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Instadapp Avocado EIP-7702 PR validation

03-03-2026 - 04-03-2026

Table of contents

1. Project brief 2

2. Finding severity breakdown 3

3. Summary of findings 4

4. Conclusion 4

5. Findings report 5

Informational

_isContract() gas optimization via an additional code-length check 5

Redundant Address import 5

1. Project brief

Title	Description
Client	Instadapp
Project name	Instadapp Avocado EIP-7702 PR validation
Timeline	03-03-2026 - 04-03-2026

Project Log

Date	Commit Hash	Note
03-03-2026	31969ea79a4047604fa09231235b87460c26c7f8	Initial Commit
04-03-2026	b149b2b1b8c0ed75c7edf666d16b6990e0258a53	Reaudit commit

Short Overview

During this engagement, EIP 7702 Support PR pull request in the Avocado multisig was audited. This pull request included changes related to the activation of EIP 7702. In particular, the function used to distinguish between an EOA address and a contract address was modified.

Project Scope

The audit covered the following files:

- AvoForwarder.sol
- AvoRegistry.sol
- AvocadoMultisig.sol
- AvoFactory.sol
- AvocadoMultisigCore.sol
- AvocadoMultisigSecondary.sol

2. Finding severity breakdown

All vulnerabilities discovered during the audit are classified based on their potential severity and have the following classification:

Severity	Description
Critical	Bugs leading to assets theft, fund access locking, or any other loss of funds to be transferred to any party.
High	Bugs that can trigger a contract failure. Further recovery is possible only by manual modification of the contract state or replacement.
Medium	Bugs that can break the intended contract logic or expose it to DoS attacks, but do not cause direct loss of funds.
Informational	Bugs that do not have a significant immediate impact and could be easily fixed.

Based on the feedback received from the Client regarding the list of findings discovered by the Contractor, they are assigned the following statuses:

Status	Description
Fixed	Recommended fixes have been made to the project code and no longer affect its security.
Acknowledged	The Client is aware of the finding. Recommendations for the finding are planned to be resolved in the future.

3. Summary of findings

Severity	# of Findings
Critical	0 (0 fixed, 0 acknowledged)
High	0 (0 fixed, 0 acknowledged)
Medium	0 (0 fixed, 0 acknowledged)
Informational	2 (2 fixed, 0 acknowledged)
Total	2 (2 fixed, 0 acknowledged)

4. Conclusion

During the audit of the codebase, 2 issues were found in total:

- 2 informational severity issues (2 fixed)

The final reviewed commits: Avocado EIP-7702 support PR: b149b2b1b8c0ed75c7edf666d16b6990e0258a53

5. Findings report

INFORMATIONAL-01	_isContract() gas optimization via an additional code-length check	Fixed at: b149b2b

Description

Lines:

- AvocadoMultisig/AvocadoMultisigCore.sol#L219
- AvoFactory.sol#L164
- AvoForwarder.sol#L179
- AvoRegistry.sol#L98

_isContract() performs prefix extraction for any account with code **size >= 3**. However, EIP-7702 delegation code has a fixed runtime size of 23 bytes, so this expensive prefix logic is only needed for **size == 23**. In signer verification flows, this leads to avoidable gas overhead when signer addresses are regular contracts.

Recommendation

We recommend introducing a new check before reading the prefix and running the prefix comparison only when the runtime code size is exactly 23 bytes; in other cases, return true for a non-zero code.

INFORMATIONAL-02	Redundant Address import	Fixed at: 5204ec8

Description

Lines:

- AvoFactory.sol#L4
- AvoForwarder.sol#L4
- AvoRegistry.sol#L6
- AvoSignersList.sol#L5
- AvocadoMultisig/AvocadoMultisig.sol#L5

These contracts keep redundant **Address** import lines that are not used by the implementation.

Recommendation

We recommend removing the stale **Address** import lines from these files.

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