



MOTECH AUDIT

SMART CONTRACT SECURITY AUDIT

SECURITY ASSESSMENT

**VMATES TOKEN
AUDIT REPORT**

2021



25 DEC 2021

SECURITY ASSESMENT

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SECURITY ASSESMENT

SUMMARY

This report has been prepared for Vmates to discover issues and vulnerabilities in the source code of the Vmates 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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BACKGROUND

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

<https://bscscan.com/address/0x696c2d3c711d5727c3686672f411583faedaa29f>

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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AUDIT DETAILS



AUDITED PROJECT

Vmates



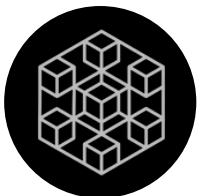
DEPLOYER ADDRESS

0x071853Fde1BB51aBfE2A424621c98E7c218E6e51



CLIENT CONTACTS:

Vmates Team



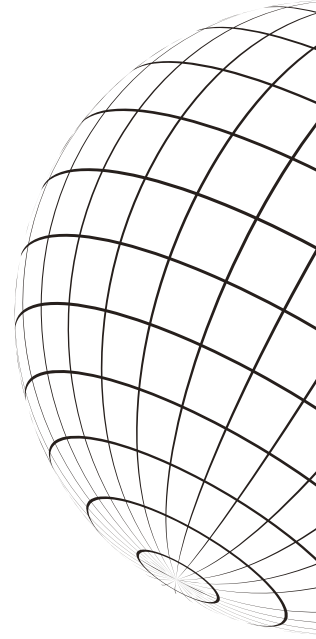
BLOCKCHAIN

BSC Project



WEBSITE:

<https://vmates.io/>

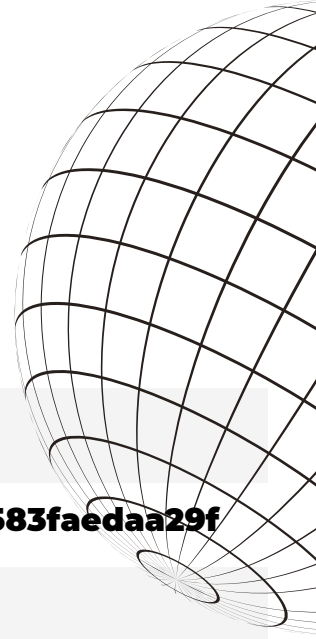


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CONTRACT DETAILS

Token contract details for Oct-30-2021



Contract name	Vmates
Contract address	0x696c2d3c711d5727c3686672f411583faedaa29f
Total supply	20,000,000 MATE
Token ticker	Vmates Token (MATE)
Decimals	18
Token holders	941
Transactions count	5,943
Top 100 holders dominance	98.58%
Contract deployer address	0x071853Fde1BB51aBfE2A424621c98E7c218E6e51
Contract's current owner address	0x071853Fde1BB51aBfE2A424621c98E7c218E6e51

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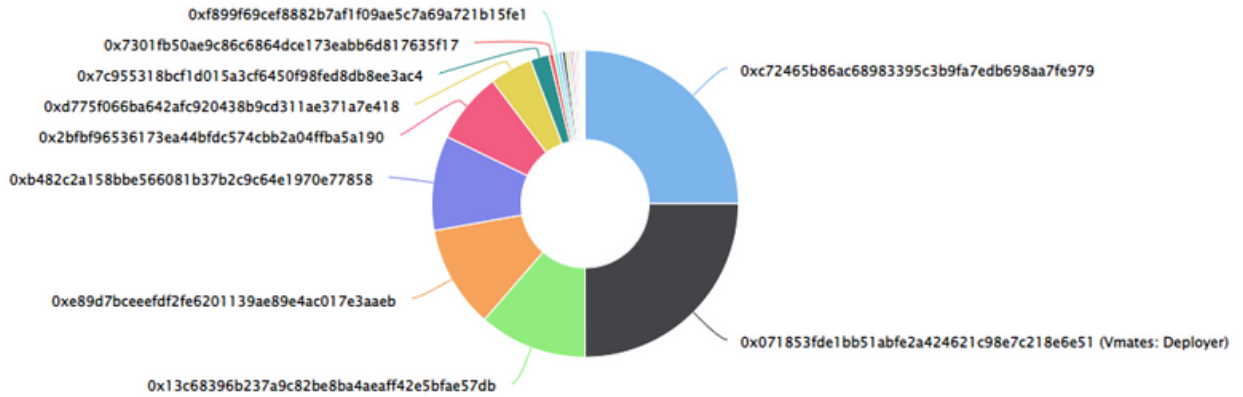
VMATES TOKEN DISTRIBUTION

