



Cyberscope

Audit Report

Lava A Token

April 2022

File α Lava.sol
Commit d59617e3ac107eea6d7601aac6e73e7f45ee00eb
Github <https://github.com/lavafinancial/LavaContracts>
Audited by © cyberscope

Table of Contents

Table of Contents	1
Contract Review	2
Source Files	2
Audit Updates	3
Contract Analysis	4
Unit Test	5
Contract Functions	6
Contract Flow	8
Summary	9
Disclaimer	10
About Cyberscope	11

Contract Review

Github	LavaFinance
commit	d59617e3ac107eea6d7601aac6e73e7f45ee00eb
File	aLava.sol

Source Files

Filename	SHA256
@openzeppelin/contracts/access/Ownable.sol	75e3c97011e75627ffb36f4a2799a4e887e1a3e27ed427490e82d7b6f51cc5c9
@openzeppelin/contracts/token/ERC20/ERC20.sol	f7831910f2ed6d32acff6431e5998baf50e4a00121303b27e974aab0ec637d79
@openzeppelin/contracts/token/ERC20/extensions/IERC20Metadata.sol	af5c8a77965cc82c33b7ff844deb9826166689e55dc037a7f2f790d057811990
@openzeppelin/contracts/token/ERC20/IERC20.sol	c2b06bb4572bb4f84bfc5477dadc0fcc497cb66c3a1bd53480e68bedc2e154a6
@openzeppelin/contracts/Utils/Context.sol	1458c260d010a08e4c20a4a517882259a23a4baa0b5bd9add9fb6d6a1549814a
contracts/aLava.sol	bcf5ed0c942355e6d3e14d2fe3ec9ba88b441da12b2e6a92b41b22403e317fa2

Audit Updates

Initial Audit	10th April 2022
Corrected	

Contract Analysis

- The contract allows only the whitelisted addresses to make a transfer.
- The contract owner has the ability to mutate the array of the whitelisted addresses.
- The contract gives the ability to the users to burn their holdings.
- The contract gives the ability to the users to provide allowance to a third address to burn their holdings.

● Critical ● Medium ● Minor ● Pass

Severity	Code	Description
●	ST	Contract Owner is not able to stop or pause transactions
●	OCTD	Contract Owner is not able to transfer tokens from specific address
●	OTUT	Owner Transfer User's Tokens
●	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)
●	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
●	MT	Contract Owner is not able to mint new tokens
●	BT	Contract Owner is not able to burn tokens from specific wallet
●	BC	Contract Owner is not able to blacklist wallets from selling

Unit Test

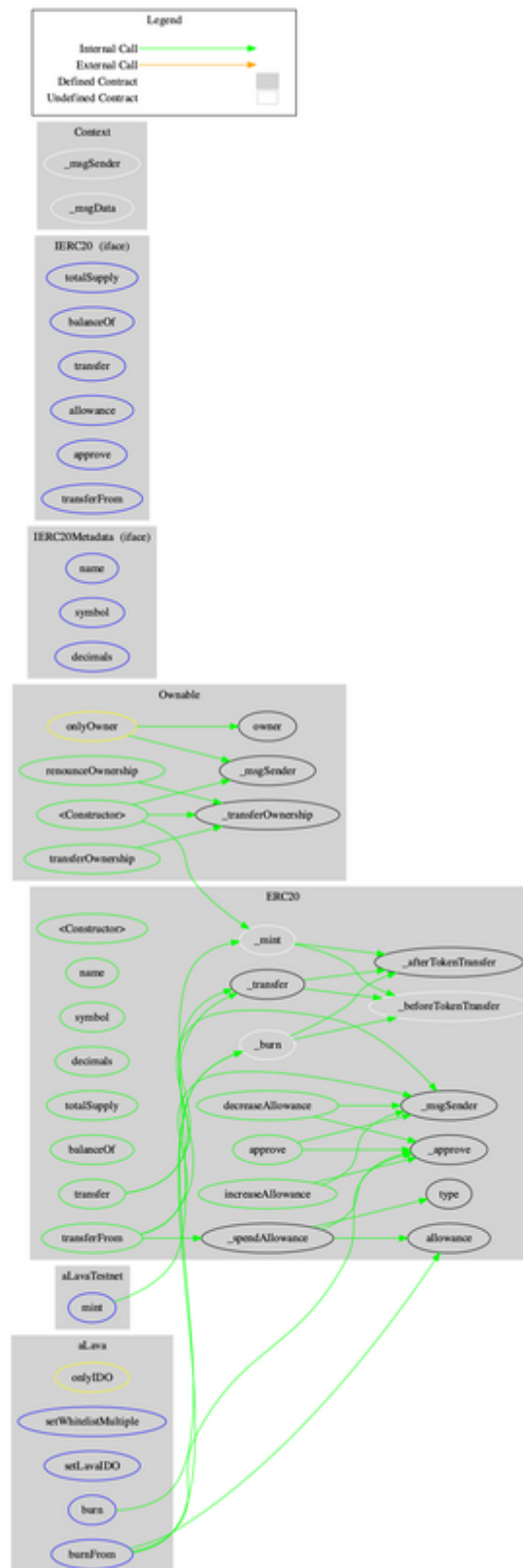
- ✓ Test lava ido transfer (83ms)
- ✓ Test lava ido burn (70ms)
- ✓ Test whitelist transfer (44ms)

Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
Ownable	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_transferOwnership	Internal	✓	
ERC20	Implementation	Context, IERC20, IERC20Meta data		
	<Constructor>	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	✓	
	_spendAllowance	Internal	✓	
	_beforeTokenTransfer	Internal	✓	
	_afterTokenTransfer	Internal	✓	

IERC20Metadata	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
aLava	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	setWhitelistMultiple	External	✓	onlyOwner
	setLavaIDO	External	✓	onlyOwner
	burn	External	✓	-
	burnFrom	External	✓	onlyIDO
	_beforeTokenTransfer	Internal	✓	
aLavaTestnet	Implementation	aLava		
	mint	External	✓	-
	_beforeTokenTransfer	Internal	✓	

Contract Flow



Summary

The Lava A token is a pure implementation of the ERC20 protocol. The Smart Contract analysis reported no compiler error or critical issues. The contract contains a list of whitelisted addresses. Only the whitelisted addresses are allowed to transfer tokens.

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.

Cyberscope 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 Cyberscope 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 Cyberscope 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 Cyberscope team disclaims any liability for the resulting losses.

About Cyberscope

Coinscope audit and K.Y.C. service has been rebranded to Cyberscope.

Coinscope is the leading early coin listing, voting and auditing authority firm. The audit process is analyzing and monitoring many aspects of the project. That way, it gives the community a good sense of security using an informative report and a generic score.

Cyberscope and Coinscope are aiming to make crypto discoverable and efficient globally. They provides all the essential tools to assist users draw their own conclusions.



The Cyberscope team

<https://www.cyberscope.io>