TechRate
May, 2022

SMART CONTRACTS SECURITY AUDIT REPORT

Techrate_audits Techrate Techrate1

Audit Details

Audited project

Pige Inu

Deployer address

0xa4b0588df297921ef93fda96979bf0db97e2f0df

Client contacts:

Pige Inu team

Blockchain

Binance Smart Chain

Project website:

https://pigeinu.online

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 Pige Inu to perform an audit of smart contracts:
https://bscscan.com/address/0x1fdb2c3851d067502ce2122be80a41ea212949e2#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

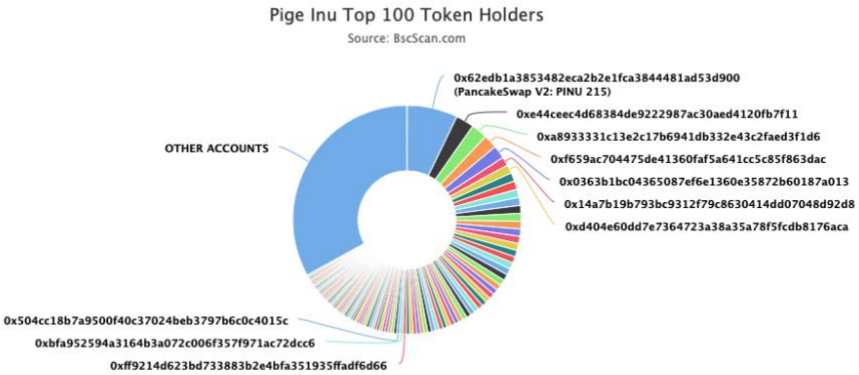
Token contract details for 02.05.2022

Contract name	Pige Inu
Contract address	0x1FDB2c3851D067502Ce2122bE80a41ea212949E2
Total supply	1,000,000,000,000,000
Token ticker	PINU
Decimals	9
Token holders	1,553
Transactions count	16,232
Top 100 holders dominance	66.98%
Auto LP percent	15
Buy fee	3
Sell fee	3
Uniswap V2 pair	0x62edb1a3853482eca2b2e1fca3844481ad53d900
Contract deployer address	0xa4b0588df297921ef93fda96979bf0db97e2f0df
Owner address	0x0000000000000000000000000000000000000000

Pige Inu Token Distribution

The top 100 holders collectively own 66.98% (669,764,256,220,142.00 Tokens) of Pige Inu

Token Total Supply: 1,000,000,000,000,000.00 Token | Total Token Holders: 1,554

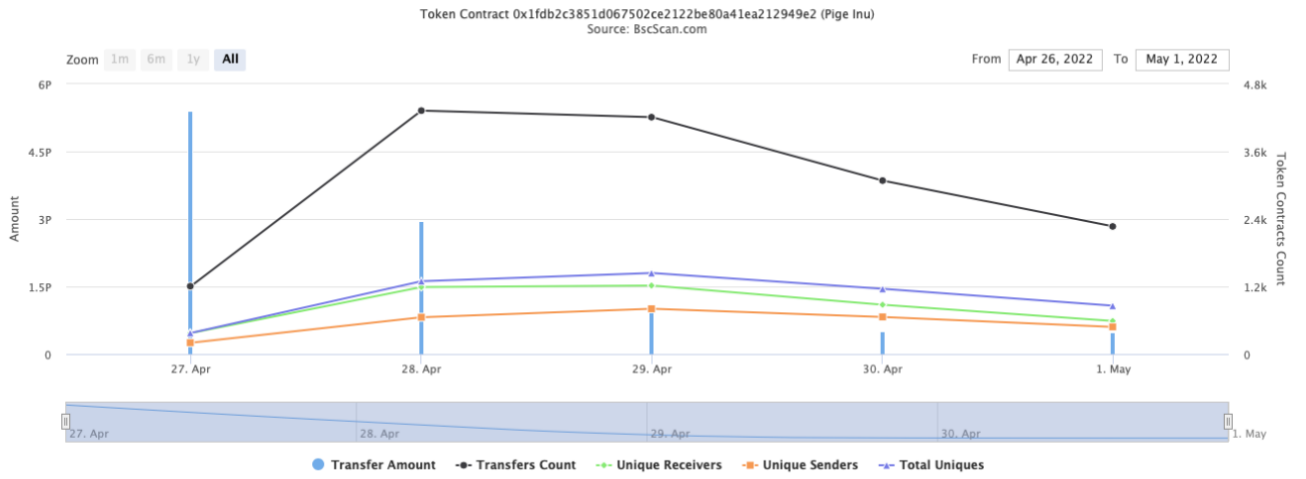


(A total of 669,764,256,220,142.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000.00 token)

