CFG NINJA AUDITS

Security Assessment

Reward Token Token

August 10, 2023

Audit Status: Pass

Audit Edition: Advance

TRUMPX

POWERED BY BLADE POOL

Risk Analysis

Classifications of Manual Risk Results

Classification	Description
Critical	Danger or Potential Problems.
Major	Be Careful or Fail test.
Minor	Pass, Not-Detected or Safe Item.
Informational	Function Detected

Manual Code Review Risk Results

Contract Priviledge	Description
Buy Tax	5
Sale Tax	5
Cannot Buy	Pass
Cannot Sale	Pass
Max Tax	5
Modify Tax	Not-Detected
Fee Check	Pass
Is Honeypot?	Not detected
Trading Cooldown	Not Detected
Can Pause Trade?	Pass
Pause Transfer?	Not-Detected

Contract Priviledge	Description
Max Tx?	Pass
Is Anti Whale?	Not Detected
Is Anti Bot?	Not Detected
Is Blacklist?	Not Detected
Blacklist Check	Pass
is Whitelist?	Not Detected
Can Mint?	Pass
Is Proxy?	Not Detected
Can Take Ownership?	Not detected
Hidden Owner?	Not detected
Owner	0x1f6b32601345a92fb77656699ae157be9270d9b2
Self Destruct?	Not Detected
Other?	Not detected
Other?	Not detected
Holders	7
Auditor Confidence	High

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.

Project Overview

Token Summary

Parameter	Result
Address	
Name	Reward Token
Token Tracker	Reward Token (RWDT)
Decimals	18
Supply	10,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.19+commit.7dd6d404
Contract Name	RewardToken
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/#code
Payment Tx	0xe337472f7fdd4d147867617c50675d4e7ccfc68c9499a72b8b8b4bd139a14f51

MainNet Contract was Not Assessed

TestNet Contract Assessed

Contract Name

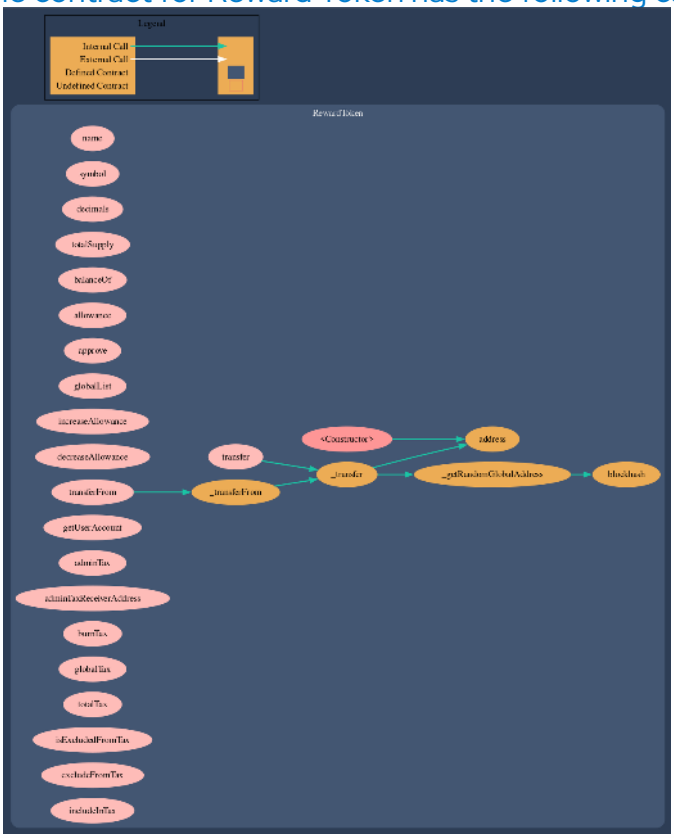
Name	Contract	Live
Reward Token	0x1a6Bd0627Ba227ad05160252113A1040a8d0695C	Yes

Solidity Code Provided

SolID	File Sha-1	FileName
RewardToken	1414112eeb54a8a3ec14be2b25e63b4a68b0fd73	RewardToken.sol
RewardToken		
RewardToken		
RewardToken		

Call Graph

The contract for Reward Token has the following call graph structure.



Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	RewardToken.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	RewardToken.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	RewardToken.sol	L: 0 C: 0
SWC-103	Low	A floating pragma is set.	RewardToken.sol	L: 2 C: 2
SWC-104	Pass	Unchecked Call Return Value.	RewardToken.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	RewardToken.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	RewardToken.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	RewardToken.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set..	RewardToken.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	RewardToken.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	RewardToken.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	RewardToken.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	RewardToken.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	RewardToken.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	RewardToken.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	RewardToken.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	RewardToken.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	RewardToken.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	RewardToken.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	RewardToken.sol	L: 0 C: 0
SWC-120	Low	Potential use of block.number as source of randonmness.	RewardToken.sol	L: 25 C: 5922, L: 25 C: 5932
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	RewardToken.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	RewardToken.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	RewardToken.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	RewardToken.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-125	Pass	Incorrect Inheritance Order.	RewardToken.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	RewardToken.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	RewardToken.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	RewardToken.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	RewardToken.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	RewardToken.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	RewardToken.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	RewardToken.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	RewardToken.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	RewardToken.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	RewardToken.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	RewardToken.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.

