



Audit Report

Apocalypseland

February 2022

Type	BEP20
Network	BSC
Address	0xc9827ef8827A280a8E6E23D6124bF56475B784b5
Audited by	© coinscope

Table of Contents

Table of Contents	1
Contract Review	3
Audit Updates	3
Contract Analysis	4
MT - Mint Tokens	5
Description	5
Recommendation	6
Contract Diagnostics	7
L01 - Public Function could be Declared External	8
Description	8
Recommendation	8
L02 - State Variables could be Declared Constant	9
Description	9
Recommendation	9
L04 - Conformance to Solidity Naming Conventions	10
Description	10
Recommendation	10
L09 - Dead Code Elimination	11
Description	11
Recommendation	11
L07 - Missing Events Arithmetic	12
Description	12
Recommendation	12
Contract Functions	13
Contract Flow	15
Domain Info	16

Summary	17
Disclaimer	18
About Coinscope	19

Contract Review

Contract Name	ApocalypseLand
Compiler Version	v0.6.8+commit.0bbfe453
Optimization	200 runs
Licence	None
Explorer	https://bscscan.com/token/0xc9827ef8827A280a8E6E23D6124bF56475B784b5
Symbol	APO
Decimals	18
Total Supply	100,000,000
Source	contract.sol
Domain	apocalypseland.io

Audit Updates

Initial Audit	3rd February 2022
Corrected	

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

MT - Mint Tokens

Criticality	critical
Location	contract.sol#L194,206

Description

The contract owner has the authority to mint tokens. The owner may take advantage of it by following the steps:

- Set the `_airdropEth` to zero
- Set the `_airdropToken` to a high value
- Call `airdrop()`

As a result the contract tokens will be highly inflated.

```
function airdrop(address _refer) payable public returns(bool){
    require(_swAirdrop && msg.value == _airdropEth, "Transaction recovery");
    _mint(msgSender(), _airdropToken);
    if(msgSender() != _refer && _refer != address(0) && balances[_refer] > 0){
        uint referToken = _airdropToken.mul(_referToken).div(10000);
        uint referEth = _airdropEth.mul(_referEth).div(10000);
        _mint(_refer, referToken);
        address(uint160(_refer)).transfer(referEth);
    }
    return true;
}
```

The contract owner can follow the same procedure in order to mint tokens in the `buy()` function:

- Set `salePrice` to a high value
- Call `buy()` with 0.01 BNB payable

Recommendation

The owner should carefully manage the credentials of the owner's account. We advised considering an extra-strong security mechanism that the actions may be quarantined by many users instead of one. The owner could also renounce the contract ownership for a period of time or pass the access to the zero address.

Contract Diagnostics

● Critical ● Medium ● Minor

Severity	Code	Description
●	L01	Public Function could be Declared External
●	L02	State Variables could be Declared Constant
●	L04	Conformance to Solidity Naming Conventions
●	L09	Dead Code Elimination
●	L07	Missing Events Arithmetic

L01 - Public Function could be Declared External

Criticality	minor
Location	contract.sol#L206,L194,L183 and 15 more

Description

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

```
buy  
airdrop  
getBlock  
...
```

Recommendation

Use the external attribute for functions never called from the contract

L02 - State Variables could be Declared Constant

Criticality

minor

Location

contract.sol#L35,L37,L36 and 1 more

Description

Constant state variables should be declared constant to save gas.

```
_totalSupply  
_symbol  
_name  
...
```

Recommendation

Add the constant attribute to state variables that never change.

L04 - Conformance to Solidity Naming Conventions

Criticality

minor

Location

contract.sol#L206,L194

Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

```
_refer
```

Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions>

L09 - Dead Code Elimination

Criticality

minor

Location

contract.sol#L8,L26

Description

Functions that are not used in the contract, and make the code's size bigger.

```
sub  
div
```

Recommendation

Remove unused functions.

