TechRate

AUDIT COMPANY

Smart Contract Security Audit

Audit Details

Audited project

ZamoLaws

Deployer address

0x9acb3ca313516d367838e77be370d8104361682b

Client contacts:

ZamoLaws team

Blockchain

Ethereum

Project website:

zamolaws.com

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

Background

TechRate was commissioned by ZamoLaws to perform an audit of smart contracts:
https://etherscan.io/address/0xb7888f20642f6bcab295b48a8a20bede0f4a3c49#code

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Contracts Details

Token contract details for 29.12.2021

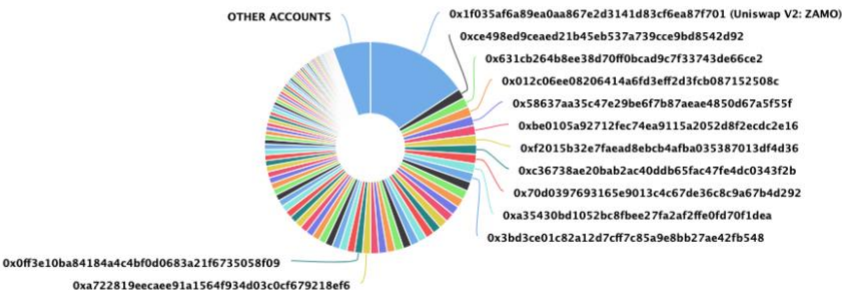|	
Contract name	**ZamoLaws**
Contract address	**0xB7888f20642F6Bcab295B48a8a20beDe0f4a3c49**
Total supply	**1,000,000,000,000**
Token ticker	**ZAMO**
Decimals	**9**
Token holders	**199**
Transactions count	**286**
Top 100 holders dominance	**94.20%**
Max wallet size	**15000000000000000000**
Max TX amount	**5000000000000000000**
Development address	**0x23d94b332f6f89cbd3555c645736a0bd52c70c68**
Uniswap V2 pair	**0x1f035af6a89ea0aa867e2d3141d83cf6ea87f701**
Contract deployer address	**0x9acb3ca313516d367838e77be370d8104361682b**
Contract's current owner address	**0x9acb3ca313516d367838e77be370d8104361682b**

ZamoLaws Token Distribution

ZamoLaws Top 100 Token Holders
Source: Etherscan.io

OTHER ACCOUNTS

- 0x1f035af6a89ea0aa867e2d3141d83cf6ea87f701 (Uniswap V2: ZAMO)
- 0xce498ed9ceaed21b45eb537a739cce9bd8542d92
- 0x631cb264b8ee38d70ff0bcad9c7f33743de66ce2
- 0x012c06ee08206414a6fd3eff2d3fcb087152508c
- 0x58637aa35c47e29be6f7b87aeae4850d67a5f55f
- 0xbe0105a92712fec74ea9115a2052d8f2ecdc2e16
- 0xf2015b32e7faead8ebcb4afba035387013df4d36
- 0xc36738ae20bab2ac40ddb65fac47fe4dc0343f2b
- 0x70d0397693165e9013c4c67de36c8c9a67b4d292
- 0xa35430bd1052bc8fbee27fa2af2ffe0fd70f1dea
- 0x3bd3ce01c82a12d7cff7c85a9e8bb27ae42fb548

0x0ff3e10ba84184a4c4bf0d0683a21f6735058f09
0xa722819eecaee91a1564f934d03c0cf679218ef6

(A total of 942,000,603,092.60 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000.00 token)
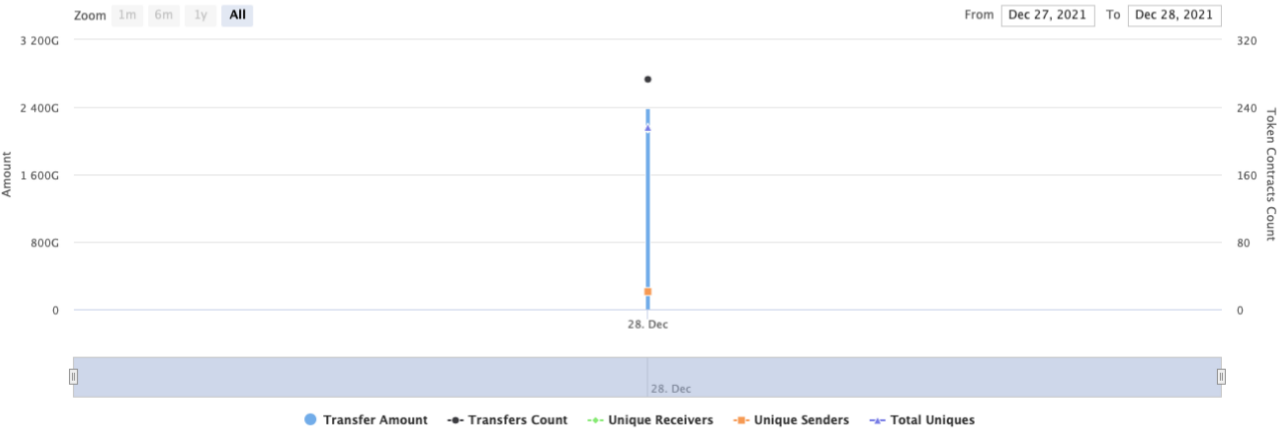
ZamoLaws Contract Interaction Details

