Cyberscope

Audit Report

SBDEXCOIN

January 2023

Type	BEP20
Network	BSC
Address	0x95F4272F325983bE80bf1b3D3b761422876A0cE8
Audited by	© cyberscope

Table of Contents

Table of Contents 1
Review 2
Audit Updates 2
Source Files 3
Analysis 4
Diagnostics 5
L02 - State Variables could be Declared Constant 6
Description 6
Recommendation 6
L04 - Conformance to Solidity Naming Conventions 7
Description 7
Recommendation 7
L19 - Stable Compiler Version 9
Description 9
Recommendation 9
Functions Analysis 10
Inheritance Graph 12
Flow Graph 13
Summary 14
Disclaimer 15
About Cyberscope 16

Review

Contract Name	ENMT
Compiler Version	v0.8.1+commit.df193b15
Optimization	200 runs
Explorer	https://bscscan.com/address/0x95f4272f325983be80bf1b3d3b761422876a0ce8
Address	0x95f4272f325983be80bf1b3d3b761422876a0ce8
Network	BSC
Symbol	SBDEX
Decimals	18
Total Supply	21.000.000

Audit Updates

Initial Audit	20 Jan 2023

Source Files

Filename	SHA256
Context.sol	8eb8a77f3ef90eb4391cfd3a1937a2198d60cba90155fd017c5a66a7b7fca938
ENMT.sol	26184d8387ff9ea1c5fda134079006e4dd7040aab76f8ef1f1a378b3e46ee945
ERC20.sol	3bf9d6a7f30b9e63099f5d52180e4ae2239c191d71ea7ae8ddc23c26feb9cfb3
IERC20.sol	7d2a6a7c516b1ee659cbba418661ea002e6436c81e1aa1f7f31cc9dbac505605

Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OCTD	Transfers Contract's Tokens	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	ULTW	Transfers Liquidity to Team Wallet	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

Diagnostics

Critical Medium Minor / Informative

Severity	Code	Description	Status
●	L02	State Variables could be Declared Constant	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L19	Stable Compiler Version	Unresolved

L02 - State Variables could be Declared Constant

Criticality	Minor / Informative
Location	ENMT.sol#L20
Status	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

Criticality	Minor / Informative
Location	ENMT.sol#L20,27
Status	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

Criticality	Minor / Informative
Location	ENMT.sol#L12
Status	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

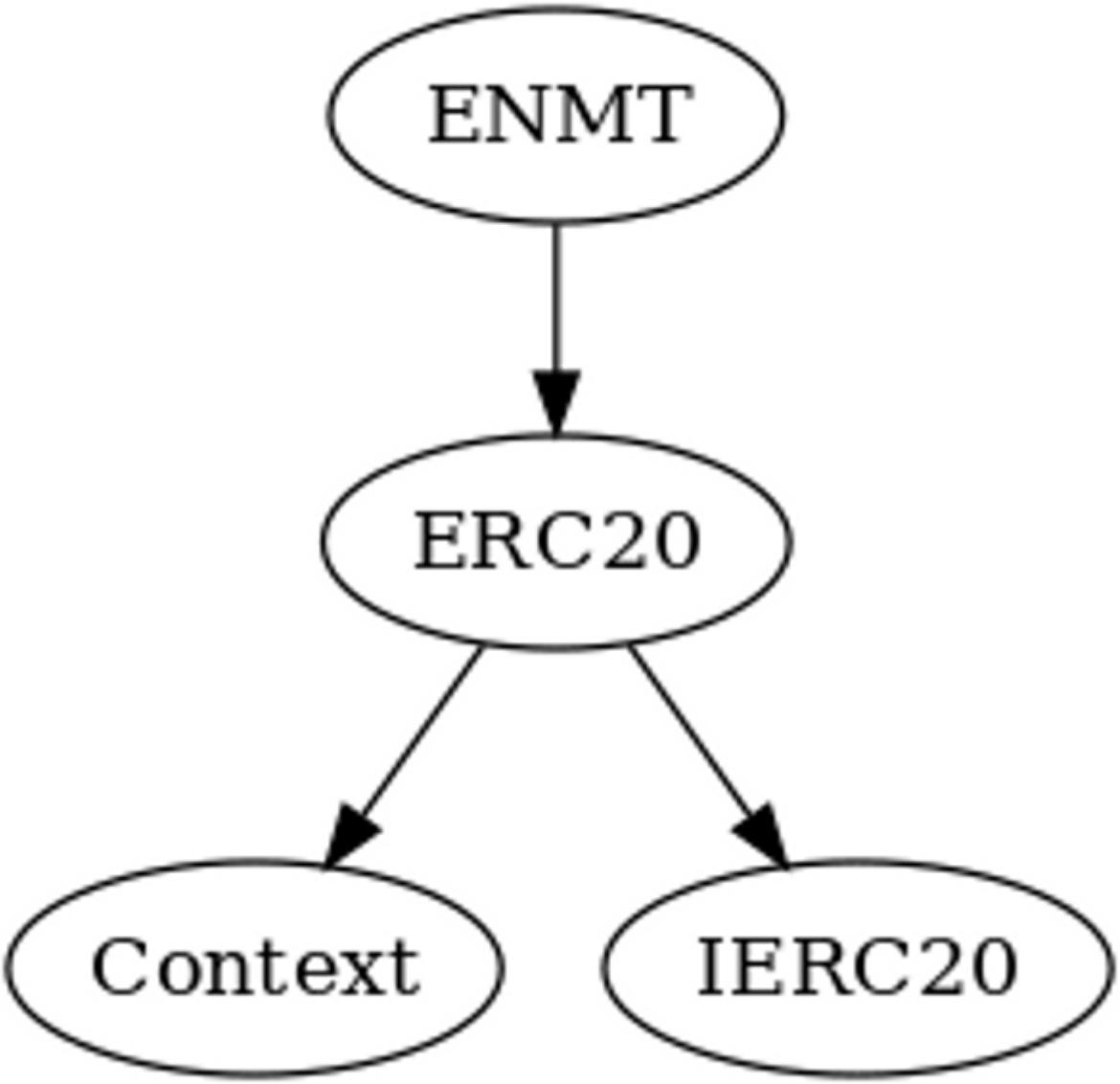
The team is advised to lock the pragma to ensure the stability of the codebase. The locked pragma version ensures that the contract will not be deployed with an unexpected version. An unexpected version may produce vulnerabilities and undiscovered bugs. The compiler should be configured to the lowest 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

