

# CFG NINJA AUDITS

Security Assessment

DonsPepe Token

May 16, 2023

Audit Status: Pass

Audit Edition: Advance



3LADE POOL



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# **Assessment Summary**

This report has been prepared for DonsPepe 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.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders
- Thorough line-by-line manual review of the entire codebase by industry experts.





# **Project Overview**

## **Token Summary**

Parameter	Result
Address	0x434853B2387307ff0a08E1869e18C82C51F9c89F
Name	DonsPepe
Token Tracker	DonsPepe (DOPE)
Decimals	9
Supply	1,000,000,000
Platform	Binance Smart Chain
compiler	v0.8.19+commit.7dd6d404
Contract Name	DONSPEPE
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x434853B2387307ff0a08E186 9e18C82C51F9c89F#code
Payment Tx	Ox





# **Project Overview**

## Risk Analysis Summary

Parameter	Result
Buy Tax	10%
Sale Tax	10%
Is honeypot?	Clean
Trading Cooldown	No
Transfer Pausable	No
Modify Fees	No
ls anti whale?	No
Is blacklisted?	No
Is whitelisted?	No
Holders	1
Confidence Level	Medium

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.









# Main Contract Assessed Contract Name

Name	Contract	Live
DonsPepe	0x434853B2387307ff0a08E1869e18C82C51F9c89F	Yes

# TestNet Contract Assessed Contract Name

Name	Contract	Live
DonsPepe	0x4E418C91d0776794c098AF795fEA6A691EFCC1fD	Yes

### **Solidity Code Provided**

SollD	File Sha-1	FileName
donspepe	8f61736fa829560110ae8f36ab5e0f7539ad1b0b	donspepe.sol





# **Mint Check**

The project owners of DonsPepe do 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 and cannot mint any more than the Max Supply.

Mint Notes:

**Auditor Notes:** 







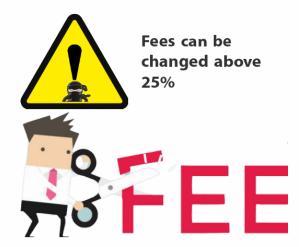
## **Fees Check**

The project owners of DonsPepe have the ability to set higher than 25%

We Recommend the team to review contract and set it with fees restrictions to avoid any problems, as alternative the team can use multi signature wallet to ensure the project is safe from a potential fee increase.

**Tax Fee Notes:** 

Auditor Notes: The contract currently has 10% buy and 10% sale taxes.







# **Blacklist Check**

The project owners of DonsPepe do not have a blacklist function their contract.

The Project allow owners to transfer their tokens without any restrictions.

Token owner cannot blacklist the contract: Malicious or compromised owners can trap contracts relying on tokens with a blacklist.

**Blacklist Notes:** 

**Auditor Notes:** 







# MaxTx Check

# The Project Owners of DonsPepe cannot set max tx amount

The Team allows any investors to swap, transfer or sell their total amount if needed.

MaxTX Notes:

Auditor Notes: .

**Project Owner Notes:** 

**Project Has No MaxTX** 







# Pause Trade Check

The Project Owners of DonsPepe don't have the ability to stop or 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 DonsPepe 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
OxObaa9fbdb2a62b36a3a655b125c56d2fbc86e59f
which can be viewed:

#### **HERE**

The owner wallet has the power to call the functions displayed on the privileged functions chart below, if the owner's wallet is compromised, they could exploit these privileges.

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

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





# **Liquidity Ownership**

The token does not have liquidity at the moment of the audit, block 28263468

If liquidity is unlocked, then the token developers can do what is infamously known as 'rugpull'. Once investors start buying token from the exchange, the liquidity pool will accumulate more and more coins of established value (e.g., ETH or BNB or Tether). This is because investors are basically sending these tokens of value to the exchange, to get the new token. Developers can withdraw this liquidity from the exchange, cash in all the value and run off with it. Liquidity is locked by renouncing the ownership of liquidity pool (LP) tokens for a fixed time period, by sending them to a time-lock smart contract. Without ownership of LP tokens, developers cannot get liquidity pool funds back. This provides confidence to the investors that the token developers will not run away with the liquidity money. It is now a standard practice that all token developers follow, and this is what really differentiates a scam coin from a real one.

#### Read More

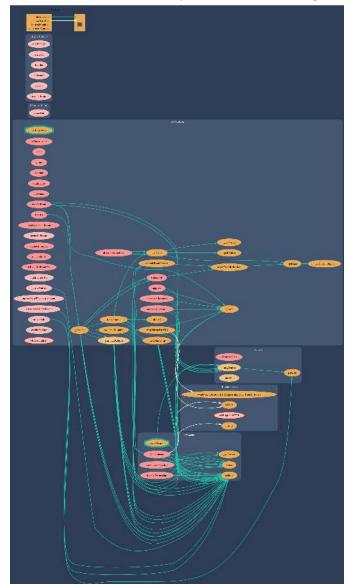






# Call Graph

The contract for DonsPepe has the following call graph structure.







