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Novos is an agency specializing in blockchain technology solutions, Audits, KYC / Doxx.



Dofi Network



#### Smart Contract Audit by NOVOS





# Audit Passed

# August 19, 2022



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# Novos Audit Summary

This report has been prepared for Dofi Network (DOFI) on the DOGECHAIN network. Novos provides both clientcentered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.



Parameter	Result
Address	0xF3484AE003c7ce4Dcc2fC890A9544Cd383e4199a
Name	Dofi Network
Token Tracker	DOFI
Decimals	9
Supply	460,000,000
Platform	DOGECHAIN
Compiler	v0.8.4+commit.c7e474f2
Optimization	True / 200
Other Settings:	default evmVersion
Language	Solidity
Codebase	https://explorer.dogechain.dog/address/0x0A85739762B9f9FEbDB0EE61ada <u>9F71a5c9BE524/contracts</u>
Url	https://dofinetwork.com/

#### Main Contract Assessed

Name	Contract	Live
Dofi Network	0xF3484AE003c7ce4Dcc2fC890A9544Cd383e4199a	Yes



## Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
<ul> <li>Unencrypted Private Data On-Chain</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Code With No Effects</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Message call with hardcoded gas amount</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Unexpected Ether balance</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Presence of unused variables</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Right-To-Left-Override control character (U+202E)</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Typographical Error</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>DoS With Block Gas Limit</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Arbitrary Jump with Function Type Variable</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Insufficient Gas Griefing</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Incorrect Inheritance Order</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Write to Arbitrary Storage Location</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Requirement Violation</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Missing Protection against Signature Replay Attacks</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Weak Sources of Randomness from Chain Attributes</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk









## Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
<ul> <li>Authorization through tx.origin</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Delegatecall to Untrusted Callee</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Use of Deprecated Solidity Functions</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Assert Violation</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Reentrancy</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
Unprotected SELFDESTRUCT Instruction	✓ Complete	✓ Complete	✓ Low / No Risk
Unprotected Ether Withdrawal	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Unchecked Call Return Value</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Outdated Compiler Version</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Integer Overflow and Underflow</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk
<ul> <li>Function Default Visibility</li> </ul>	✓ Complete	✓ Complete	✓ Low / No Risk









# Contract Ownership

The contract ownership of Dofi Network is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol. 01

The current owner is the address 0x3745283D4cA1066F899FC470e37db66cd7D15691 which can be viewed from: <u>HERE</u>

02

03

The owner wallet has the power to call the functions displayed on the priviliged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.



# Important Notes To The Users:



Contract name: AntiBotLiquidityGeneratorToken

 amount` as the allowance of `spender` over the caller's tokens. Returns a boolean value indicating whether the operation succeeded.

04

06

Beware that changing an allowance with this method brings the risk that someone may use both the old and the new allowance by unfortunate transaction ordering. One possible solution to mitigate this race condition is to first reduce the spender's allowance to 0 and set the desired value afterwards

This contract is only required for intermediate, library-like contracts.

10

You shouldn't rely on `isContract` to protect against flash loan attacks!





This version of SafeMath should only be used with Solidity 0.8 or later, because it relies on the compiler's built in overflow checks.

Returns the remainder of dividing two unsigned integers. (unsigned integer modulo),reverting with custom message when dividing by zero. CAUTION: This function is deprecated because it requires allocating memory for the error message unnecessarily. For custom revert reasons use {tryMod}.



Preventing calls from contracts is highly discouraged. It breaks composability, breaks support for smart wallets like Gnosis Safe, and does not provide security since it can be circumvented by calling from a contract constructor.



function removeAllFee() private { if (\_taxFee == 0 && \_liquidityFee == 0 && \_charityFee == 0) return;



It is unsafe to assume that an address for which this function returns false is an externallyowned account (EOA) and not a contract.

Counterpart to Solidity's `%` operator. This function

uses a `revert`opcode (which leaves remaining gas untouched) while Solidity uses an invalid opcode to

revert (consuming all remaining gas).

09

following types of addresses: - an externally-owned account - a contract in construction - an address where a contract will be create - an address where a contract lived, but was destroyed

