

Blockchain Security | Smart Contract Audits | KYC Development | Marketing



SOLCRAFT

AUDIT

SECURITY ASSESSMENT

03. April, 2024

FOR







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Introduction

<u>SolidProof.io</u> is a brand of the officially registered company MAKE Network GmbH, based in Germany. We're mainly focused on Blockchain Security such as Smart Contract Audits and KYC verification for project teams.

Solidproof.io assess potential security issues in the smart contracts implementations, review for potential inconsistencies between the codebase and the whitepaper/documentation, and provide suggestions for improvement.

Disclaimer

<u>SolidProof.io</u> reports are not, nor should be considered, an "endorsement" or "disapproval" of any particular project or team. These reports are not, nor should be considered, an indication of the economics or value of any "product" or "asset" created by any team. SolidProof.io do not cover testing or auditing the integration with external contract or services (such as Unicrypt, Uniswap, PancakeSwap etc'...)

SolidProof.io Audits do not provide any warranty or guarantee regarding the absolute bug-free nature of the technology analyzed, nor do they provide any indication of the technology proprietors. SolidProof Audits should not be used in any way to make decisions around investment or involvement with any particular project. These reports in no way provide investment advice, nor should be leveraged investment advice of any sort.

SolidProof.io Reports represent an extensive auditing process intending tohelp 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. SolidProof's position is that each company and individual are responsible for their own due diligence and continuous security. SolidProof in no way claims any guarantee of security or functionality of the technology we agree to analyze.



Project Overview

Summary

Project Name	SOLCRAFT				
Website	https://solcraft.ai/				
About the project Building the Future, One Block at a Time.					
Chain	Solana				
Language	Rust				
Codebase	https://solscan.io/token/77ddMZWMNrCm5aLMUFb3tuSJG AFNA8u8PTf4MUxJvMDB				
Commit	N/A				
Unit Tests	Not Provided				

Social Medias

	411111111111111111111111111111111111111							
Telegram	https://t.me/sol	<u>craftai</u>						
Twitter	https://twitter.o	com/SolcraftA	i i					
Facebook	N/A							
Instagram	N/A							
GitHub	N/A							
Reddit	N/A							
Medium	N/A							
	.,							
Discord	N/A							
YouTube	N/A							
								
TikTok	N/A							
LinkedIn	N/A							
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Audit Summary

Version	Delivery Date	Change Log
v1.0	03. April 2024	· Layout Project
		 Automated/Manual Functionality Review
		· Summary

Note - The following audit report presents a comprehensive security analysis of the smart contract utilized in the project. This analysis did not include functional testing (or unit testing) of the contract's logic. We cannot guarantee 100% logical correctness of the contract as it was not functionally tested by us.

File Overview

The Team provided us with the files that should be tested in the security assessment. This audit covered the following files listed below with a SHA-1 Hash.

1. n/a

Please note: Files with a different hash value than in this table have been modified after the security check, either intentionally or unintentionally. A different hash valuemay (but need not) be an indication of a changed state or potential vulnerability thatwas not the subject of this scan.

Imported packages

Used code from other Frameworks.

1. n/a



Audit Information

Vulnerability & Risk Level

Risk represents the probability that a certain source-threat will exploit vulnerability, and the impact of that event on the organization or system. Risk Level is computed based on CVSS version 3.0.

Level	Level Value Vulnerability		Risk (Required Action)
Critical 9-10		A vulnerability that can disrupt the contract functioning in a number of scenarios, or creates a risk that the contract may be broken.	Immediate action to reduce risk level.
High 7-8		A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.	Implementation of corrective actions as soon aspossible.
Medium	4 – 6.9	A vulnerability that could affect the desired outcome of executingthe contract in a specific scenario.	Implementation of corrective actions in a certain period.
Low 2-3.9 A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.		Implementation of certain corrective actions or accepting the risk.	
Informational	0 – 1.9	A vulnerability that have informational character but is not effecting any of the code.	An observation that does not determine a level of risk



Auditing Strategy and Techniques Applied

Throughout the review process, care was taken to check the repository for security- related issues, code quality, and compliance with specifications and best practices. To this end, our team of experienced pen-testers and smart contract developers reviewed the code line by line and documented any issues discovered.

We check every file manually. We use automated tools only so that they help us achieve faster and better results.