The top 100 holders collectively own 99.89% (19,978,651.32 Tokens) of Vmates Token

Token Total Supply: 20,000,000.00 Token | Total Token Holders: 941

Vmates Token Top 100 Token Holders

Source: BscScan.com



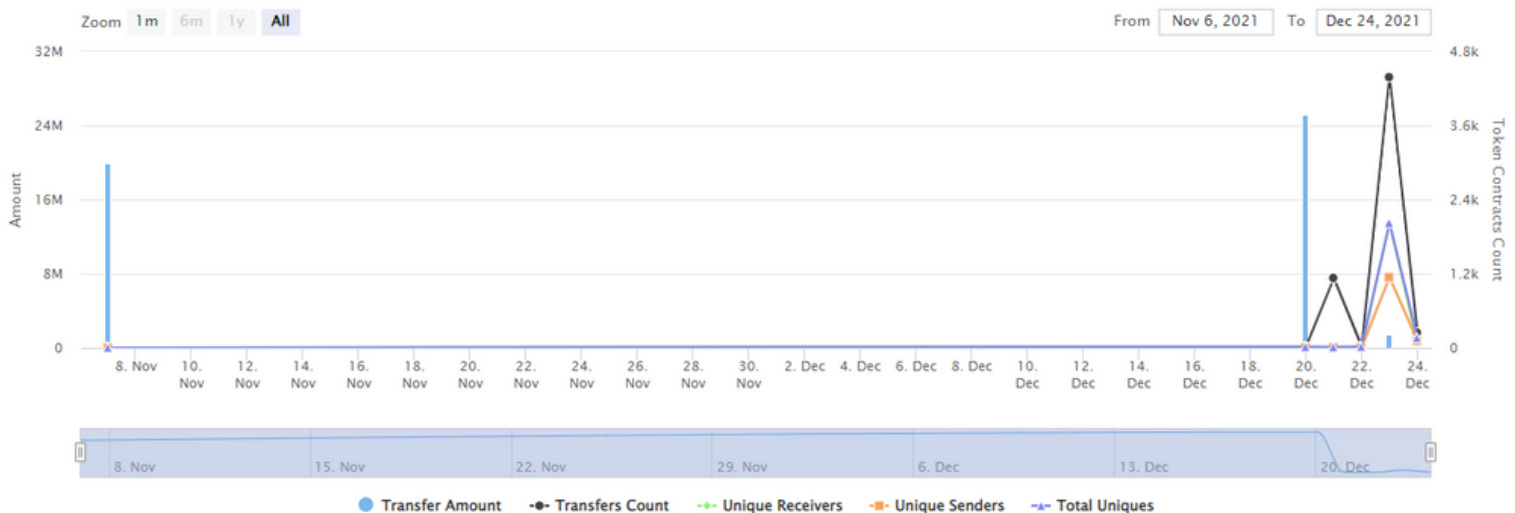
(A total of 19,978,651.32 tokens held by the top 100 accounts from the total supply of 20,000,000.00 token)

VMATES TOKEN CONTRACT INTERACTION DETAILS

Time Series: Token Contract Overview

Sun 7, Nov 2021 - Fri 24, Dec 2021

Token Contract 0x696c2d3c711d5727c3686672f411583faedaa29f (Vmates Token)
Source: BscScan.com



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TOP 10 TOKEN HOLDERS

Rank	Address	Quantity	Percentage	Analytics
1	0xc72465b86ac68983395c3b9fa7edb698aa7fe979	5,000,000	25.0000%	Analytics
2	Vmates: Deployer	5,000,000	25.0000%	Analytics
3	0x13c68396b237a9c82be8ba4aeaff42e5bfae57db	2,280,000	11.4000%	Analytics
4	0xe89d7bceee9df2fe6201139ae89e4ac017e3aaeb	2,160,000	10.8000%	Analytics
5	0xb482c2a158bbe566081b37b2c9c64e1970e77858	2,000,000	10.0000%	Analytics
6	0x2bfbf96536173ea44b9dc574cbb2a04ffa5a190	1,504,000	7.5200%	Analytics
7	0xd775f066ba642afc920438b9cd311ae371a7e418	898,030	4.4902%	Analytics
8	0x7c955318bcf1d015a3cf6450f98fed8db8ee3ac4	400,000	2.0000%	Analytics
9	0x7301fb50ae9c86c6864dce173eabb6d817635f17	102,500	0.5125%	Analytics
10	0xf899f69cef8882b7af1f09ae5c7a69a721b15fe1	99,675	0.4984%	Analytics

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



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SECURITY ISSUES

✓ High Severity Issues

No high severity issues found.

