



# MOTECH AUDIT

SMART CONTRACT SECURITY AUDIT

## SECURITY ASSESSMENT

# MAFAGAFO TOKEN AUDIT REPORT

2021

4 DEC 2021

## SECURITY ASSESMENT

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# SECURITY ASSESMENT

## SUMMARY

This report has been prepared for Mafagafo to discover issues and vulnerabilities in the source code of the Mafagafo project as well as any contract dependencies that were not part of an officially recognized library. A comprehensive examination has been performed, utilizing Static Analysis, Manual Review, and Test net Deployment techniques.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.

The security assessment resulted in findings that ranged from critical to informational. We recommend addressing these findings to ensure a high level of security standards and industry practices. We suggest recommendations that could better serve the project from the security perspective:

- Enhance general coding practices for better structures of source codes;
- Add enough unit tests to cover the possible use cases given they are currently missing in the repository;
- Provide more comments per each function for readability, especially contracts are verified in public;
- Provide more transparency on privileged activities once the protocol is live.



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# 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.



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# SECURITY ASSESSMENT

# BACKGROUND

MotechAudit was commissioned by Mafagafo to perform an audit of smart contracts:

<https://bscscan.com/address/0x352631918cA5682290c841b54CE2E7fE3B73CEa0>

The purpose of the audit was to achieve the following:

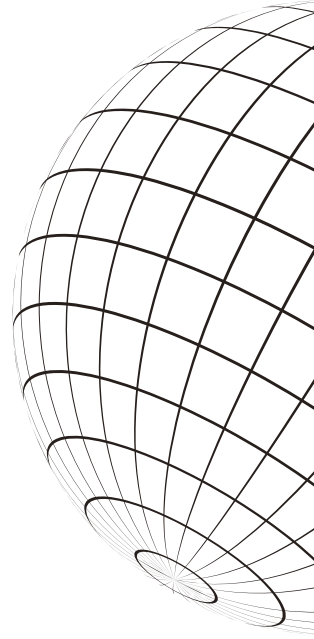
- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

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.



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SMART CONTRACT SECURITY AUDIT

# AUDIT DETAILS



## AUDITED PROJECT

Mafagafo



## DEPLOYER ADDRESS

0x95cCe83F4EC3E68DaABEf3604a33e00fb097fe22



## CLIENT CONTACTS:

Mafagafo Team



## BLOCKCHAIN

BSC Project



## WEBSITE:

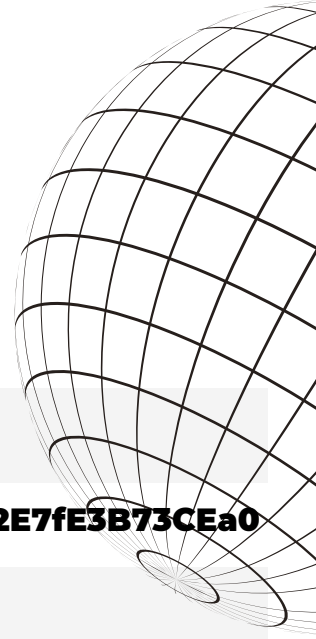
<https://mafagafo.com/>



## SECURITY ASSESSMENT

# CONTRACT DETAILS

### Token contract details for Nov-21-2021



<b>Contract name</b>	<b>Mafagafo</b>
<b>Contract address</b>	<b>0x352631918cA5682290c841b54CE2E7fE3B73CEa0</b>
<b>Total supply</b>	<b>1,000,000,000 MAFA</b>
<b>Token ticker</b>	<b>MafaCoin (MAFA)</b>
<b>Decimals</b>	<b>18</b>
<b>Token holders</b>	<b>15,787</b>
<b>Transactions count</b>	<b>21,380</b>
<b>Top 100 holders dominance</b>	<b>97.71%</b>
<b>Contract deployer address</b>	<b>0xE341d141133D82Def0Ee59a3D9365fd2942Eeb63</b>
<b>Contract's current owner address</b>	<b>0xE341d141133D82Def0Ee59a3D9365fd2942Eeb63</b>

