



MVP Coin
Smart Contract Audit Report

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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: (i) cybersecurity vulnerabilities and issues in the smart contract source code analysed, the details of which are set out in this report, (Source Code); and (ii) the Source Code compiling, deploying and performing the intended functions. In order to get a full view of our findings and the scope 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 disclaimer below – please make sure to read it in full.

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Document Properties

Client	MVP
Title	Smart Contract Audit Report
Repository	https://github.com/MVP-Coin/contract
Commit	bcd75f6b66f86bcc5bd6be6b7381601d38a4ca97
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Introduction

Thai Chain was contracted by MVP to conduct an audit of smart contracts. The report presents the findings of the security assessment of the smart contracts and its code review conducted between May 27th, 2021 - May 29th, 2021.

Scope

The scope of the project is smart contracts in the repository:

<https://github.com/MVP-Coin/contract> (bcd75f6b66f86bcc5bd6be6b7381601d38a4ca97)

The repository contains one file: TokenineERC20.sol

Executive Summary

The TokenineERC20 token is a ERC-20 Token Standard extended to support access control ability, restricted minting behaviour, and emergency stop mechanism by using OpenZeppelin Contracts library.

Our team performed an analysis of code functionality and manual audit. We found 1 High and 1 Lowest severity issue.

Notice: The audit scope is limited to only files in the repository. Though, reviewed contracts are secure, we may not guarantee the secureness of contracts that are not in the scope.

Severity Definitions

Severity Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to asset loss or data manipulations.
High	High-level vulnerabilities have a significant impact on smart contract execution, e.g., public access to crucial functions.
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to asset loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution.
Lowest / Coding Style / Best Practice	Lowest-level vulnerabilities, code style violations, and info statements can't affect smart contract execution and can be ignored.

Audit Overview

Critical

No critical issues were found.

High

1. Anyone can call `start` and `stop` functions which are the functions for the emergency stop mechanism that lead to unwanted behaviour of the token.

Recommendation: Add `onlyOwner` modifier to the aforementioned functions.

```
function stop() public onlyOwner {
    super._pause();
}

function start() public onlyOwner {
    super._unpause();
}
```

Medium

No medium issues were found.

Low

No low issues were found.

Lowest / Coding Style / Best Practice

1. The function `transfer`, `transferFrom`, `start`, and `stop` never be called from within the contract and hence their visibilities can be changed from `public` to `external`.

Conclusion

Smart contracts contain 1 high severity issue which should be fixed before deploying to the production. Audited only the smart contracts listed above, without any other smart contracts of the project.