

# Security Assessment: Destra Network Token

March 11, 2024

• Audit Status: Fail

• Audit Edition: Advance





# **Risk Analysis**

## **Classifications of Manual Risk Results**

Classification	Description		
Critical	Danger or Potential Problems.		
High	Be Careful or Fail test.		
Low	Pass, Not-Detected or Safe Item.		
Informational	Function Detected		

## **Manual Code Review Risk Results**

Contract Privilege	Description
Buy Tax	5%
<ul><li>Sale Tax</li></ul>	5%
Cannot Sale	Pass
Cannot Sale	Pass
Max Tax	100%
Modify Tax	Yes
Fee Check	Pass
	Not Detected
Trading Cooldown	Not Detected
Can Pause Trade?	Fail
Pause Transfer?	Detected
Max Tx?	Pass
Is Anti Whale?	Not Detected
	Not Detected

Contract Privilege	Description
	Detected
Blacklist Check	Fail
is Whitelist?	Detected
Can Mint?	Pass
	Not Detected
Can Take Ownership?	Not Detected
Hidden Owner?	Not Detected
(i) Owner	0x9CE77c36570A2BDA5B94b8Df092Dd26abbDF4589
Self Destruct?	Not Detected
External Call?	Not Detected
Other?	Not Detected
Holders	1
<ul><li>Auditor Confidence</li></ul>	Low Risk
	No

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.

# **Project Overview**

## **Token Summary**

Parameter	Result
Address	0xf94e7d0710709388bCe3161C32B4eEA56d3f91CC
Name	Destra Network
Token Tracker	Destra Network (DSync)
Decimals	18
Supply	1,000,000,000
Platform	ETHEREUM
compiler	v0.8.17+commit.8df45f5f
Contract Name	DestraNetwork
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://etherscan.io/address/0xf94e7d0710709388bCe3161C32B 4eEA56d3f91CC#code
Payment Tx	Corporate

# Main Contract Assessed Contract Name

Name	Contract	Live
Destra Network	0xf94e7d0710709388bCe3161C32B4eEA56d3f91CC	Yes

## **TestNet Contract was Not Assessed**

## **Solidity Code Provided**

SolID	File Sha-1	FileName
DSync	8bf85430c367e99b1a5abd321198f93d90442cf8	DSync.sol
DSync		
DSync	undefined	

# Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	DSync.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	DSync.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	DSync.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	DSync.sol	L: 0 C: 0
SWC-104	Pass	Unchecked Call Return Value.	DSync.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	DSync.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	DSync.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	DSync.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set	DSync.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	DSync.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	DSync.sol	L: 0 C: 0
SWC-111	Pass	Use of Deprecated Solidity Functions.	DSync.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	DSync.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	DSync.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	DSync.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-115	Pass	Authorization through tx.origin.	DSync.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	DSync.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	DSync.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	DSync.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	DSync.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randonmness.	DSync.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	DSync.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	DSync.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	DSync.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	DSync.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	DSync.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	DSync.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	DSync.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	DSync.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	DSync.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	DSync.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	DSync.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	DSync.sol	L: 0 C: 0

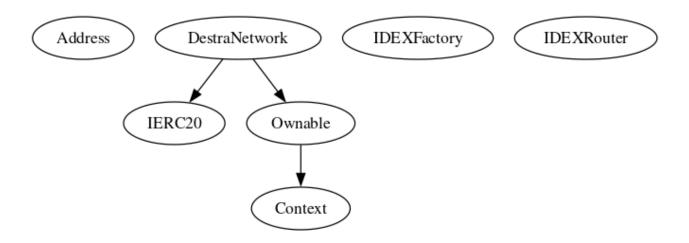
ID	Severity	Name	File	location
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	DSync.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	DSync.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	DSync.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	DSync.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.

## **Inheritance**

The contract for Destra Network has the following inheritance structure.

The Project has a Total Supply of 1,000,000,000



## **Privileged Functions (onlyOwner)**

Please Note if the contract is Renounced none of this functions can be executed. Visibility **Function Name Parameters** renounceOwnership **Public** transferOwnership address newOwner **Public** setTeamMember External External airdrop clearStuckBalance External blacklistWallets External openTrading **External** addLiquidityPool External setSwapBackRateLimit External setTxLimit External setMaxWallet External setIsFeeExempt External setIsTxLimitExempt External setFees External toggleTransferTax External setFeeReceivers External

Function Name	Parameters	Visibility
setSwapBackSettings		External

## **DSync-01** | Potential Sandwich Attacks.

Category	Severity	Location	Status
Security	Medium	DSync.sol: L: 488, C: 14	■ Detected

#### **Description**

A sandwich attack might happen when an attacker observes a transaction swapping tokens or adding liquidity without setting restrictions on slippage or minimum output amount. The attacker can manipulate the exchange rate by frontrunning (before the transaction being attacked) a transaction to purchase one of the assets and make profits by back running (after the transaction being attacked) a transaction to sell the asset. The following functions are called without setting restrictions on slippage or minimum output amount, so transactions triggering these functions are vulnerable to sandwich attacks, especially when the input amount is large:

- swapExactTokensForETHSupportingFeeOnTransferTokens()
- addLiquidityETH()

#### Remediation

We recommend setting reasonable minimum output amounts, instead of 0, based on token prices when calling the aforementioned functions.

