



Cyberscope

# Audit Report

## **WALKN**

May 2022

Type       BEP20

Network    BSC

Address     0x904160f6e18d90882e85c9ac0475ef3412241723

Audited by  © cyberscope

# Table of Contents

<b>Table of Contents</b>	<b>1</b>
<b>Contract Review</b>	<b>2</b>
<b>Source Files</b>	<b>2</b>
<b>Audit Updates</b>	<b>2</b>
<b>Contract Analysis</b>	<b>3</b>
<b>BC - Blacklisted Contracts</b>	<b>4</b>
<b>Description</b>	<b>4</b>
<b>Recommendation</b>	<b>4</b>
<b>Contract Diagnostics</b>	<b>5</b>
<b>CR - Code Repetition</b>	<b>6</b>
<b>Description</b>	<b>6</b>
<b>Recommendation</b>	<b>6</b>
<b>L01 - Public Function could be Declared External</b>	<b>7</b>
<b>Description</b>	<b>7</b>
<b>Recommendation</b>	<b>7</b>
<b>Contract Functions</b>	<b>8</b>
<b>Contract Flow</b>	<b>11</b>
<b>Domain Info</b>	<b>12</b>
<b>Summary</b>	<b>13</b>
<b>Disclaimer</b>	<b>14</b>
<b>About Cyberscope</b>	<b>15</b>

## Contract Review

<b>Contract Name</b>	WalkN
<b>Compiler Version</b>	v0.8.4+commit.c7e474f2
<b>Optimization</b>	200 runs
<b>Licence</b>	MIT
<b>Explorer</b>	<a href="https://bscscan.com/token/0x904160f6e18d90882e85c9ac0475ef3412241723">https://bscscan.com/token/0x904160f6e18d90882e85c9ac0475ef3412241723</a>
<b>Symbol</b>	WALKN
<b>Decimals</b>	18
<b>Total Supply</b>	5,000,000,000
<b>Domain</b>	walkn.app

## Source Files

<b>Filename</b>	<b>SHA256</b>
<b>contract.sol</b>	90672f47faf9706fb1ec967751af1432cca60e091691c23490814f592ae14e54

## Audit Updates

<b>Initial Audit</b>	8th May 2022
<b>Corrected</b>	

# Contract Analysis

● 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

## BC - Blacklisted Contracts

Criticality	medium
Location	contract.sol#L794

### Description

The contract owner has the authority to stop contracts from transactions. The owner may take advantage of it by calling the `addBlacklist` function.

```
require(!_blacklist[from], "Sender Blacklisted");  
require(!_blacklist[to], "Receiver Blacklisted");
```

### Recommendation

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

# Contract Diagnostics

● Critical    ● Medium    ● Minor

Severity	Code	Description
●	CR	Code Repetition
●	L01	Public Function could be Declared External

## CR - Code Repetition

Criticality	minor
Location	contract.sol#L807,835

### Description

There are code segments that are repetitive in the contract. Those segments increase the code size of the contract unnecessarily.

```
if(_whitelist[from] || _whitelist[to]){
    //No tax added for a whitelisted address
}
else{
    if(_isPool[from]) {
        //Add buyTax
        require(amount >= 100, "Amount too low");
        uint256 taxAmount = (_buyTax * amount) / 100;
        amount = amount - taxAmount;
        _transfer(from , _taxAddress, taxAmount);
    }

    if(_isPool[to]) {
        //Add sellTax
        require(amount >= 100, "Amount too low");
        uint256 taxAmount = (_sellTax * amount) / 100;
        amount = amount - taxAmount;
        _transfer(from , _taxAddress, taxAmount);
    }
}
```

### Recommendation

Create an internal function that contains the code segment and remove it from all the sections.

## L01 - Public Function could be Declared External

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L70,78,333,341,365,372,384,407,429,452,472,667,682

### Description

Public functions that are never called by the contract should be declared external to save gas.

```
burnFrom  
burn  
decreaseAllowance  
increaseAllowance  
transferFrom  
approve  
transfer  
balanceOf  
totalSupply  
...
```

### Recommendation

Use the external attribute for functions never called from the contract.



