



Cyberscope

# Audit Report

## **Dog Planet**

November 2023

Network    ETH

Address    0x1a90ea47888d8d152f8e91d530083b36a467e08f

Audited by    © cyberscope

# Analysis

● Critical ● Medium ● Minor / Informative ● Pass

| Severity | Code | Description             | Status |
|----------|------|-------------------------|--------|
| ●        | ST   | Stops Transactions      | Passed |
| ●        | OTUT | Transfers User's Tokens | Passed |
| ●        | ELFM | Exceeds Fees Limit      | Passed |
| ●        | MT   | Mints Tokens            | Passed |
| ●        | BT   | Burns Tokens            | Passed |
| ●        | BC   | Blacklists Addresses    | Passed |

# Diagnostics

● Critical ● Medium ● Minor / Informative

| Severity | Code | Description                                | Status     |
|----------|------|--|------------|
| ●        | RVD  | Redundant Variable Declaration             | Unresolved |
| ●        | L02  | State Variables could be Declared Constant | Unresolved |
| ●        | L04  | Conformance to Solidity Naming Conventions | Unresolved |
| ●        | L19  | Stable Compiler Version                    | Unresolved |

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## Review

|                  |   |
|------------------|---|
| Contract Name    | ENMT  |
| Compiler Version | v0.8.1+commit.df193b15  |
| Optimization     | 200 runs  |
| Explorer         | <a href="https://etherscan.io/address/0x1a90ea47888d8d152f8e91d530083b36a467e08f">https://etherscan.io/address/0x1a90ea47888d8d152f8e91d530083b36a467e08f</a> |
| Address          | 0x1a90ea47888d8d152f8e91d530083b36a467e08f  |
| Network          | ETH   |
| Symbol           | DOGPLANET   |
| Decimals         | 9   |
| Total Supply     | 200,000,000,000,000   |

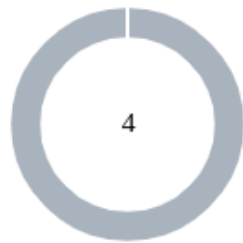
## Audit Updates

|               |             |
|---------------|-------------|
| Initial Audit | 10 Nov 2023 |
|---------------|-------------|

## Source Files

|          |  |
|----------|--|
| Filename | SHA256   |
| ENMT.sol | 26184d8387ff9ea1c5fda134079006e4dd7040aab76f8ef1f1a378b3e46ee945 |

## Findings Breakdown



|                     |   |
|---------------------|---|
| Critical            | 0 |
| Medium              | 0 |
| Minor / Informative | 4 |

| Severity            | Unresolved | Acknowledged | Resolved | Other |
|---------------------|------------|--------------|----------|-------|
| Critical            | 0          | 0            | 0        | 0     |
| Medium              | 0          | 0            | 0        | 0     |
| Minor / Informative | 4          | 0            | 0        | 0     |

## RVD - Redundant Variable Declaration

|                    |                     |
|--------------------|---------------------|
| <b>Criticality</b> | Minor / Informative |
| <b>Location</b>    | ENMT.sol#L20        |
| <b>Status</b>      | Unresolved          |

### Description

There are code segments that could be optimized. A segment may be optimized so that it becomes a smaller size, consumes less memory, executes more rapidly, or performs fewer operations.

The contract declares the `TOKEN_TYPE` variable that isn't used in a meaningful way from the contract. As a result, the variable is redundant.

```
uint256 public TOKEN_TYPE = 1;
```

### Recommendation

The team is advised to take these segments into consideration and rewrite them so the runtime will be more performant. That way it will improve the efficiency and performance of the source code and reduce the cost of executing it.

## L02 - State Variables could be Declared Constant

|                    |                     |
|--------------------|---------------------|
| <b>Criticality</b> | Minor / Informative |
| <b>Location</b>    | ENMT.sol#L20        |
| <b>Status</b>      | Unresolved          |

### Description

State variables can be declared as constant using the constant keyword. This means that the value of the state variable cannot be changed after it has been set. Additionally, the constant variables decrease gas consumption of the corresponding transaction.

```
uint256 public TOKEN_TYPE = 1
```

### Recommendation

Constant state variables can be useful when the contract wants to ensure that the value of a state variable cannot be changed by any function in the contract. This can be useful for storing values that are important to the contract's behavior, such as the contract's address or the maximum number of times a certain function can be called. The team is advised to add the constant keyword to state variables that never change.



## L04 - Conformance to Solidity Naming Conventions

|                    |                     |
|--------------------|---------------------|
| <b>Criticality</b> | Minor / Informative |
| <b>Location</b>    | ENMT.sol#L20,27     |
| <b>Status</b>      | Unresolved          |

### Description

The Solidity style guide is a set of guidelines for writing clean and consistent Solidity code. Adhering to a style guide can help improve the readability and maintainability of the Solidity code, making it easier for others to understand and work with.

The followings are a few key points from the Solidity style guide:

1. Use camelCase for function and variable names, with the first letter in lowercase (e.g., myVariable, updateCounter).
2. Use PascalCase for contract, struct, and enum names, with the first letter in uppercase (e.g., MyContract, UserStruct, ErrorEnum).
3. Use uppercase for constant variables and enums (e.g., MAX\_VALUE, ERROR\_CODE).
4. Use indentation to improve readability and structure.
5. Use spaces between operators and after commas.
6. Use comments to explain the purpose and behavior of the code.
7. Keep lines short (around 120 characters) to improve readability.

```
uint256 public TOKEN_TYPE = 1  
TokenInfo public INFO
```

### Recommendation

By following the Solidity naming convention guidelines, the codebase increased the readability, maintainability, and makes it easier to work with.

