



METATRUST

# Security Assessment for **EraPAD contract**

April 21, 2023

## Executive Summary

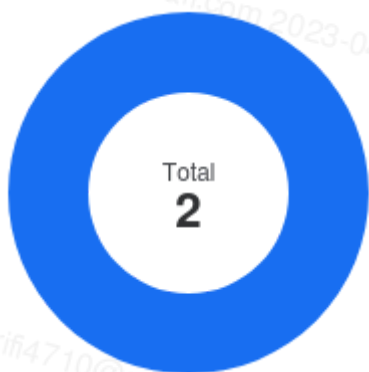
Overview			
Project Name	EraPAD contract	Critical Issues	The issue can cause large economic losses, large-scale data disorder, loss of control of authority management, failure of key functions, or indirectly affect the correct operation of other smart contracts interacting with it.
Codebase URL	-		
Scan Engine	Security Analyzer,Open Source Analyzer	High Risk Issues	The issue puts a large number of users' sensitive information at risk or is reasonably likely to lead to catastrophic impacts on clients' reputations or serious financial implications for clients and users.
Scan Time	2023/04/21 09:55:26		
Commit Id	-	Medium Risk Issues	The issue puts a subset of users' sensitive information at risk, would be detrimental to the client's reputation if exploited, or is reasonably likely to lead to moderate financial impact.
		Low Risk Issues	The risk is relatively small and could not be exploited on a recurring basis, or is a risk that the client has indicated is low-impact in view of the client's business circumstances.
		Informational Issue	The issue does not pose an immediate risk but is relevant to security best practices or Defence in Depth.






  

Total	
Critical Issues	0
High risk Issues	0
Medium risk Issues	0
Low risk Issues	0
Informational Issues	2

Total	
Security Analyzer	2
Security Prover	-
Open Source Analyzer	0



	Critical Issues	0%	0
	High risk Issues	0%	0
	Medium risk Issues	0%	0
	Low risk Issues	0%	0
	Informational Issues	100%	2

## Summary of Findings

MetaScan security assessment was performed on **April 21, 2023 09:55:26** on project **EraPAD contract** with the repository **EraPAD\_contract** on branch **default branch**. The assessment was carried out by scanning the project's codebase using the scan engine **MetaScan**. There are in total **2** vulnerabilities / security risks discovered during the scanning session, among which **0** critical vulnerabilities, **0** high risk vulnerabilities, **0** medium risk vulnerabilities, **0** low risk vulnerabilities, **2** informational issues.

ID	Description	Severity
MSA-001	MWE-086: Unused Internal Functions in erapad.sol	Informational
MSA-002	MWE-030: Redundant Code Statements in erapad.sol	Informational

## Findings

### Critical (0)

No Critical vulnerabilities found here

### High risk (0)

No High risk vulnerabilities found here

### Medium risk (0)


No Medium risk vulnerabilities found here


### Low risk (0)

No Low risk vulnerabilities found here

### Informational (2)

#### 1. MWE-086: Unused Internal Functions in erapad.sol

 Informational

 Security Analyzer

Presence of internal functions that are defined but never used in the contract. Such functions may introduce unnecessary gas consumption and make the code's review more difficult.

##### File(s) Affected

erapad.sol #22-25



##### Examples

```
22     function _msgData() internal view virtual returns (bytes calldata) {  
23         this; // silence state mutability warning without generating bytecode - see https://github.com/e  
24         return msg.data;  
25     }
```

##### Recommendation

Remove unused functions to save gas and improve code readability.

## 2. MWE-030: Redundant Code Statements in erapad.sol

 Informational Security Analyzer

Redundant statements like types or identifiers that have no action performed on them do not affect the functionality of the codebase. However, as a result, they congest code and reduce code readability. Moreover, they may lead to unnecessary gas costs.

### File(s) Affected

erapad.sol #17-26 #23-23

### Examples

```
17 abstract contract Context {
18     function _msgSender() internal view virtual returns (address) {
19         return msg.sender;
20     }
21     ...
24     return msg.data;
25 }
26 }
```

### Recommendation

Remove redundant statements to improve code readability, prepare a better production environment, and optimize gas.

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