## Infinity Rocket Token

# Smart Contract Audit Report

SYSFIXED

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## Disclaimer

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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<br>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<br>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<br>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<br>SWC-121<br>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 |
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| SWC-101 | ARITHMETIC OPERATION "-" DISCOVERED | low | acknowledged |
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |

| | | | |
|---|---|---|---|
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |
| SWC-103 | A FLOATING PRAGMA IS SET. | low | acknowledged |

# 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
```

# 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
```

# 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
```

# 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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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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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.