Techrate1 Techrate

TechRate

AUDIT COMPANY

# Smart Contract Security Audit

TechRate

July, 2021

# Audit Details

Audited project

**Porn Token**

Deployer address

**0xf47318B5d5F8265976775098d87aBc65A3873E49**

Client contacts:

**Porn Token team**

Blockchain

**Binance Smart Chain**

Project website:

**Not provided**

# 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.

DISCLAIMER: By reading this report or any part of it, you agree to the terms of this disclaimer. If you do not agree to the terms, then please immediately cease reading this report, and delete and destroy any and all copies of this report downloaded and/or printed by you. This report is provided for information purposes only and on a non-reliance basis, and does not constitute investment advice. No one shall have any right to rely on the report or its contents, and TechRate and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers and other representatives) (TechRate) owe no duty of care towards you or any other person, nor does TechRate make any warranty or representation to any person on the accuracy or completeness of the report. The report is provided "as is", without any conditions, warranties or other terms of any kind except as set out in this disclaimer, and TechRate hereby excludes all representations, warranties, conditions and other terms (including, without limitation, the warranties implied by law of satisfactory quality, fitness for purpose and the use of reasonable care and skill) which, but for this clause, might have effect in relation to the report. Except and only to the extent that it is prohibited by law, TechRate hereby excludes all liability and responsibility, and neither you nor any other person shall have any claim against TechRate, for any amount or kind of loss or damage that may result to you or any other person (including without limitation, any direct, indirect, special, punitive, consequential or pure economic loss or damages, or any loss of income, profits, goodwill, data, contracts, use of money, or business interruption, and whether in delict, tort (including without limitation negligence), contract, breach of statutory duty, misrepresentation (whether innocent or negligent) or otherwise under any claim of any nature whatsoever in any jurisdiction) in any way arising from or connected with this report and the use, inability to use or the results of use of this report, and any reliance on this report.

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 Porn Token to perform an audit of smart contracts:

https://bscscan.com/address/0xab4b42fec18f9a5ad5cf6668c0fa1ba79f13570a#code

## 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

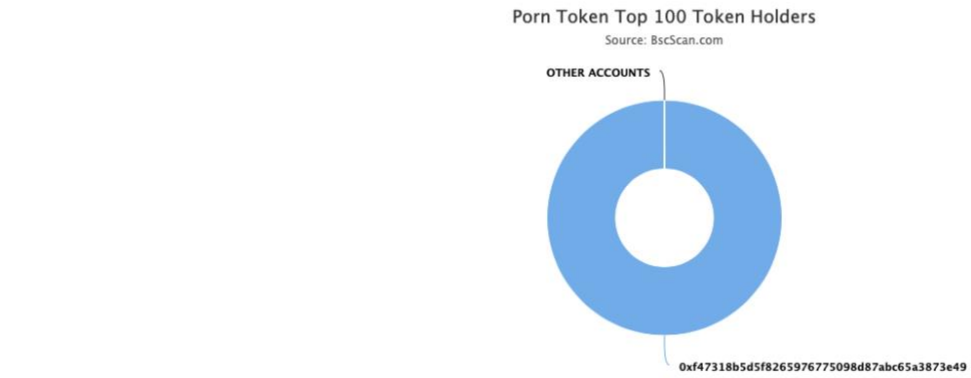
## Token contract details for 17.07.2021

| | |
|---|---|
| Contract name | Porn Token |
| Contract address | 0xaB4B42fEC18F9a5aD5CF6668c0fa1ba79f13570a |
| Total supply | 1,000,000,000,000 |
| Token ticker | PORN |
| Decimals | 9 |
| Token holders | 1 |
| Transactions count | 1 |
| Top 100 holders dominance | 100.00% |
| Swap threshold | 500000000000000000 |
| Auto liquidity receiver | 0xf47318b5d5f8265976775098d87abc65a3873e49 |
| Marketing fee receiver | 0x689e6ece4052996d77f30f79a457fe9e5c942a28 |
| Pair | 0x9f56e0250aa15d06b99e72a9f97d6943be0279b9 |
| Contract deployer address | 0xf47318B5d5F8265976775098d87aBc65A3873E49 |
| Contract's current owner address | 0xf47318b5d5f8265976775098d87abc65a3873e49 |

