



MOTECH AUDIT

SMART CONTRACT SECURITY AUDIT

SECURITY ASSESSMENT

**BEMIL TOKEN
AUDIT REPORT**

2021

6 DEC 2021

SECURITY ASSESMENT

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SECURITY ASSESMENT

SUMMARY

This report has been prepared for Bemil to discover issues and vulnerabilities in the source code of the Bemil 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 Bemil to perform an audit of smart contracts:

<https://bscscan.com/address/0x5306be16e6af81140aa1cc4de45aa27f657f02b2>

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

Bemil



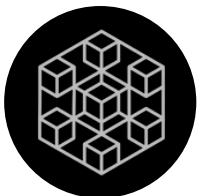
DEPLOYER ADDRESS

0x2A34DD50809d836385E5f08c1783A60b7eE2e371



CLIENT CONTACTS:

Bemil Team



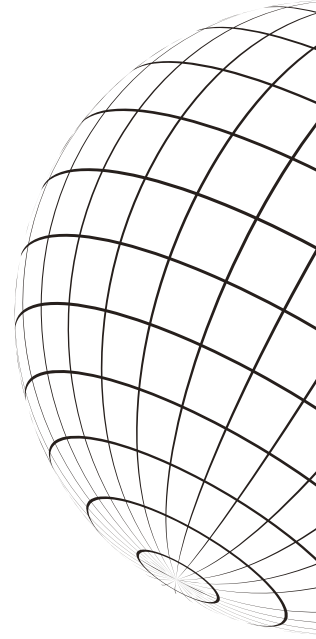
BLOCKCHAIN

BSC Project



WEBSITE:

<https://bemil.io/>

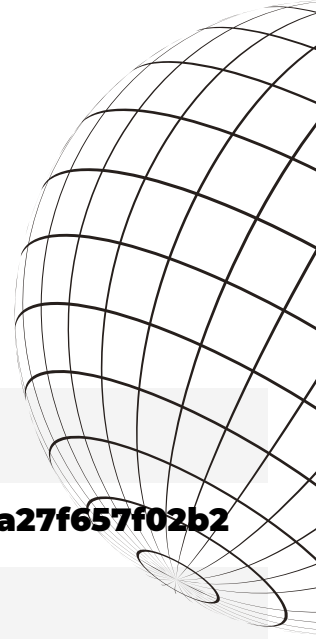


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CONTRACT DETAILS

Token contract details for Oct-30-2021



Contract name	Bemil
Contract address	0x5306be16e6af81140aa1cc4de45aa27f657f02b2
Total supply	1,000,000,000 BEM
Token ticker	Bemil (BEM)
Decimals	18
Token holders	8,252
Transactions count	51,357
Top 100 holders dominance	98.45%
Contract deployer address	0x2A34DD50809d836385E5f08c1783A60b7eE2e371
Contract's current owner address	0x2A34DD50809d836385E5f08c1783A60b7eE2e371

