

# HEXNINJA AUDITS



Security Assessment

**Flame Token**

May 27, 2022

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# Audit Summary

This report has been prepared for Flame Token on the 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	0x20D5BA6D5aa2A3dF3A632B493621D760E4c7965E
Name	Flame
Token Tracker	Flame (FLM)
Decimals	18
Supply	100,000
Platform	Binance Smart Chain
compiler	v0.8.13+commit.abaa5c0e
Contract Name	FlameToken
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	<a href="https://bscscan.com/token/0xe55bd75d7ce7bfde26a347a748d080d3acda7ffe">https://bscscan.com/token/0xe55bd75d7ce7bfde26a347a748d080d3acda7ffe</a>
Payment Tx	0xd9b4ae240866d84b664bc5786bb0708e45fd41e08f164be58787f954bcf11f36



# Project Overview

## Risk Analysis Summary

Parameter	Result
Buy Tax	0%
Sale Tax	0%
Is honeypot?	Clean
Can edit tax?	Yes
Is anti whale?	No
Is blacklisted?	No
Is whitelisted?	No
Holders	Clean
Security Score	96/100
Auditor Score	98/100
Confidence Level	High

The following quick summary has been added to the project overview, however there are more details about the audit and their results please read every details.



## Main Contract Assessed Contract Name

Name	Contract	Live
Flame	0x20D5BA6D5aa2A3dF3A632B493621D760E4c7965E	Yes

## TestNet Contract Assessed Contract Name

Name	Contract	Live
Flame	0xB7EDbDB82c8b77acA773D4a5FB984C1c65fb6cFc	Yes

## Solidity Code Provided

SolID	File Sha-1	FileName
FlameToken	32f17f31ee157610aadf36a9fade7395be52855f	FlameToken.sol
FlameToken	fc782584021a4700f9f7086ba8e78c8d36a59c52	IPancakeSwapRouter.sol
FlameToken	5f49a5f88207fafa7dbc5d97e5cb025bda7864a9	ITokenLocker.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 Flame does not have a mint function in the contract, owner cannot mint tokens after initial deploy

..

The Project has a Total Supply of 100,000 and cannot mint any more than the Max Supply.

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Mint Notes:

Auditor Notes:

Project Owner Notes:



Owner can't mint new coins





# Fees Check

The Project Owners of Flame 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%.

**Tax Fee Notes:**

**Auditor Notes:** Contract don't have a tax by default so is set at 0 tax currently, however there is function to update the tax and this one cannot be higher than 20%

**Project Owner Notes:** .



**Fees can be changed up to a maximum of 25%**



# MaxTx Check

The Project Onwers of Flame does not has the ability to set max tx amount

The Team allow any investors to swap, transfer or sale their total amount if needed.

**Project Has No MaxTX**



# Pause Trade Check

The Project Owners of Flame 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:



**Owner can't pause trading**



# Contract Ownership

The contract ownership of Flame 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 `0x3cc6a3fa5bECF00B585E4575537F03d24891bD70` 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 `17670820`



# KYC Information

The Project Owners of Flame 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:** Customer is KYC with PinkSale



# Mythx Security Summary Checks

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	FlameToken.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	FlameToken.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	FlameToken.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	FlameToken.sol	L: 5 C: 0
SWC-104	Pass	Unchecked Call Return Value.	FlameToken.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	FlameToken.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	FlameToken.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	FlameToken.sol	L: 0 C: 0
SWC-108	Low	State variable visibility is not set..	FlameToken.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	FlameToken.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	FlameToken.sol	L: 0 C: 0
SWC-111	Pass	Use of Deprecated Solidity Functions.	FlameToken.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	FlameToken.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	FlameToken.sol	L: 0 C: 0



ID	Severity	Name	File	location
SWC-114	Pass	Transaction Order Dependence.	FlameToken.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	FlameToken.sol	L: 474 C: 15
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	FlameToken.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	FlameToken.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	FlameToken.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	FlameToken.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randomness.	FlameToken.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	FlameToken.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	FlameToken.sol	L: 0 C: 0
SWC-123	Low	Requirement Violation.	FlameToken.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	FlameToken.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	FlameToken.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	FlameToken.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	FlameToken.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	FlameToken.sol	L: 0 C: 0





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

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



# Security Check Details Page

## SWC-108 – State Variable Default Visibility

CWE-710: Improper Adherence to Coding Standards

Description:

Labeling the visibility explicitly makes it easier to catch incorrect assumptions about who can access the variable.