Methodology

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
 - a. Reviewing the specifications, sources, and instructions provided to SolidProof to ensure we understand the size, scope, and functionality of the smart contract.
 - b. Manual review of the code, i.e., reading the source code line by line to identify potential vulnerabilities.
 - c. Comparison to the specification, i.e., verifying that the code does what is described in the specifications, sources, and instructions provided to SolidProof.
- 2. Testing and automated analysis that includes the following:
 - a. Test coverage analysis, which determines whether test cases actually cover code and how much code is executed when those test cases are executed.
 - b. Symbolic execution, which is analysing a program to determine what inputs causes each part of a program to execute.
- 3. Review best practices, i.e., review smart contracts to improve efficiency, effectiveness, clarity, maintainability, security, and control based on best practices, recommendations, and research from industry and academia.
- 4. Concrete, itemized and actionable recommendations to help you secure your smart contracts.



Overall Security

Upgradeablility





Ownership

The ownership is renounced	▼ The owner is renounced
Description	The owner renounced the ownership that means the contract's owner will no longer have any control or authority over the contract's operations.
Comment	N/A

Note – In case of SPL-Token the ownership is renounced or assumed as renounced, if all Authorities, mintAuthority, freezeAuthoriy, updateAuthority, are not able to change anything of the token.



Ownership Privileges

These functions can be dangerous. Please note that abuse can lead to financial loss. We have a guide where you can learn more about these Functions.

Minting tokens

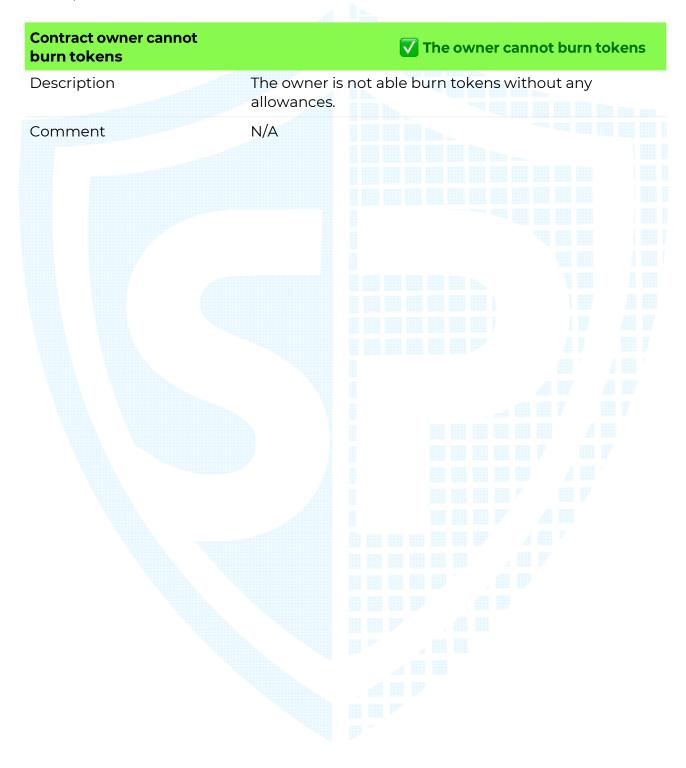
Minting tokens refers to the process of creating new tokens in a cryptocurrency or blockchain network. This process is typically performed by the project's owner or a designated authority, who has the ability to add new tokens to the network's total supply.

Contract owner cannot mint new tokens	Revoked mintAuthority
Description	The owner is not able to mint new tokens once the contract is deployed.
Comment	N/A



Burning tokens

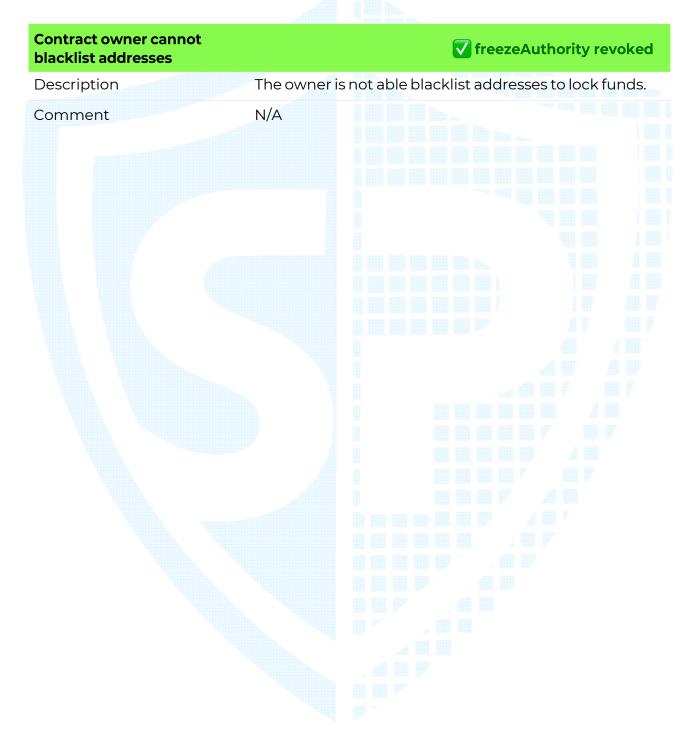
Burning tokens is the process of permanently destroying a certain number of tokens, reducing the total supply of a cryptocurrency or token. This is usually done to increase the value of the remaining tokens, as the reduced supply can create scarcity and potentially drive up demand.