# BASE3 Token Distribution

The top 100 holders collectively own 100.00% (1,000,000,000,000.00 Tokens) of Porn Token

Token Total Supply: 1,000,000,000,000.00 Token | Total Token Holders: 1

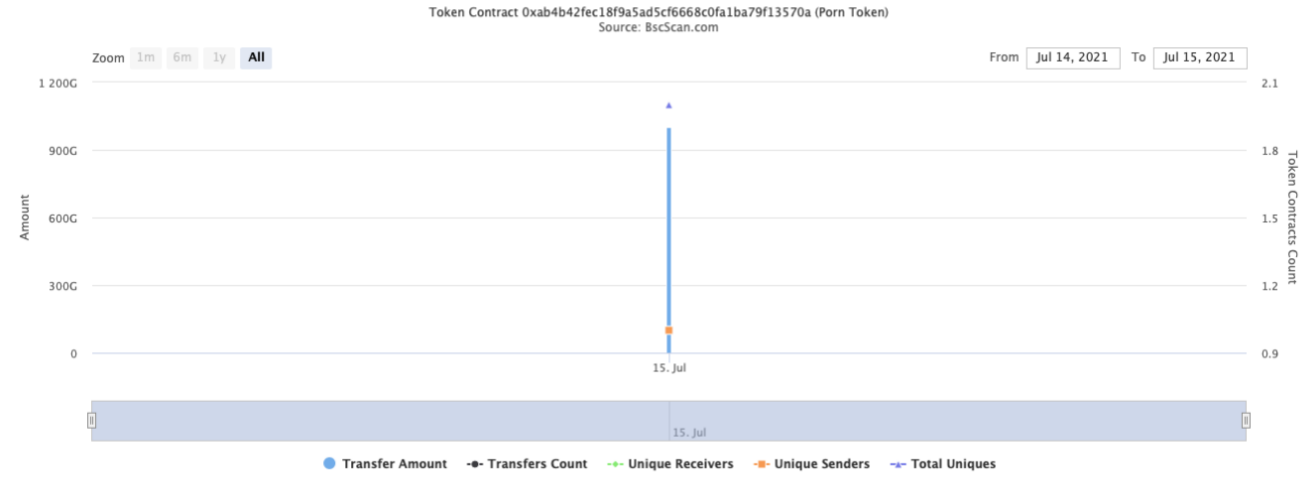



(A total of 1,000,000,000,000.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000.00 token)

# BASE3 Contract Interaction Details

Time Series: Token Contract Overview

Thu 15, Jul 2021 - Thu 15, Jul 2021



# BASE3 Top 10 Token Holders

| Rank | Address | Quantity (Token) | Percent |
|---|---|---|---|
| 1. | 0xf47318b5d5f8265976775098d87abc65a3873e49 | 1,000,000,000,000 | 100.0000% |

# Contract functions details

+ [Lib] SafeMath
  - [Int] add
  - [Int] sub
  - [Int] sub
  - [Int] mul
  - [Int] div
  - [Int] div

+ [Int] IBEP20
  - [Ext] totalSupply
  - [Ext] decimals
  - [Ext] symbol
  - [Ext] name
  - [Ext] getOwner
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #

+  Auth
  - [Pub] <Constructor> #
  - [Pub] authorize #
    - modifiers: onlyOwner
  - [Pub] unauthorize #
    - modifiers: onlyOwner
  - [Pub] isOwner
  - [Pub] isAuthorized
  - [Pub] transferOwnership #
    - modifiers: onlyOwner

