

**Building the Futuristic Blockchain Ecosystem** 

### SECURITY AUDIT REPORT

**APPLEVR** 



### **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



# TABLE OF CONTENTS

02	Token Overview
03	Table of Contents
04	Overview
05	Contract Details ————————————————————————————————————
06	Audit Methodology
07	Vulnerabilities Checklist ————————————————————————————————————
08	Risk Classification
09	Inheritence Trees ———————————————————————————————————
10	Function Details ————————————————————————————————————
13	Testnet Version
15	Manual Review ————————————————————————————————————
17	About Expelee
18	Disclaimer



# **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:

Audit Result	Passed	
KYC Verification	-	
Audit Date	10 June 2023	



### **CONTRACT DETAILS**

**Token Name: APPLEVR** 

**Symbol: APPLEVR** 

Network: Binance Smart Chain

**Language: Solidity** 

Contract Address: --

Total Supply: 10,000,000,000

Owner's Wallet: --

Deployer's Wallet: --

Testnet.

https://testnet.bscscan.com/token/0x95e50E9956434b8A2 ae29c6b215b684d851A2E3d



### 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 Zepplin module	Passed



### RISK CLASSIFICATION

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and acces 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**

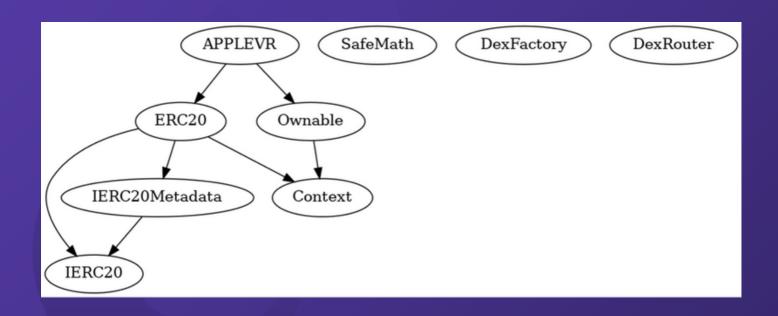
Issues on this level are minor details and warning that can remain unfixed.

#### **Informational**

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



### **INHERITANCE TREES**





### **FUNCTION DETAILS**

```
| Contract |
      **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
**IERC20** | Interface | |||
 L | totalSupply | External | | NO | |
 L | balanceOf | External | NO | |
 L | transfer | External | | | NO | |
 L | allowance | External | | NO | |
 | approve | External | | | NO | |
 L | transferFrom | External | | | NO | |
**Context** | Implementation | |||
 L | msgSender | Internal 🔒 | | |
 L | msgData | Internal 🔒 | | |
 **IERC20Metadata** | Interface | IERC20 |||
 L | name | External | | NO | |
 L | symbol | External | | NO | |
 L | decimals | External | | NO | |
 **ERC20** | Implementation | Context, IERC20, IERC20Metadata ||
 └ | <Constructor> | Public | | ● | NO | |
 I name | Public | | NO ! |
 L | symbol | Public | | NO | |
 | decimals | Public | | | NO |
 L | totalSupply | Public | | NO |
 L | balanceOf | Public | | NO |
 L | transfer | Public | | | NO |
 L | allowance | Public | | NO | |
 | approve | Public | | | NO |
 L | transferFrom | Public | | | NO |
 | increaseAllowance | Public | | | NO | |
 L | decreaseAllowance | Public | | | NO | |
 📙 transfer | Internal 🔒 | 🛑
 L | mint | Internal 🔒 | 🛑 | |
 L | burn | Internal 🔒 | 🛑 | |
 L | approve | Internal 🔒 | 🛑 | |
 L| spendAllowance | Internal 🔒 | 🛑 | |
 L | _beforeTokenTransfer | Internal 🔒 | 🛑 | |
 afterTokenTransfer | Internal 🔒 | 🛑 | |
 **SafeMath** | Library | ||
 L | tryAdd | Internal 🔒 | | |
 L | trySub | Internal 🔒 | ||
 L | tryMul | Internal 🔒 | | |
 L | tryDiv | Internal 🔒 | ||
```



