Mar 20 2022 08:47:24 GMT+0000 (Coordinated Universal Time)		
Finished	Monday Mar 21 2022 19:52:20 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	Aura.sol		

### Detected Issues

ID	Title	Severity	Status
SWC-103	A FLOATING PRAGMA IS SET.	low	acknowledged



### SWC-103 | A FLOATING PRAGMA IS SET.

LINE 6

#### **Iow SEVERITY**

The current pragma Solidity directive is "">=0.6.0<0.8.0"". It is recommended to specify a fixed compiler version to ensure that the bytecode produced does not vary between builds. This is especially important if you rely on bytecode-level verification of the code.

#### Source File

- Aura.sol

#### Locations

5 // SPDX-License-Identifier: MIT 6 pragma solidity >=0.6.0 <0.8.0; 7 8 /\*\* 9 \* @dev Wrappers over Solidity's arithmetic operations with added overflow 10



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This is a limited report on our findings based on our analysis, in accordance with good industry practice as of 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 below disclaimer below – please make sure to read it in full.

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## ABOUT US

Sysfixed is a blockchain security certification organization established in 2021 with the objective to provide smart contract security services and verify their correctness in blockchain-based protocols. Sysfixed automatically scans for security vulnerabilities in Ethereum and other EVM-based blockchain smart contracts. Sysfixed a comprehensive range of analysis techniques—including static analysis, dynamic analysis, and symbolic execution—can accurately detect security vulnerabilities to provide an in-depth analysis report. With a vibrant ecosystem of world-class integration partners that amplify developer productivity, Sysfixed can be utilized in all phases of your project's lifecycle. Our team of security experts is dedicated to the research and improvement of our tools and techniques used to fortify your code.