

Juggernaut DeFi Smart Contract Audit Report



16 Dec 2020



TABLE OF CONTENTS

Audited Details

- Audited Project
- Blockchain
- Addresses
- Project Website
- Codebase

Summary

- Contract Summary
- Audit Findings Summary
- Vulnerabilities Summary

Conclusion

Audit Results

Smart Contract Analysis

- Detected Vulnerabilities

Disclaimer

About Us



AUDITED DETAILS

Audited Project

| Project name | Token ticker | Blockchain | |
|-----------------|--------------|---------------------|--|
| Juggernaut DeFi | JGN | Binance Smart Chain | |

Addresses

| Contract address | 0xc13b7a43223bb9bf4b69bd68ab20ca1b79d81c75 |
|---------------------------|--|
| Contract deployer address | 0x12229B53C6E7cE4d5dF1AfD6738f65d2a798FD23 |

Project Website

https://jgndefi.com/

Codebase

https://bscscan.com/address/0xc13b7a43223bb9bf4b69bd68ab20ca1b79d81c75#code



SUMMARY

The next evolution of DeFi will go beyond pure finance and into real-life financial use cases and abstractions of all assets and innovations. Juggernaut (JGN) aims to build the next generation of blockchain infrastructure to make DeFi & NFTs unstoppable.

Contract Summary

Documentation Quality

Juggernaut DeFi 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 GOOD.

• Solidity basecode and rules are clearly followed by Juggernaut DeFi.

Test Coverage

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

Audit Findings Summary

We didn't find any issues in our audit results for Juggernaut DeFi smart contracts. This result is very satisfying. Judging from the code base of this smart contract, this smart contract follows the official Solidity style guide.





CONCLUSION

We have audited the Juggernaut DeFi project released on December 2020 to discover issues and identify potential security vulnerabilities in Juggernaut DeFi 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 a satisfactory result. This smart contract doesn't have any issues.

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Judging from the code base of this smart contract, this smart contract follows the official Solidity style guide.



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. | PASS |
| 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. | PASS |
| 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. | 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. | PASS |
| 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. | PASS |
| 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. | 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. | 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. | 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. | PASS |
| 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/. | PASS |
| 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. | PASS |
| 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. | PASS |
|-------------------------------|--------------------|--|------|
| 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. | 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. | PASS |
| 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. | PASS |
| Unencrypted Private Data | SWC-136 | It is a common misconception that private type variables cannot be read. | PASS |



SMART CONTRACT ANALYSIS

| Started | Tuesday Dec 15 2020 22:36:32 GMT+0000 (Coordinated Universal Time) | |
|------------------|--|--|
| Finished | Wednesday Dec 16 2020 08:33:53 GMT+0000 (Coordinated Universal Time) | |
| Mode | Standard | |
| Main Source File | BEP20Token.sol | |

Detected Issues

We didn't find any issues in this smart contract.



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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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