SECURITY ASSESSMENT

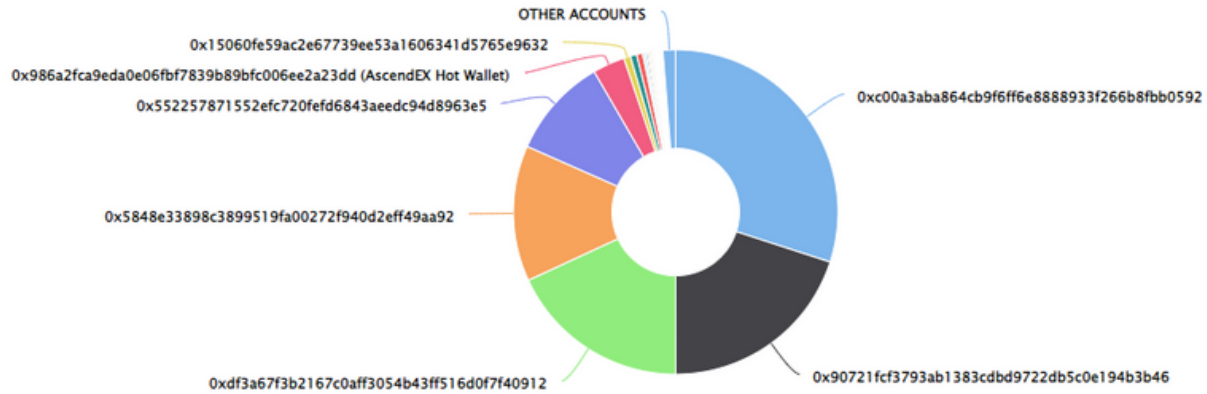
BEMIL TOKEN DISTRIBUTION

The top 100 holders collectively own 98.73% (987,329,684.60 Tokens) of Bemil

Token Total Supply: 1,000,000,000.00 Token | Total Token Holders: 8,251

Bemil Top 100 Token Holders

Source: BscScan.com



(A total of 987,329,684.60 tokens held by the top 100 accounts from the total supply of 1,000,000,000.00 token)

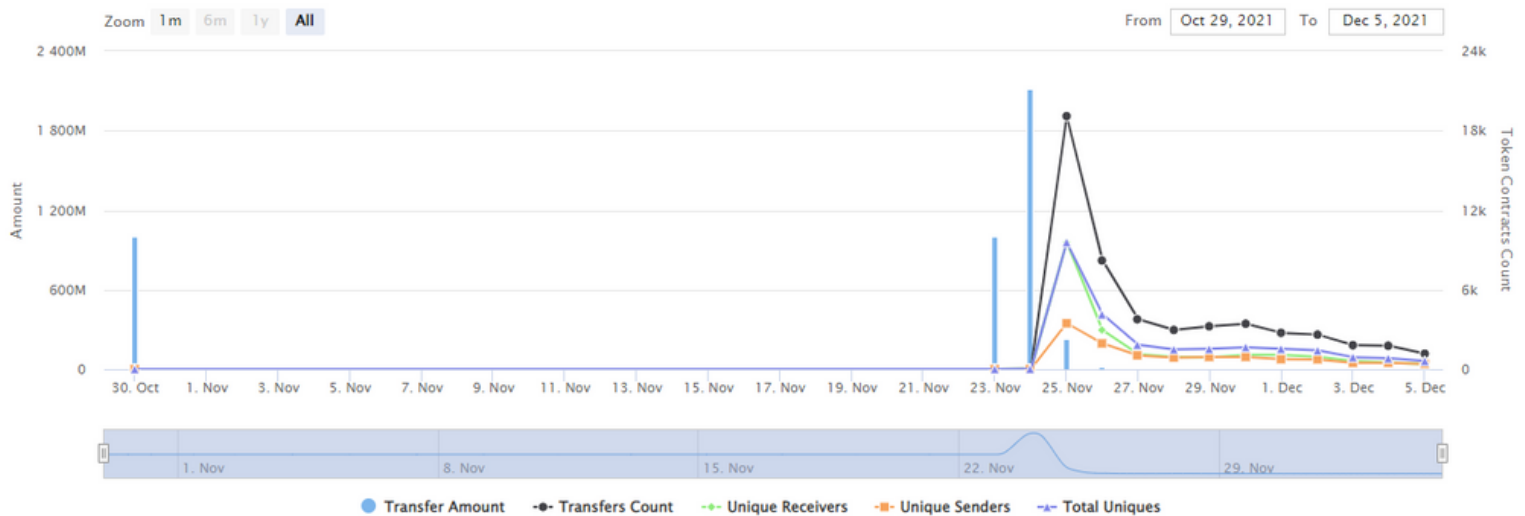
BEMIL TOKEN CONTRACT INTERACTION DETAILS

Time Series: Token Contract Overview

Sat 30, Oct 2021 - Sun 5, Dec 2021

Token Contract 0x5306be16e6af81140aa1cc4de45aa27f657f02b2 (Bemil)

