Cyberscope

A TAC Security Company

Audit Report

ByBarter

September 2025

Network ETH

Address 0xb8Ac68Fe7cADC93A802800315A8E9Ecbb8A5f5e8

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
	PNU	Privileges Not Updated	Unresolved

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Risk Classification

The criticality of findings in Cyberscope's smart contract audits is determined by evaluating multiple variables. The two primary variables are:

1. **Likelihood of Exploitation**: This considers how easily an attack can be executed, including the economic feasibility for an attacker.
2. **Impact of Exploitation**: This assesses the potential consequences of an attack, particularly in terms of the loss of funds or disruption to the contract's functionality.

Based on these variables, findings are categorized into the following severity levels:

1. **Critical**: Indicates a vulnerability that is both highly likely to be exploited and can result in significant fund loss or severe disruption. Immediate action is required to address these issues.
2. **Medium**: Refers to vulnerabilities that are either less likely to be exploited or would have a moderate impact if exploited. These issues should be addressed in due course to ensure overall contract security.
3. **Minor**: Involves vulnerabilities that are unlikely to be exploited and would have a minor impact. These findings should still be considered for resolution to maintain best practices in security.
4. **Informative**: Points out potential improvements or informational notes that do not pose an immediate risk. Addressing these can enhance the overall quality and robustness of the contract.

Severity	Likelihood / Impact of Exploitation
Critical	Highly Likely / High Impact
Medium	Less Likely / High Impact or Highly Likely/ Lower Impact
Minor / Informative	Unlikely / Low to no Impact

Review

Contract Name	ByBarterCoin
Compiler Version	v0.8.7+commit.e28d00a7
Optimization	200 runs
Explorer	https://etherscan.io/address/0xb8ac68fe7cadc93a802800315a8e9ecbb8a5f5e8
Address	0xb8ac68fe7cadc93a802800315a8e9ecbb8a5f5e8
Network	ETH
Symbol	BYB
Decimals	18
Total Supply	1,000,000,000
Badge Eligibility	Yes

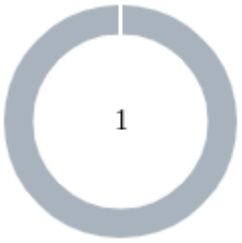
Audit Updates

Initial Audit	04 Sep 2025

Source Files

Filename	SHA256
ByBarterCoin.sol	c5571a988accaccd138b143ba6b7ee728bcc33f014ac86357fd446c1952dcba0

Findings Breakdown



Critical	0
Medium	0
Minor / Informative	1

Severity	Unresolved	Acknowledged	Resolved	Other
Critical	0	0	0	0
Medium	0	0	0	0
Minor / Informative	1	0	0	0

PNU - Privileges Not Updated

Criticality	Minor / Informative
Location	ByBarterCoin.sol#L126
Status	Unresolved

Description

The contract grants privileges to certain addresses, to support operational flexibility. However, it does not automatically adjust these privileges when an address's role or status changes. In particular, if ownership of the contract is transferred, the `_previousOwner` variable is not updated accordingly. As a result, if the `lock` function is called after the ownership transfer, only the original owner can unlock the contract. This effectively renders the lock operation equivalent to a permanent renouncement of ownership unless the initial deployer intervenes.

```
Shell
function transferOwnership(address newOwner) external
virtual onlyOwner {
  require(newOwner != address(0), "Ownable: new owner is
the zero address");
  emit OwnershipTransferred(_owner, newOwner);
  _owner = newOwner;

}
```

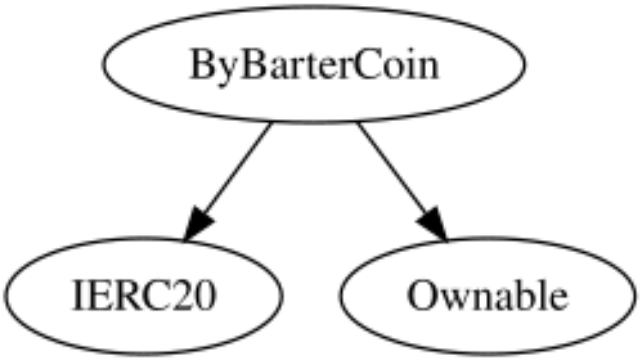
Recommendation

It is advised to modify the contract to include functionality that updates privileges for all addresses whenever there is a change in roles or ownership. This method will ensure consistent and equitable distribution of privileges while preserving the integrity and security of the contract.

