



AniFi World Token

Smart Contract Security Audit Report

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Versatile Finance Audit

**Helping Businesses Incubate Ideas
Into Reality**

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Summary

Project Name: AniFi World

Contract Address: 0x4c161d6Cf0ec884141c44c852510Ff5B1b2D5092

Client contact: AniFi World Team

Blockchain: Binance smart chain

Language: Solidity

Project website: <https://anifi.io/>

Buy Tax: 0%

Sell Tax: 0 - 5%

Token supply: 200,000,000

Token ticker: ANIFI

Decimals: 18

Wallet: 0x71b07e01dde0adcbeba8b635704043ec1f665e75

Contract deployer address: 0x450cA723e55523f410bbBF0Bc5f299453a374671

Contract's current owner address: 0x450ca723e55523f410bbbf0bc5f299453a374671

Background

Versatile Finance was commissioned by AniFi World Team to perform an audit of the smart contract.

<https://bscscan.com/token/0x4c161d6Cf0ec884141c44c852510Ff5B1b2D5092>

The purpose of this audit was to achieve the following:

- Identify potential security issues with smart contracts
- Formally check the logic behind given smart contracts.

Information in this report should be used for understanding the risk exposure of smart contracts, and as a guide to improving the security posture of smart contracts by remediating the issues that were identified.

What is an audit

A smart contract audit is a comprehensive review process designed to discover logical errors, security vulnerabilities, and optimization opportunities within code. The Versatile Finance manages this a step further by verifying economic logic to ensure the stability of smart contracts and highlighting privileged functionality to create a report that is easy to understand for developers and community members.

Techniques and Methods

- The code quality
- Use of best practices
- Implementation of ERC-20 token standards.
- Efficient use of gas.
- Code is safe from re-entrancy and other vulnerabilities.
- Code risk issue analysis and recommendations
- Ownership privileges
- Code documentation and comments match logic and expected behavior.
- Token distribution and calculations are as per the intended behavior mentioned in the whitepaper.

The following techniques, methods, and tools were used to review all the smart contracts.

Structural Analysis

We analyze the design patterns and structure of smart contracts. A thorough check is done to ensure the smart contract is structured in a way that will not have any issues.

Static Analysis

A static Analysis of Smart Contracts is done to identify contract vulnerabilities. In this step, a series of automated tools and manual testings are used to test the security of smart contracts.

Code Review / Manual Analysis

Manual Analysis or review of code is done to identify new vulnerabilities or verify the vulnerabilities found during the static analysis. Contracts are completely manually analyzed line by line, and the logic is checked and compared with what's mentioned in the whitepaper to make sure everything's functioned as intended.

Gas Consumption

We check the behavior of smart contracts in production. Manual testings are done in DEXs to know how much gas gets consumed and the possibilities of optimization of code to reduce gas consumption.

Issue Categories

Every issue in this report has been assigned a severity level. There are four levels of severity and each of them has been explained below.

High severity issues

NO High severity issues found

A high severity issue or vulnerability means that your smart contract can be exploited. Issues on this level are critical to the smart contract's performance or functionality and we recommend these issues be fixed before moving to a live environment.

Medium-level severity issues

NO Medium severity issues found

The issues marked as medium severity usually arise because of errors and deficiencies in the smart contract code. Issues on this level could potentially bring problems and they can still be fixed. This can put users' funds at risk and has a medium to the high probability of exploitation.

Low-level severity issues

NO Low severity issues found

Low-level severity issues can cause minor impact and or are just warnings that can remain unfixed for now. It would be better to fix these issues at some point in the future. These issues have a low probability of occurring or may have a minimal impact.

Informational

NO Informational issues found

These are severity four issues that indicate an improvement request, a general question, a cosmetic or documentation error, or a request for information. There is low-to-no impact.