Source: BscScan.com



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TOP 10 TOKEN HOLDERS

Rank	Address	Quantity	Percentage	Value	Analytics
1	0xc00a3aba864cb9f6ff6e8888933f266b8fbb0592	300,000,000	30.0000%	\$80,628,900.00	Analytics
2	0x90721fc3793ab1383cdbc9722db5c0e194b3b46	200,000,000	20.0000%	\$53,752,600.00	Analytics
3	0xdf3a67f3b2167c0aff3054b43ff516d07f40912	181,000,000	18.1000%	\$48,646,103.00	Analytics
4	0x5848e33898c3899519fa00272f940d2eff49aa92	135,303,412.78	13.5303%	\$36,364,551.13	Analytics
5	0x552257871552efc720fef6843aeedc94d8963e5	100,000,000	10.0000%	\$26,876,300.00	Analytics
6	AscendEX Hot Wallet	32,085,462.903120870839355344	3.2085%	\$8,623,385.27	Analytics
7	0x15060fe59ac2e67739ee53a1606341d5765e9632	6,600,000	0.6600%	\$1,773,835.80	Analytics
8	0x179a3d8fc9034ec5794dfd72daa5cad285c4123	6,378,635.343280286986546137	0.6379%	\$1,714,341.17	Analytics
9	0x5edc8b1d6e04f5a856e01d0170c20e685ebee0ca	5,889,970.278574928873856322	0.5890%	\$1,583,006.08	Analytics
10	0xbe551dd71cfd5e78157840dc87bd70b7204a20f	2,133,333.33	0.2133%	\$573,361.07	Analytics

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



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SECURITY ISSUES

✓ High Severity Issues

No high severity issues found.

⚠ Medium Severity Issues

1. Old solidity version used.

Recommendation: use the last stable version.

Status: Fixed

2. mintingAllowance can be changed even if the address is not a minter.

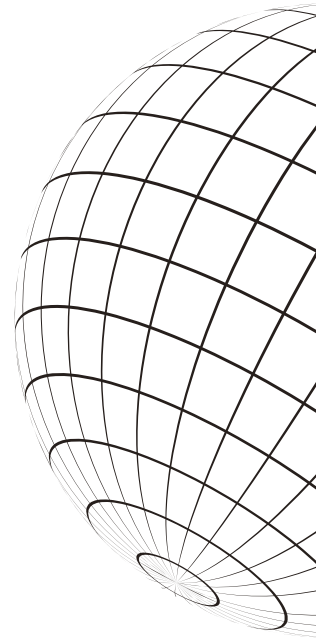
Contracts: BemilToken.sol

Function: increaseMintingAllowance, decreaseMintingAllowance

Recommendation: add a check if the address is a minter. **Status:** Fixed

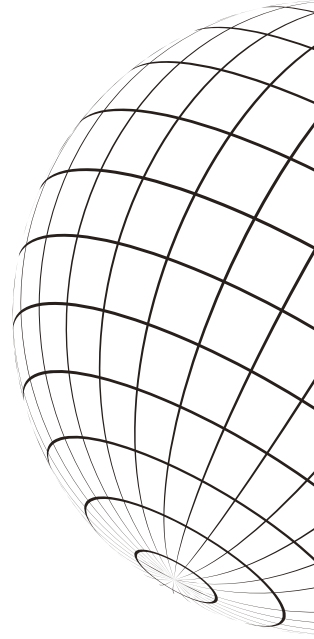
✓ Low Severity Issues

No high severity issues found.



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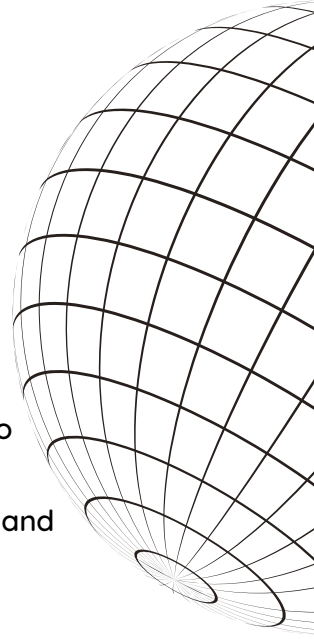
SECURITY ASSESMENT
TOKEN LOGO



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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