



TechRate
AUDIT COMPANY

Smart Contract Security Audit

TechRate

November, 2021

Audit Details



Audited project

Profit Bank



Deployer address

0x7b6fbaa772048ed2358088c9fdbdfbb4582b15f0



Client contacts:

Profit Bank team



Blockchain

Binance Smart Chain



Project website:

<https://www.profitbank.io/>

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 Profit Bank to perform an audit of smart contracts:

<https://bscscan.com/address/0xf2f087955684Eabdf252A16C7B6620a1e3774515#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 11.11.2021

Contract name	Profit Bank
Contract address	0xf2f087955684Eabdf252A16C7B6620a1e3774515
Total supply	100,000,000,000
Token ticker	PBK
Decimals	6
Token holders	1,572
Transactions count	3,927
Top 100 holders dominance	100.00%
Liquidity fee	70/50
Tax fee	30/50
Total fees	124804105270632
Uniswap V2 pair	0xa3b6b1d4d91ac934efee493dceaeccacf80f5c25
Contract deployer address	0x7b6fbba772048ed2358088c9fdbdfbb4582b15f0
Contract's current owner address	0x6c0481a20d3447c48b1fdb3c8cf2efc5e0d85198

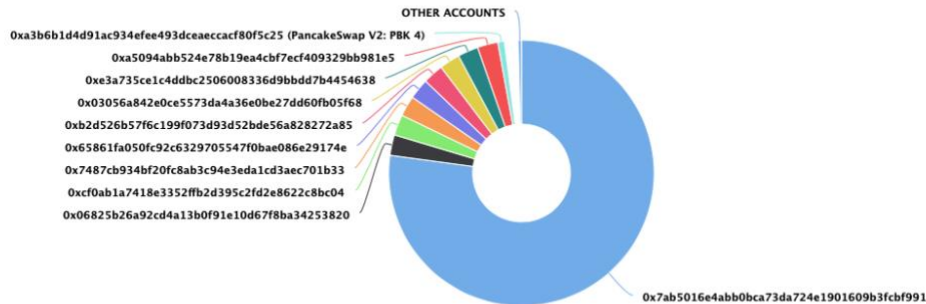
Profit Bank Token Distribution

The top 100 holders collectively own 99.61% (99,605,441,592.99 Tokens) of Profit Bank

Token Total Supply: 100,000,000,000.00 Token | Total Token Holders: 1,572

Profit Bank Top 100 Token Holders

Source: BscScan.com



(A total of 99,605,441,592.99 tokens held by the top 100 accounts from the total supply of 100,000,000,000.00 token)

Profit Bank Contract Interaction Details

Time Series: Token Contract Overview


Tue 2, Nov 2021 - Wed 10, Nov 2021

Token Contract 0xf2f087955684Eabdf252A16C786620a1e3774515 (Profit Bank)

Source: BscScan.com



Profit Bank Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x7ab5016e4abb0bca73da724e1901609b3fcbf991	77,145,380,175.593139	77.1454%
2	0x06825b26a92cd4a13b0f91e10d67f8ba34253820	2,500,000,000	2.5000%
3	0xcf0ab1a7418e3352ffb2d395c2fd2e8622c8bc04	2,500,000,000	2.5000%
4	0x7487cb934bf20fc8ab3c94e3eda1cd3aec701b33	2,500,000,000	2.5000%
5	0x65861fa050fc92c6329705547f0bae086e29174e	2,500,000,000	2.5000%
6	0xb2d526b57f6c199f073d93d52bde56a828272a85	2,500,000,000	2.5000%
7	0x03056a842e0ce5573da4a36e0be27dd60fb05f68	2,500,000,000	2.5000%
8	0xe3a735ce1c4ddbc2506008336d9bbdd7b4454638	2,500,000,000	2.5000%
9	0xa5094abb524e78b19ea4cbf7ecf409329bb981e5	2,500,000,000	2.5000%
10	 PancakeSwap V2: PBK 4	814,218,762.842489	0.8142%



Contract functions details

+ [Int] IERC20

- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] transfer #
- [Ext] allowance
- [Ext] approve #
- [Ext] transferFrom #

+ [Lib] Address

- [Int] isContract
- [Int] sendValue #
- [Int] functionCall #
- [Int] functionCall #
- [Int] functionCallWithValue #
- [Int] functionCallWithValue #
- [Int] functionStaticCall
- [Int] functionStaticCall
- [Int] functionDelegateCall #
- [Int] functionDelegateCall #
- [Int] 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] 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 #

