

# Smart Contract Audit

**FOR** 

MAC

**DATED: 19 June 23'** 



## **AUDIT SUMMARY**

Project name - MAC

**Date: 19** June, 2023

**Scope of Audit-** Audit Ace was consulted to conduct the smart contract audit of the solidity source codes.

**Audit Status: Passed** 

#### **Issues Found**

Status	Critical	High	Medium	Low	Suggestion
Open	0	0	0	0	0
Acknowledged	0	0	0	0	0
Resolved	0	0	0	0	0



## **USED TOOLS**

#### Tools:

#### 1- Manual Review:

A line by line code review has been performed by audit ace team.

2- BSC Test Network: All tests were conducted on the BSC Test network, and each test has a corresponding transaction attached to it. These tests can be found in the "Functional Tests" section of the report.

#### 3-Slither:

The code has undergone static analysis using Slither.

#### **Testnet version:**

The tests were performed using the contract deployed on the BSC Testnet, which can be found at the following address:

https://testnet.bscscan.com/address/0x0e320dF607a14256BA4e76c1A4d3668757feb613#code



# **Token Information**

Token Name: MetaAi City

Token Symbol: MAC

Decimals: 18

Token Supply: 1,000,000,000

#### **Token Address:**

0x7D5b6F2E31B1e50e6a45130f4AdBB8839FAdeb2E

#### Checksum:

edc23b09a4f253a1214ac4821f8675663b3265f6

#### **Owner:**

---

(at time of writing the audit)

#### Deployer:

0x4d5A5A5f6ab58Ae64b57825e239A516379CE826e



# **TOKEN OVERVIEW**

Fees:

Buy Fees: 0%

Sell Fees: 0%

Transfer Fees: 0%

Fees Privilege: No fees

Ownership: Not owned

Minting: none

Max Tx Amount/ Max Wallet Amount: No

Blacklist: No

Other Privileges: - Initial distribution of the tokens



## **AUDIT METHODOLOGY**

The auditing process will follow a routine as special considerations by Auditace:

- Review of the specifications, sources, and instructions provided to Auditace to make sure the contract logic meets the intentions of the client without exposing the user's funds to risk.
- Manual review of the entire codebase by our experts, which is the process of reading source code line-byline in an attempt to identify potential vulnerabilities.
- Specification comparison is the process of checking whether the code does what the specifications, sources, and instructions provided to Auditace describe.
- Test coverage analysis determines whether the test cases are covering the code and how much code isexercised when we run the test cases.
- Symbolic execution is analysing a program to determine what inputs cause each part of a program to execute.
- Reviewing the codebase to improve maintainability, security, and control based on the established industry and academic practices.



## **VULNERABILITY CHECKLIST**





## **CLASSIFICATION OF RISK**

#### Severity

- Critical
- High-Risk
- Medium-Risk
- Low-Risk
- Gas Optimization/Suggestion

#### **Description**

These vulnerabilities could be exploited easily and can lead to asset loss, data loss, asset, or data manipulation. They should be fixed right away.

A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.

A vulnerability that could affect the desired outcome of executing the contract in a specific scenario.

A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.

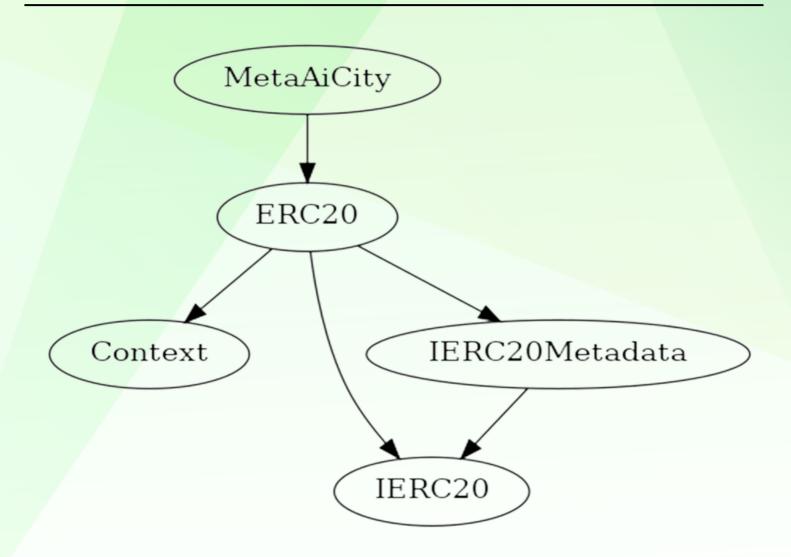
A vulnerability that has an informational character but is not affecting any of the code.