# **KYC Information**

## The Project Owners of DonsPepe is not KYC.

**KYC Information Notes:** 

Auditor Notes: KYC to be completed by PinkSale, project will be a SAFU Project.







# Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

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





ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	donspepe.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	donspepe.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	donspepe.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	donspepe.sol	L: 0 C: 0
SWC-115	Low	Authorization through tx.origin.	donspepe.sol	L: 432 C: 33
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	donspepe.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	donspepe.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	donspepe.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	donspepe.sol	L: 0 C: 0
SWC-120	Low	Potential use of block.number as source of randonmness.	donspepe.sol	L: 455 C: 74
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	donspepe.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	donspepe.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	donspepe.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	donspepe.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	donspepe.sol	L: 0 C: 0





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

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





# Smart Contract Vulnerability Details

SWC-115 - Authorization through tx.origin

**CWE-477: Use of Obsolete Function** 

#### **Description:**

tx.origin is a global variable in Solidity which returns the address of the account that sent the transaction. Using the variable for authorization could make a contract vulnerable if an authorized account calls into a malicious contract. A call could be made to the vulnerable contract that passes the authorization check since tx.origin returns the original sender of the transaction which in this case is the authorized account.

#### Remediation:

tx.origin should not be used for authorization. Use msg.sender instead.

#### References:

Solidity Documentation - tx.origin

Ethereum Smart Contract Best Practices - Avoid using tx.origin

SigmaPrime - Visibility.





# Smart Contract Vulnerability Details

# SWC-120 - Weak Sources of Randomness from Chain Attributes

**CWE-330: Use of Insufficiently Random Values** 

#### **Description:**

Solidity allows for ambiguous naming of state variables when inheritance is used. Contract A with a variable x could inherit contract B that also has a state variable x defined. This would result in two separate versions of x, one of them being accessed from contract A and the other one from contract B. In more complex contract systems this condition could go unnoticed and subsequently lead to security issues.

Shadowing state variables can also occur within a single contract when there are multiple definitions on the contract and function level.

#### Remediation:

Using commitment scheme, e.g. RANDAO. Using external sources of randomness via oracles, e.g. Oraclize. Note that this approach requires trusting in oracle, thus it may be reasonable to use multiple oracles. Using Bitcoin block hashes, as they are more expensive to mine.

#### References:

How can I securely generate a random number in my smart contract?)

When can BLOCKHASH be safely used for a random number? When would it be unsafe?

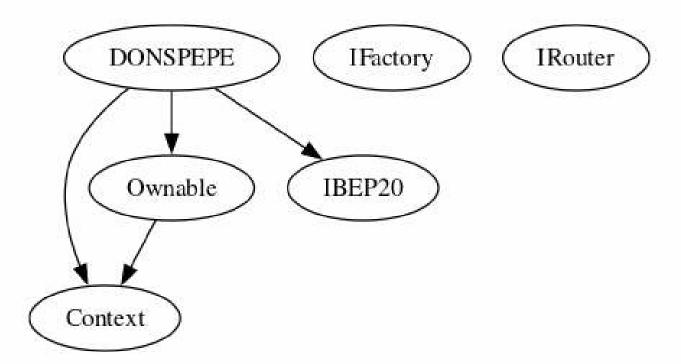
The Run smart contract.





# **Inheritance**

The contract for DonsPepe has the following inheritance structure.







# Privileged Functions (onlyOwner)

Please Note if the contract is Renounced none of this functions can be executed.

Function Name	Parameters	Visibility
renounceOwnership		Public
transferOwnership	address newOwner	Public
enableTrading		External
rescueBNB		External
updateSwapTokensA tAmount		External
updateWallets		External
updatedeadline		External
bulkExcludeFee		External
includeInFee		External
excludeFromFee		External
updateExemptFee		External
bulkExemptFee		External
includeInReward		External





Function Name Parameters Visibility

excludeFromReward

External





# **Smart Contract Advance Checks**

ID	Severity	Name	Result	Status
DOPE-01	Minor	Potential Sandwich Attacks.	Pass	Not-Found
DOPE-02	Minor	Function Visibility Optimization	Pass	Not-found
DOPE-03	Minor	Lack of Input Validation.	Fail	Pending
DOPE-04	Major	Centralized Risk In addLiquidity.	Pass	Not-found
DOPE-05	Minor	Missing Event Emission.	Fail	Pending
DOPE-06	Minor	Conformance with Solidity Naming Conventions.	Pass	Not-found
DOPE-07	Minor	State Variables could be Declared Constant.	Pass	Not-Found
DOPE-08	Minor	Dead Code Elimination.	Pass	Not-Found
DOPE-09	Major	Third Party Dependencies.	Pass	Not-Found
DOPE-10	Major	Initial Token Distribution.	Fail	Pending
DOPE-11	Major	Sniper Tax to 90%	Fail	Pending
DOPE-12	Major	Centralization Risks In The X Role	Pass	Resolved
DOPE-13	Informational	Extra Gas Cost For User	Fail	Pending
DOPE-14	Medium	Unnecessary Use Of SafeMath	Pass	Not-Found
DOPE-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not-Found





ID	Severity	Name	Result	Status
DOPE-16	Medium	Invalid collection of Taxes during Transfer.	Pass	Not-Found
DOPE-17	Informational	Conformance to numeric notation best practice.	Pass	Not-Found
DOPE-18	Informational	Enable Trade and Exclude Exist to create a whitelist.	Pass	Not-Found





### DOPE-03 | Lack of Input Validation.

Category	Severity	Location	Status
Volatile Code	Minor	donspepe.sol: 309,14	Pending

#### **Description**

The given input is missing the check for the non-zero address.