Blacklist addresses

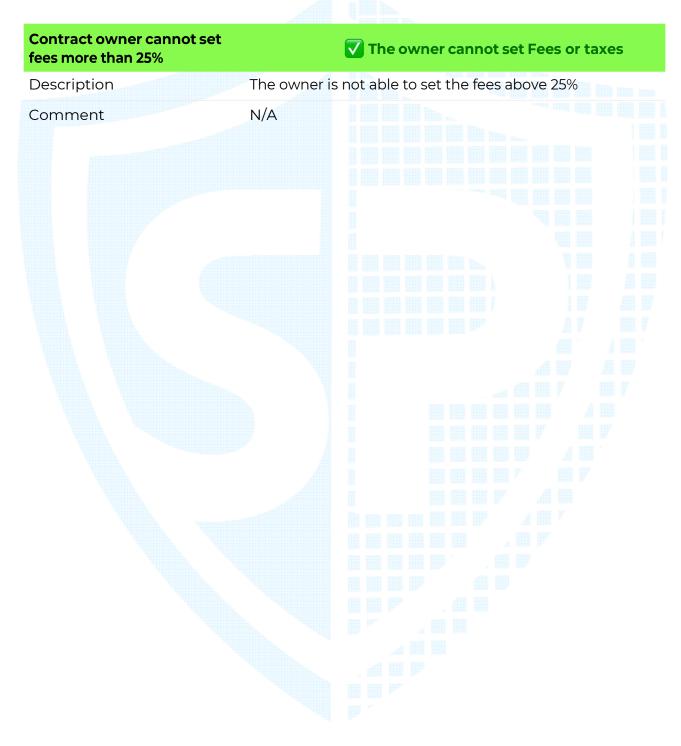
Blacklisting addresses in smart contracts is the process of adding a certain address to a blacklist, effectively preventing them from accessing or participating in certain functionalities or transactions within the contract. This can be useful in preventing fraudulent or malicious activities, such as hacking attempts or money laundering.





Fees and Tax

In some smart contracts, the owner or creator of the contract can set fees for certain actions or operations within the contract. These fees can be used to cover the cost of running the contract, such as paying for gasfees or compensating the contract's owner for their time and effort in developing and maintaining the contract.





Centralization Privileges

Centralization can arise when one or more parties have privileged access or control over the contract's functionality, data, or decision-making. This can occur, for example, if the contract is controlled by a single entity or if certain participants have special permissions or abilities that others do not.

In the project, there are authorities that have access to the following functions:

File	Privileges	
SOLCRAFT	> none	

Recommendations

To avoid potential hacking risks, it is advisable for the client to manage the private key of the privileged account with care. Additionally, we recommend enhancing the security practices of centralized privileges or roles in the protocol through a decentralized mechanism or smart- contract-based accounts, such as multi-signature wallets.

Here are some suggestions of what the client can do:

- Consider using multi-signature wallets: Multi-signature wallets require multiple parties to sign off on a transaction before it can be executed, providing an extra layer of security e.g. Gnosis Safe
- Use of a timelock at least with a latency of e.g. 48-72 hours for awareness of privileged operations
- Introduce a DAO/Governance/Voting module to increase transparency and user involvement
- Consider Renouncing the ownership so that the owner cannot modify any state variables of the contract anymore. Make sure to set up everything before renouncing.



Audit Results

Critical Issues

No critical issues

High Issues

No high issues

Medium Issues

No medium issues

Low Issues

No low issues

Informational Issues

#1 | Lack of reflection of on-chain data

File	Severity	Location	Status
Continental	Informational		Open

Description

Lack of reflection on the on-chain data of the distribution of tokenomics displayed on the website. A wallet by categorization with the right detention percentage would give a clear view of on-chain tokenomics.

#2 | Token metadata are saved

File	Severity	Location	Status
Continental	Informational		Open

Description

Token metadata are saved on "https://ipfs.nftstorage.link/" storage for an indefinite period. We recommend using the Arweave blockchain for indefinite storage (as the most popular tokens on the Solana blockchain use this service, which ensures uninterrupted operation)



Legend For the Issue Status

Attribute or Symbol	Meaning
Open	The issue is not fixed by the project team.
Fixed	The issue is fixed by the project team.
Acknowledged(ACK)	The issue has been acknowledged or declared as part of business logic.





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