

“UREUMVERSE” Smart Contract Security Audit

DOM Tech
March, 2022

Audit Details



Audited project

Ureumverse



Deployer address

0x91514f5ac6ab85d0E5C9DF8AE9ABDf0221DFBbad



Client contacts:

Ureum Metaverse



Blockchain

Binance Smart Chain



Project website:

<https://ureum.tech/>

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

DOM Auditor was commissioned by Ureumverse to perform an audit of smart contracts:

<https://bscscan.com/token/0x69A1eFc523579b653F32aaAB0c2C42636E1396eA#balances>

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 28.03.2022

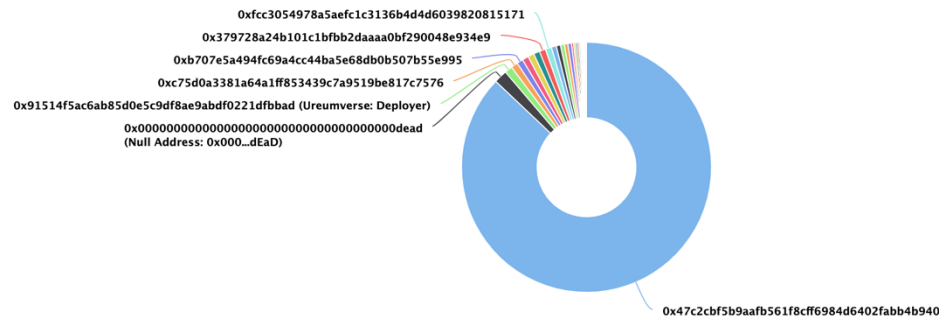
Contract name	Ureumverse
Contract address	0x69A1eFc523579b653F32aaAB0c2C42636E1396eA
Total supply	1,000,000,000
Token ticker	URMV
Decimals	9
Token holders	33
Transactions count	175
Top 100 holders dominance	23%
Sell cycle hours	0
Tax fee	7,8
Total fees	7,7
Marketing / dev / dev product shares	40 / 30 / 30
Contract deployeraddress	0x91514f5ac6ab85d0E5C9DF8AE9ABDf0221DFBbad
Contract's current owner address	0x91514f5ac6ab85d0E5C9DF8AE9ABDf0221DFBbad

Ureumverse Token Distribution


The top 100 holders collectively own 99.99% (999,903,990.78 Tokens) of Ureumverse

Token Total Supply: 1,000,000,000.00 Token | Total Token Holders: 33

Ureumverse Top 100 Token Holders
Source: BscScan.com



UreumverseTop10Token Holders

Rank	Address	Quantity (Token)	Percentage
1	 0x47c2cbf5b9aafb561f8cff6984d6402fabb4b940	870,720,000	87.0720%
2	Null Address: 0x000...dEaD	17,000,000	1.7000%
3	Ureumverse: Deployer	10,000,000.000003773	1.0000%
4	0xc75d0a3381a64a1ff853439c7a9519be817c7576	8,800,000	0.8800%
5	0xb707e5a494fc69a4cc44ba5e68db0b507b55e995	8,181,548	0.8182%
6	0x46480c617f3ecd0a8cf55c5cb6ab22e57817c01	8,000,000	0.8000%
7	0xeb43e24d5553ff511451bc7760eba32732f74fbd	8,000,000	0.8000%
8	0x22bf0976eb2b893986e194f853a0fcfa8370725	8,000,000	0.8000%
9	0x379728a24b101c1bfbb2daaaa0bf290048e934e9	8,000,000	0.8000%
10	0xfcc3054978a5aefc1c3136b4d4d6039820815171	8,000,000	0.8000%

Contract functions details

+ Supply (Tokenomics, RFI)

- [Pub] totalCirculatingSupply

+ [Int] IUniswapV2Router02 (IUniswapV2Router01)

- [Ext] removeLiquidityETHSupportingFeeOnTransferTokens #
- [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens #
- [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
- [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)
- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #

+ [Int] IUniswapV2Router01

- [Ext] factory
- [Ext] WETH
- [Ext] addLiquidity #
- [Ext] addLiquidityETH (\$)
- [Ext] removeLiquidity #
- [Ext] removeLiquidityETH #
- [Ext] removeLiquidityWithPermit #
- [Ext] removeLiquidityETHWithPermit #
- [Ext] swapExactTokensForTokens #
- [Ext] swapTokensForExactTokens #
- [Ext] swapExactETHForTokens (\$)
- [Ext] swapTokensForExactETH #
- [Ext] swapExactTokensForETH #
- [Ext] swapETHForExactTokens (\$)
- [Ext] quote
- [Ext] getAmountOut
- [Ext] getAmountIn
- [Ext] getAmountsOut
- [Ext] getAmountsIn

+ [Int] IUniswapV2Pair

- [Ext] name
- [Ext] symbol
- [Ext] decimals
- [Ext] totalSupply
- [Ext] balanceOf
- [Ext] allowance
- [Ext] approve #
- [Ext] transfer #
- [Ext] transferFrom #
- [Ext] DOMAIN_SEPARATOR
- [Ext] PERMIT_TYPEHASH
- [Ext] nonces
- [Ext] permit #
- [Ext] MINIMUM_LIQUIDITY
- [Ext] factory
- [Ext] token0
- [Ext] token1
- [Ext] getReserves
- [Ext] price0CumulativeLast

