SALUS SECURITY

AUG 2025

CODE SECURITY ASSESSMENT

FMAP

Overview

Project Summary

- Name: FMAP
- Platform: Bitcoin chain
- Language: BRC-20 token inscription
- Inscription ID: 5e8154fb11464305559467719f4ced463875eb85e51eb1b7f96c54e6b9e47288i0

Project Dashboard

Application Summary

Name	FMAP
Version	v2
Type	BRC-20 token inscription
Dates	Aug 12 2025
Logs	Aug 12 2025; Aug 12 2025

Vulnerability Summary

Total High-Severity issues	0
Total Medium-Severity issues	0
Total Low-Severity issues	2
Total informational issues	0
Total	2

Contact

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Risk Level Description

High Risk	The issue puts a large number of users' sensitive information at risk, or is reasonably likely to lead to catastrophic impact for clients' reputations or serious financial implications for clients and users.
Medium Risk	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 a moderate financial impact.
Low Risk	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	The issue does not pose an immediate risk, but is relevant to security best practices or defense in depth.

Content

Introduction

1.1 About SALUS

At Salus Security, we are in the business of trust.

We are dedicated to tackling the toughest security challenges facing the industry today. By building foundational trust in technology and infrastructure through security, we help clients to lead their respective industries and unlock their full Web3 potential.

Our team of security experts employ industry-leading proof-of-concept (PoC) methodology for demonstrating smart contract vulnerabilities, coupled with advanced red teaming capabilities and a stereoscopic vulnerability detection service, to deliver comprehensive security assessments that allow clients to stay ahead of the curve.

In addition to smart contract audits and red teaming, our Rapid Detection Service for smart contracts aims to make security accessible to all. This high calibre, yet cost-efficient, security tool has been designed to support a wide range of business needs including investment due diligence, security and code quality assessments, and code optimisation.

We are reachable on Telegram (https://t.me/salusec), Twitter (https://twitter.com/salus_sec), or Email (support@salusec.io).

1.2 Audit Breakdown

The objective was to evaluate the repository for security-related issues, code quality, and adherence to specifications and best practices. Possible issues we looked for included (but are not limited to):

- Risky external calls
- Integer overflow/underflow
- Transaction-ordering dependence
- Timestamp dependence
- Access control
- Call stack limits and mishandled exceptions
- Number rounding errors
- Centralization of power
- Logical oversights and denial of service
- Business logic specification
- Code clones, functionality duplication

1.3 Disclaimer

Note that this security audit is not designed to replace functional tests required before any software release and does not give any warranties on finding all possible security issues with the given smart contract(s) or blockchain software, i.e., the evaluation result does not guarantee the nonexistence of any further findings of security issues.

Findings

2.1 Summary of Findings

ID	Title	Severity	Category	Status
1	Centralization risk	Low	Centralization	Acknowledged
2	Possible BRC20 indexer risks	Low	Centralization	Acknowledged

2.2 Notable Findings

Significant flaws that impact system confidentiality, integrity, or availability are listed below.

1. Centralization risk

Severity: Low	Category: Centralization
Target: - https://web3.okx.com/zh-hans/inscription/ordinals/token/FMAP	

Description

When trading inscriptions (such as BRC-20 tokens) on a centralized exchange like OKX, the assets are actually stored in the exchange's private wallets, not in the user's own on-chain address. This means the exchange has full custody of the assets, and users do not have direct control over them.

If the exchange's private wallet is compromised or stolen, the on-chain assets could be irreversibly transferred away. Whether users get compensated depends entirely on the exchange's security reserves and willingness to reimburse, making it fundamentally different from self-custody, where the user retains full control of the private keys.

Recommendation

It is recommended that project teams and users pay attention to the security of the OKX ecosystem and be prepared to handle potential risks.

Status

This issue has been acknowledged by the team.

2. Possible BRC20 indexer risks

Severity: Low	Category: Centralization
Target: - https://web3.okx.com/zh-hans/inscription/ordinals/token/FMAP	

Description

BRC-20(`FMAP`) uses Bitcoin inscriptions as raw data: each deploy/mint/transfer is a JSON record written on-chain, but there is no on-chain contract enforcing limits. All balances, mint caps, and transfers are reconstructed off-chain by indexers that scan blocks and interpret those JSON records under a specific ruleset. In short, the inscription is the immutable record, and the indexer is the bookkeeper. If an indexer mis-parses data, applies a divergent ruleset, or mishandles reorgs and UTXO binding, the platform can display incorrect balances, accept or reject actions inconsistently, or diverge from other platforms even though the underlying inscriptions are unchanged. This is an ecosystem-level centralization risk rooted in off-chain interpretation rather than L1 consensus.

If a BRC-20 indexer parses data incorrectly, it can lead to incorrect balances shown to users or duplicate counting or wrong asset ownership.

Recommendation

Timely monitoring and alerting of BRC-20 indexer activities.

Status

This issue has been acknowledged by the team.

Appendix

Appendix 1 - Files in Scope

This audit targets the inscription with the ID 5e8154fb11464305559467719f4ced463875eb85e51eb1b7f96c54e6b9e47288i0. We can find more detailed information from https://web3.okx.com/zh-hans/inscription/ordinals/token/FMAP.