Remediation:

Variables can be specified as being public, internal or private. Explicitly define visibility for all state variables.

References:

Ethereum Smart Contract Best Practices – Explicitly mark visibility in functions and state variables

## SWC-123 – Requirement Violation

CWE-573: Improper Following of Specification by Caller

Description:

The Solidity `require()` construct is meant to validate external inputs of a function. In most cases, such external inputs are provided by callers, but they may also be returned by callees. In the former case, we refer to them as precondition violations. Violations of a requirement can indicate one of two possible issues:

- A bug exists in the contract that provided the external input.
- The condition used to express the requirement is too strong.

Remediation:

If the required logical condition is too strong, it should be weakened to allow all valid external inputs. Otherwise, the bug must be in the contract that provided the external input and one should consider fixing its code by making sure no invalid inputs are provided.

References:



The use of `revert()`, `assert()`, and `require()` in Solidity, and the new REVERT opcode in the EVM

**SWC Information Notes:**

**Auditor Notes:**

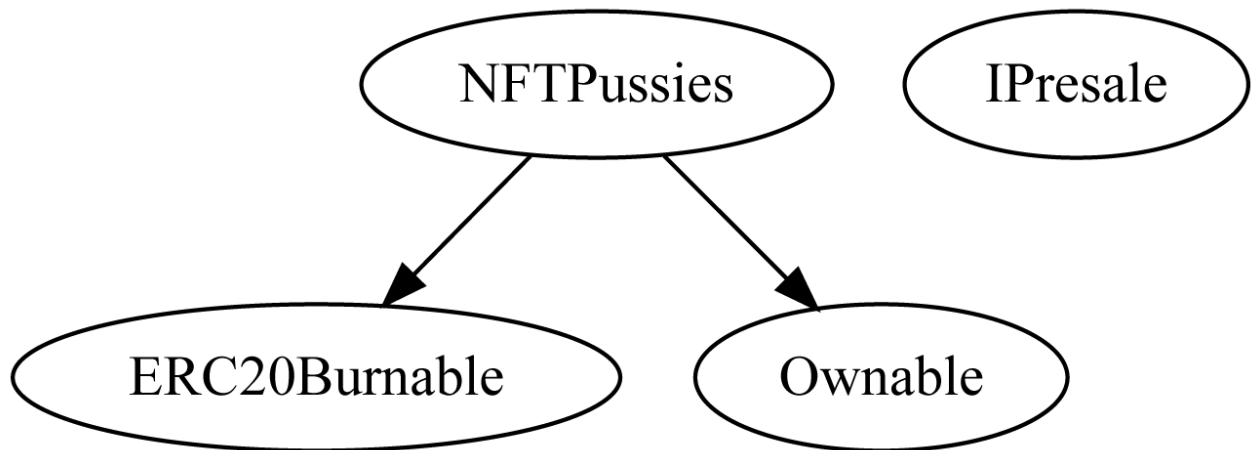
**Project Owner Notes:**



# Call Graph and Inheritance

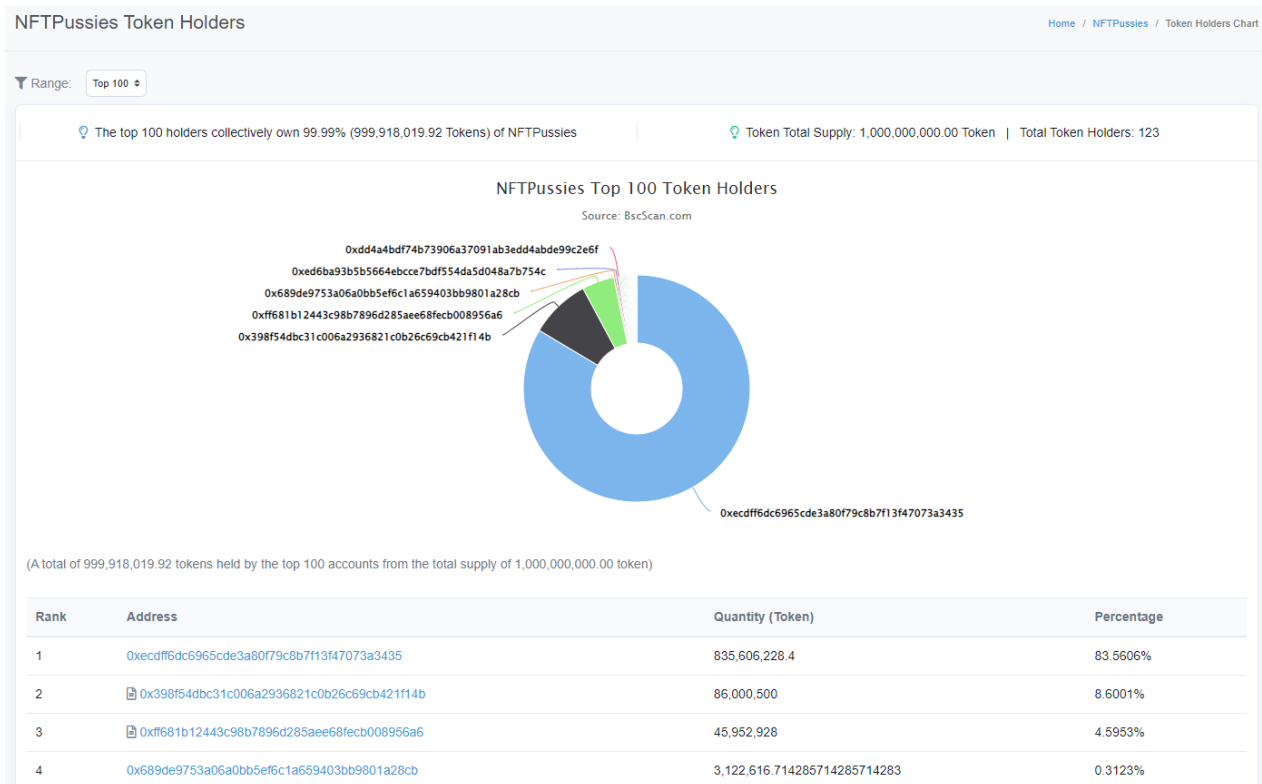
The contract for Flame has the following call graph structure