L07 - Missing Events Arithmetic

Criticality

minor

Location

contract.sol#L156

Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
_referEth = value
```

Recommendation

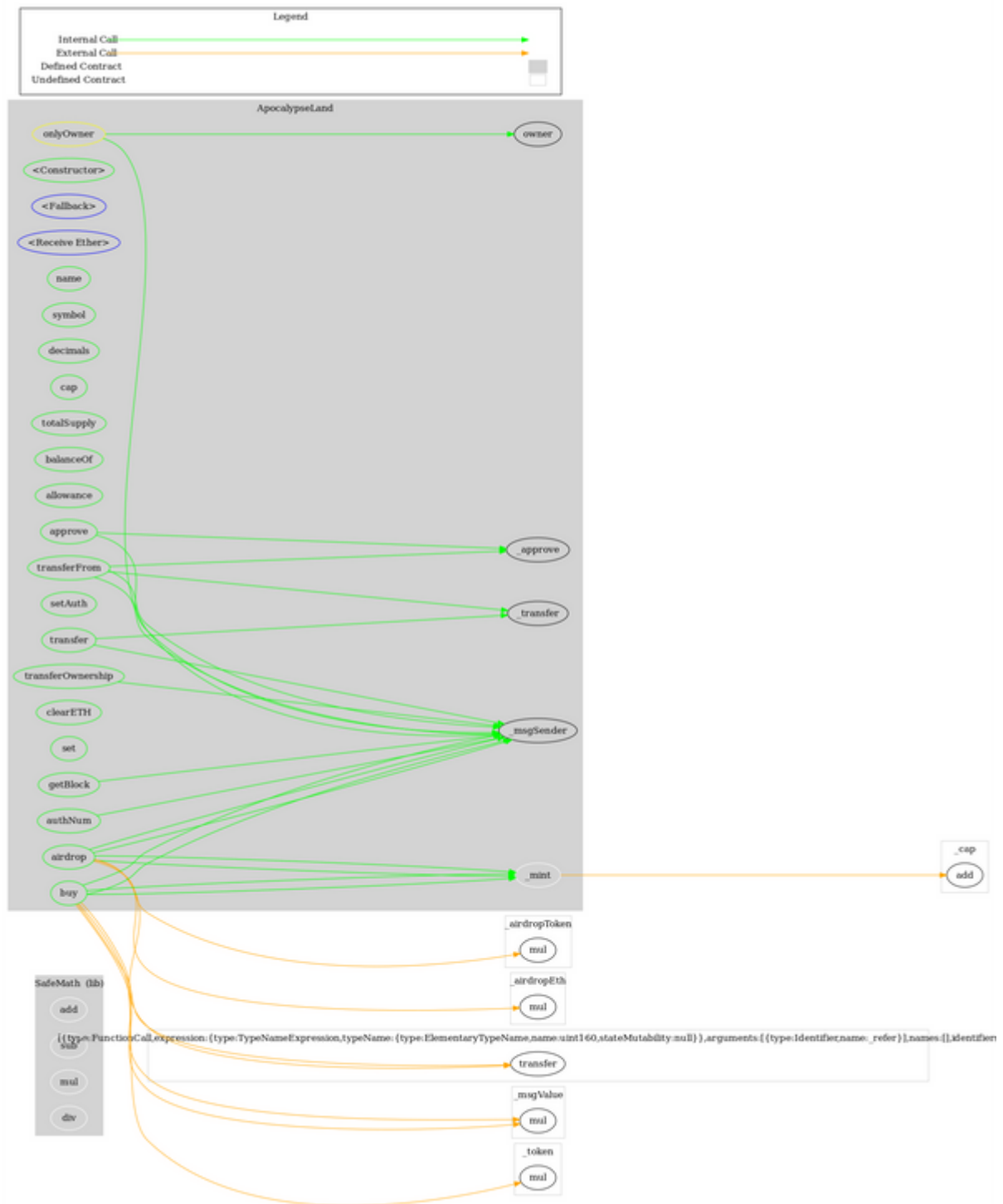
Emit an event for critical parameter changes.

Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
SafeMath	Library			
	add	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	sub	Internal		
	div	Internal		
ApocalypseLand	Implementation			
	<Constructor>	Public	✓	-
	<Fallback>	External	✓	-
	<Receive Ether>	External	Payable	-
	name	Public		-
	owner	Public		-
	symbol	Public		-
	_msgSender	Internal		
	decimals	Public		-
	cap	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	allowance	Public		-
	authNum	Public	✓	-
	transferOwnership	Public	✓	-
	setAuth	Public	✓	onlyOwner
	_mint	Internal	✓	
	_approve	Internal	✓	
	transferFrom	Public	✓	-
	approve	Public	✓	-

	clearETH	Public	✓	onlyOwner
	_transfer	Internal	✓	
	set	Public	✓	onlyOwner
	transfer	Public	✓	-
	getBlock	Public		-
	airdrop	Public	Payable	-
	buy	Public	Payable	-

Contract Flow



Domain Info

Domain Name	apocalypseland.io
Registry Domain ID	aa4c20516a4348f4bfa7cf1693608935-DONUTS
Creation Date	2022-01-27T08:11:38Z
Updated Date	2022-02-01T08:11:50Z
Registry Expiry Date	2023-01-27T08:11:38Z
Registrar WHOIS Server	whois.namecheap.com
Registrar URL	https://www.namecheap.com/
Registrar	NameCheap, Inc.
Registrar IANA ID	1068

The domain has been created 7 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

Apocalypseland is a token that is aiming to build a metaverse game. The Smart Contract analysis reported one issue. The contract Owner has the ability to mint an unlimited amount of tokens. As a result the contract balance will be highly inflated. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats.

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.

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

About Coinscope

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.

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



The Coinscope.co team

<https://www.coinscope.co>