



BNB Game Box Smart Contract Audit Report

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
BNB Game Box	BNBGB	Binance Smart Chain

Addresses

Contract address	0x63696D3D0e0C426AE83161b847d59ea3Ec83008C
Contract deployer address	0x343b48C12Ea98f360766e1B5Ad5b086fC751Aaa3

Project Website

<https://bnbgamebox.com/>

Codebase

<https://bscscan.com/address/0x63696D3D0e0C426AE83161b847d59ea3Ec83008C#code>

SUMMARY

Looking for the ultimate gaming gift this holiday season? Look no further than BNB Game Box! Our revolutionary new platform allows earn PC games as rewards while holding the BNBGB tokens!

Contract Summary

Documentation Quality

BNB Game Box 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 BNB Game Box with the discovery of several low issues.

Test Coverage

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

Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 510, 519, 531, 552, 555, 571, 572, 593, 676, 679, 691, 695, 799, 806, 807, 809, 813 and 822.

CONCLUSION

We have audited the BNB Game Box project released on January 2023 to discover issues and identify potential security vulnerabilities in BNB Game Box 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 with some low-risk issues.

The issues found in the BNB Game Box 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 found are some arithmetic operation issues. It is recommended to use vetted safe math libraries for arithmetic operations consistently.

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.	ISSUE FOUND
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
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
Assert Violation	SWC-110	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	Delegate calls 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
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
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

SMART CONTRACT ANALYSIS

Started	Wednesday Jan 11 2023 05:01:12 GMT+0000 (Coordinated Universal Time)
Finished	Thursday Jan 12 2023 18:55:01 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	BNBGB.sol

Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged

SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 510

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
509
510  _beforeTokenTransfer(address(0), account, amount);
511
512  _totalSupply += amount;
513  _balances[account] += amount;
514
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 519

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
518
519 function _burn(address account, uint256 amount) internal virtual {
520     require(account != address(0), "ERC20: burn from the zero address");
521
522     _beforeTokenTransfer(account, address(0), amount);
523 }
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 531

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
530
531   emit Transfer(account, address(0), amount);
532
533   _afterTokenTransfer(account, address(0), amount);
534   }
535
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 552

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
551     uint256 amount
552     ) internal virtual {}
553
554     function _afterTokenTransfer(
555         address from,
556
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 555

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
554     function _afterTokenTransfer(  
555         address from,  
556         address to,  
557         uint256 amount  
558     ) internal virtual {}  
559
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 571

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
570
571  uint256 public  liquidityFeeOnBuy;
572  uint256 public  liquidityFeeOnSell;
573
574  uint256 public  marketingFeeOnBuy;
575
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED

LINE 572

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
571  uint256 public  liquidityFeeOnBuy;  
572  uint256 public  liquidityFeeOnSell;  
573  
574  uint256 public  marketingFeeOnBuy;  
575  uint256 public  marketingFeeOnSell;  
576
```


SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED

LINE 593

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
592     event ExcludeFromFees(address indexed account, bool isExcluded);
593     event MarketingWalletChanged(address marketingWallet);
594     event SwapAndLiquify(uint256 tokensSwapped,uint256 bnbReceived,uint256
tokensIntoLiquidity);
595     event SwapAndSendMarketing(uint256 tokensSwapped, uint256 bnbSend);
596     event SwapTokensAtAmountUpdated(uint256 swapTokensAtAmount);
597
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 676

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
675     function isExcludedFromFees(address account) public view returns(bool) {  
676         return _isExcludedFromFees[account];  
677     }  
678  
679     function changeMarketingWallet(address _marketingWallet) external onlyOwner{  
680
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 679

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
678
679  function changeMarketingWallet(address _marketingWallet) external onlyOwner{
680  require(_marketingWallet != marketingWallet,"Marketing wallet is already that
address");
681  require(_marketingWallet != address(0),"Marketing wallet cannot be the zero
address");
682  marketingWallet = _marketingWallet;
683
```

SWC-101 | ARITHMETIC OPERATION "*" DISCOVERED

LINE 691

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
690     require(!tradingEnabled, "Trading already enabled.");
691     tradingEnabled = true;
692     swapEnabled = true;
693 }
694
695
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 695

low SEVERITY

This plugin produces issues to support false positive discovery within mythrill.

Source File

- BNBGB.sol

Locations

[illegible]

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 799

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
798     0 ,  
799     address(0xdead) ,  
800     block.timestamp  
801     );  
802  
803
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 806

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
805
806  function swapAndSendMarketing(uint256 tokenAmount) private {
807      uint256 initialBalance = address(this).balance;
808
809      address[] memory path = new address[](2);
810
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 807

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
806     function swapAndSendMarketing(uint256 tokenAmount) private {  
807         uint256 initialBalance = address(this).balance;  
808  
809         address[] memory path = new address[](2);  
810         path[0] = address(this);  
811     }
```


SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

LINE 809

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
808
809     address[] memory path = new address[](2);
810     path[0] = address(this);
811     path[1] = uniswapV2Router.WETH();
812
813
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 813

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
812
813     uniswapV2Router.swapExactTokensForETHSupportingFeeOnTransferTokens(
814         tokenAmount,
815         0,
816         path,
817
```

SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

LINE 822

low SEVERITY

This plugin produces issues to support false positive discovery within mythril.

Source File

- BNBGB.sol

Locations

```
821
822 payable(marketingWallet).sendValue(newBalance);
823
824 emit SwapAndSendMarketing(tokenAmount, newBalance);
825 }
826
```

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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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