



Cyberscope

Audit Report

Trendify

December 2024

Network SOL

Type Token 2022

Address EkvJkkQq1uTpv2vxst5bfEFFntKYGqhfGjXL2ZjSrDaU

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Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	STMA	Mint Authority	Passed
●	STFA	Freeze Authority	Passed
●	ST2ETFC	Excessive Transfer Fee Configuration	Unresolved
●	ST2TMM	Token Modifiable Metadata	Unresolved

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Risk Classification

The criticality of findings in Cyberscope's smart contract audits is determined by evaluating multiple variables. The two primary variables are:

1. **Likelihood of Exploitation:** This considers how easily an attack can be executed, including the economic feasibility for an attacker.
2. **Impact of Exploitation:** This assesses the potential consequences of an attack, particularly in terms of the loss of funds or disruption to the contract's functionality.

Based on these variables, findings are categorized into the following severity levels:

1. **Critical:** Indicates a vulnerability that is both highly likely to be exploited and can result in significant fund loss or severe disruption. Immediate action is required to address these issues.
2. **Medium:** Refers to vulnerabilities that are either less likely to be exploited or would have a moderate impact if exploited. These issues should be addressed in due course to ensure overall contract security.
3. **Minor:** Involves vulnerabilities that are unlikely to be exploited and would have a minor impact. These findings should still be considered for resolution to maintain best practices in security.
4. **Informative:** Points out potential improvements or informational notes that do not pose an immediate risk. Addressing these can enhance the overall quality and robustness of the contract.

Severity	Likelihood / Impact of Exploitation
● Critical	Highly Likely / High Impact
● Medium	Less Likely / High Impact or Highly Likely/ Lower Impact
● Minor / Informative	Unlikely / Low to no Impact

Review

Network	Solana
Address	EKvJKKqq1uTpv2vxst5bfEFFntKYGqhfGjXL2ZjSrDaU
Explorer	https://solscan.io/address/EKvJKKqq1uTpv2vxst5bfEFFntKYGqhfGjXL2ZjSrDaU
Name	ALPHA
Symbol	AL
Decimals	9
Total Supply	1,000,000
Metadata File Type	JSON
Owner Program	https://solscan.io/address/TokenzQdBNbLqP5VEhdkAS6EPFLC1PHnBqCXEpPxuEb
Badge Eligibility	Must Fix Criticals

Audit Updates

Initial Audit	30 Dec 2024
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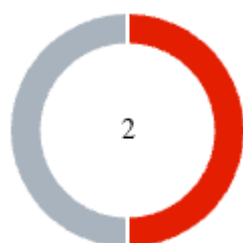
Overview

The Trendify Token token symbolized as AL, is a distinguished SPL (Solana Program Library) token initialized using the `TokenzQdBNbLqP5VEhdkAS6EPFLC1PHnBqCXEpPxuEb` Token Program on the Solana blockchain, with a supply of 1,000,000 tokens. The token uses the URL

<https://gateway.pinata.cloud/ipfs/QmbW9xajkqYgCCwvUt6fXy6JaBmtMmCnJMivU2EPAYbhJZ>, which points to a decentralized storage service, while the image is used for visual identification of the token across platforms and marketplaces. Overall, the Solana token is a distinct entity within the Solana network, identifiable by its unique characteristics as outlined in its metadata.

Field	Value	Description
mint	EKvJKKq1uTpv2vxst5bfE FFntKYGqhfGjXL2ZjSrDaU	The public key of the Mint Account it derives from
name	ALPHA	The on-chain name of the token
symbol	AL	The on-chain symbol of the token
uri	https://gateway.pinata.cloud/ipfs/QmbW9xajkqYgCCwvUt6fXy6JaBmtMmCnJMivU2EPAYbhJZ	The URI to the external metadata. This URI points to an off-chain JSON file that contains additional data following a certain standard

