



Building the Futuristic **Blockchain Ecosystem**

# SECURITY AUDIT REPORT

PRO

# TOKEN OVERVIEW

## Risk Findings

Severity	Found
● High	1
● Medium	0
● Low	0
● Informational	0

## Centralization Risks

Owner Privileges	Description
● Can Owner Set Taxes >25% ?	Not Detected
● Owner needs to enable trading ?	Yes, owner needs to enable trades
● Can Owner Disable Trades ?	Not Detected
● Can Owner Mint ?	Not Detected
● Can Owner Blacklist ?	Not Detected
● Can Owner set Max Wallet amount ?	Not Detected
● Can Owner Set Max TX amount ?	Not Detected

# HIGH RISK FINDING

## Enabling trades

**Category:** Centralization

**Status:** Open

**Impact:** High

### Overview:

Owner must enable trades manually for investors. If trades remain disabled, no one would be able to buy/sell/transfer tokens.

```
function enableTrading() external onlyOwner {  
    require(!tradingEnabled, "Trading is already enabled");  
    tradingEnabled = true;  
    startTradingBlock = block.number;  
}
```

### Suggestion:

To mitigate this issue, its suggested to :

- 1- enable trades before presale
- 2- transfer ownership of the contract to a trusted 3rd party (e.g. pinksale safu developer), this ensures that trades will be enabled at right time
- 3- implement a more decentralized method for enabling trades at right moment, such as using a cooldown.

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# OVERVIEW

The Expelee team has performed a line-by-line manual analysis and automated review of the smart contract. The smart contract was analysed mainly for common smart contract vulnerabilities, exploits, and manipulation hacks. According to the smart contract audit:

<b>Audit Result</b>	<b>Passed with high risk</b>
<b>KYC Verification</b>	<b>-</b>
<b>Audit Date</b>	<b>4 August 2023</b>

# CONTRACT DETAILS

Token Name: The Pro

Symbol: PRO

Network: Ethereum mainnet

Language: Solidity

Contract Address:

0xD153539F893d549B4Bb6D746F609f6e46EEB8dE8

Total Supply: 1,000,000

Owner's Wallet:

0xCf87FDfEE0A2F85951E54f7c9a69974fa3a85354

Deployer's Wallet:

0xCf87FDfEE0A2F85951E54f7c9a69974fa3a85354

Testnet.

<https://testnet.bscscan.com/token/0xb09CA63F320E6e73bCCb0076350eC656acbfladd>

# AUDIT METHODOLOGY

## Audit Details

Our comprehensive audit report provides a full overview of the audited system's architecture, smart contract codebase, and details on any vulnerabilities found within the system.

## Audit Goals

The audit goal is to ensure that the project is built to protect investors and users, preventing potentially catastrophic vulnerabilities after launch, that lead to scams and rugpulls.

## Code Quality

Our analysis includes both automatic tests and manual code analysis for the following aspects:

- Exploits
- Back-doors
- Vulnerability
- Accuracy
- Readability

## Tools

- DE
- Open Zeppelin
- Code Analyzer
- Solidity Code
- Compiler
- Hardhat

# VULNERABILITY CHECKS

Design Logic	Passed
Compiler warnings	Passed
Private user data leaks	Passed
Timestamps dependence	Passed
Integer overflow and underflow	Passed
Race conditions & reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front Running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed