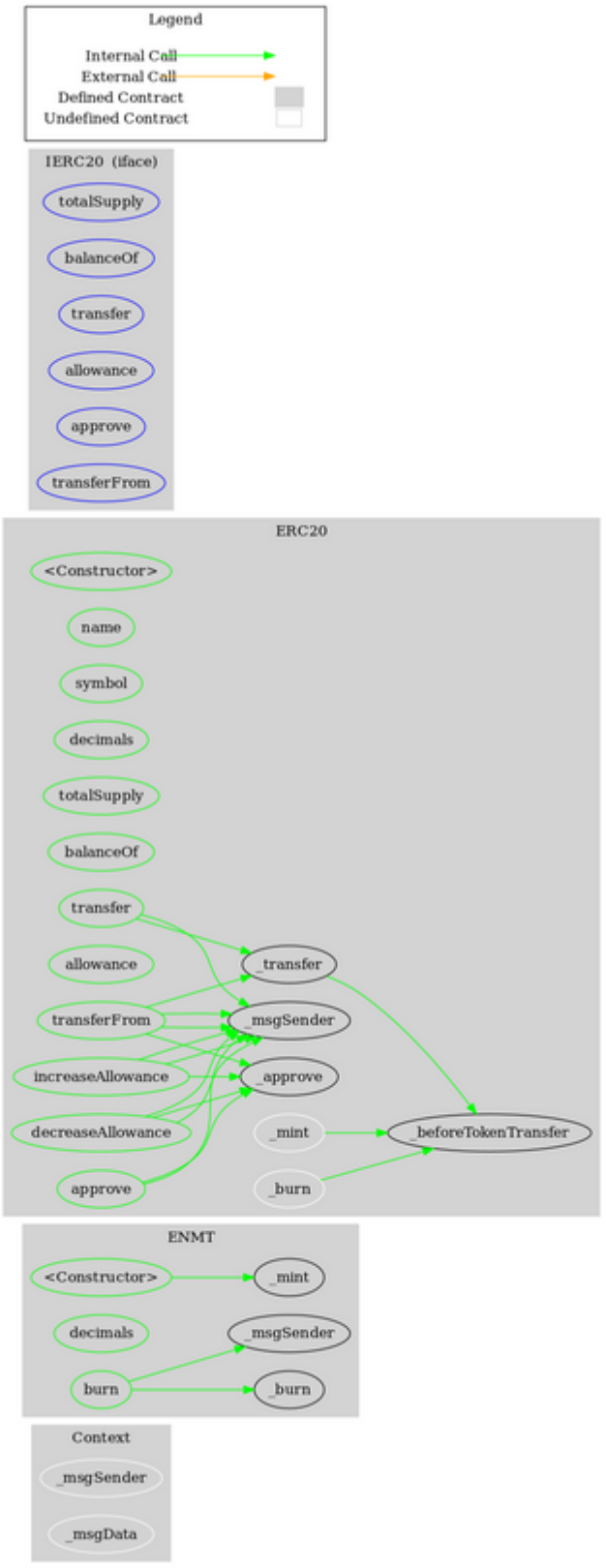
Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
ENMT	Implementation	ERC20		
		Public	✓	ERC20
	decimals	Public		-
	burn	Public	✓	-
ERC20	Implementation	Context, IERC20		
		Public	✓	-
	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-
	allowance	Public		-
	approve	Public	✓	-
	transferFrom	Public	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	_transfer	Internal	✓	

	_mint	Internal	✓	
	_burn	Internal	✓	
	_approve	Internal	✓	
	_beforeTokenTransfer	Internal	✓	
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-

Inheritance Graph



Flow Graph


Legend
Internal Call
External Call
Defined Contract
Undefined Contract
IERC20 (iface)
totalSupply
balanceOf
transfer
allowance
approve
transferFrom
ERC20
<Constructor>
name
symbol
decimals
totalSupply
balanceOf
transfer
allowance
transferFrom
increaseAllowance
decreaseAllowance
approve
_transfer
_msgSender
_approve
_mint
_burn
beforeTokenTransfer
ENMT
<Constructor>
decimals
burn
_mint
_msgSender
_burn
Context
_msgSender
_msgData

Summary

SBDEXCOIN 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