### **FUNCTION DETAILS**

```
L | tryMod | Internal 🔒 | ||
L | add | Internal 🔒 | | |
L | sub | Internal 🔒 | | |
L | mul | Internal 🔒 | | |
L | div | Internal 🔒 | ||
L | mod | Internal 🔒 | | |
L | sub | Internal 🔒 | | |
📙 div | Internal 🔒 | ||
L | mod | Internal 🔒 | ||
**Ownable** | Implementation | Context |||
└ | <Constructor> | Public | | ● | NO | |
| owner | Public | | NO | |
L | checkOwner | Internal 🔒 | | |
L | transferOwnership | Public | | | | onlyOwner |
L | transferOwnership | Internal 🔒 | 🛑 | |
**DexFactory** | Interface | |||
createPair | External | | | NO | |
**DexRouter** | Interface | |||
| factory | External | NO
L|WETH|External | | NO | |
| addLiquidityETH | External | | | NO | |
| swapExactTokensForETHSupportingFeeOnTransferTokens | External | | | | NO | |
**APPLEVR** | Implementation | ERC20, Ownable ||
└ | <Constructor> | Public | | ● | ERC20 |
| setmarketingWallet | External | | | onlyOwner |
└ | setSwapTokensAtAmount | External | | ● | onlyOwner |
L | toggleSwapping | External | | | onlyOwner |
L | setWhitelistStatus | External | | | | onlyOwner |
| checkWhitelist | External | NO | |
L | startTrading | External | | | onlyOwner |
L | updateBuyTax | External | | | onlyOwner |
L | updateSellTax | External | | | | onlyOwner |
└ | updateTransferTax | External | | ● | onlyOwner |
L | takeTax | Internal 🔒 | 🛑 | |
📙 transfer | Internal 🔒 | 🛑 | |
L | internal Swap | Internal 🔒 | 🛑 | |
📙 swapToETH | Internal 🔒 | 🛑 | |
| withdrawStuckETH | External | | | | onlyOwner |
└ | withdrawStuckTokens | External | | ● | onlyOwner |
| <Receive Ether> | External | | III | NO | |
```



### **FUNCTION DETAILS**

Tx (0-10% tax):

3f4753f83b71f5d2fbdaf



### **TESTNET VERSION**

Adding Liquidity   Tx:
https://testnet.bscscan.com/tx/0xeb57a95a480c18123a31f1ba03d71127fbe7882bc27 277da444c7f99a8733da
Buying from a fee excluded wallet   Tx (0% tax):
https://testnet.bscscan.com/tx/0x61be09035dc330c64723b11200ccdb756af92d32a 9816f79efa3816cb46abab
Selling from a fee excluded wallet   Tx (0% tax):
https://testnet.bscscan.com/tx/0xd9943191940680cc827b77d94f5c25ac65b8dc61bd547d437439469cd4a52ad
=======================================
Transferring using a fee excluded wallet   Tx (0% tax):
https://testnet.bscscan.com/tx/0xa65ae351e0f30607704d32ffc0656c29548e5f3d07abbc90b827a47c7b9aaa2c
Buying from a regular wallet   Tx (0-10% tax):
https://testnet.bscscan.com/tx/0xe76788fe041992dacdebd4a06d0a8fe5d492020009b40c3839a81bf71ea80e9a
Selling from a regular wallet

https://testnet.bscscan.com/tx/0xda87350e83b8d0f869efabf22b2094b3528f7a2af78



### **TESTNET VERSION**

Transferring a regular wallet 🗸 Tx (0-10%):

https://testnet.bscscan.com/tx/0x78f1ede735818149f1ea9d00beb7f4b0e53714057d6f 8e8f8b37b9a55dd62a56

Internal swap (marketing BNB)



Tx:

https://testnet.bscscan.com/address/0x33707e9bae7cb5843288a08bcaeee0e33c4a f000#internaltx



### **MANUAL REVIEW**

#### **Severity Criteria**

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

Vulnerabilities are dividend into three primary risk categroies:

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**

#### **Enabling trades is not guaranteed**

**Category: Centralization** 

**Status: Open** 

**Severity: High** 

#### **Overview:**

Owner must enable trades for investors manually. If trades remain disabled, holders wont be able to trade their tokens.

```
function startTrading() external onlyOwner {
require(!tradingEnabled, "Trading already enabled");
  tradingEnabled = true;
}
```

#### **Suggestion:**

to mitigate this issue there are several options:

- Enable trades before end of presale
- Transfer ownership to a trusted 3rd party to guarantee enable of trades



#### **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

- 🔰 expeleeofficial
- expelee

Expelee

- in expelee
- expelee\_official
- 👩 expelee-co



**Building the Futuristic Blockchain Ecosystem** 



### **DISCLAIMER**

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment. Team provides no guarantess against the sale of team tokens or the removal of liquidity by the project audited in this document.

Always do your own research and project yourselves from being scammed. The Expelee team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools.

Under no circumstances did Expelee receive a payment to manipulate those results or change the awarding badge that we will be adding in our website. Alway do your own research and protect yourselves from scams.

This document should not be presented as a reason to buy or not buy any particular token. The Expelee team disclaims any liability for the resulting losses.



**Building the Futuristic Blockchain Ecosystem**