# RISK CLASSIFICATION

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

## High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

## Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

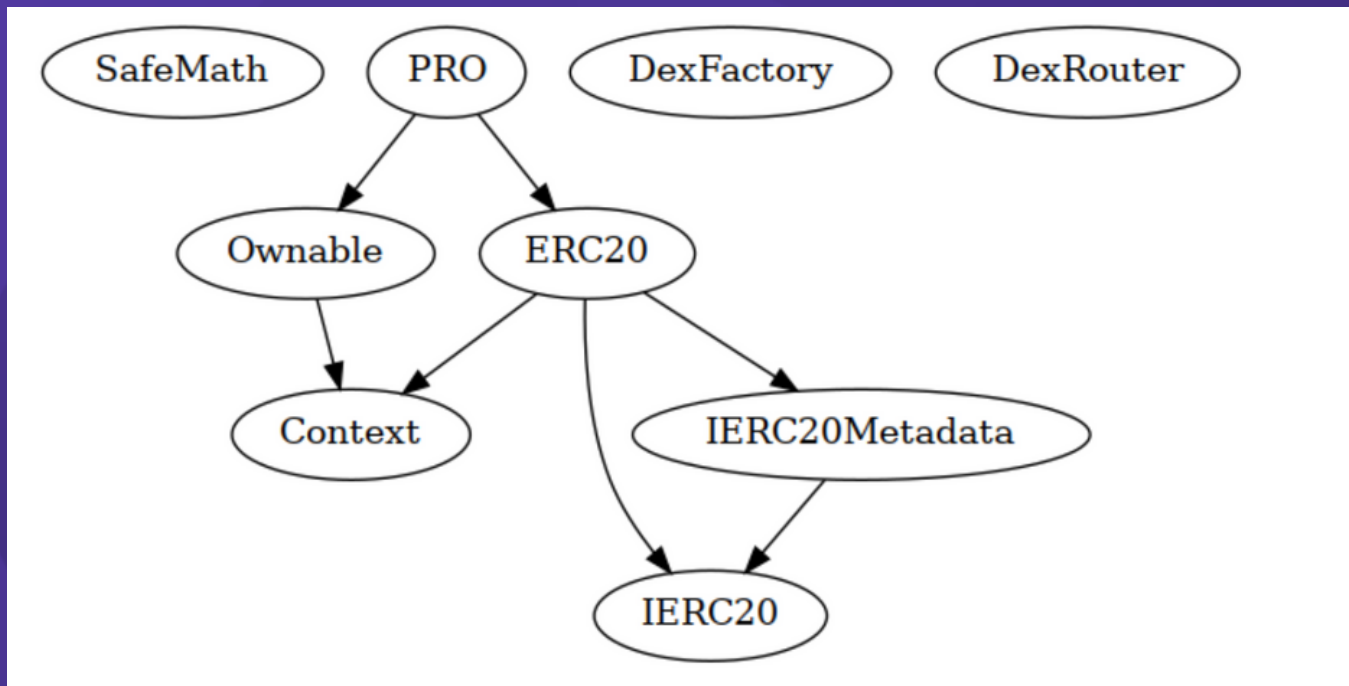
## Low Risk

Issues on this level are minor details and warnings that can remain unfixed.

## Informational

Issues on this level are minor details and warnings that can remain unfixed.

# INHERITANCE TREES



# FUNCTION DETAILS

Contract	Type	Bases			
↳	**Function Name**	**Visibility**	**Mutability**	**Modifiers**	
**SafeMath**	Library				
↳	tryAdd	Internal	🔒		
↳	trySub	Internal	🔒		
↳	tryMul	Internal	🔒		
↳	tryDiv	Internal	🔒		
↳	tryMod	Internal	🔒		
↳	add	Internal	🔒		
↳	sub	Internal	🔒		
↳	mul	Internal	🔒		
↳	div	Internal	🔒		
↳	mod	Internal	🔒		
↳	sub	Internal	🔒		
↳	div	Internal	🔒		
↳	mod	Internal	🔒		
**Context**	Implementation				
↳	_msgSender	Internal	🔒		
↳	_msgData	Internal	🔒		
**Ownable**	Implementation	Context			
↳	<Constructor>	Public	!   🚫	NO !	
↳	owner	Public	!	NO !	
↳	_checkOwner	Internal	🔒		
↳	renounceOwnership	Public	!   🚫	onlyOwner	
↳	transferOwnership	Public	!   🚫	onlyOwner	
↳	_transferOwnership	Internal	🔒   🚫		
**IERC20**	Interface				
↳	totalSupply	External	!	NO !	
↳	balanceOf	External	!	NO !	
↳	transfer	External	!   🚫	NO !	

# FUNCTION DETAILS

```

|  ↳ allowance | External ! | |NO ! | |
|  ↳ approve | External ! | 🔴 |NO ! |
|  ↳ transferFrom | External ! | 🔴 |NO ! |
|||||
| **IERC20Metadata** | Interface | IERC20 |||
|  ↳ name | External ! | |NO ! |
|  ↳ symbol | External ! | |NO ! |
|  ↳ decimals | External ! | |NO ! |
|||||
| **ERC20** | Implementation | Context, IERC20, IERC20Metadata |||
|  ↳ <Constructor> | Public ! | 🔴 |NO ! |
|  ↳ name | Public ! | |NO ! |
|  ↳ symbol | Public ! | |NO ! |
|  ↳ decimals | Public ! | |NO ! |
|  ↳ totalSupply | Public ! | |NO ! |
|  ↳ balanceOf | Public ! | |NO ! |
|  ↳ transfer | Public ! | 🔴 |NO ! |
|  ↳ allowance | Public ! | |NO ! |
|  ↳ approve | Public ! | 🔴 |NO ! |
|  ↳ transferFrom | Public ! | 🔴 |NO ! |
|  ↳ increaseAllowance | Public ! | 🔴 |NO ! |
|  ↳ decreaseAllowance | Public ! | 🔴 |NO ! |
|  ↳ _transfer | Internal 🗝️ | 🔴 ||
|  ↳ _mint | Internal 🗝️ | 🔴 ||
|  ↳ _burn | Internal 🗝️ | 🔴 ||
|  ↳ _approve | Internal 🗝️ | 🔴 ||
|  ↳ _spendAllowance | Internal 🗝️ | 🔴 ||
|  ↳ _beforeTokenTransfer | Internal 🗝️ | 🔴 ||
|  ↳ _afterTokenTransfer | Internal 🗝️ | 🔴 ||
|||||
| **DexFactory** | Interface | |||
|  ↳ createPair | External ! | 🔴 |NO ! |
|||||
| **DexRouter** | Interface | |||
|  ↳ factory | External ! | |NO ! |
|  ↳ WETH | External ! | |NO ! |
|  ↳ addLiquidityETH | External ! | 💰 |NO ! |

