

HEG NINJA **AUDITS**



Security Assessment

Banana Index Token

April 27, 2022

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Audit Summary

This report has been prepared for Banana Index Token on the Ethereum, Binance Smart Chain network. CFGNINJA provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.



Project Overview

Token Summary

Parameter	Result
Address	0xA67b8e40111AOEDD30C3210b77aadb86AD234c43
Name	Banana Index
Token Tracker	Banana Index (Bandex)
Decimals	9
Supply	1,000,000,000,000
Platform	Ethereum,Binance Smart Chain
compiler	v0.8.13+commit.abaa5c0e
Contract Name	BananaIndex
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://ropsten.etherscan.io/ address/0x256fbe2195875fe074fa8d1f7fc1d5477ba22b4
Payment Tx	0x14019d071cf8acaf95de0dc7482b5c147346009bb8bd7aca3 6624ebe76285735



Main Contract Assessed

Contract Name

Name	Contract	Live
Banana Index	0xA67b8e4011AOEDD30C3210b77aadb86AD234c43	Yes

TestNet Contract Assessed

Contract Name

Name	Contract	Live
Banana Index	0x256FBE2195875Fe074fa8D1F7fCD1D5477Ba22b4	Yes

Solidity Code Provided

SolidID	FileNameMD5	FileName
bandex	69ffcd62b61e2d0fa8510f9f02ea115ec8b20a5b	bandex.sol



Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
Unencrypted Private Data On-Chain	Complete	Complete	Low / No Risk
Code With No Effects	Complete	Complete	Low / No Risk
Message call with hardcoded gas amount	Complete	Complete	Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	Complete	Complete	Low / No Risk
Unexpected Ether balance	Complete	Complete	Low / No Risk
Presence of unused variables	Complete	Complete	Low / No Risk
Right-To-Left-Override control character (U+202E)	Complete	Complete	Low / No Risk
Typographical Error	Complete	Complete	Low / No Risk
DoS With Block Gas Limit	Complete	Complete	Low / No Risk
Arbitrary Jump with Function Type Variable	Complete	Complete	Low / No Risk
Insufficient Gas Griefing	Complete	Complete	Low / No Risk
Incorrect Inheritance Order	Complete	Complete	Low / No Risk
Write to Arbitrary Storage Location	Complete	Complete	Low / No Risk
Requirement Violation	Complete	Complete	Low / No Risk
Missing Protection against Signature Replay Attacks	Complete	Complete	Low / No Risk



Mint Check

The Project Owners of Banana Index does not have a mint function in the contract, owner cannot mint tokens after initial deploy

..

The Project has a Total Supply of 1,000,000,000,000 and cannot mint any more than the Max Supply.



Owner can't mint new coins



Fees Check

The Project Owners of Banana Index does not have the ability to set fees higher than 25% .

Team May have fees defined, however they dont have the ability to set those fees higher than 25%.

 Fees can be changed up to a maximum of 25%



MaxTx Check

The Project Owners of Banana Index can set max tx amount.

The ability to set MaxTx can be used as bad actor, this can limit the ability of investors to sale their tokens at any given time if is set too low..

We recommend the project to set MaxTx to Total Supply or simiar to avoid swap or transfer from failures



Pause Trade Check

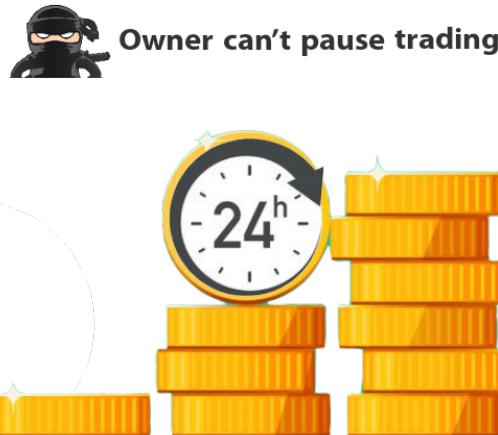
The Project Owners of Banana Index Owner can pause trading but he can't move tokens
(Owner can't pause trading)

The Team has done a great job to avoid stop trading, and investors has the ability to trade at any given time without any problems

Pause Trade Notes:

Auditor Notes:

Project Owner Notes:



Contract Ownership

The contract ownership of Banana Index is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0x7B788b5De0FFC8d222128D03E2750db7196B7863 which can be viewed from:
[HERE](#)

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.

We recommend the team to use a Multisignature Wallet if contract is not going to be renounced, this will give the ability to the team to have more control over the contract.

Liquidity Ownership

The token does not have liquidity at the moment of the audit, block 14665066



KYC Information

The Project Owners of Banana Index has provided KYC Documentation.

KYC Certificated can be found on the Following:

[KYC Data](#)

KYC Information Notes:

Auditor Notes: Asked project owner about KYC.

