

**Building the Futuristic Blockchain Ecosystem** 

# SECURITY AUDIT REPORT

**DENARIUS** 



### **TOKEN OVERVIEW**

#### **Risk Findings**

Severity	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 set Max Wallet amount?	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	Passed
KYC Verification	_
Audit Date	21 June 2023



# **CONTRACT DETAILS**

**Token Name: Denarius** 

Symbol: ROMA

**Network: Ethereum** 

Language: Solidity

**Contract Address:** 

0x69a08f851551Bb401755C48228E18E3b8c9333a9

Total Supply: 100,000,000,000

**Owner's Wallet:** 

Deployer's Wallet:

0x42456FFe5F331Ac8746c16b55EED844f9E39173B



# 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





# **TESTNET VERSION**

Adding Liquidity 🗸					
Tx:					
https://testnet.bscscan.com/tx/0xd9f2a1f2932ed4cf50a4d8 7278fd58bd459c4437230412b0a774ae0964f7d881					
Buying 🗸					
Tx (0% tax):					
https://testnet.bscscan.com/tx/0x532317420e6e4eb13d39b					
48c853a0505b402d85c873980173f23cac49cd54a7c					
Selling   ✓					
Tx (0% tax):					
https://testnet.bscscan.com/tx/0x09d79ba310e1239d463ae					
e2ff8c6b5ad20ac7583b7cc21552fca20e3aff368e5					
Transferring 🗸					
Tx (0% tax):					
https://testnet.bscscan.com/tx/0x5fb12a30be63d67c0417d0					
c1dc1f89a8b41d89c6e17561681476dccba521b14e					



### **FUNCTION DETAILS**

```
Contract
              Type
                           Bases
   L | **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
**IERC20** | Interface | |||
 L | decimals | External | NO | |
 | symbol | External | | NO | |
 | name | External | | NO | |
 L | totalSupply | External | NO | |
 L | balanceOf | External | NO | |
 L | transfer | External | | | NO | |
 | allowance | External | | NO | |
 L | approve | External | | | NO | |
 L | transferFrom | External | | | NO | |
**Denarius** | Implementation | IERC20 |||
 | | <Receive Ether> | External | | | NO | |
 | approve | Public | | | NO | |
 L | transfer | External | | | NO | |
 L | transferFrom | External | | | NO | |
 L | transferFrom | Private 🔐 | 🛑 | |
### Legend
| Symbol | Meaning |
|:----|
      | Function can modify state |
      | Function is payable |
```



### **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						



### **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

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# **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.



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