## **Findings**

Severity	Found
◆ Critical	0
◆ High-Risk	0
◆ Medium-Risk	0
♦ Low-Risk	0
<ul><li>Gas Optimization /</li><li>Suggestions</li></ul>	0



## **INHERITANCE TREE**





## **POINTS TO NOTE**

- Fees are 0 (static)
- Owner is not able to blacklist an arbitrary address.
- Owner is not able to disable trades
- Owner is not able to limit buy/sell/transfer/wallet amounts
- Owner is not able to mint new tokens



## **CONTRACT ASSESMENT**

```
Contract |
              Type
                           Bases
   | **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
**Context** | Implementation | |||
| L | msgSender | Internal 🔒 | | |
 L | msgData | Internal | | | |
<mark>| **IERC20</mark>** | Interface | |||
 L | totalSupply | External | | NO | |
 | balanceOf | External | NO | |
 lallowance | External | | NO | |
L | approve | External | | | NO | |
L | transferFrom | External | | | | | | | | | | | | | | | |
**IERC20Metadata** | Interface | IERC20 |||
| L | name | External | | NO | |
 L | symbol | External | | NO | |
 L | decimals | External | | NO | |
**ERC20** | Implementation | Context, IERC20, IERC20Metadata |||
 L | name | Public | | NO | |
 L | symbol | Public | | NO | |
 L | decimals | Public | | NO |
 L | totalSupply | Public | | NO |
 L | balanceOf | Public | | NO | |
 L | transfer | Public | | | NO | |
 L | allowance | Public | | NO | |
 L | approve | Public | | | NO | |
 L | transferFrom | Public | | | NO | |
 L | increaseAllowance | Public | | | NO | |
 L | decreaseAllowance | Public | | | NO | |
 L | transfer | Internal 🔒 | 🛑 | |
 L | burn | Internal 🔒 | ● ||
 L | approve | Internal | | | | |
 L | spendAllowance | Internal | | |
 └ | beforeTokenTransfer | Internal 🔒 | 🛑 | |
 └ | afterTokenTransfer | Internal 🔒 | ● ||
**MetaAiCity** | Implementation | ERC20 |||
```



## **CONTRACT ASSESMENT**

### Legend

| Symbol | Meaning |
|:-----|
| Function can modify state |

| Function is payable |



### STATIC ANALYSIS

```
Different versions of Solidity are used:
- Version used: ['^0.8.0', '^0.8.17']
         - ^0.8.0 (contracts/Token.sol#7)
- ^0.8.0 (contracts/Token.sol#19)
          - ^0.8.0 (contracts/Token.sol#33)
         - ^0.8.0 (contracts/Token.sol#41)
- ^0.8.17 (contracts/Token.sol#191)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#different-pragma-directives-are-used
Context._msgData() (contracts/Token.sol#14-16) is never used and should be removed
ERC20._burn(address,uint256) (contracts/Token.sol#150-166) is never used and should be removed
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#dead-code
Pragma version^0.8.0 (contracts/Token.sol#7) allows old versions
Pragma version^0.8.0 (contracts/Token.sol#19) allows old versions
Pragma version^0.8.0 (contracts/Token.sol#33) allows old versions
Pragma version^0.8.0 (contracts/Token.sol#41) allows old versions
Pragma version^0.8.17 (contracts/Token.sol#191) necessitates a version too recent to be trusted. Consider deploying with 0.6.12/0.7.6/0.8.16
solc-0.8.20 is not recommended for deployment
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity
MetaAiCity.constructor() (contracts/Token.sol#194-196) uses literals with too many digits:
             mint(msg.sender,1000000000 * 10 ** decimals()) (contracts/Token.sol#195)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#too-many-digits
```

Result => A static analysis of contract's source code has been performed using slither,

No major issues were found in the output



# **FUNCTIONAL TESTING**

#### Router (PCS V2):

0xD99D1c33F9fC3444f8101754aBC46c52416550D1

#### 1- Adding liquidity (passed):

https://testnet.bscscan.com/tx/0x0f091615697f9c3a9fd17bcf65b5df16 8983e47f5e1dac872bd1e3b8b0f66ae5

#### 2- Buying (0% tax) (passed):

https://testnet.bscscan.com/tx/0x995b28e9e48fdd951f8298cc7ac09abe007ee91a86582925b810152802b91d8e

#### 3- Selling (0% tax) (passed):

https://testnet.bscscan.com/tx/0xebdea8df5949d8bb74a73d77b65a06 195013a391ad845e6b44282063584876b0

#### 4- Transferring 0% tax) (passed):

https://testnet.bscscan.com/tx/0x596cdb2fb569ca4bf3ee0d5e73194c1e977efd24f8445e5b702cb8f4a4e1c11d



# DISCLAIMER

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment. Team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document. Always Do your own research and protect yourselves from being scammed. The Auditace team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools. Under no circumstances did Auditace receive a payment to manipulate those results or change the awarding badge that we will be adding in our website. Always Do your own research and protect yourselves from scams. This document should not be presented as a reason to buy or not buy any particular token. The Auditace team disclaims any liability for the resulting losses.



# **ABOUT AUDITACE**

We specializes in providing thorough and reliable audits for Web3 projects. With a team of experienced professionals, we use cutting-edge technology and rigorous methodologies to evaluate the security and integrity of blockchain systems. We are committed to helping our clients ensure the safety and transparency of their digital assets and transactions.



https://auditace.tech/



https://t.me/Audit\_Ace



https://twitter.com/auditace\_



https://github.com/Audit-Ace