



# **Smart Contract Security Audit**

<u>TechRate</u> May, 2021

## **Audit Details**



**Audited project** 

**PORNROCKET** 



**Deployer address** 

0x86C6Bb32c8a95bD040e2Da7489b544D168c895a5



**Client contacts:** 

**PORNROCKET** team



Blockchain

**Binance Smart Chain** 





### **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at 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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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

## **Background**

TechRate was commissioned by PORNROCKET to perform an audit of smart contracts:

 $\frac{https://bscscan.com/address/0xCF9f991b14620f5ad144Eec11f9bc7Bf08987622\#cod}{\underline{e}}$ 

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

## **Contracts Details**

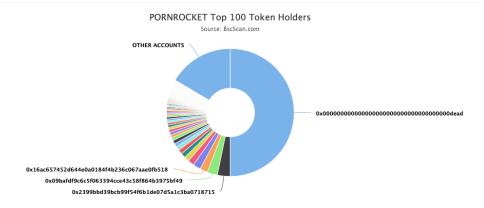
#### Token contract details for 02.06.2021

Contract name	PORNROCKET
Contract address	0xCF9f991b14620f5ad144Eec11f9bc7Bf08987622
Total supply	1_000_000_000_000
Token ticker	PORNROCKET
Decimals	9
Token holders	10,714
Transactions count	29,685
Top 100 holders dominance	83.45%
Liquidity fee	5
Tax fee	5
Total fees	103998311243389465381173
Uniswap V2 pair	0x8195143df00e94f320f3f60c48d5ed97a6bfabfc
Contract deployer address	0x86C6Bb32c8a95bD040e2Da7489b544D168c895a5
Contract's current owner address	0x000000000000000000000000000000000000

## **PORNROCKET Token Distribution**

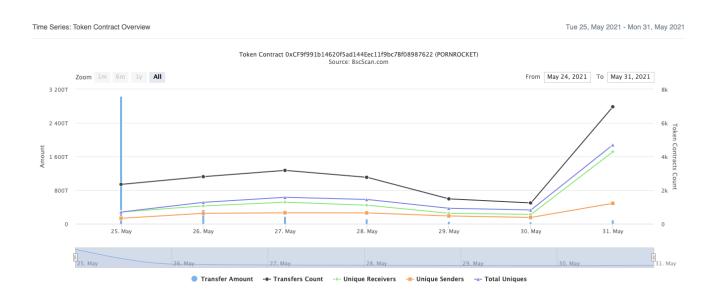
? The top 100 holders collectively own 83.45% (834,525,026,266,333.00 Tokens) of PORNROCKET

∑ Token Total Supply: 1,000,000,000,000,000.00 Token I Total Token Holders: 10,714



(A total of 834,525,026,266,333.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000,000 token)

## PORNROCKET Contract Interaction Details



# PORNROCKET Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x000000000000000000000000000000000000	500,000,000,000,000	50.0000%
2	0x2399bbd39bcb99f54f6b1de07d5a1c3ba0718715	32,665,754,776,883.070476118	3.2666%
3	0x09bafdf9c6c5f063394cce43c58f864b3975bf49	25,762,955,600,999.926392475	2.5763%
4	0x16ac657452d644e0a0184f4b236c067aae0fb518	19,742,079,682,718.707376724	1.9742%
5	PancakeSwap V2: PORNROCKET	19,380,476,468,926.92855228	1.9380%
6	0xc94478a8994462ed31011b3c210776f4611f2d47	16,000,139,694,564.492662028	1.6000%
7	0x769ba16f31a73b635e75c17fccc3db4feb2521ab	12,842,799,924,316.257103794	1.2843%
8	0x5da3b3017c2d6a1d5fa5ec4092ec1e5d37e233e9	12,067,899,486,008.028071088	1.2068%
9	0x78e442de480e9851ca9db06974e04fc0f6905ba7	11,375,625,996,958.923316532	1.1376%
10	0xe6f3f846390f36efc840b9a3e6148c340d9d39e6	9,937,931,161,782.014650838	0.9938%



### **Contract functions details**

#### + [Int] IERC20 - [Ext] totalSupply - [Ext] balanceOf - [Ext] transfer # - [Ext] allowance - [Ext] approve # - [Ext] transferFrom # + [Lib] SafeMath - [Int] add - [Int] sub - [Int] sub - [Int] mul - [Int] div - [Int] div - [Int] mod - [Int] mod + Context - [Int] \_msgSender - [Int] \_msgData + [Lib] Address - [Int] isContract - [Int] sendValue # - [Int] functionCall # - [Int] functionCall # - [Int] functionCallWithValue # - [Int] functionCallWithValue # - [Prv] \_functionCallWithValue # + Ownable (Context) - [Int] <Constructor># - [Pub] owner - [Pub] renounceOwnership # - modifiers: onlyOwner - [Pub] transferOwnership # - modifiers: onlyOwner - [Pub] geUnlockTime - [Pub] lock # - modifiers: onlyOwner - [Pub] unlock # + [Int] IUniswapV2Factory - [Ext] feeTo - [Ext] feeToSetter - [Ext] getPair - [Ext] allPairs - [Ext] allPairsLength - [Ext] createPair #