Project Owner Notes: Project owner have KYC with several platforms including Pinksale and Certik



Mythx Security Summary Checks

ID	Severity	Name	File	location
SWC-100	Pass	Function .	bandex.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	bandex.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	bandex.sol	L: 0 C: 0
SWC-103	Low	A floating pragma is set.	bandex.sol	L: 6 C: 0
SWC-104	Pass	Unchecked Call Return Value.	bandex.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	bandex.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	bandex.sol	L: 0 C: 0
SWC-107	PASS	Read of persistent state following external call.	bandex.sol	L: 0 C: 0
SWC-108	Low	State variable visibility is not set..	bandex.sol	L: 114 C: 30
SWC-108	Low	State variable visibility is not set.	bandex.sol	L: 185 C: 9
SWC-108	Pass	State variable visibility is not set.	bandex.sol	L: 195 C: 14
SWC-109	Pass	Uninitialized Storage Pointer.	bandex.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	bandex.sol	L: 0 C: 0



ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	bandex.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	bandex.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	bandex.sol	L: 1180 C: 8
SWC-114	Pass	Transaction Order Dependence.	bandex.sol	L: 0 C: 0
SWC-115	Low	Authorization through tx.origin.	bandex.sol	L: 474 C: 15
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	bandex.sol	L: 1205 C: 8
SWC-117	Pass	Signature Malleability.	bandex.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	bandex.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	bandex.sol	L: 0 C: 0
SWC-120	Low	Potential use of block.number as source of randomness.	bandex.sol	L: 608 C: 47
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	bandex.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	bandex.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	bandex.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	bandex.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	bandex.sol	L: 0 C: 0



ID	Severity	Name	File	location
SWC-126	Pass	Insufficient Gas Griefing.	bandex.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	bandex.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	bandex.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	bandex.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U+202E).	bandex.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	bandex.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	bandex.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	bandex.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	bandex.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	bandex.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	bandex.sol	L: 0 C: 0

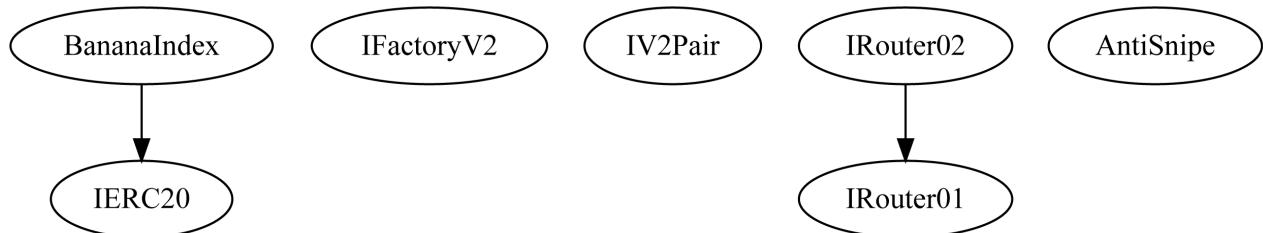
We scan the contract for additional security issues using MYTHX and industry standard security scanning tool



Call Graph and Inheritance

The contract for Banana Index has the following call graph structure

The Project has a Total Supply of 1,000,000,000,000 and has the following inheritance



Privileged Functions (onlyOwner)

Function Name	Parameters	Visibility
renounceOwnership	none	public
transferOwnership	address newOwner	public
approveContractContingency		public
setNewRouter	newRouter (address)	public
setLpPair	pair (address), enabled (bool)	external
setInitializer	initializer (address)	external
setExcludedFromLimits	account (address), enabled (bool)	external
setExcludedFromFees	account (address), enabled (bool)	public
setExcludedFromProtection	account (address), enabled (bool)	external
setBlacklistEnabled	account (address), enabled (bool)	external
setBlacklistEnabledMultiple	accounts (address[]), enabled (bool)	external
removeSniper	account (address)	public
setProtectionSettings	_antiSnipe (bool), _antiGas (bool), _antiBlock (bool), _algo (bool)	external
setGasPriceLimit	gas (uint256)	public



Function Name	Parameters	Visibility
setTaxes	buyFee (uint16), sellFee (uint16), transferFee (uint16)	external
setRatios	liquidity (uint16), marketing (uint16), dev (uint16), floorSupport (uint16)	external
setWallets	marketing (address), dev (address), floorSupport (address)	external
setMaxTxPercent	percent (uint256), divisor (uint256)	external
setMaxWalletSize	percent (uint256), divisor (uint256)	external
setSwapSettings	thresholdPercent (uint256), thresholdDivisor (uint256), amountPercent (uint256), amountDivisor (uint256)	external
setContractSwapEnabled	enabled (bool)	external
excludePresaleAddresses	router (address), presale (address)	external
enableTrading		public
sweepContingency		external
multiSendTokens	accounts (address[]), amounts (uint256[])	external



Important Notes To The Users:

- Banana Task Force team is KYC with Pinksale and Certik, their trust score is very high.
- Costumer main contract is audited by Certik.
- No mint function found, owner cannot mint tokens after initial deployment.
- Owner can't charge fees up to 25%.
- Owner can set max tx amount.
- Owner can't pause trading.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.
- The contract Developer is a skilled one, we tested the code in Testnet/Ropsten and did not found any logical errors within the code.

Audit Passed



Social Media Checks

Social Media	URL	Result
Twitter	https://twitter.com/BananaTFA	Pass
Instagram	https://www.instagram.com/BananaTFA/	Pass
Website	https://bananataskforceape.com	Pass
Telegram	https://t.me/BestEverAPY	Pass

We recommend to have 3 or more social media sources including a completed working websites.

Social Media Information Notes:

Auditor Notes: undefined

Project Owner Notes:



Disclaimer

CFGNINJA has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocacy for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or depreciation of technologies.

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