



Building the Futuristic **Blockchain Ecosystem**

SECURITY AUDIT REPORT

ALBETROS

TOKEN OVERVIEW

Risk Findings

Sever ty	Found
● High	0
● Medium	0
● Low	0
● Informational	0

Centralization Risks

Owner Privileges	Description
● Can Owner Set Taxes >25% ?	Not Detected
● Owner needs to enable trading	Not Detected
● Can Owner Disable Trades ?	Not Detected
● Can Owner Mint ?	Not Detected
● Can Owner Blacklist ?	Not Detected
● Can Owner Burn Tokens ?	Not Detected
● Can Owner Set Max TX amount	Not Detected

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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:

Audit Result	No Risk
Audit Date	29 March 2024

CONTRACT DETAILS

Token Address: 0xB087CB524daEF1CdAC5E78b7b9F2Ed20B891C187

Name: ALBETROS

Symbol: ARS

Decimals: 18

Network: BscScan

Token Type: BEP-20

Owner: 0xC978f05787a944DDb0602AF825057B7Ee081a38e

Deployer: 0xC978f05787a944DDb0602AF825057B7Ee081a38e

Token Supply: 100 Billion

Checksum: Ae1c3a4fbb6e83e8393a57617b5a5132

Testnet:

<https://testnet.bscscan.com/address/0x0970d6fbaee1ffadc1d7ec7ae92ec187b6264a2a#code>

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 Log cPassed

Comp ler warn ngs	Passed
Pr vate user data leaks	Passed
T mestamps dependence	Passed
Integer overflow and underflow	Passed
Race cond t ons & reentrancy. Cross-funct on race cond t ons	Passed
Poss ble delays n data del very	Passed
Oracle calls	Passed
Front Runn ng	Passed
DoS w th Revert	Passed
DoS w th block gas l m t	Passed
Methods execut on perm ss ons	Passed
Economy model	Passed
Impact of the exchange rate on the log c	Passed
Mal c ous event log	Passed
Scop ng and declarat ons	Passed
Un n t al zed storage po nters	Passed
Ar thmet c accuracy	Passed
Cross-funct on race cond t ons	Passed
Safe Zeppl n 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.