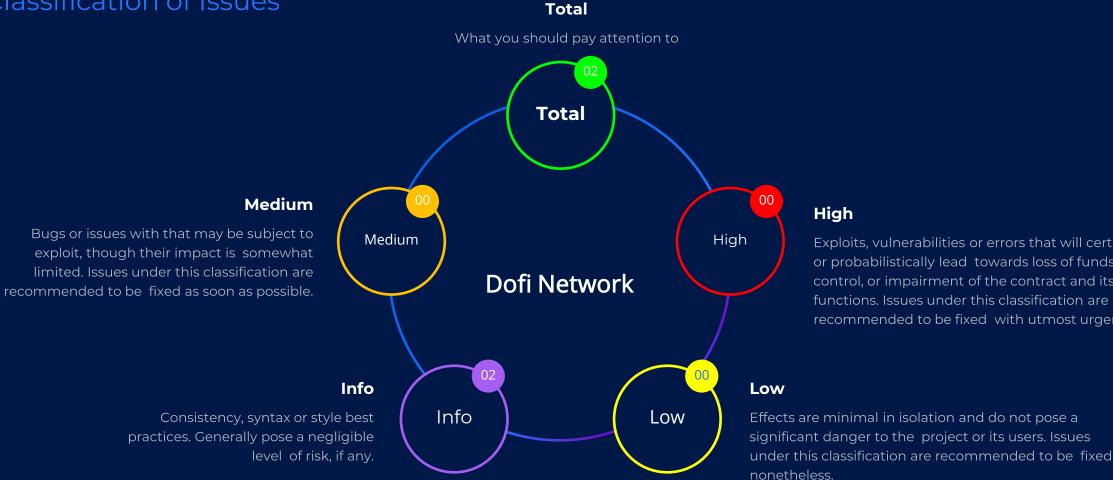
Among others, `isContract` will return false for the





#### Technical Findings Summary

#### Classification of Issues



#### High

Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency



# Findings

Public function that could be declared external



ID	Severity	Contract	Function
01	Informational	Dofi Network	Functions: size, getKeyAtIndex, getIndexOfKey

#### Description

Gas Optimization. Public function that could be declared external

#### Recommendation

Public functions that are never called by the contract should be declared external to save gas.



# <sup>7</sup> Novos Findings

Missing events arithmetic



ID	Severity	Contract	Function
02	Informational	Dofi Network	Missing events for setWalletBalance, setMaxBuyTransaction, setMaxSellTransaction, setSwapTokensAtAmount, setSellTransactionMultiplier

#### Description

Functions that change critical arithmetic parameters should emit an event.

#### Recommendation

Emit corresponding events for critical parameter changes.



## Priviliged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
✓ renounceOwnership	■ none	<ul> <li>external</li> </ul>
✓ transferOwnership	<ul> <li>address newOwner</li> </ul>	• public
✓ prepareForPartherOrExchang eListing	<ul> <li>address_partnerOrExchangeAddress</li> </ul>	• external
✓ setWalletBalance	<ul> <li>uint256 _maxWalletBalance</li> </ul>	external
✓ setMaxBuyTransaction	<ul> <li>uint256_maxTxn</li> </ul>	<ul> <li>external</li> </ul>
✓ setMaxSellTransaction	<ul> <li>uint256_maxTxn</li> </ul>	<ul> <li>external</li> </ul>
✓ updateBusdDividendToken	address_newContract	external
✓ updateMarketingWallet	<ul> <li>address_newWallet</li> </ul>	<ul> <li>external</li> </ul>
✓ setSwapTokensAtAmount	<ul> <li>uint256_swapAmount</li> </ul>	external
✓ setSellTransactionMultiplier	<ul> <li>uint256 _multiplier</li> </ul>	external
✓ setTradingIsEnabled	■ none	• external
✓ setBusdDividendEnabled	<ul> <li>bool _enabled</li> </ul>	• external
✓ setMarketingEnabled	<ul> <li>bool_enabled</li> </ul>	• external
✓ setSwapAndLiquifyEnabled	<ul> <li>bool_enabled</li> </ul>	• external
✓ updatebusdDividendTracker	address newAddress	external
✓ updateUniswapV2Router	<ul> <li>address newAddress</li> </ul>	<ul> <li>external</li> </ul>



## Priviliged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
✓ excludeFromFees	<ul> <li>address account, bool excluded</li> </ul>	- public
✓ excludeFromDividend	<ul> <li>address account</li> </ul>	• public
✓ setAutomatedMarketMakerP air	<ul> <li>address pair, bool value</li> </ul>	• external
✓ updateGasForProcessing	<ul> <li>uint256 newValue</li> </ul>	• external
✓ updateMinimumBalanceForDi vidends	<ul> <li>uint256 newMinimumBalance</li> </ul>	• external
✓ updateClaimWait	<ul> <li>uint256 claimWait</li> </ul>	<ul> <li>external</li> </ul>
✓ processDividendTracker	<ul> <li>uint256 gas</li> </ul>	external





# Novos Statistics Hidity Ipc



Parameter	Result	
Pair Address	0xa461e64402c693b6a953faf37aefbf19674cf225	
DOFI Reserves	O DOFI	
Reserves, wDoge	0 wDoge	
Liquidity Value	\$ O	



# Statistics • Token (DOFI) Holders Info

Parameter	Result
DOFI Percentage Burnt	2 %
DOFI Amount Burnt	9,200,000 DOFI
Top 10 Percentage Own	98 %
Top 10 Amount Owned	450,800,000 DOFI
Token Holders	< Page 1 >
0x3745283D4cA1066F899FC470e37db66cd7D15691 266,802,500 DOFI 58.0005%	
0x6d085986D2e7CDAB45CC27c4989F731681afc954 183,997,500 DOFI 39.9995%	
0x000000000000000000000000000000000000	



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