Centralization

NO Centralization issues found

Owner privileges

The owner can include/exclude wallets from fees

```
ftrace | funcSig
function addWhitelist(address _whitelist↑, bool _status↑) external onlyOwner {
    require(_whitelist↑ != address(0), "Zero wallet");
    whitelist[_whitelist↑] = _status↑;
    emit OnWhitelist(_whitelist↑, _status↑);
}
```

The owner can set fee maximum up to 5% (fees will apply only when selling)

```
ftrace | funcSig
function setFee(uint256 _fee↑) external onlyOwner {
    require(_fee↑ <= 500, "Fee too high");
    fee = _fee↑;
    emit OnSetFee(_fee↑);
}
```

The owner can change fees receiver wallet







```
ftrace | funcSig
function setWallet(address _wallet↑) external onlyOwner {
    require(_wallet↑ != address(0), "Zero wallet");
    wallet = _wallet↑;
    emit OnSetWallet(_wallet↑);
}
```















Audit Results





Vulnerability Category	Status
Arbitrary Jump/Storage Write	pass
BRC20 Token standards	pass
Compiler errors	pass
Latest compiler version	pass
Authorization of function call to untrusted contract	pass
Dependence on Predictable Variables	pass
Ether/Token Theft	pass
Gas consumption	pass
Safemath features	pass
Fallback usage	pass
Deprecated items	pass
Redundant code	pass
Overriding variables	pass
Flash Loans	pass
Front Running	pass
Improper Events	pass
Improper Authorization Scheme	pass
Integer Over/Underflow	pass
Business logic issues	pass







Orcle issues	pass
Race Conditions	pass
Reentrancy	pass
Signature Issues	pass
Unbounded Loops	pass
Unused Code	pass
Pseudo random number generator (PRNG)	pass
Fake deposit	pass
Centralization of control	pass








Contracts Description Table










Contract	Type	Bases		
L	Function Name	Visibility	Mutability	Modifiers
AniToken	Implementation	ERC20, ERC20Burnable, Ownable		
L		Public !		ERC20
L	addWhitelist	External !		onlyOwner
L	setFee	External !		onlyOwner
L	setWallet	External !		onlyOwner
L	_transfer	Internal 		
L	_swap	Internal 		
IUniswapV2Router02	Interface	IUniswapV2Router01		
L	removeLiquidityETHSupportingFeeOnTransferTokens	External !		NO !
L	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External !		NO !
L	swapExactTokensForTokensSupportingFeeOnTransferTokens	External !		NO !

L	swapExactETHForTokensSupportingFeeOnTransferTokens	External !		NO !
L	swapExactTokensForETHSupportingFeeOnTransferTokens	External !		NO !
IUniswapV2Router01	Interface			
L	factory	External !		NO !
L	WETH	External !		NO !
L	addLiquidity	External !		NO !
L	addLiquidityETH	External !		NO !
L	removeLiquidity	External !		NO !
L	removeLiquidityETH	External !		NO !
L	removeLiquidityWithPermit	External !		NO !
L	removeLiquidityETHWithPermit	External !		NO !
L	swapExactTokensForTokens	External !		NO !
L	swapTokensForExactTokens	External !		NO !
L	swapExactETHForTokens	External !		NO !
L	swapTokensForExactETH	External !		NO !
L	swapExactTokensForETH	External !		NO !
L	swapETHForExactTokens	External !		NO !
L	quote	External !		NO !

L	getAmountOut	External !		NO !
L	getAmountIn	External !		NO !
L	getAmountsOut	External !		NO !
L	getAmountsIn	External !		NO !
IUniswapV2Pair	Interface			
L	name	External !		NO !
L	symbol	External !		NO !
L	decimals	External !		NO !
L	totalSupply	External !		NO !
L	balanceOf	External !		NO !
L	allowance	External !		NO !
L	approve	External !		NO !
L	transfer	External !		NO !
L	transferFrom	External !		NO !
L	DOMAIN_SEPARATOR	External !		NO !
L	PERMIT_TYPEHASH	External !		NO !
L	nonces	External !		NO !
L	permit	External !		NO !
L	MINIMUM_LIQUIDITY	External !		NO !



L	factory	External !		NO !
L	token0	External !		NO !
L	token1	External !		NO !
L	getReserves	External !		NO !
L	price0CumulativeLast	External !		NO !
L	price1CumulativeLast	External !		NO !
L	kLast	External !		NO !
L	mint	External !		NO !
L	burn	External !		NO !
L	swap	External !		NO !
L	skim	External !		NO !
L	sync	External !		NO !
L	initialize	External !		NO !
IUniswapV2Factory	Interface			
L	feeTo	External !		NO !
L	feeToSetter	External !		NO !
L	getPair	External !		NO !
L	allPairs	External !		NO !