+ Context

- [Int] _msgSender
- [Int] _msgData

+ Ownable (Context)

- [Pub] <Constructor> #
- [Pub] owner
- [Pub] renounceOwnership #
 - modifiers: onlyOwner
- [Pub] transferOwnership #
 - modifiers: onlyOwner
- [Prv] _setOwner #

+ [Lib] SafeMath

- [Int] tryAdd
- [Int] trySub
- [Int] tryMul
- [Int] tryDiv
- [Int] tryMod

- [Int] add
- [Int] sub
- [Int] mul
- [Int] div
- [Int] mod
- [Int] sub
- [Int] div
- [Int] mod

+ ProfitBank (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] totalFees
- [Pub] minimumTokensBeforeSwapAmount
- [Pub] deliver #
- [Pub] reflectionFromToken
- [Pub] tokenFromReflection
- [Prv] _approve #
- [Prv] _transfer #
- [Prv] swapTokens #
 - modifiers: lockTheSwap
- [Prv] swapTokensForEth #
- [Prv] addLiquidity #
- [Prv] _tokenTransfer #
- [Prv] _transferStandard #
- [Prv] _transferExcluded #
- [Prv] _reflectFee #
- [Prv] _getValues
- [Prv] _getTValues
- [Prv] _getRValues
- [Prv] _getRate
- [Prv] _getCurrentSupply
- [Prv] _takeLiquidity #
- [Prv] calculateTaxFee
- [Prv] calculateLiquidityFee
- [Prv] removeAllFee #
- [Prv] restoreAllFee #
- [Ext] setTaxFeePercent #
 - modifiers: onlyOwner
- [Ext] setLiquidityFeePercent #
 - modifiers: onlyOwner
- [Ext] setMaxTxAmount #
 - modifiers: onlyOwner
- [Ext] setMarketingDivisor #
 - modifiers: onlyOwner

- [Ext] setDevDivisor #
 - modifiers: onlyOwner
- [Ext] setMarketingAddress #
 - modifiers: onlyOwner
- [Pub] setSwapAndLiquifyEnabled #
 - modifiers: onlyOwner
- [Pub] setBuyBackEnabled #
 - modifiers: onlyOwner
- [Pub] setExclusions #
 - modifiers: onlyOwner
- [Prv] transferToAddressETH #
- [Ext] <Fallback> (\$)

(\$) = 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 change tax and liquidity fees.

```
ftrace | funcSig
function setTaxFeePercent(uint256[2] memory taxFee↑) external onlyOwner() {
    _taxFee = taxFee↑;
}

ftrace | funcSig
function setLiquidityFeePercent(uint256[2] memory liquidityFee↑) external onlyOwner() {
    _liquidityFee = liquidityFee↑;
}
```

- Owner can change maximum transaction amount.

```
function setMaxTxAmount(uint256 maxTxAmount↑) external onlyOwner() {
    _maxTxAmount = maxTxAmount↑;
}
```

- Owner can change marketingDivisor.

```
function setMarketingDivisor(uint256[2] memory divisor↑) external onlyOwner() {
    marketingDivisor = divisor↑;
}
```

- Owner can change marketing address.

```
function setMarketingAddress(address _marketingAddress↑) external onlyOwner() {
    marketingAddress = payable(_marketingAddress↑);
}
```

- Owner can enable and disable buyback (unsued).

```
ftrace | funcSig
function setBuyBackEnabled(bool _enabled↑) public onlyOwner {
    buyBackEnabled = _enabled↑;
    emit BuyBackEnabledUpdated(_enabled↑);
}
```

- Owner can exclude from taxes.

```
function setExclusions(address _account↑, bool _status↑) public onlyOwner {
    excludeFromTaxes[_account↑] = _status↑;
}
```

- Owner can change dev divisor.

```
function setDevDivisor(uint256[2] memory divisor↑) external onlyOwner() {
    devDivisor = divisor↑;
}
```


Conclusion

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

Liquidity locking details provided by the team:

<https://dxsale.app/app/v3/dxlplocksearch?id=0&add=0xf2f087955684Eabdf252A16C7B6620a1e3774515&type=lpdefi&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.