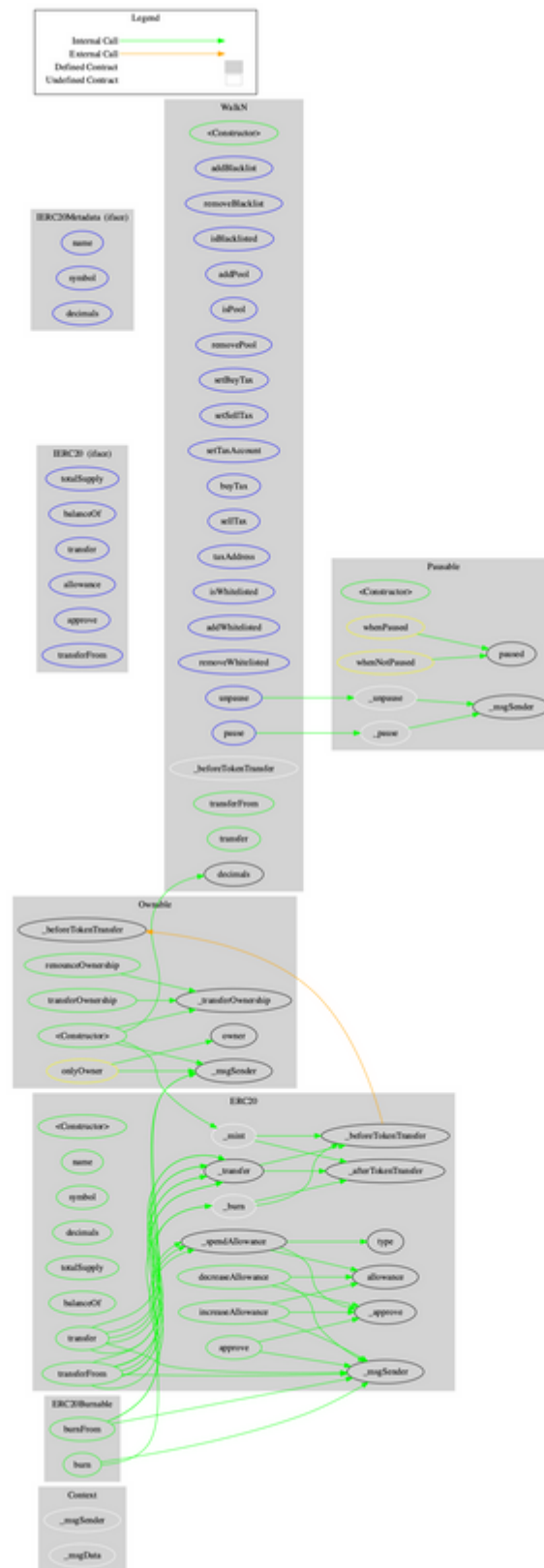
# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>Context</b>	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
<b>Ownable</b>	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_transferOwnership	Internal	✓	
<b>Pausable</b>	Implementation	Context		
	<Constructor>	Public	✓	-
	paused	Public		-
	_pause	Internal	✓	whenNotPaused
	_unpause	Internal	✓	whenPaused
<b>IERC20</b>	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>IERC20Metadata</b>	Interface	IERC20		
	name	External		-

	symbol	External		-
	decimals	External		-
<b>ERC20</b>	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	✓	
<b>ERC20Burnable</b>	Implementation	Context, ERC20		
	burn	Public	✓	-
	burnFrom	Public	✓	-
<b>WalkN</b>	Implementation	ERC20, ERC20Burn able, Pausable, Ownable		
	<Constructor>	Public	✓	ERC20

	addBlacklist	External	✓	onlyOwner
	removeBlacklist	External	✓	onlyOwner
	isBlacklisted	External		-
	addPool	External	✓	onlyOwner
	isPool	External		-
	removePool	External	✓	onlyOwner
	setBuyTax	External	✓	onlyOwner
	setSellTax	External	✓	onlyOwner
	setTaxAccount	External	✓	onlyOwner
	buyTax	External		-
	sellTax	External		-
	taxAddress	External		-
	isWhitelisted	External		-
	addWhitelisted	External	✓	onlyOwner
	removeWhitelisted	External	✓	onlyOwner
	pause	External	✓	onlyOwner
	unpause	External	✓	onlyOwner
	_beforeTokenTransfer	Internal	✓	whenNotPaused
	transferFrom	Public	✓	-
	transfer	Public	✓	-

# Contract Flow



## Domain Info

<b>Domain Name</b>	walkn.app
<b>Registry Domain ID</b>	48D3A100D-APP
<b>Creation Date</b>	2022-04-26T09:08:48Z
<b>Updated Date</b>	2022-05-01T09:08:48Z
<b>Registry Expiry Date</b>	2023-04-26T09:08:48Z
<b>Registrar WHOIS Server</b>	whois.namecheap.com
<b>Registrar URL</b>	<a href="https://www.namecheap.com/">https://www.namecheap.com/</a>
<b>Registrar</b>	Namecheap Inc.
<b>Registrar IANA ID</b>	1068

The domain has been created 12 days before the creation of the audit. It will expire in 12 months.

There is no public billing information, the creator is protected by the privacy settings.

## Summary

The Smart Contract analysis reported one medium severity issue. The contract owner has the authority to blacklist addresses. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats. There is also a limit of max 10% fees. The users cannot buy or sell tokens with an amount less than 0,000000000000000001.

# 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>