- [Ext] price1CumulativeLast
- [Ext] kLast
- [Ext] mint #
- [Ext] burn #
- [Ext] swap #
- [Ext] skim #
- [Ext] sync #
- [Ext] initialize #
- + [Int] IUniswapV2Factory
 - [Ext] feeTo
 - [Ext] feeToSetter
 - [Ext] getPair
 - [Ext] allPairs
 - [Ext] allPairsLength
 - [Ext] createPair #
 - [Ext] setFeeTo #
 - [Ext] setFeeToSetter #
- + Helpers
- + Pancake (Ownable)
 - [Ext] <Fallback> (\$)
 - [Ext] initDEXRouter #
 - modifiers: onlyOwner
 - [Int] swapTokensForBnb #
 - [Pub] addAddressToLPs #
 - modifiers: onlyOwner
 - [Pub] removeAddressFromLPs #
 - modifiers: onlyOwner
- + TxPolice (Tokenomics, Pancake, RFI, Supply)
 - [Pub] toggleLimitExemptions #
 - modifiers: onlyOwner
 - [Ext] toggleSpecialWallets #
 - modifiers: onlyOwner
 - [Int] enforceCyclicSellLimit #
 - [Pub] maxSellAllowancePerCycle
 - [Ext] setMaxSellAllowanceMultiplier #
 - modifiers: onlyOwner
 - [Int] hasSellCycleEnded
 - [Ext] setSellCycleHours #
 - modifiers: onlyOwner
 - [Ext] disableSellLimit #
 - modifiers: onlyOwner
 - [Ext] enableSellLimit #
 - modifiers: onlyOwner
 - [Ext] sellAllowanceLeft
 - [Int] guardMaxLimits
 - [Int] canTakeFee
 - [Int] swapExcludedFromFee #
 - [Int] getTransactionType
- + Expensify (Ownable, Helpers, Tokenomics, Pancake, TxPolice)
 - [Ext] setProductDevWallet #

- modifiers: onlyOwner,legitWallet
 - [Ext] setDevWallet #
 - modifiers: onlyOwner,legitWallet
 - [Ext] setMarketingWallet #
 - modifiers: onlyOwner,legitWallet
 - [Int] canTax
 - [Int] taxify #
 - modifiers: lockTheProcess
- + RFI (IERC20, Ownable, Tokenomics, Pancake)
- [Pub] <Constructor> #
 - [Prv] _getValues
 - [Prv] _getTValues
 - [Prv] _getRValues
 - [Prv] _getRate
 - [Prv] _getCurrentSupply
 - [Pub] tokenFromReflection
 - [Int] rfiApprove #
 - [Int] _transfer #
 - [Prv] _tokenTransfer #
 - [Int] beforeTokenTransfer #
 - [Int] takeFee #
 - [Prv] _takeTax #
 - [Pub] balanceOf
 - [Pub] transfer #
 - [Pub] allowance
 - [Pub] approve #
 - [Pub] transferFrom #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
- + Tokenomics (IERC20, Ownable)
- [Ext] setTaxFee #
 - modifiers: onlyOwner,sameValue
 - [Ext] disableAllFeesTemporarily #
 - modifiers: onlyOwner
 - [Ext] restoreAllFees #
 - modifiers: onlyOwner
 - [Int] removeAllFee #
 - [Int] restoreAllFee #
 - [Int] calculateTaxFee
 - [Ext] setMinToTax #
 - modifiers: onlyOwner,supplyBounds
 - [Ext] totalSupply
 - [Ext] totalFees
 - [Ext] setAntibot #
 - modifiers: onlyOwner
 - [Pub] isBot
 - [Ext] rescueBNB #
 - modifiers: onlyOwner
 - [Ext] rescueBEP20Tokens #
 - modifiers: onlyOwner
- + [Int] IERC20Metadata (IERC20)
- [Ext] name

- [Ext] symbol
- [Ext] decimals

+ [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
- [Int] _transferOwnership #

+ Context

- [Int] _msgSender
- [Int] _msgData

+ [Lib] SafeMath

- [Int] tryAdd
- [Int] trySub
- [Int] tryMul
- [Int] tryDiv
- [Int] tryMod
- [Int] add
- [Int] sub
- [Int] mul
- [Int] div
- [Int] mod
- [Int] sub
- [Int] div
- [Int] mod

+ URMV (IERC20Metadata, Context, Ownable, Tokenomics, RFI, TxPolice, Expensify)

- [Pub] <Constructor> #
- [Ext] name
- [Ext] symbol
- [Ext] decimals
- [Int] beforeTokenTransfer #
- [Int] takeFee
- [Prv] triggerFeatures #
- [Int] _triggerTax #
- [Ext] triggerTax #
 - modifiers: onlyOwner

(\$) = 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.

Notes:

- Max transaction amount equals total supply.

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

- Owner can change router address.
- Owner can add/remove addresses from lp array.
- Owner can change limit exemptions.
- Owner can change specialAddresses value.
- Owner can change maxSellAllowanceMultiplier.
- Owner can enable/disable sell limit.
- Owner can change productDevWallet and productDevShare.
- Owner can change devWallet and devShare.
- Owner can change marketingWallet and marketingShare.
- Owner can change tax fee and enable/disable fee.
- Owner can change minToTax.
- Owner can mark addresses as bots.
- Owner can withdraw ERC20 and native tokens.
- Owner can manually trigger the tax.

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 NOT provided by the team.

DOM Auditor 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.