✓ Medium Severity Issues

No high severity issues found.

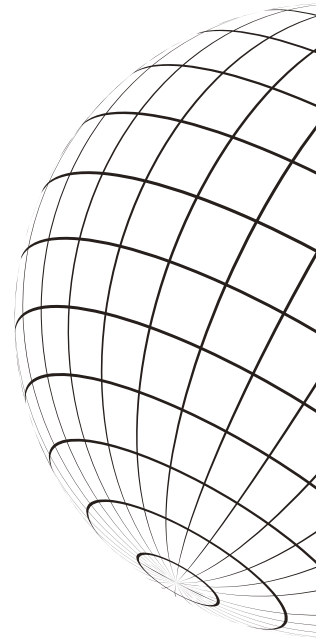
⚠ Low Severity Issues

Too many digits. Literals with many digits are difficult to read and review.

Contract: VmatesToken.sol

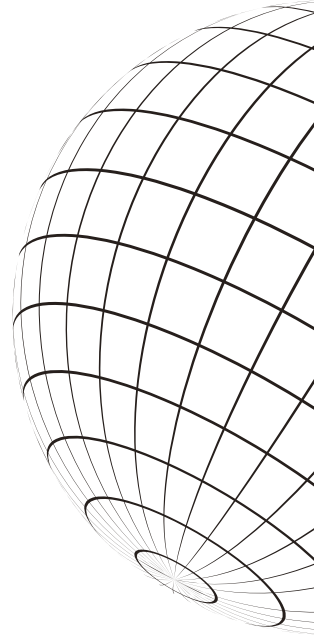
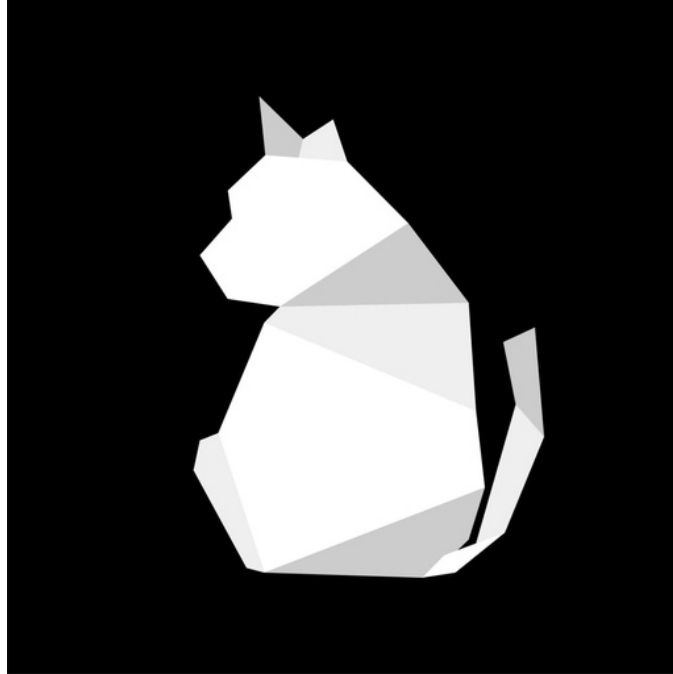
Function: constructor

Recommendation: Please consider using scientific notation with ether units suffixes (ie: 20e6 ether)



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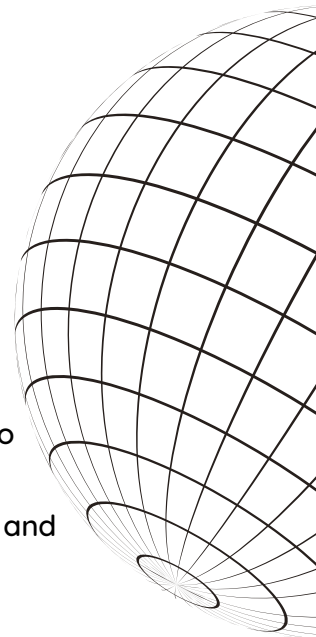
SECURITY ASSESSMENT TOKEN LOGO



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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