- [Ext] setFeeTo #

#### - [Ext] setFeeToSetter # + [Int] IUniswapV2Pair - [Ext] name - [Ext] symbol - [Ext] decimals - [Ext] totalSupply - [Ext] balanceOf - [Ext] allowance - [Ext] approve # - [Ext] transfer # - [Ext] transferFrom # - [Ext] DOMAIN\_SEPARATOR - [Ext] PERMIT\_TYPEHASH - [Ext] nonces - [Ext] permit # - [Ext] MINIMUM\_LIQUIDITY - [Ext] factory - [Ext] token0 - [Ext] token1 - [Ext] getReserves - [Ext] price0CumulativeLast - [Ext] price1CumulativeLast - [Ext] kLast - **[Ext]** mint # - [Ext] burn # - [Ext] swap # - [Ext] skim # - [Ext] sync # - [Ext] initialize # + [Int] IUniswapV2Router01 - [Ext] factory - [Ext] WETH - [Ext] addLiquidity # - [Ext] addLiquidityETH (\$) - [Ext] removeLiquidity # - [Ext] removeLiquidityETH # - [Ext] removeLiquidityWithPermit # - [Ext] removeLiquidityETHWithPermit # - [Ext] swapExactTokensForTokens # - [Ext] swapTokensForExactTokens # - [Ext] swapExactETHForTokens (\$) - [Ext] swapTokensForExactETH # - [Ext] swapExactTokensForETH # - [Ext] swapETHForExactTokens (\$) - [Ext] quote - [Ext] getAmountOut - [Ext] getAmountIn - [Ext] getAmountsOut - [Ext] getAmountsIn

- + [Int] IUniswapV2Router02 (IUniswapV2Router01)
  - [Ext] removeLiquidityETHSupportingFeeOnTransferTokens #
  - [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens #

```
- [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
```

- [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)
- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #

#### + PORNROCKET (Context, IERC20, Ownable)

- [Pub] <Constructor> #
- [Pub] name
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] isExcludedFromReward
- [Pub] totalFees
- [Pub] deliver #
- [Pub] reflectionFromToken
- [Pub] tokenFromReflection
- [Pub] excludeFromReward #
  - modifiers: onlyOwner
- [Ext] includeInReward #
  - modifiers: onlyOwner
- [Prv] transferBothExcluded #
- [Pub] excludeFromFee #
  - modifiers: onlyOwner
- [Pub] includeInFee #
- modifiers: onlyOwner
- [Ext] setTaxFeePercent #
  - modifiers: onlyOwner
- [Ext] setLiquidityFeePercent #
  - modifiers: onlyOwner
- [Ext] setMaxTxPercent #
  - modifiers: onlyOwner
- [Pub] setSwapAndLiquifyEnabled #
  - modifiers: onlyOwner
- [Ext] enableTrading #
  - modifiers: onlyOwner
- [Ext] <Fallback> (\$)
- [Prv] \_reflectFee #
- [Prv] \_getValues
- [Prv] getTValues
- [Prv] \_getRValues
- [Prv] getRate
- [Prv] \_getCurrentSupply
- [Prv] \_takeLiquidity #
- [Prv] calculateTaxFee
- [Prv] calculateLiquidityFee
- [Prv] removeAllFee #
- [Prv] restoreAllFee #
- [Pub] isExcludedFromFee
- [Prv] \_approve #

- [Prv] \_transfer #
- [Prv] swapAndLiquify #
  - modifiers: lockTheSwap
- [Prv] swapTokensForEth #
- [Prv] addLiquidity #
- [Prv] \_tokenTransfer #
- [Prv] \_transferStandard #
- [Prv] \_transferToExcluded #
- [Prv] \_transferFromExcluded #
- (\$) = payable function # = non-constant function

# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Low issues
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

### **Security Issues**

High Severity Issues

No high severity issues found.

No medium severity issues found.

- Low Severity Issues
  - 1. Out of gas

Issue:

 The function includeInReward() uses the loop to find and remove addresses from the \_excluded list. Function will be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.

```
function includeInReward(address account1) external onlyOwner() {
    require(_isExcluded[account1], "Account is already excluded");
    for (uint256 i = 0; i < _excluded.length; i++) {
        if (_excluded[i] == account1) {
            excluded[i] = _excluded.length - 1];
            tOwned[account1] = 0;
            isExcluded[account1] = false;
            excluded.pop();
            break;
      }
    }
}</pre>
```

 The function \_getCurrentSupply also uses the loop for evaluating total supply. It also could be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.

#### Recommendation:

Check that the excluded array length is not too big.

# Owner privileges (In the period when the owner is not renounced)

Owner can change the tax and liquidity fee.

```
function setTaxFeePercent(uint256 taxFee) external onlyOwner() {
    _taxFee = taxFee;
}

function setLiquidityFeePercent(uint256 liquidityFee) external onlyOwner() {
    _liquidityFee = liquidityFee;
}
```

Owner can change the maximum transaction amount.

Owner can exclude from the fee.

```
function excludeFromFee(address account1) public onlyOwner {
    _isExcludedFromFee[account1] = true;
}
```

Owner can enable trading.

```
ftrace|funcSig
function enableTrading() external onlyOwner() {
    tradingEnabled = true;
}
```

 Owner can lock and unlock. By the way, using these functions the owner could leave as owner even after the ownership was renounced.

```
//Locks the contract for owner for the amount of time provided
function lock(uint256 time) public virtual onlyOwner {
    _previousOwner = _owner;
    _owner = address(0);
    _lockTime = now + time;
    emit OwnershipTransferred(_owner, address(0));
}

//Unlocks the contract for owner when _lockTime is exceeds
function unlock() public virtual {
    require(_previousOwner == msg.sender, "You don't have permission to unlock");
    require(now > _lockTime , "Contract is locked until 7 days");
    emit OwnershipTransferred(_owner, _previousOwner);
    _owner = _previousOwner;
}
```

### Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details provided by the team: https://dxsale.app/app/pages/dxlockview?id=0&add=0x86c6bb32c8 a95bd040e2da7489b544d168c895a5&type=lplock&chain=BSC.

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.