## SECURITY ASSESSMENT

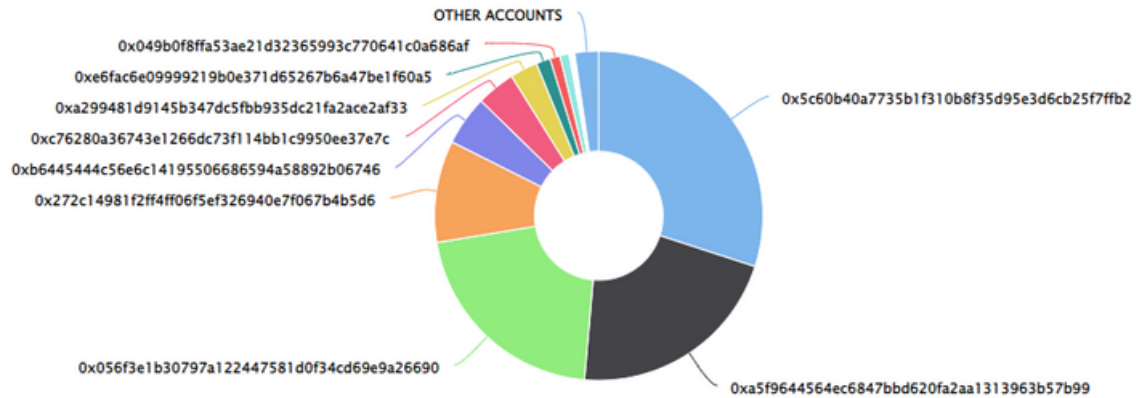
# MAFAGAFO TOKEN DISTRIBUTION

The top 100 holders collectively own 97.66% (976,598,290.19 Tokens) of MafaCoin

Token Total Supply: 1,000,000,000.00 Token | Total Token Holders: 15,792

MafaCoin Top 100 Token Holders

Source: BscScan.com

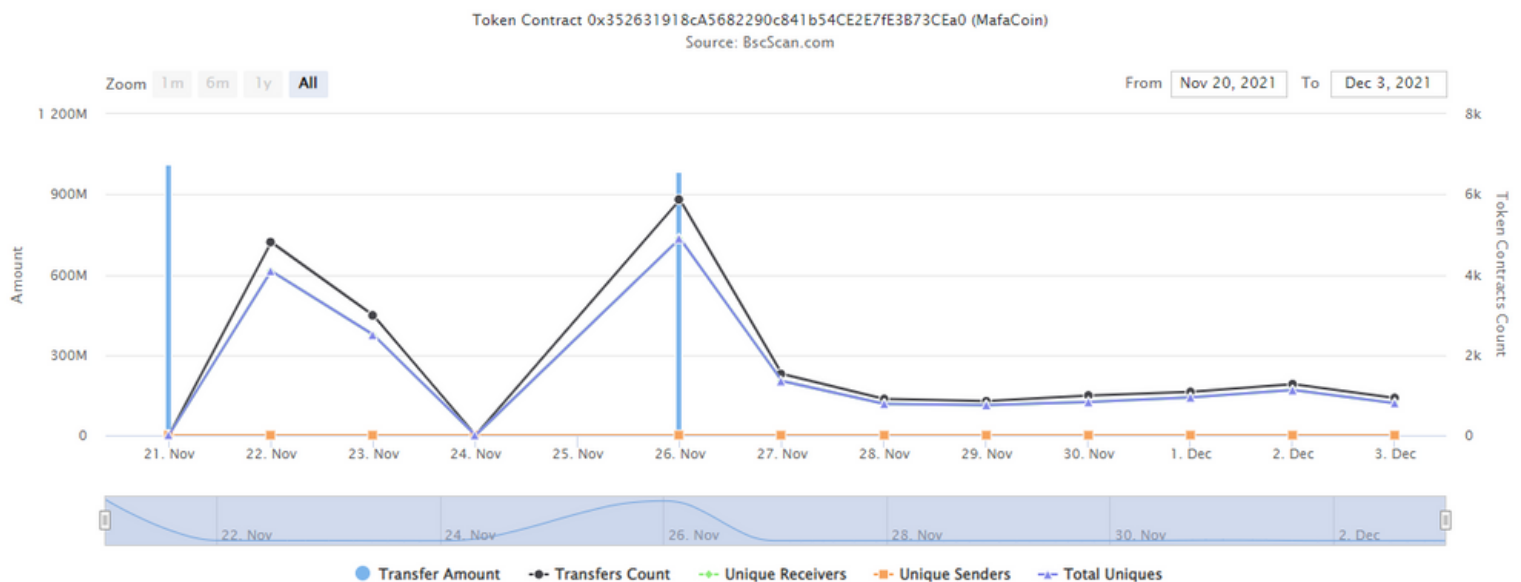


(A total of 976,598,290.19 tokens held by the top 100 accounts from the total supply of 1,000,000,000.00 token)