Time Series: Token Contract Overview   Tue 28, Dec 2021 - Tue 28, Dec 2021

Token Contract 0xb7888f20642f6bcab295b48a8a20bede0f4a3c49 (ZamoLaws)
Source: Etherscan.io

Zoom   1m   6m   1y   All   From   Dec 27, 2021   To   Dec 28, 2021

● Transfer Amount   -●- Transfers Count   -○- Unique Receivers   -■- Unique Senders   -▵- Total Uniques

ZamoLaws Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	📄 Uniswap V2: ZAMO	157,237,785,740.74116124	15.7238%
2	0xce498ed9ceaed21b45eb537a739cce9bd8542d92	14,964,073,604	1.4964%
3	0x631cb264b8ee38d70ff0bcad9c7f33743de66ce2	14,824,850,972	1.4825%
4	0x012c06ee08206414a6fd3eff2d3fcb087152508c	14,728,991,959	1.4729%
5	0x58637aa35c47e29be6f7b87aeae4850d67a5f55f	14,669,764,790	1.4670%
6	0xbe0105a92712fec74ea9115a2052d8f2ecdc2e16	14,624,426,756	1.4624%
7	0xf2015b32e7faead8ebcb4afba035387013df4d36	14,615,369,938	1.4615%
8	0xc36738ae20bab2ac40ddb65fac47fe4dc0343f2b	14,539,393,595	1.4539%
9	0x70d0397693165e9013c4c67de36c8c9a67b4d292	14,284,041,834	1.4284%
10	0xa35430bd1052bc8fbee27fa2af2ffe0fd70f1dea	14,276,401,104	1.4276%

Contract functions details

+ Context
- [Int] _msgSender

+ [Int] IERC20
- **[Ext]** totalSupply
- **[Ext]** balanceOf
- **[Ext]** transfer **#**
- **[Ext]** allowance
- **[Ext]** approve **#**
- **[Ext]** transferFrom **#**

+ Ownable (Context)
- **[Pub]** <Constructor> **#**
- **[Pub]** owner
- **[Pub]** renounceOwnership **#**
  - modifiers: onlyOwner
- **[Pub]** transferOwnership **#**
  - modifiers: onlyOwner

+ [Lib] SafeMath
- [Int] add
- [Int] sub
- [Int] sub
- [Int] mul
- [Int] div
- [Int] div

+ [Int] IUniswapV2Factory
- **[Ext]** createPair **#**

+ [Int] IUniswapV2Router02
- **[Ext]** swapExactTokensForETHSupportingFeeOnTransferTokens **#**
- **[Ext]** factory
- **[Ext]** WETH
- **[Ext]** addLiquidityETH **($)**

+ ZamoLaws (Context, IERC20, Ownable)
- **[Pub]** <Constructor> **#**
- **[Pub]** name
- **[Pub]** symbol
- **[Pub]** decimals
- **[Pub]** totalSupply
- **[Pub]** balanceOf
- **[Pub]** developmentWallet
- **[Pub]** transfer **#**
- **[Pub]** allowance
- **[Pub]** approve **#**
- **[Pub]** transferFrom **#**
- **[Prv]** tokenFromReflection
- **[Prv]** removeAllFee **#**
- **[Prv]** restoreAllFee **#**

- **[Prv]** _approve **#**
- **[Prv]** _transfer **#**
- **[Prv]** swapTokensForEth **#**
  - modifiers: lockTheSwap
- **[Ext]** setMinSwapTokensThreshold **#**
- **[Prv]** sendETHToFee **#**
- **[Pub]** setTrading **#**
  - modifiers: onlyOwner
- **[Ext]** manualswap **#**
- **[Ext]** manualsend **#**
- **[Prv]** _tokenTransfer **#**
- **[Prv]** _transferStandard **#**
- **[Prv]** _takeTeam **#**
- **[Prv]** _reflectFee **#**
- **[Ext]** <Fallback> **($)**
- **[Prv]** _getValues
- **[Prv]** _getTValues
- **[Prv]** _getRValues
- **[Prv]** _getRate
- **[Prv]** _getCurrentSupply
- **[Pub]** toggleSwap **#**
  - modifiers: onlyOwner
- **[Ext]** setMaxTxnAmount **#**
- **[Ext]** setMaxWalletSize **#**
- **[Ext]** lowerBuyTeamFee **#**
- **[Ext]** lowerSellTeamFee **#**

($) = payable function
= non-constant function

Issues Checking Status

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Passed
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

Security Issues

⊘ High Severity Issues

No high severity issues found.

⊘ Medium Severity Issues

No medium severity issues found.

⊘ Low Severity Issues

No low severity issues found.

Owner privileges (In the period when the owner is not renounced)

- **Owner can enable/disable trading.**
- **Owner can enable/disable swap.**
- **Development address can change _swapTokensAtAmount.**
- **Development address can withdraw contract ETHs.**
- **Development address can manually swap and send amount to fee.**
- **Development address can change max TX amount.**
- **Development address can change _maxWalletSize.**
- **Development address can lower _taxFeeOnBuy and _taxFeeOnSell.**

Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details are provided by the team:
https://app.unicrypt.network/amm/uni-v2/pair/0x275ae462b7206cec11e06b90745c23f2e06a328b

Ownership renounce details are provided by the team:
https://etherscan.io/tx/0x778aa99b5fe1b1b32ad598554ffe737a69f3016a182e583ff66278ae1309b599

TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.

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