#### **Referrences:**

What Are Sandwich Attacks in DeFi — and How Can You Avoid Them?.

## **DSync-03 | Lack of Input Validation.**

Category	Severity	Location	Status
Volatile Code	Low	DSync.sol: L: 192 C: 14, L: 320 C: 14	Detected

#### **Description**

The given input is missing the check for the non-zero address.

The given input is missing the check for the missing required function.

#### Remediation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
require(receiver != address(0), "Receiver is the zero address"); ...
require(value X limitation, "Your not able to do this function");
```

We also recommend customer to review the following function that is missing a required validation. missing required function.

## **DSync-05** | Missing Event Emission.

Category	Severity	Location	Status
Volatile Code	Low	DSync.sol: L: 262 C: 14	Detected

#### **Description**

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes. The linked code does not create an event for the transfer.

#### Remediation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.

## **DSync-11** | Airdrop Function found...

Category	Severity	Location	Status
Optimization	Low	DSync.sol: L: 233 C: 14	Detected Detected

## **Description**

We found several airdrop functions that can be exploited.

#### Remediation

use a traditional airdrop system, instead of the currently design one in contract.

## DSync-16 | Taxes can be up to 100%.

Category	Severity	Location	Status
Logical Issue	Critical	DSync.sol: L: 714 C: 14	Detected

#### **Description**

The current definition of taxes can be set up to 100% for specific wallets, we suggest to modify the function not to be dynamic but to be a static resolution.

feeInTokens > senderBalance && (feeInTokens / 100) \* 95 <= senderBalance

due to the logic written in here may results in loss of funds.

#### Remediation

We advise the team to review the following logic..

## **DSync-18 | Stop Transactions by using Enable Trade.**

Category	Severity	Location	Status
Logical Issue	Critical	DSync.sol: L: 393 C: 14	Detected

#### **Description**

Enable Trade is presend on the following contract and when combined with Exclude from fees it can be considered a whitelist process, this will allow anyone to trade before others and can represent and issue for the holders.

#### Remediation

We recommend the project owner to carefully review this function and avoid problems when performing both actions.

## DSync-20 | Use of tx.origin.

Category	Severity	Location	Status
Logical	Critical	DSync.sol: L: 452 C: 14	Acknowledge

## **Description**

The blacklistWallets function uses tx.origin for authorization checks, which can be vulnerable to phishing attacks where a malicious contract can trick an authenticated user into executing a transaction.

#### Remediation

Replace tx.origin with msg.sender to ensure that only the direct caller can trigger the function.

# **Technical Findings Summary**Classification of Risk

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
High	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
○ Low	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

## **Findings**

Severity	Found	Pending	Resolved
Critical	3	3	0
High	0	0	0
Medium	1	1	0
O Low	3	3	0
Informational	0	0	0
Total	7	7	0

# **Social Media Checks**

Social Media	URL	Result
Twitter	https://x.com/destranetwork	Pass
Other		N/A
Website	https://destra.network	Pass
Telegram	https://t.me/DestraNetwork	Pass

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:** 

Auditor Notes: undefined Project Owner Notes:



## **Assessment Results**

## **Score Results**

Review	Score
Overall Score	58/100
Auditor Score	70/100
Review by Section	Score
Manual Scan Score	14
SWC Scan Score	37
Advance Check Score	7

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below.

## **Audit Fail**



# Assessment Results Important Notes:

- The Destra Network contract presents a high severity risk due to potential reentrancy in the sendValue function and the use of tx.origin which could be exploited. Medium risks include centralization from owner privileges and reliance on external contracts like IDEXRouter. Critical risks involve the airdrop function potentially exceeding gas limits and centralized blacklisting capabilities. I
- Recommendations include implementing reentrancy guards, using msg.sender instead of tx.origin, introducing multisignature control for owner actions, and ensuring external contract reliability.
- The contract's setFees function does not enforce a maximum fee limit, potentially allowing the owner to set the totalBuyFee or totalSellFee to 100% of the transaction amount, which would result in all transferred tokens being taken as fees, effectively blocking token transfers.



# **Appendix**

## **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owner-only functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.

#### **Coding Best Practices**

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.

## **Disclaimer**

Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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