Findings Breakdown



● Critical	1
● Medium	0
● Minor / Informative	1

Severity	Unresolved	Acknowledged	Resolved	Other
● Critical	1	0	0	0
● Medium	0	0	0	0
● Minor / Informative	1	0	0	0

STMA - Mint Authority

Criticality	Passed
Status	Resolved

Description

The token has a fixed supply of tokens, as the mint authority has been revoked, ensuring a stable and unchangeable total supply. This key characteristic enhances its value proposition within the ecosystem by eliminating the possibility of future inflation of the token value through additional minting. This creates a predictable environment for investors and users, contributing to a perception of increased trustworthiness and security. This decision aligns with the best practices aiming to preserve the token's integrity and value, fostering a more sustainable and confident market presence.

STFA - Freeze Authority

Criticality	Passed
Status	Resolved

Description

The freeze authority of the token has been revoked, permanently disabling the ability to freeze and thaw accounts. This action signals a definitive stance on account management within the token's ecosystem, emphasizing the permanence of account statuses. Removing the possibility of altering account states, establishes a more secure environment for token holders, reinforcing the network's commitment to stability and reliability. This decision reflects adherence to best security practices, aiming to solidify investor confidence and enhance the token's value by ensuring consistent operational integrity.

ST2ETFC - Excessive Transfer Fee Configuration

Criticality	Critical
Status	Unresolved

Description

The token program has implemented the `transferFeeConfig` extension, which is currently configured to potentially allow fees that exceed the critical threshold of 2500 basis points, equivalent to 25% of the transaction value. This extension empowers the `transferFeeConfigAuthority` to enforce a protocol-level fee on every token transfer, where a portion of the tokens is withheld from the recipient and controlled by a designated authority. While this feature enhances the capability to monetize token transfers directly within the protocol, setting fees at such a high rate can severely impede token liquidity and may be viewed unfavorably by users and investors, diminishing the token's attractiveness and usability.

Recommendation

To address the issue of excessive fees configured through the `transferFeeConfig` extension, it is imperative to adjust the fee settings to ensure that they do not exceed a 25% limit. This alignment with reasonable market practices is essential for maintaining user trust and enhancing the token's marketability. Ensuring that transaction costs do not become a burden will enhance user retention and support a healthy ecosystem. Furthermore, the team should carefully manage the private keys of the `transferFeeConfigAuthority` account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the extension's functionalities.

Temporary Solutions:

These measurements do not decrease the severity of the finding

- Introduce a time-locker mechanism with a reasonable delay.
- Introduce a multi-signature wallet so that many addresses will confirm the action.
- Introduce a governance model where users will vote about the actions.

Permanent Solution:

- Set the `transferFeeBasisPoints` less than 2500 and revoke the `transferFeeConfigAuthority` authority, which will eliminate the issues caused by the extension but it is non-reversible.

ST2TMM - Token Modifiable Metadata

Criticality	Minor / Informative
Status	Unresolved

Description

The token program is currently susceptible to risks associated with mutable metadata due to non-renounced authorities within the metadata extensions. This setup permits unauthorized or unintended modifications to the token's metadata, potentially leading to inconsistencies and misinformation that could affect the token's integrity and reliability within the ecosystem.

The use of the `metadataPointer` extension with an active authority that has not been renounced, allows changes to the metadata's designated pointing location.

Recommendation

To mitigate these risks and ensure the stability and integrity of the token's metadata, it is advisable to secure the metadata by revoking the relevant authorities.

For the `metadataPointer` extension, revoke the `authority` of the `metadataPointer` to permanently lock the metadata's location and eliminate the possibility of redirection.

Summary

The Trendify token, built on the Solana network, leverages a solid architecture initiated via the Token program. This audit rigorously evaluates its performance, security, and compliance with best practices. The investigation aims to identify and address any operational vulnerabilities, performance bottlenecks, and areas for optimization, ensuring the token's robustness and reliability in the Solana ecosystem.

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Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



The Cyberscope team

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