**GA** GUARDIAN

# **USDTO**

Tether Gold Deployment

**Security Assessment** 

May 16th, 2025



# **Summary**

**Audit Firm** Guardian

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**Client Firm USDT0** 

Final Report Date May 16, 2025

### **Audit Summary**

USDT0 engaged Guardian to review the security of their Tether Gold deployment. From the 14th of May to the 15th of May, a team of 2 auditors reviewed the source code in scope. All findings have been recorded in the following report.

#### **Confidence Ranking**

Given the lack of critical issues detected and the minimal code changes following the main review, Guardian assigns a Confidence Ranking of 5 to the protocol. Guardian advises the protocol to consider periodic review with future changes.

For detailed understanding of the Guardian Confidence Ranking, please see the rubric on the following page.

Verify the authenticity of this report on Guardian's GitHub: <a href="https://github.com/guardianaudits">https://github.com/guardianaudits</a>

# **Guardian Confidence Ranking**

Confidence Ranking	Definition and Recommendation	Risk Profile
5: Very High Confidence	Codebase is mature, clean, and secure. No High or Critical vulnerabilities were found. Follows modern best practices with high test coverage and thoughtful design.	0 High/Critical findings and few Low/Medium severity findings.
	<b>Recommendation:</b> Code is highly secure at time of audit. Low risk of latent critical issues.	
4: High Confidence	Code is clean, well-structured, and adheres to best practices. Only Low or Medium-severity issues were discovered. Design patterns are sound, and test coverage is reasonable. Small changes, such as modifying rounding logic, may introduce new vulnerabilities and should be carefully reviewed.	0 High/Critical findings. Varied Low/Medium severity findings.
	<b>Recommendation:</b> Suitable for deployment after remediations; consider periodic review with changes.	
3: Moderate Confidence	Medium-severity and occasional High-severity issues found. Code is functional, but there are concerning areas (e.g., weak modularity, risky patterns). No critical design flaws, though some patterns could lead to issues in edge cases.	1 High finding and ≥ 3 Medium. Varied Low severity findings.
	<b>Recommendation:</b> Address issues thoroughly and consider a targeted follow-up audit depending on code changes.	
2: Low Confidence	Code shows frequent emergence of Critical/High vulnerabilities (~2/week). Audit revealed recurring anti-patterns, weak test coverage, or unclear logic. These characteristics suggest a high likelihood of latent issues.	2-4 High/Critical findings per engagement week.
	<b>Recommendation:</b> Post-audit development and a second audit cycle are strongly advised.	
1: Very Low Confidence	Code has systemic issues. Multiple High/Critical findings (≥5/week), poor security posture, and design flaws that introduce compounding risks. Safety cannot be assured.	≥5 High/Critical findings and overall systemic flaws.
	<b>Recommendation:</b> Halt deployment and seek a comprehensive re-audit after substantial refactoring.	

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# **Project Overview**

# **Project Summary**

Project Name	USDT0
Language	Solidity
Codebase	https://github.com/Everdawn-Labs/usdt0-tether-contracts-hardhat https://github.com/Everdawn-Labs/usdt0-oft-contracts
Commit(s)	usdt0-tether commit: ffd78fc1f275fcb403c3f65a2e7e8bded713b2c1 usdt0-oft commit: 528bd5f508ff4e21f08365ad666c7fa71ab320c6

### **Audit Summary**

Delivery Date	May 16, 2025
Audit Methodology	Static Analysis, Manual Review, Test Suite

### **Vulnerability Summary**

Vulnerability Level	Total	Pending	Declined	Acknowledged	Partially Resolved	Resolved
Critical	0	0	0	0	0	0
• High	0	0	0	0	0	0
<ul><li>Medium</li></ul>	0	0	0	0	0	0
• Low	0	0	0	0	0	0
• Info	3	0	0	1	0	2

# **Audit Scope & Methodology**

### **Vulnerability Classifications**

Severity	Impact: High	Impact: Medium	Impact: Low
Likelihood: High	Critical	• High	<ul><li>Medium</li></ul>
Likelihood: Medium	• High	• Medium	• Low
Likelihood: Low	• Medium	• Low	• Low

#### **Impact**

**High** Significant loss of assets in the protocol, significant harm to a group of users, or a core

functionality of the protocol is disrupted.

**Medium** A small amount of funds can be lost or ancillary functionality of the protocol is affected.

The user or protocol may experience reduced or delayed receipt of intended funds.

**Low** Can lead to any unexpected behavior with some of the protocol's functionalities that is

notable but does not meet the criteria for a higher severity.

#### **Likelihood**

**High** The attack is possible with reasonable assumptions that mimic on-chain conditions,

and the cost of the attack is relatively low compared to the amount gained or the

disruption to the protocol.

Medium An attack vector that is only possible in uncommon cases or requires a large amount of

capital to exercise relative to the amount gained or the disruption to the protocol.

