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AUDIT COMPANY

Smart Contract Security Audit

TechRate

November, 2021

Audit Details

Audited project

IRONMAN

Deployer address

0xfbd7683A48563f3D352C94898f9Ad869B2742960

Client contacts:

IRONMAN team

Blockchain

Ethereum

Project website:

Not provided

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 IRONMAN to perform an audit of smart contracts:
https://etherscan.io/address/0x88ad95cd21b0a88972fb87a4c1c83d29125a0e30#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

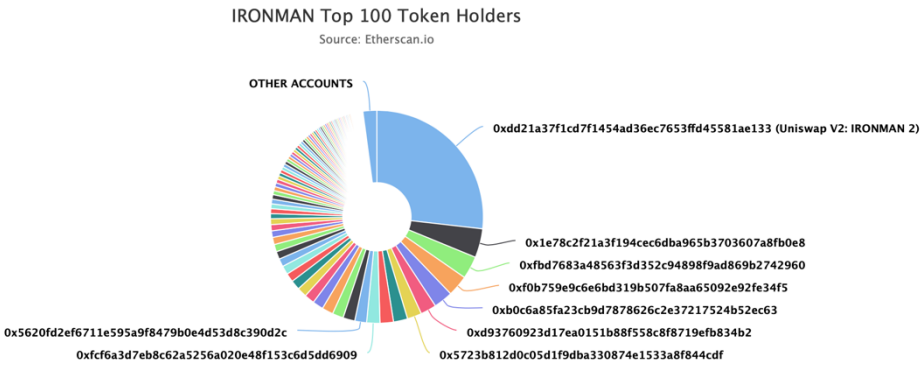
Token contract details for 03.11.2021

Contract name	IRONMAN
Contract address	0x88Ad95Cd21b0A88972fB87A4C1C83d29125A0e30
Total supply	10,000,000,000
Token ticker	IRONMAN
Decimals	9
Token holders	232
Transactions count	653
Top 100 holders dominance	97.89%
Contract deployer address	0xfbd7683A48563f3D352C94898f9Ad869B2742960
Contract's current owner address	0x0000000000000000000000000000000000000000

IRONMAN Token Distribution

The top 100 holders collectively own 97.89% (9,789,362,519.22 Tokens) of IRONMAN

Token Total Supply: 10,000,000,000.00 Token | Total Token Holders: 232

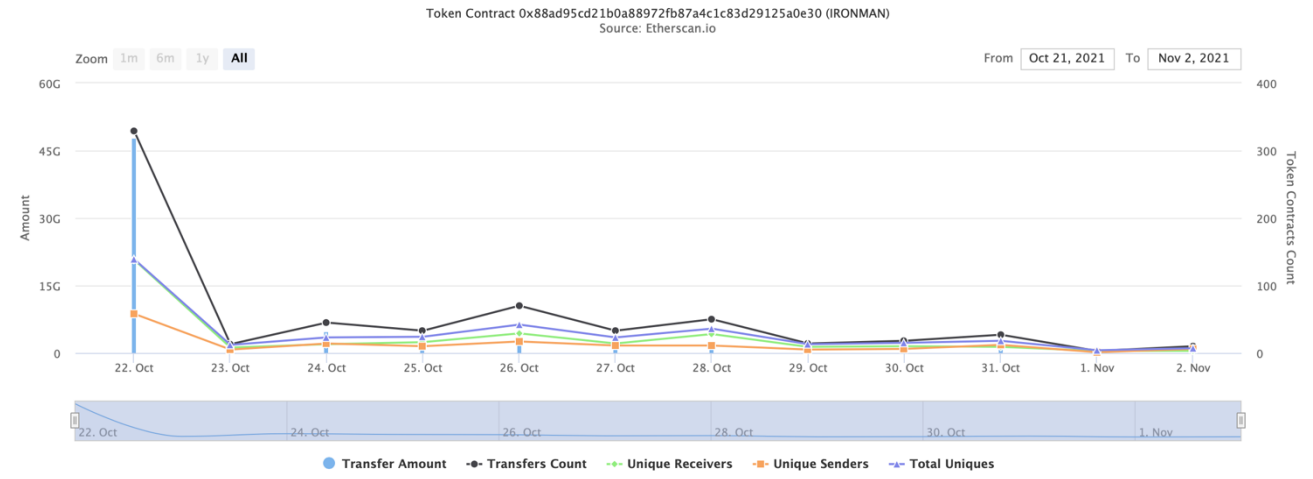


(A total of 9,789,362,519.22 tokens held by the top 100 accounts from the total supply of 10,000,000,000.00 token)