Smart Contract Vulnerability Details

SWC-103 - Floating Pragma.

CWE-664: Improper Control of a Resource Through its Lifetime.

References:

Description:

Contracts should be deployed with the same compiler version and flags that they have been tested with thoroughly. Locking the pragma helps to ensure that contracts do not accidentally get deployed using, for example, an outdated compiler version that might introduce bugs that affect the contract system negatively.

Remediation:

Lock the pragma version and also consider known bugs (https://github.com/ethereum/solidity/releases) for the compiler version that is chosen.

Pragma statements can be allowed to float when a contract is intended for consumption by other developers, as in the case with contracts in a library or EthPM package. Otherwise, the developer would need to manually update the pragma in order to compile locally.

References:

Ethereum Smart Contract Best Practices - Lock pragmas to specific compiler version.

Smart Contract Vulnerability Details

SWC-120 - Weak Sources of Randomness from Chain Attributes

CWE-330: Use of Insufficiently Random Values

Description:

Solidity allows for ambiguous naming of state variables when inheritance is used. Contract A with a variable x could inherit contract B that also has a state variable x defined. This would result in two separate versions of x, one of them being accessed from contract A and the other one from contract B. In more complex contract systems this condition could go unnoticed and subsequently lead to security issues.

Shadowing state variables can also occur within a single contract when there are multiple definitions on the contract and function level.

Remediation:

Using commitment scheme, e.g. RANDAO. Using external sources of randomness via oracles, e.g. Oraclize. Note that this approach requires trusting in oracle, thus it may be reasonable to use multiple oracles. Using Bitcoin block hashes, as they are more expensive to mine.

References:

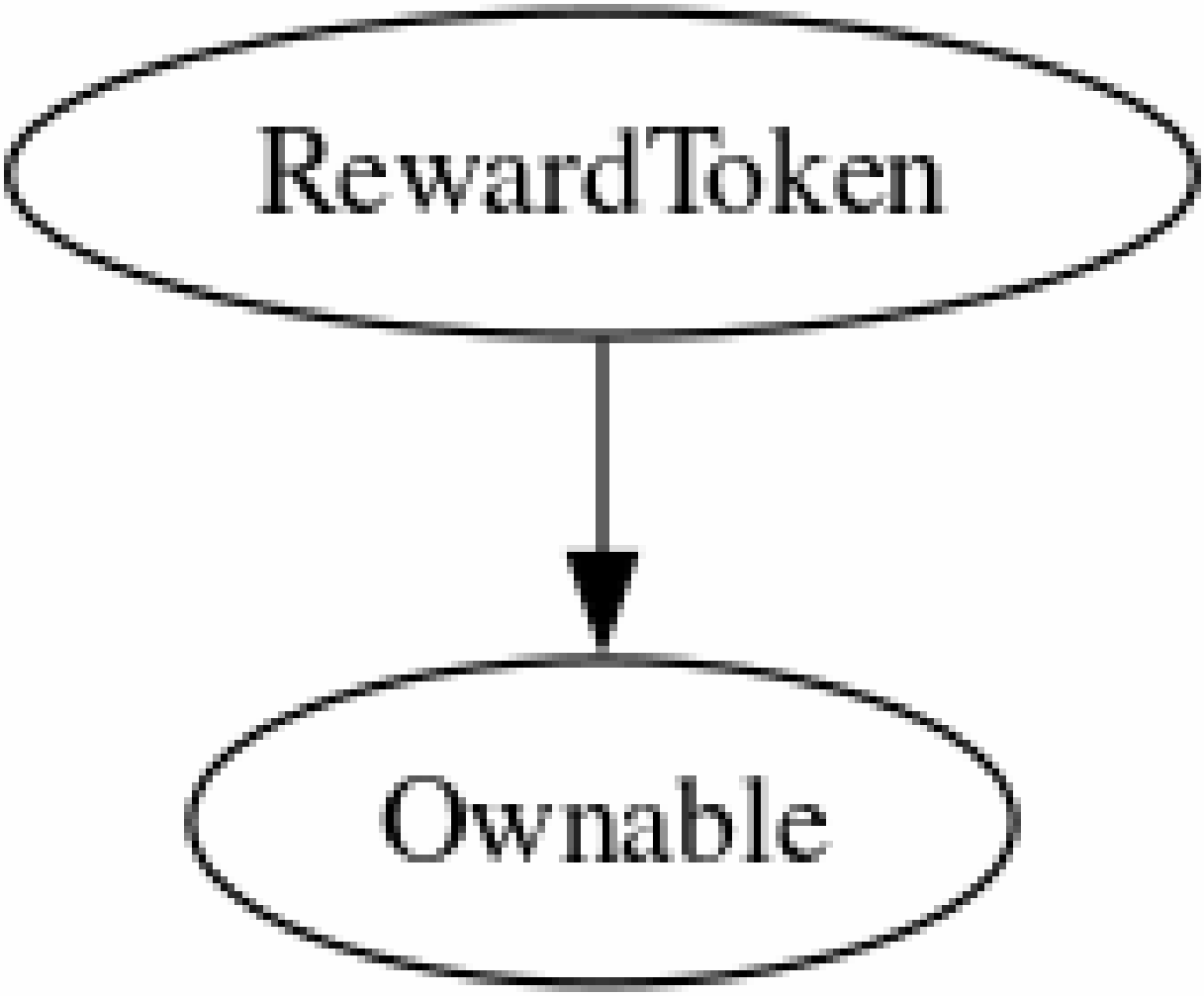
How can I securely generate a random number in my smart contract?)

