

2025-04-02



Table of contents

- Table of contents
- Flash Loan Router Audit
 - Scope
 - Context
 - Status
 - Legal Information And Disclaimer
- Issues

Flash Loan Router Audit

This document presents the findings of a smart contract audit conducted by Côme du Crest for Gnosis Ltd.

Scope

The scope includes all contracts within cowprotocol/flash-loan-router as of commit 0 x930914f.

A few commits have been added mainly to update documentation and add an event. The contracts were reviewed after commit $0 \times f9c1867$.

Context

The goal of this repository is to provide for a way for CoW solvers to flash loan tokens before applying their settlement.

Solvers may call FlashLoanRouter.flashLoanAndSettle() with a list of loans and a settlement. For each loan, a target borrower contract will be called with the data containing the encoded remaining loans and settlement. The borrower will handle the specifics required to execute the flash loan and call back the router with the remaining loans and settlement data.

Once all the loans have been executed, the router will settle the CoW batch.

Security is guaranteed by enforcing that only CoW solvers can use the router to settle a batch. Additionally, the hash of the data passed from borrower is compared to the hash of the data sent to them so that borrowers cannot modify the remaining loans and settlement they send back to the router.

Status

No serious issues have been found.

The report has been sent to the core developers.

The code has been slightly updated and reviewed until commit 0xf9c1867.

Legal Information And Disclaimer

1. This report is based solely on the information provided by CoW protocol (the "Company"), with the assumption that the information provided to Gnosis is authentic, accurate, complete, and not misleading as of the date of this report. Gnosis has not conducted any independent enquiries, investigations or due diligence in respect of the Company, its business or its operations.

- 2. Changes to the information contained in the documents, repositories and any other materials referenced in this report might affect or change the analysis and conclusions presented. Gnosis is not responsible for monitoring, nor will we be aware of, any future additions, modifications, or deletions to the audited code. As such, Gnosis does not assume any responsibility to update any information, content or data contained in this report following the date of its publication.
- 3. This report does not address, nor should it be interpreted as addressing, any regulatory, tax or legal matters, including but not limited to: tax treatment, tax consequences, levies, duties, data privacy, data protection laws, issues relating to the licensing of information technology, intellectual property, money laundering and countering the financing of terrorism, or any other legal restrictions or prohibitions. Gnosis disclaims any liability for omissions or errors in the findings or conclusions presented in this report.
- 4. The views expressed in this report are solely our views regarding the specific issues discussed within this report. This report is not intended to be exhaustive, nor should it be construed as an assurance, guarantee or warranty that the code is free from bugs, vulnerabilities, defects or deficiencies. Different use cases may carry different risks, and integration with third-party applications may introduce additional risks.
- 5. This report is provided for informational purposes only and should not be used as the basis for making investment or financial decisions. This report does not constitute investment research and should not be viewed as an invitation, recommendation, solicitation or offer to subscribe for or purchase any securities, investments, products or services. Gnosis is not a financial advisor, and this report does not constitute financial or investment advice.
- 6. The statements in this report should be considered as a whole, and no individual statement should be extracted or referenced independently.
- 7. To the fullest extent permitted by applicable laws, Gnosis disclaims any and all other liability, whether in contract, tort, or otherwise, that may arise from this report or the use thereof.

Issues

No serious issues have been found.