Pige Inu Contract Interaction Details

Time Series: Token Contract Overview

Wed 27, Apr 2022 - Sun 1, May 2022



Pige Inu Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	PancakeSwap V2: PINU 215	71,860,405,676,629.092035717	7.1860%
2	0xe44ceec4d68384de9222987ac30aed4120fb7f11	25,879,709,157,512.771096429	2.5880%
3	0xa8933331c13e2c17b6941db332e43c2faed3f1d6	22,955,704,757,734.23433874	2.2956%
4	0xf659ac704475de41360faf5a641cc5c85f863dac	19,396,746,709,939.78385971	1.9397%
5	0x0363b1bc04365087ef6e1360e35872b60187a013	18,503,380,423,301.939981129	1.8503%
6	0x14a7b19b793bc9312f79c8630414dd07048d92d8	12,242,985,286,328.786629658	1.2243%
7	0xd404e60dd7e7364723a38a35a78f5fcdb8176aca	12,213,516,341,142.737449604	1.2214%
8	0xdd64c4eba00035fef4ae7b113ad0968f3ed6ffcf	12,096,015,858,593.184897001	1.2096%
9	0xf0716543a926ba3047482f0346b84bcbc9d67f37	12,003,029,975,087.672039769	1.2003%
10	0x81b4cb84844185d18911465a3c1cd4c02adb7a5d	11,491,943,349,048.861093993	1.1492%

Contract functions details

+ [Int] IERC20
  - [Ext] totalSupply
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #

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

+ Context
  - [Int] _msgSender
  - [Int] _msgData

+ [Lib] Address
  - [Int] isContract
  - [Int] sendValue #
  - [Int] functionCall #
  - [Int] functionCall #
  - [Int] functionCallWithValue #
  - [Int] functionCallWithValue #
  - [Int] functionStaticCall
  - [Int] functionStaticCall
  - [Int] functionDelegateCall #
  - [Int] functionDelegateCall #
  - [Prv] _verifyCallResult

+ [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] 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 #

+ PIGEINU (Context, IERC20)
  - [Pub] owner
  - [Pub] renounceOwnership #
  - [Pub] <Constructor> #
  - [Pub] name
  - [Pub] symbol
  - [Pub] decimals
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] allowance
  - [Pub] approve #
  - [Pub] transferFrom #
  - [Pub] increaseAllowance #
  - [Pub] decreaseAllowance #
  - [Ext] <Fallback> ($)
  - [Prv] _getCurrentSupply
  - [Prv] _approve #
  - [Prv] _transfer #
  - [Prv] sendToWallet #
  - [Prv] swapAndLiquify #
    - modifiers: lockTheSwap
  - [Prv] swapTokensForBNB #
  - [Prv] addLiquidity #
  - [Pub] remove_Random_Tokens #
  - [Prv] _tokenTransfer #

($) = 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.**	High issues
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

1. Burn issue

Issue:

- At every transfer with burn wallet it's balances changing, also total supply is decreasing. After some number of that kind of operations sum of the contract balances will not equal total supply.

Recommendation:
Revise burn logic of the contract and keep only one way of burning – decreasing total supply, or sending tokens to zero address.

Medium Severity Issues

No medium severity issues found.

Low Severity Issues

No low severity issues found.

- Owner can change fee receivers addresses.

Conclusion

Smart contracts contain high severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details are provided by the team:
https://bscscan.com/tx/0xffd64c8ee860bb4381f0fa9eaa249bde2f4a8938f56461ed8a86ce10ef0a09b1

Ownership renounce details are provided by the team:
https://bscscan.com/tx/0x00a4b002d962877e273258dacb6dbcb60a27e88f3317f34be79d290a031333e8

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.