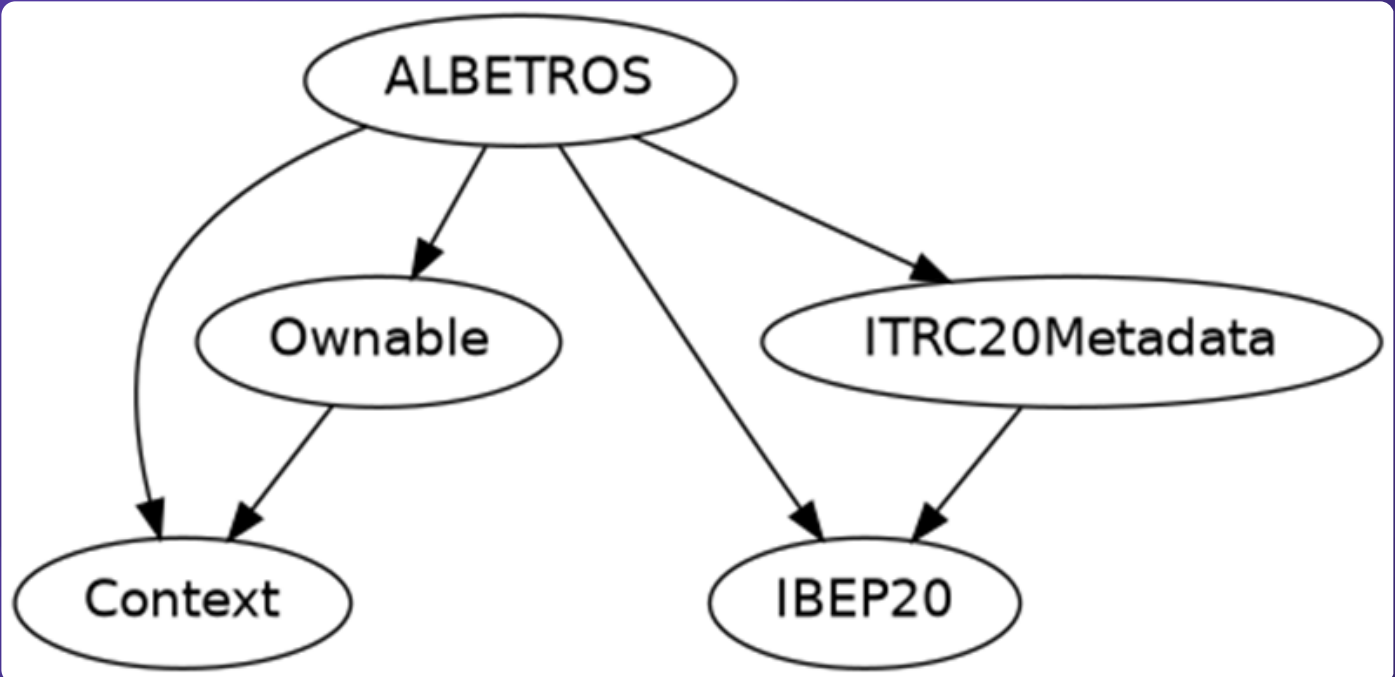
Low Risk

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 TREE



STATIC ANALYSIS

```
INFO:Detectors:
ALBETROS.allowance(address,address).owner (ALBETROS.sol#133) shadows:
  - Ownable.owner() (ALBETROS.sol#51-53) (function)
ALBETROS._approve(address,address,uint256).owner (ALBETROS.sol#281) shadows:
  - Ownable.owner() (ALBETROS.sol#51-53) (function)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#local-variable-shadowing
INFO:Detectors:
Context._msgData() (ALBETROS.sol#13-15) is never used and should be removed
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#dead-code
INFO:Detectors:
Pragma version^0.8.17 (ALBETROS.sol#6) allows old versions
solc-0.8.24 is not recommended for deployment
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity
INFO:Detectors:
ALBETROS.constructor() (ALBETROS.sol#92-97) uses literals with too many digits:
  - _mint(msg.sender,1000000000000 * 10 ** 18) (ALBETROS.sol#96)
ALBETROS.slitherConstructorConstantVariables() (ALBETROS.sol#76-313) uses literals with too many digits:
  - MAX_SUPPLY = 1000000000000 * 10 ** 18 (ALBETROS.sol#87)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#too-many-digits
INFO:Detectors:
ALBETROS._decimals (ALBETROS.sol#85) should be immutable
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#state-variables-that-could-be-declared-immutable
INFO:Slither:ALBETROS.sol analyzed (5 contracts with 93 detectors), 8 result(s) found
```

TESTNET VERSION

1- Approve (passed):

<https://testnet.bscscan.com/tx/0xdc9da3afbd572a6fc9498a977affe29b894bde54a3a54d2001984f1ca4d7f7bb>

2- Increase Allowance (passed):

<https://testnet.bscscan.com/tx/0x7696de5c6921593498a465df225dd9653f7ab91fac05d6663c82a57d6e1cf99e>

3- Decrease Allowance (passed):

<https://testnet.bscscan.com/tx/0x19f8a2cef33f2c41c8bfab38d2d166797fab1ef52e1c7731db5e6b165124ed5f>

4- Mint (passed):

<https://testnet.bscscan.com/tx/0xfb2efac9ec9509506414bb64b92d9a303c336bde9279d331afa706094b2bde9b>

5- Burn (passed):

<https://testnet.bscscan.com/tx/0x86c2589a2974c760d0b6239bbcdce828585e1185a6a6978bf9ff86b58af69a56>

6- Transfer Ownership (passed):

<https://testnet.bscscan.com/tx/0xdb36aaca02e324474cb0b1fdc9433038fc61ae164d66ab2c634881940320451f>

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

Centralization – Owner can Burn Tokens. Severity: **Low**

Function: burn

Status: Open

Overview:

The owner can burn tokens without approval from any wallet.

```
function burn(address account, uint256 value) public  
onlyOwner {  
    _burn(account, value);  
}
```

Suggestion:

There should not be any burning without any allowance from the user.

HIGH RISK FINDING

Centralization – Owner Can Mint Tokens. Severity: **Low**

Status: Open

Function: mint

Overview:

The owner is able to mint unlimited tokens which is not recommended as this functionality can cause the token to lose its value and the owner can also use it to manipulate the price of the token.

```
function mint(address account, uint256 value) public onlyOwner {  
  _mint(account, value);  
}
```

Suggestion:

It is recommended that the total supply of the token should not be changed after initial deployment.

LOW RISK FINDING

Centralization – Local Variable

Shadowing Severity: **Low**

Status: Open

Function: **_approve and allowance**

Overview:

```
function allowance(address owner, address spender) public  
view virtual override returns (uint256) {  
    return _allowances[owner][spender];  
}
```

```
function _approve(  
    address owner,  
    address spender,  
    uint256 amount  
) internal virtual {  
    require(owner != address(0), "BEP20: approve from the zero  
address");  
    require(spender != address(0), "BEP20: approve to the zero  
address");
```

```
    _allowances[owner][spender] = amount;  
    emit Approval(owner, spender, amount);  
}
```

Suggestion:

Rename the local variable that shadows another component.

INFORMATIONAL & OPTIMIZATIONS

Optimization

Severity: Informational

Subject: Floating Pragma.

Status: Open

Overview:

It is considered best practice to pick one compiler version and stick with it. With a floating pragma, contracts may accidentally be deployed using an outdated.

```
pragma solidity ^0.8.0;
```

Suggestion:

Adding the latest constant version of solidity is recommended, as this prevents the unintentional deployment of a contract with an outdated compiler that contains unresolved bugs.

INFORMATIONAL & OPTIMIZATIONS

Optimization

Severity: Optimization

Subject: Remove unused code. Status: Open

Overview:

Unused variables are allowed in Solidity, and they do not pose a direct security issue. It is the best practice though to avoid them.

```
function _msgData() internal pure returns (bytes calldata) {  
    return msg.data;  
}
```

ABOUT EXPELEE

Expelee is a product-based as a platform 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

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expelee

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Always do your own research and protect yourselves from being scammed. The Expelee team has audited this project for general information and only expresses the 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. Always 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.

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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