Infinity Rocket Token

Smart Contract Audit Report

SYSFIXED

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AUDITED DETAILS

Audited Project

Project name	Token ticker	Blockchain
Infinity Rocket Token	IRT	Binance Smart Chain

Addresses

Contract address	0xcbe5bca571628894a38836b0bae833ff012f71d8
Contract deployer address	0x805920b5F79377D521e685477c632A6a17a9f6B9

Project Website

https://irocket.pro/

Codebase

https://bscscan.com/address/0xcbe5bca571628894a38836b0bae833ff012f71d8#code

SUMMARY

Infinity Rocket is a multi-purpose platform that allows you to simplify the launch and promotion of any projects on the blockchain.

▌Contract Summary

Documentation Quality

Infinity Rocket Token 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 Infinity Rocket Token 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 349, 386, 407, 438, 439, 458, 459, 481, 482 and 580.
- SWC-103 | Pragma statements can be allowed to float when a contract is intended on lines 11, 38, 108, 212, 548, 589 and 609.

CONCLUSION

We have audited the Infinity Rocket Token project released on September 2021 to discover issues and identify potential security vulnerabilities in Infinity Rocket Token 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 Infinity Rocket Token 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 floating pragma is set. 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.	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.	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.	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	Friday Sep 17 2021 06:41:35 GMT+0000 (Coordinated Universal Time)
Finished	Saturday Sep 18 2021 22:02:15 GMT+0000 (Coordinated Universal Time)
Mode	Standard
Main Source File	BurnableBEP20.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-103	A FLOATING PRAGMA IS SET.	low	acknowledged
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SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 349

low SEVERITY

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

Source File

- BurnableBEP20.sol

Locations

```
348    require(currentAllowance >= amount, "BEP20: transfer amount exceeds allowance");
349    _approve(sender, _msgSender(), currentAllowance - amount);
350
351    return true;
352    }
353
```

SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED
LINE 386

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

Source File
- BurnableBEP20.sol

Locations

```
385    function increaseAllowance(address spender, uint256 addedValue) public virtual
returns (bool) {
386    _approve(_msgSender(), spender, _allowances[_msgSender()][spender] + addedValue);
387    return true;
388    }
389
390
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 407

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

Source File
- BurnableBEP20.sol

Locations

```
406   require(currentAllowance >= subtractedValue, "BEP20: decreased allowance below
zero");
407   _approve(_msgSender(), spender, currentAllowance - subtractedValue);
408
409   return true;
410   }
411
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 438

low SEVERITY

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

Source File

- BurnableBEP20.sol

Locations

```
437    require(senderBalance >= amount, "BEP20: transfer amount exceeds balance");
438    _balances[sender] = senderBalance - amount;
439    _balances[recipient] += amount;
440
441    emit Transfer(sender, recipient, amount);
442
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED
LINE 439

low SEVERITY

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

Source File

- BurnableBEP20.sol

Locations

```
438    _balances[sender] = senderBalance - amount;
439    _balances[recipient] += amount;
440
441    emit Transfer(sender, recipient, amount);
442    }
443
```

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SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED
LINE 458

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

Source File
- BurnableBEP20.sol

Locations

```
457
458    _totalSupply += amount;
459    _balances[account] += amount;
460    emit Transfer(address(0), account, amount);
461    }
462
```

SWC-101 | ARITHMETIC OPERATION "+=" DISCOVERED
LINE 459

low SEVERITY

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

Source File

- BurnableBEP20.sol

Locations

```
458    _totalSupply += amount;
459    _balances[account] += amount;
460    emit Transfer(address(0), account, amount);
461    }
462
463
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 481

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

Source File
- BurnableBEP20.sol

Locations

```
480    require(accountBalance >= amount, "BEP20: burn amount exceeds balance");
481    _balances[account] = accountBalance - amount;
482    _totalSupply -= amount;
483
484    emit Transfer(account, address(0), amount);
485
```

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SWC-101 | ARITHMETIC OPERATION "-=" DISCOVERED
LINE 482

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

Source File
- BurnableBEP20.sol

Locations

```
481    _balances[account] = accountBalance - amount;
482    _totalSupply -= amount;
483
484    emit Transfer(account, address(0), amount);
485    }
486
```

SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED
LINE 580

low SEVERITY

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

Source File

- BurnableBEP20.sol

Locations

```
579    require(currentAllowance >= amount, "BEP20: burn amount exceeds allowance");
580    _approve(account, _msgSender(), currentAllowance - amount);
581    _burn(account, amount);
582    }
583    }
584
```

SWC-103 | A FLOATING PRAGMA IS SET.
LINE 11

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
10
11   pragma solidity ^0.8.0;
12
13   /*
14   * @dev Provides information about the current execution context, including the
15
```

SWC-103 | A FLOATING PRAGMA IS SET.
LINE 38

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
37
38   pragma solidity ^0.8.0;
39
40   /**
41   * @dev Contract module which provides a basic access control mechanism, where
42
```

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SWC-103 | A FLOATING PRAGMA IS SET.
LINE 108

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
107
108   pragma solidity ^0.8.0;
109
110   /**
111    * @dev Interface of the BEP standard.
112
```

SWC-103 | A FLOATING PRAGMA IS SET.
LINE 212

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
211
212    pragma solidity ^0.8.0;
213
214
215
216
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 548

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
547
548    pragma solidity ^0.8.0;
549
550
551    /**
552
```

SWC-103 | A FLOATING PRAGMA IS SET.
LINE 589

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
588
589    pragma solidity ^0.8.0;
590
591    interface IPayable {
592    function pay(string memory serviceName) external payable;
593
```

SWC-103 | A FLOATING PRAGMA IS SET.

LINE 609

low SEVERITY

The current pragma Solidity directive is ""^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

- BurnableBEP20.sol

Locations

```
608
609   pragma solidity ^0.8.0;
610
611
612
613
```

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