When can BLOCKHASH be safely used for a random number? When would it be unsafe?

The Run smart contract.

Inheritance

The contract for Reward Token has the following inheritance structure.



Smart Contract Advance Checks

ID	Severity	Name	Result	Status
RWDT-01	Minor	Potential Sandwich Attacks.	Pass	Not-Found
RWDT-02	Minor	Function Visibility Optimization	Pass	Not-Detected
RWDT-03	Medium	Lack of Input Validation.	Fail	Detected
RWDT-04	Major	Centralized Risk In addLiquidity.	Pass	Not-Detected
RWDT-05	Medium	Missing Event Emission.	Fail	Detected
RWDT-06	Minor	Conformance with Solidity Naming Conventions.	Pass	Not-Detected
RWDT-07	Minor	State Variables could be Declared Constant.	Pass	Not-Found
RWDT-08	Minor	Dead Code Elimination.	Pass	Not-Found
RWDT-09	Major	Third Party Dependencies.	Pass	Not-Found
RWDT-10	Major	Initial Token Distribution.	Pass	Not-Found
RWDT-11	Minor	Multisend is present in code.	Pass	Not-Detected
RWDT-12	Major	Centralization Risks In The X Role	Pass	Not-Found
RWDT-13	Informational	Extra Gas Cost For User..	Pass	Not-Found
RWDT-6	Medium	Unnecessary Use Of SafeMath	Pass	Not-Detected
RWDT-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not-Found

ID	Severity	Name	Result	Status
RWDT-16	Medium	Invalid collection of Taxes during Transfer.	Pass	Not-Found
RWDT-17	Informational	Conformance to numeric notation best practice.	Pass	Not-Found
RWDT-18	Medium	Stop Transactions by using Enable Trade.	Pass	Not-Detected

RWDT-03 | Lack of Input Validation.

Category	Severity	Location	Status
Volatile Code	Medium	RewardToken.sol: 125,14	Detected

Description

The given input is missing the check for the non-zero address.

The given input is missing the check for the unSetPair is missing required function.

Remediation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
...
 require(receiver != address(0), "Receiver is the zero address");
...
...
require(value X limitation, "Your not able to do this function");
...
```

We also recommend customer to review the following function that is missing a required validation. unSetPair is missing required function.

RWDT-05 | Missing Event Emission.

Category	Severity	Location	Status
Volatile Code	Medium	RewardToken.sol: 125, 14	Detected

Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.The linked code does not create an event for the transfer.

Remediation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.

Technical Findings Summary

Classification of Risk

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
Major	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
Minor	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

Findings

Severity	Found	Pending	Resolved
Critical	0	0	0
Major	0	0	0
Medium	0	0	0
Minor	2	0	0
Informational	0	0	0
Total	2	0	0

Social Media Checks

Social Media	URL	Result
Twitter	https://twitter.com/TrumpXofficial	Pass
Other	https://docs.trumpx.us	Pass
Website	https://trumpx.us	Pass
Telegram	https://t.me/TrumpXofficial	Pass

We recommend to have 3 or more social media sources including a completed working websites.

Social Media Information Notes:

Auditor Notes: undefined

Project Owner Notes:

Assessment Results

Score Results

Review	Score
Overall Score	89/100
Auditor Score	85/100
Review by Section	**Score**
Manual Scan Score	36/53
SWC Scan Score	35 /37
Advance Check Score	18 /19

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

Audit Passed

Assessment Results

Important Notes:

- Owner can't set max tx amount.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.

Auditor Score =85
Audit Passed

Appendix

Finding Categories

Centralization / Privilege

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

Logical Issue

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functionsbeing invoke-able by anyone under certain circumstances.

Volatile Code

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

Inconsistency

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code,such as a constructor assignment imposing different require statements on the input variables than a setterfunction.

Coding Best Practices

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.

Disclaimer

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