L	allPairsLength	External !		NO !
L	createPair	External !		NO !
L	setFeeTo	External !		NO !
L	setFeeToSetter	External !		NO !
Context	Implementation			
L	_msgSender	Internal 		
L	_msgData	Internal 		
IERC20Metadata	Interface	IERC20		
L	name	External !		NO !
L	symbol	External !		NO !
L	decimals	External !		NO !
ERC20Burnable	Implementation	Context, ERC20		
L	burn	Public !		NO !
L	burnFrom	Public !		NO !
IERC20	Interface			
L	totalSupply	External !		NO !

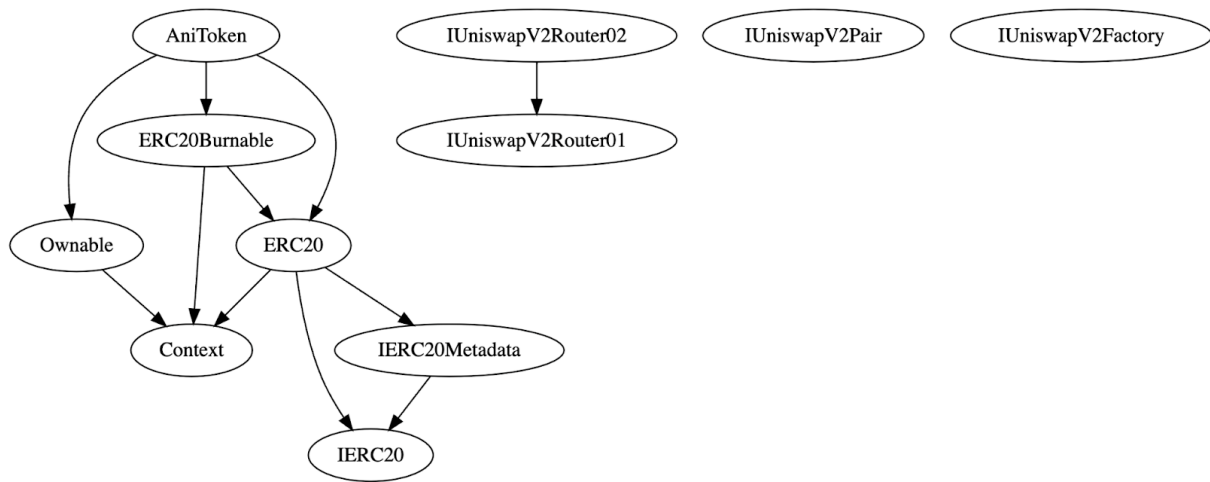
L	balanceOf	External !		NO !
L	transfer	External !		NO !
L	allowance	External !		NO !
L	approve	External !		NO !
L	transferFrom	External !		NO !
ERC20	Implementation	Context, IERC20, IERC20Meta data		
L		Public !		NO !
L	name	Public !		NO !
L	symbol	Public !		NO !
L	decimals	Public !		NO !
L	totalSupply	Public !		NO !
L	balanceOf	Public !		NO !
L	transfer	Public !		NO !
L	allowance	Public !		NO !
L	approve	Public !		NO !
L	transferFrom	Public !		NO !
L	increaseAllowance	Public !		NO !
L	decreaseAllowance	Public !		NO !

L	_transfer	Internal 		
L	_mint	Internal 		
L	_burn	Internal 		
L	_approve	Internal 		
L	_beforeTokenTransfer	Internal 		
L	_afterTokenTransfer	Internal 		
Ownable	Implementation	Context		
L		Public 		NO 
L	owner	Public 		NO 
L	renounceOwnership	Public 		onlyOwner
L	transferOwnership	Public 		onlyOwner
L	_setOwner	Private 		

Legend

Symbol	Meaning
	Function can modify state
	Function is payable

Inheritance chart



Audit conclusion

Versatile Finance team has performed in-depth testings, line by line manual code review, and automated audit of the smart contract. The smart contract was analyzed mainly for common smart contract vulnerabilities, exploits, manipulations, and hacks. According to the smart contract audit.

Smart contract functional Status: **PASS**

Number of risk issues: **0**

Solidity code functional issue level: **PASS**

Number of owner privileges: **3**

Centralization risk correlated to the active owner: **LOW**

Smart contract active ownership: **YES**

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as of the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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