## MAFAGAFO TOKEN CONTRACT INTERACTION DETAILS

Time Series: Token Contract Overview





















Sun 21, Nov 2021 - Fri 3, Dec 2021





## SECURITY ASSESSMENT

# TOP 10 TOKEN HOLDERS

Rank	Address	Quantity	Percentage	Analytics
1	 0x5c60b40a7735b1f310b8f35d95e3d6cb25f7ffb2	300,000,000	30.0000%	
2	 0xa5f9644564ec6847bbd620fa2aa1313963b57b99	214,000,000	21.4000%	
3	 0x056f3e1b30797a122447581d0f34cd69e9a26690	210,000,000	21.0000%	
4	 0x272c14981f2ff4ff06f5ef326940e7f067b4b5d6	100,000,000	10.0000%	
5	 0xb6445444c56e6c14195506686594a58892b06746	49,000,000	4.9000%	
6	 0xc76280a36743e1266dc73f114bb1c9950ee37e7c	38,000,000	3.8000%	
7	 0xa299481d9145b347dc5fbb935dc21fa2ace2af33	27,000,000	2.7000%	
8	 0xe6fac6e09999219b0e371d65267b6a47be1f60a5	14,000,000	1.4000%	
9	 0x049b0f8ffa53ae21d32365993c770641c0a686af	10,000,000	1.0000%	
10	 0xefff120bfae1a530da9a9c42606423f053f4eb40	9,101,410.837559601910494737	0.9101%	

source:<https://bscscan.com/>



# SECURITY ASSESSMENT

# SECURITY ISSUES

## ✓ High Severity Issues

No high severity issues found.

## ✓ Medium Severity Issues

No high severity issues found.

## ⚠ Low Severity Issues

1. Missing event for changing liquidityFee, burnFee, teamBuyFee, teamSellFee, lotteryFee

**Contracts:** Mafacoin.sol

**Functions:** setLiquidityFee, setBurnFee, setTeamBuyFee, setTeamSellFee, setLotteryFee Changing critical values should be followed by the event emitting for better tracking off-chain.

**Recommendation:** Please emit events on the critical values changing.

2. State variables that could be declared constant Constant state variables should be declared constant to save gas.

**Contracts:** Mafacoin.sol

**Variables:** deadAddress, tSupply

**Recommendation:** Add the constant attributes to state variables that never change.

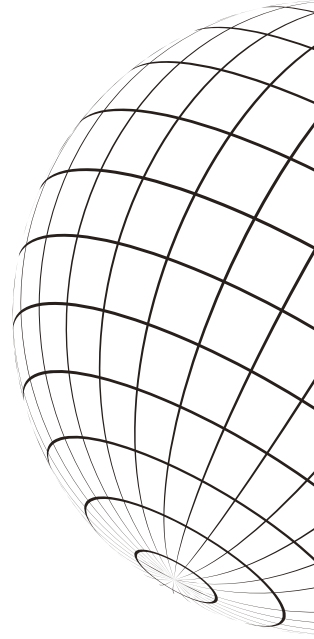
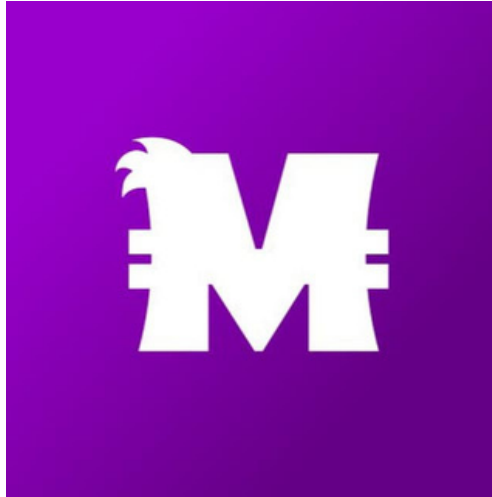
3. A public function that could be declared external. public functions that are never called by the contract should be declared external to save gas.

**Contracts:** TimeLockedWallet.sol, Mafacoin.sol

**Functions:** withdraw, info, setAutomatedMarketMakerPair

**Recommendation:** Use the external attribute for functions never called from the contract.

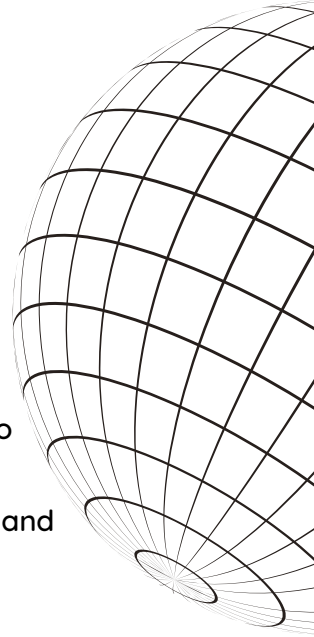
**SECURITY ASSESMENT**  
**TOKEN LOGO**



# SECURITY ASSESMENT CONCLUSION

Smart contracts contain owner privileges!

Motech Audit 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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