

SALUS SECURITY

MAY 2025



# CODE SECURITY ASSESSMENT

CYCLE NETWORK

# Overview

## Project Summary

- Name: Cycle network token
- Platform: EVM-compatible chains
- Language: Solidity
- Repository:
  - <https://github.com/RollNA/cyc-contract>
- Audit Range: See [Appendix - 1](#)

## Project Dashboard

### Application Summary

Name	Cycle network token
Version	v2
Type	Solidity
Dates	May 23 2025
Logs	May 23 2025; May 23 2025

### Vulnerability Summary

Total High-Severity issues	0
Total Medium-Severity issues	0
Total Low-Severity issues	1
Total informational issues	1
Total	2

## Contact

E-mail: [support@salusec.io](mailto:support@salusec.io)

## Risk Level Description

<b>High Risk</b>	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.
<b>Medium Risk</b>	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.
<b>Low Risk</b>	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.
<b>Informational</b>	The issue does not pose an immediate risk, but is relevant to security best practices or defense in depth.

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# 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](https://twitter.com/salus_sec)), or Email ([support@salusec.io](mailto: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	Mitigated
2	Magic numbers are used	Informational	Code Quality	Acknowledged

## 2.2 Notable Findings

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

<b>1. Centralization risk</b>	
Severity: Low	Category: Centralization
Target: <ul style="list-style-type: none"><li>- contracts/CycleNetworkToken.sol</li></ul>	

### Description

When the `CycleNetworkToken` contract is deployed, `\$CVC` is sent to one account. This account then has full control over the token distribution. If it is an EOA account, any compromise of its private key could drastically affect the project. For example, attackers could manipulate the price of `\$CVC` on the DEX if they gain access to the private key.

### Recommendation

It is recommended to transfer tokens to a multi-sig account and promote transparency by providing a breakdown of the intended initial token distribution in a public location.

### Status

This issue has been mitigated by the team. The team stated that the privileged address will be transferred to a multi-sig account.

## 2.3 Informational Findings

### 2. Magic numbers are used

Severity: Informational

Category: Code Quality

Target:

- contracts/CycleNetworkToken.sol

### Description

There are a few occurrences of literal values being used. To improve the code's readability and facilitate refactoring, consider defining a constant for every magic number, giving it a clear and self-explanatory name.

contracts/CycleNetworkToken.sol:L9

```
_mint(receiver, 1_000_000_000 * 1e18);
```

### Recommendation

Consider defining a constant variable `initialSupply` for the magic number `1_000_000_000 * 1e18`.`

### Status

This issue has been acknowledged by the team.



# Appendix

## Appendix 1 - Files in Scope

This audit covered the following files in commit [ce1c7bb](#):

File	SHA-1 hash
contracts/CycleNetworkToken.sol	f90a851074e2e8fd3746af58b8673e3c1f64898e