+ [Int] IPancakeFactory
  - [Ext] feeTo
  - [Ext] feeToSetter
  - [Ext] getPair
  - [Ext] allPairs
  - [Ext] allPairsLength
  - [Ext] createPair #
  - [Ext] setFeeTo #
  - [Ext] setFeeToSetter #

+ [Int] IPancakePair
  - [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] IPancakeRouter01
  - [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] IPancakeRouter02 (IPancakeRouter01)
  - [Ext] removeLiquidityETHSupportingFeeOnTransferTokens #
  - [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens #
  - [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
  - [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens ($)
  - [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #

+ [Int] IDividendDistributor
  - [Ext] setDistributionCriteria #
  - [Ext] setShare #
  - [Ext] deposit ($)
  - [Ext] process #

+  DividendDistributor (IDividendDistributor)
  - [Pub] <Constructor> #

- [Ext] setDistributionCriteria #
  - modifiers: onlyToken
- [Ext] setShare #
  - modifiers: onlyToken
- [Ext] deposit ($)
  - modifiers: onlyToken
- [Ext] process #
  - modifiers: onlyToken
- [Int] shouldDistribute
- [Int] distributeDividend #
- [Ext] claimDividend #
- [Pub] getUnpaidEarnings
- [Int] getCumulativeDividends
- [Int] addShareholder #
- [Int] removeShareholder #

+ PORN (IBEP20, Auth)
  - [Pub] <Constructor> #
    - modifiers: Auth
  - [Ext] <Fallback> ($)
  - [Ext] totalSupply
  - [Ext] decimals
  - [Ext] symbol
  - [Ext] name
  - [Ext] getOwner
  - [Pub] balanceOf
  - [Ext] allowance
  - [Pub] approve #
  - [Ext] approveMax #
  - [Ext] transfer #
  - [Ext] transferFrom #
  - [Int] _transferFrom #
  - [Int] _basicTransfer #
  - [Int] checkTxLimit
  - [Int] shouldTakeFee
  - [Pub] getTotalFee
  - [Int] takeFee #
  - [Int] shouldSwapBack
  - [Int] swapBack #
    - modifiers: swapping
  - [Int] shouldAutoBuyback
  - [Ext] triggerZeusBuyback #
    - modifiers: authorized
  - [Int] triggerAutoBuyback #
  - [Int] buyTokens #
    - modifiers: swapping
  - [Ext] setAutoBuybackSettings #
    - modifiers: authorized
  - [Ext] setTxLimit #
    - modifiers: authorized
  - [Ext] setIsDividendExempt #
    - modifiers: authorized
  - [Ext] setIsFeeExempt #
    - modifiers: authorized
  - [Ext] setIsTxLimitExempt #

  - modifiers: authorized
- [Ext] setFees #
  - modifiers: authorized
- [Ext] setFeeReceivers #
  - modifiers: authorized
- [Ext] setSwapBackSettings #
  - modifiers: authorized
- [Ext] setTargetLiquidity #
  - modifiers: authorized
- [Ext] setDistributionCriteria #
  - modifiers: authorized
- [Ext] setDistributorSettings #
  - modifiers: authorized
- [Pub] getCirculatingSupply
- [Pub] getLiquidityBacking
- [Pub] isOverLiquified

($) = 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. | Passed |
| 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.

## Medium Severity Issues

No medium severity issues found.

## Low Severity Issues

No low severity issues found.

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

- Owner can call triggerZeusBuyback that’s initiate buyback.
- Owner can change auto buyback settings.
- Owner can change the maximum transaction amount.
- Owner can include in and exclude from dividends.
- Owner can include in and exclude from fee and transaction amount.
- Owner can change fees.
- Owner can change fee receivers.
- Owner can change swap threshold and disable/enable swap.
- Owner can change target liquidity values.
- Owner can change distribution criteria.
- Owner can change distribution GAS.

# Conclusion

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

**Liquidity locking details NOT provided by the team.**

***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.***