```

# FUNCTION DETAILS

```

|  | swapExactTokensForETHSupportingFeeOnTransferTokens | External ! |  | NO ! |
|||||
| **PRO** | Implementation | ERC20, Ownable |||
|  | <Constructor> | Public ! |  | ERC20 |
|  | setDevelopmentWallet | External ! |  | onlyOwner |
|  | enableTrading | External ! |  | onlyOwner |
|  | setBuyTaxes | External ! |  | onlyOwner |
|  | setSellTaxes | External ! |  | onlyOwner |
|  | setMaxWalletPercentage | External ! |  | onlyOwner |
|  | setSwapTokensAtAmount | External ! |  | onlyOwner |
|  | toggleSwapping | External ! |  | onlyOwner |
|  | setWhitelistStatus | External ! |  | onlyOwner |
|  | checkWhitelist | External ! |  | NO ! |
|  | _takeTax | Internal  |  |  |
|  | _transfer | Internal  |  |  |
|  | internalSwap | Internal  |  |  |
|  | swapToETH | Internal  |  |  |
|  | withdrawStuckETH | External ! |  | onlyOwner |
|  | withdrawStuckTokens | External ! |  | onlyOwner |
|  | <Receive Ether> | External ! |  | NO ! |

```

## ### Legend

Symbol	Meaning
⚙️	Function can modify state
💰	Function is payable

# TESTNET VERSION

Adding Liquidity ✓

Tx:

<https://testnet.bscscan.com/tx/0x234e6eed7315c197304290c9c5850e7215c6ee9a336719d6906aa76e6ecb18c6z>

=====

Buying when excluded from fees ✓

Tx (0% tax):

<https://testnet.bscscan.com/tx/0x56384b4a12c09f1d123eb4e4498ea95609b55e369115a8afa409ca6fb46d397b>

=====

Selling when excluded from fees ✓

Tx(0% tax):

<https://testnet.bscscan.com/tx/0xf84d11cb9e9978a15872d53a3165f8927345ec9287337d35ca540f216e62a4a2>

=====

Transferring when excluded from fees ✓

Tx(0% tax):

<https://testnet.bscscan.com/tx/0xd87c7d69671b25ae2813bbfa5edf5b1e5292430d19b680701b745d59d304f6e5>

=====

Buying ✓

Tx(0-10% tax):

<https://testnet.bscscan.com/tx/0xf12697e2e7001a4e2ed3b93e87ac602cd3d9209e2519309b2eeba28c423736e3>

# TESTNET VERSION

Selling ✓

Tx (0-10% tax):

<https://testnet.bscscan.com/tx/0x9fbad4b428f246311f930230fc25e8c2d3f5e57160914f28b8f33c0668f93b79>

=====

Transferring ✓

Tx(0% tax):

<https://testnet.bscscan.com/tx/0xdeb5b2037249fc350c151670718e8b0d5f298af486383bc01e2341b663c245a4>

=====

Internal swap (BNB to marketing wallet | reward token to dividend tracker | reward distribution) ✓

Tx:

<https://testnet.bscscan.com/address/0x4d50442757f9f58befb2c43d4f694907a660a298#internaltx>



# MANUAL REVIEW

## Severity Criteria

Expelee assesses the severity of disclosed vulnerabilities according to methodology based on OWASP standards.

Vulnerabilities are divided into three primary risk categories:

High

Medium

Low

High-level considerations for vulnerabilities span the following key areas when conducting assessments:

- Malicious input handling
- Escalation of privileges
- Arithmetic
- Gas use

Overall Risk Severity				
Impact	HIGH	Medium	High	Critical
	MEDIUM	Low	Medium	High
	LOW	Note	Low	Medium
		LOW	MEDIUM	HIGH
	Likelihood			



# HIGH RISK FINDING

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# ABOUT EXPELEE

Expelee is a product-based aspirational Web3 start-up. Coping up with numerous solutions for blockchain security and constructing a Web3 ecosystem from deal making platform to developer hosting open platform, while also developing our own commercial and sustainable blockchain.

 [www.expelee.com](http://www.expelee.com)

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# expelee

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The logo for Expelee, featuring the word "expelee" in a stylized font. The "ex" is in white, and "pelee" is in orange. The letters are bold and modern.

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