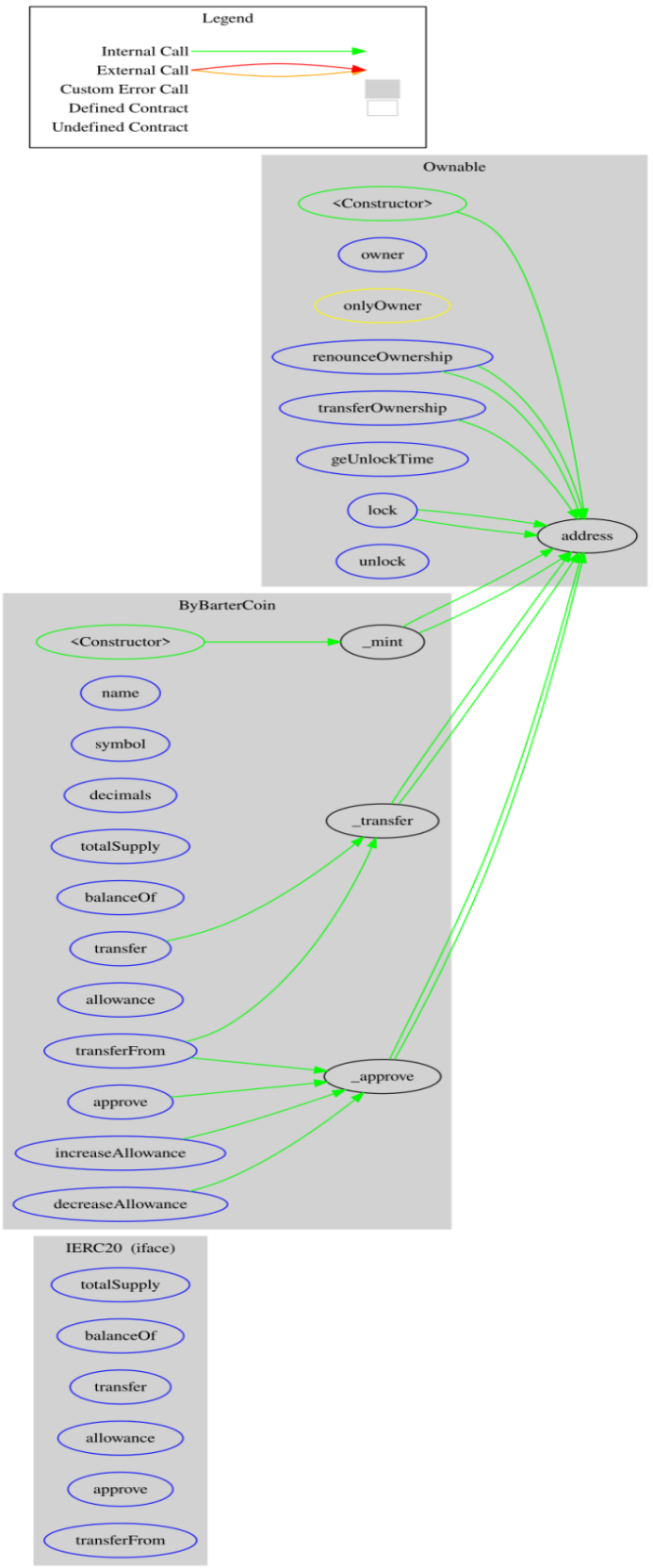
Functions Analysis

Contract	Type	Bases		
	Function Name	**Visibility**	**Mutability**	**Modifiers**
ByBarterCoin	Implementation	IERC20, Ownable		
		Public	✓	-
	name	External		-
	symbol	External		-
	decimals	External		-
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
	increaseAllowance	External	✓	-
	decreaseAllowance	External	✓	-
	_transfer	Internal	✓	
	_mint	Internal	✓	
	_approve	Internal	✓	

Inheritance Graph



Flow Graph


Legend
Internal Call
External Call
Custom Error Call
Defined Contract
Undefined Contract
Ownable
<Constructor>
owner
onlyOwner
renounceOwnership
transferOwnership
geUnlockTime
lock
unlock
address
ByBarterCoin
<Constructor>
_mint
name
symbol
decimals
totalSupply
balanceOf
transfer
allowance
transferFrom
approve
increaseAllowance
decreaseAllowance
_transfer
_approve
IERC20 (iface)
totalSupply
balanceOf
transfer
allowance
approve
transferFrom

Summary

ByBarter contract implements a token mechanism.. This audit investigates security issues, business logic concerns and potential improvements. ByBarter 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 TAC 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.

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The Cyberscope team

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