Find more information on the Solidity documentation

<https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-convention>.

## L19 - Stable Compiler Version

|                    |                     |
|--------------------|---------------------|
| <b>Criticality</b> | Minor / Informative |
| <b>Location</b>    | ENMT.sol#L12        |
| <b>Status</b>      | Unresolved          |

### Description

The `^` symbol indicates that any version of Solidity that is compatible with the specified version (i.e., any version that is a higher minor or patch version) can be used to compile the contract. The version lock is a mechanism that allows the author to specify a minimum version of the Solidity compiler that must be used to compile the contract code. This is useful because it ensures that the contract will be compiled using a version of the compiler that is known to be compatible with the code.

```
pragma solidity ^0.8.0;
```

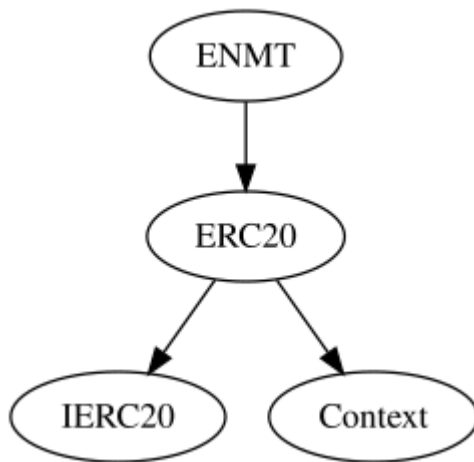
### Recommendation

The team is advised to lock the pragma to ensure the stability of the codebase. The locked pragma version ensures that the contract will not be deployed with an unexpected version. An unexpected version may produce vulnerabilities and undiscovered bugs. The compiler should be configured to the lowest version that provides all the required functionality for the codebase. As a result, the project will be compiled in a well-tested LTS (Long Term Support) environment.

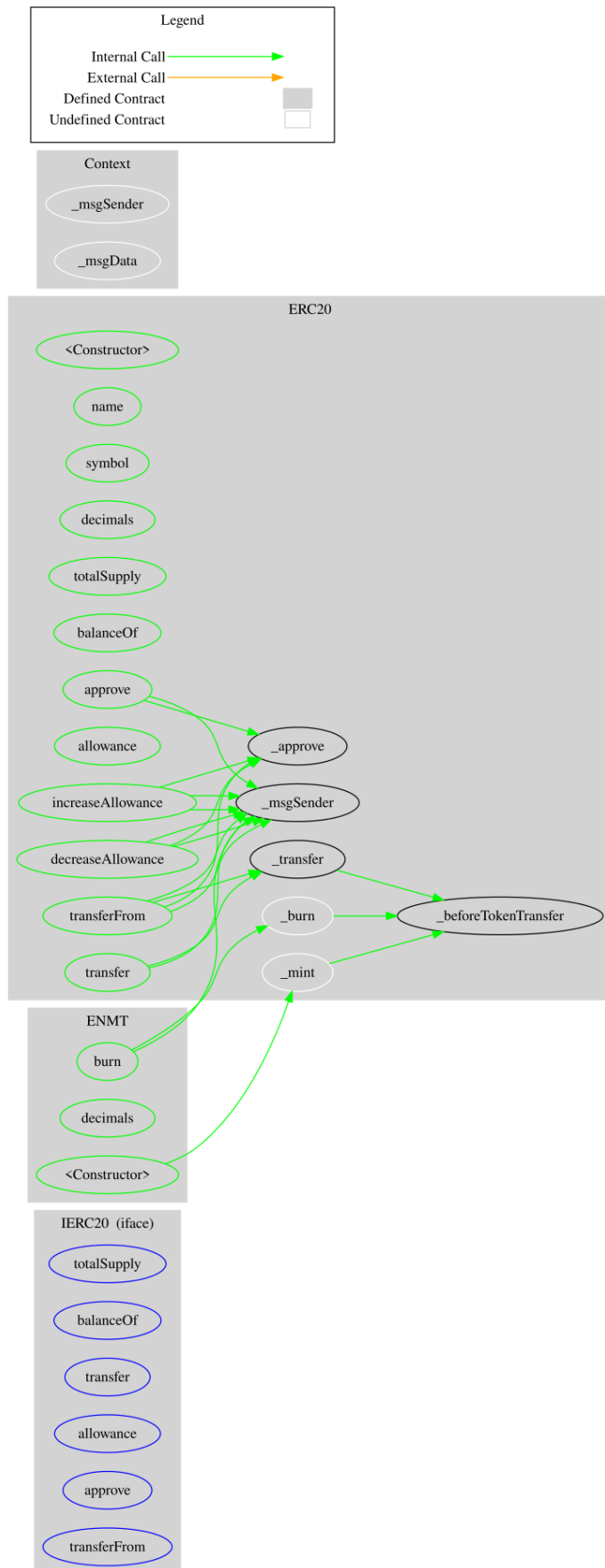
## Functions Analysis

| Contract | Type           | Bases      |            |           |
|----------|----------------|------------|------------|-----------|
|          | Function Name  | Visibility | Mutability | Modifiers |
|          |                |            |            |           |
| ENMT     | Implementation | ERC20      |            |           |
|          |                | Public     | ✓          | ERC20     |
|          | decimals       | Public     |            | -         |
|          | burn           | Public     | ✓          | -         |

## Inheritance Graph



# Flow Graph



## Summary

Dog Planet contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. Dog Planet is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.

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# About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



**The Cyberscope team**

<https://www.cyberscope.io>