The given input is missing the check for the excludeFromFee,includeInFee,bulkExcludeFee, is missing required function.

#### Remediation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
require(receiver != address(0), "Receiver is the zero address");
...
require(value X limitation, "Your not able to do this function");
...
```

We also recommend customer to review the following function that is missing a required validation. excludeFromFee,includeInFee,bulkExcludeFee, is missing required function.





## DOPE-05 | Missing Event Emission.

Category	Severity	Location	Status
Volatile Code	Minor	donspepe.sol: 287, 14	Pending

#### **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. The linked code does not create an event for the transfer.

#### Remediation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.





#### DOPE-10 | Initial Token Distribution.

Category	Severity	Location	Status
Centralization / Privilege	Major	donspepe.sol: 190,13	Pending

#### **Description**

All of the DonsPepe tokens are sent to the contract deployer when deploying the contract. This could be a centralization risk as the deployer can distribute tokens without obtaining the consensus of the community.

#### Remediation

We recommend the team to be transparent regarding the initial token distribution process, and the team shall make enough efforts to restrict the access of the private key.

#### **Project Action**

emit Transfer(address(0), owner(), \_tTotal)





## DOPE-11 | Sniper Tax to 90%.

Category	Severity	Location	Status	
Security	Major	donspepe.sol: 455,14	Pending	

#### **Description**

launchTax is in place for a specific set of blocks, more than likely for early buyers. however this can be updated and state not higher than 4 blocks.

#### Remediation

We recommend the team only allow the initial block configuration and to allow the tax to revert to zero in case of issues.

#### **Project Action**





## DOPE-13 | Extra Gas Cost For User.

Category	Severity	Location	Status
Logical Issue	<ul><li>Informational</li></ul>	donspepe.sol: 1008, 13	Pending

#### **Description**

The user may trigger a tax distribution during the transfer process, which will cost a lot of gas and it is unfair to let a single user bear it.

#### Remediation

We advise the client to make the owner responsible for the gas costs of the tax distribution.

#### **Project Action**

is declared public





# Technical Findings Summary

#### **Classification of Risk**

Severity	Description
Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
Major	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
Minor	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
<ul><li>Informational</li></ul>	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

## **Findings**

Severity	Found	Pending	Resolved
Critical	0	0	0
Major	1	0	0
Medium	0	0	0
Minor	3	0	0
<ul><li>Informational</li></ul>	1	0	0
Total	5	0	0





# **Social Media Checks**

Social Media	URL	Result
Twitter	https://twitter.com/theDonsPepe	Pass
Other	https://t.me/officialdonspepe_news	Pass
Website	https://donspepe.co/	Pass
Telegram	https://t.me/officialdonspepe	Pass

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

**Social Media Information Notes:** 

**Auditor Notes: undefined** 







# **Assessment Results**

#### **Score Results**

Review	Score
Overall Score	80/100
Auditor Score	80/100
Review by Section	Score
Manual Scan Score	29/53
SWC Scan Score	35/37
Advance Check Score	16/19

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

#### **Audit Passed**







#### **Assessment Results**

## **Important Notes:**

- No issues or vulnerabilities were found.
- The code can use some improvements.
- there's is an anti-snipe code to 90% tax, other tax hardcoded to 10%.

# Auditor Score =80 Audit Passed







# **Appendix**

### **Finding Categories**

#### **Centralization / Privilege**

Centralization / Privilege findings refer to either feature logic or implementation of components that actagainst the nature of decentralization, such as explicit ownership or specialized access roles incombination with a mechanism to relocate funds.

#### **Gas Optimization**

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM opcodes resulting in a reduction on the total gas cost of a transaction.

#### **Logical Issue**

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on howblock.timestamp works.

#### **Control Flow**

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing invoke-able by anyone under certain circumstances.

#### **Volatile Code**

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that mayresult in a vulnerability.

#### **Coding Style**

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe codebase more legible and, as a result, easily maintainable.

#### **Inconsistency**

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setterfunction.

#### **Coding Best Practices**

ERC 20 Conding Standards are a set of rules that each developer should follow to ensure the code meet a set of creterias and is readable by all the developers.





#### Disclaimer

CFGNINJA has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocation for the Project, and users relying on this 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 the Project in question may pursue, and 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 entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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