**Low** Unlikely to ever occur in production.

# **Audit Scope & Methodology**

### **Methodology**

Guardian is the ultimate standard for Smart Contract security. An engagement with Guardian entails the following:

- Two competing teams of Guardian security researchers performing an independent review.
- A dedicated fuzzing engineer to construct a comprehensive stateful fuzzing suite for the project.
- An engagement lead security researcher coordinating the 2 teams, performing their own analysis, relaying findings to the client, and orchestrating the testing/verification efforts.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross-referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts. Comprehensive written tests as a part of a code coverage testing suite.
- Contract fuzzing for increased attack resilience.

# **Findings & Resolutions**

ID	Title	Category	Severity	Status
<u>I-01</u>	OApp Owner And Delegate Address	Configuration	<ul><li>Info</li></ul>	Resolved
<u>I-02</u>	Inaccurate Block Confirmations	Configuration	<ul><li>Info</li></ul>	Resolved
<u>l-03</u>	Missing setTrusted Call In HyperliquidExtension	Configuration	<ul><li>Info</li></ul>	Acknowledged

# I-01 | OApp Owner And Delegate Address

Category	Severity	Location	Status
Configuration	<ul><li>Info</li></ul>	Global	Resolved

### **Description**

The current owner and delegate address for all the OApps deployed across the different chains is set to the externally owned address 0x565786AbE5BA0f9D307AdfA681379F0788bEdEf7.

This configuration introduces a single point of control and potential security risks across all blockchains where it is deployed. EOA-controlled addresses can be more vulnerable to key compromise or misuse by a single actor.

### **Recommendation**

Migrate the address to a multisignature wallet to distribute control and reduce the risk of unauthorized transactions. This ensures that multiple parties approve critical operations, thereby enhancing the overall protocol security.

### **Resolution**

USDT0 Team: Resolved.

### I-02 | Inaccurate Block Confirmations

Category	Severity	Location	Status
Configuration	<ul><li>Info</li></ul>	Global	Resolved

### **Description**

The current LayerZero configuration sets block confirmations to 60 for any HyperEVM communication, which does not align with the actual block time requirements and risks finality issues.

The desired interval for messages with this chain is 24 hours, equivalent to a setting of 43,200 blocks.

### **Recommendation**

Update the block confirmation value for messages sent from HyperEVM to 43,200. This adjustment ensures adequate certainty for finalizing messages.

### **Resolution**

USDT0 Team: Resolved.

# I-03 | Missing setTrusted Call In HyperliquidExtension

Category	Severity	Location	Status
Configuration	<ul><li>Info</li></ul>	contract	Acknowledged

### **Description**

The current <u>HyperliquidExtension</u> deployed is missing a setTrusted call to the HyperLiquidComposer contract.

### **Recommendation**

Similarly as was performed during the USDT deployment in this <u>transaction</u>, consider calling setTrusted(<HyperLiquidComposer address>) in the XAUt0 HyperliquidExtension.

### **Resolution**

USDT0 Team: Composer will be deployed later.

## **Disclaimer**

This report is not, nor should be considered, an "endorsement" or "disapproval" of any particular project or team. This report is not, nor should be considered, an indication of the economics or value of any "product" or "asset" created by any team or project that contracts Guardian to perform a security assessment. This report does not provide any warranty or guarantee regarding the absolute bug-free nature of the technology analyzed, nor do they provide any indication of the technologies proprietors, business, business model or legal compliance.

This report should not be used in any way to make decisions around investment or involvement with any particular project. This report in no way provides investment advice, nor should be leveraged as investment advice of any sort. This report represents an extensive assessing process intending to help our customers increase the quality of their code while reducing the high level of risk presented by cryptographic tokens and blockchain technology.

Blockchain technology and cryptographic assets present a high level of ongoing risk. Guardian's position is that each company and individual are responsible for their own due diligence and continuous security. Guardian's goal is to help reduce the attack vectors and the high level of variance associated with utilizing new and consistently changing technologies, and in no way claims any guarantee of security or functionality of the technology we agree to analyze.

The assessment services provided by Guardian is subject to dependencies and under continuing development. You agree that your access and/or use, including but not limited to any services, reports, and materials, will be at your sole risk on an as-is, where-is, and as-available basis. Cryptographic tokens are emergent technologies and carry with them high levels of technical risk and uncertainty. The assessment reports could include false positives, false negatives, and other unpredictable results. The services may access, and depend upon, multiple layers of third-parties.

Notice that smart contracts deployed on the blockchain are not resistant from internal/external exploit. Notice that active smart contract owner privileges constitute an elevated impact to any smart contract's safety and security. Therefore, Guardian does not guarantee the explicit security of the audited smart contract, regardless of the verdict.

# **About Guardian Audits**

Founded in 2022 by DeFi experts, Guardian Audits is a leading audit firm in the DeFi smart contract space. With every audit report, Guardian Audits upholds best-in-class security while achieving our mission to relentlessly secure DeFi.

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