IRONMAN Contract Interaction Details

Time Series: Token Contract Overview

Fri 22, Oct 2021 - Tue 2, Nov 2021



IRONMAN Top 10 Token Holders

Rank	Address	Quantity	Percentage
1	Uniswap V2: IRONMAN 2	2,681,276,454.197388986	26.8128%
2	0x1e78c2f21a3f194cec6dba965b3703607a8fb0e8	439,012,708.829597457	4.3901%
3	0xfbd7683a48563f3d352c94898f9ad869b2742960	344,108,136.50322387	3.4411%
4	0xf0b759e9c6e6bd319b507fa8aa65092e92fe34f5	320,751,740.413451089	3.2075%
5	0xb0c6a85fa23cb9d7878626c2e37217524b52ec63	291,137,364.502106001	2.9114%
6	0xd93760923d17ea0151b88f558c8f8719efb834b2	239,305,960.862832931	2.3931%
7	0x5723b812d0c05d1f9dba330874e1533a8f844cdf	220,247,228.97960507	2.2025%
8	0x7e462d0431d1d862132ecf6098cfd52d792d57c3	214,303,572.171252378	2.1430%
9	0x06707ce52408711266cf7de73f492f2d5cb7f11d	204,394,336.408984415	2.0439%
10	0xfcf6a3d7eb8c62a5256a020e48f153c6d5dd6909	202,347,953.266631064	2.0235%

Contract functions details

+ Context
  - [Int] _msgSender

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

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

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

+ [Int] IUniswapV2Factory
  - [Ext] createPair #

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

+ IRONMAN (Context, IERC20, Ownable)
  - [Pub] <Constructor> #
  - [Pub] name
  - [Pub] symbol
  - [Pub] decimals
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] allowance
  - [Pub] approve #
  - [Pub] transferFrom #
  - [Ext] setCooldownEnabled #
    - modifiers: onlyOwner
  - [Prv] tokenFromReflection
  - [Prv] _approve #
  - [Prv] _transfer #
  - [Prv] swapTokensForEth #

    - modifiers: lockTheSwap
  - [Ext] liftMaxTx #
    - modifiers: onlyOwner
  - [Prv] sendETHToFee #
  - [Ext] openTrading #
    - modifiers: onlyOwner
  - [Prv] _tokenTransfer #
  - [Prv] _transferStandard #
  - [Prv] _takeTeam #
  - [Prv] _reflectFee #
  - [Ext] <Fallback> ($)
  - [Ext] manualswap #
  - [Ext] manualsend #
  - [Prv] _getValues
  - [Prv] _getTValues
  - [Prv] _getRValues
  - [Prv] _getRate
  - [Prv] _getCurrentSupply

($) = 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 cooldown (user to user trading with time offset).

```
function setCooldownEnabled(bool onoff) external onlyOwner() {
    cooldownEnabled = onoff;
}
```

- Owner can change max transaction amount.

```
function liftMaxTx() external onlyOwner{
    _maxTxAmount = _tTotal;
}
```

- Owner can open swap trading.

```
function openTrading() external onlyOwner() {
    require(!tradingOpen,"trading is already open");
    IUniswapV2Router02 _uniswapV2Router = IUniswapV2Router02(0x7a250d5630B4cF539739dF2C5dAcb4c659F2488D);
    uniswapV2Router = _uniswapV2Router;
    _approve(address(this), address(uniswapV2Router), _tTotal);
    uniswapV2Pair = IUniswapV2Factory(_uniswapV2Router.factory()).createPair(address(this), _uniswapV2Router.WETH());
    uniswapV2Router.addLiquidityETH{value: address(this).balance}(address(this),balanceOf(address(this)),0,0,owner(),block.timestamp);
    swapEnabled = true;
    cooldownEnabled = true;
    _maxTxAmount = 800000000 * 10**9;
    tradingOpen = true;
    IERC20(uniswapV2Pair).approve(address(uniswapV2Router), type(uint).max);
}
```

- Fee address wallet 1 can manual swap and send.

```
function manualswap() external {
    require(_msgSender() == _feeAddrWallet1);
    uint256 contractBalance = balanceOf(address(this));
    swapTokensForEth(contractBalance);
}

function manualsend() external {
    require(_msgSender() == _feeAddrWallet1);
    uint256 contractETHBalance = address(this).balance;
    sendETHToFee(contractETHBalance);
}
```

Conclusion

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

Liquidity locking details are NOT provided by the team.

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.