The Project has a Total Supply of 100,000 and has the following inheritance



# Top Token Holders

The contract for Flame has the following top token holders



## Privileged Functions (onlyOwner)

Function Name	Parameters	Visibility
renounceOwnership	none	public
transferOwnership	address newOwner	public
setBuyTax	_enable bool	external
setSellTax	_pool(address)	external
setAllTaxes	_transferTax uint256, _sell uint256, _buy uint256	external
setMainRouter	_contract address, _tax uint256	external



## Important Notes To The Users:

- NFT Pussies team is very responsive, we have asked the team to do several revisions of their contract and they have made those improvements.
- The team currently have a KYC with PinkSale.
- Owner can't charge fees up to 25%.
- Owner can't set max tx amount.
- Owner can pause trading.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.

## Audit Passed





# Social Media Checks

Social Media	URL	Result
Twitter	<a href="https://twitter.com/Stake_Protocol">https://twitter.com/Stake_Protocol</a>	Pass
Reddit	<a href="https://stake-protocol.medium.com/introducing-a-game-changer-15f403c53804">https://stake-protocol.medium.com/introducing-a-game-changer-15f403c53804</a>	Pass
Website	<a href="https://stakeprotocol.app/">https://stakeprotocol.app/</a>	Pass
Telegram	<a href="http://T.me/stakeprotocolportal">http://T.me/stakeprotocolportal</a>	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 deprecation of technologies.

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