Cyberscope

# Audit Report

# PepeFace

September 2023

SHA256 6c20dbfa0647055483632bf33cdd55bccb4a2811ad2d54294da743b066106bc4

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# Analysis

Critical Medium Minor / Informative Pass

| Severity | Code | Description | Status |
|---|---|---|---|
| ● | ST | Stops Transactions | Unresolved |
| ● | OTUT | Transfers User's Tokens | Passed |
| ● | ELFM | Exceeds Fees Limit | Passed |
| ● | MT | Mints Tokens | Passed |
| ● | BT | Burns Tokens | Passed |
| ● | BC | Blacklists Addresses | Passed |

# Diagnostics

Critical Medium Minor / Informative

| Severity | Code | Description | Status |
|---|---|---|---|
| ● | IBC | Inconsistent Balance Calculation | Unresolved |
| ● | EIS | Excessively Integer Size | Unresolved |
| ● | RSW | Redundant Storage Writes | Unresolved |
| ● | PTRP | Potential Transfer Revert Propagation | Unresolved |
| ● | RIC | Redundant If Condition | Unresolved |
| ● | FSA | Fixed Swap Address | Unresolved |
| ● | MEE | Missing Events Emission | Unresolved |
| ● | PVC | Price Volatility Concern | Unresolved |
| ● | ULTW | Transfers Liquidity to Team Wallet | Unresolved |
| ● | RSML | Redundant SafeMath Library | Unresolved |
| ● | IDI | Immutable Declaration Improvement | Unresolved |
| ● | L02 | State Variables could be Declared Constant | Unresolved |
| ● | L04 | Conformance to Solidity Naming Conventions | Unresolved |
| ● | L07 | Missing Events Arithmetic | Unresolved |

| | | | |
|---|---|---|---|
| ● | L09 | Dead Code Elimination | Unresolved |
| ● | L20 | Succeeded Transfer Check | Unresolved |

# Table of Contents

# Review

| | |
|---|---|
| **Contract Name** | Token |
| **Testing Deploy** | https://testnet.bscscan.com/address/0xaafe8cbf6db593e137a8ca1b62df9a26daab8e18 |
| **Symbol** | PPFACE |
| **Decimals** | 18 |
| **Total Supply** | 810,000,000,000,000 |

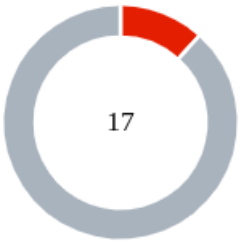
## Audit Updates

| | |
|---|---|
| **Initial Audit** | 15 Sep 2023<br>https://github.com/cyberscope-io/audits/blob/main/ppface/v1/audit.pdf |
| **Corrected Phase 2** | 18 Sep 2023 |

## Source Files

| | |
|---|---|
| **Filename** | SHA256 |
| **contracts/Token.sol** | 6c20dbfa0647055483632bf33cdd55bccb4a2811ad2d54294da743b066106bc4 |

# Findings Breakdown




| Severity | Unresolved | Acknowledged | Resolved | Other |
|---|---|---|---|---|
| Critical | 2 | 0 | 0 | 0 |
| Medium | 0 | 0 | 0 | 0 |
| Minor / Informative | 15 | 0 | 0 | 0 |

## ST - Stops Transactions

| | |
|---|---|
| **Criticality** | Critical |
| **Location** | Token.sol#L365 |
| **Status** | Unresolved |

### Description

The transactions are initially disabled for all users excluding the authorized addresses. The owner can enable the transactions for all users. Once the transactions are enable the owner will not be able to disable them again.

```
    if (isLimitedAddress(from,to)) {
            require(isTradingEnabled,"Trading is not enabled");
        }
```

### Recommendation

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. Some suggestions are:

- Introduce a multi-sign wallet so that many addresses will confirm the action.
- Introduce a governance model where users will vote about the actions.

# IBC - Inconsistent Balance Calculation

| | |
|---|---|
| **Criticality** | Critical |
| **Location** | contracts/Token.sol#L437,453,488 |
| **Status** | Unresolved |

## Description

The contract is utilizing the `internalSwap` function to handle token swaps. Within this function, the contract calculates the variable `amountETH` by subtracting `balanceETH`, which represents the WETH token balance held by the `swapRouter`, from `address(this).balance`, which represents the actual ETH balance of the contract itself. This operation mixes two fundamentally different types of balances: the `WETH` token balance of the `swapRouter` and the `ETH` balance of the contract. This leads to a serious calculation inconsistency that could result in unintended consequences such as incorrect fund transfers or logic errors.

```
function internalSwap(uint256 balanceBefore) internal
inSwapFlag {
    ...
    path[1] = swapRouter.WETH();
    uint256 balanceETH = balanceOf(swapRouter.WETH());
    ...
    uint256 amountETH = address(this).balance.sub(balanceETH);
    ...
    uint256 amount = address(this).balance.sub(balanceBefore);
    (success,) = marketingAddress.call{value: amount, gas:
35000}("");
    ...
}
```

## Recommendation

It is recommended to reconsider the code implementation to ensure that calculations are consistent and accurate. If the intended functionality is to calculate the amount of ETH received from the swap, then the contract should track the ETH balance both before and after the swap. This can be achieved by calculating `balanceETH = address(this).balance;` before the swap occurs and then again after the swap.

Subtracting these two values will calculate the accurate `amountETH` that has been accrued from the swap functionality. This approach avoids mixing different types of balances from different addresses and ensures that the calculated `amountETH` accurately reflects the outcome of the swap operation.

# EIS - Excessively Integer Size

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L220,223 |
| **Status** | Unresolved |

## Description

The contract is using a bigger unsigned integer data type that the maximum size that is required. By using an unsigned integer data type larger than necessary, the smart contract consumes more storage space and requires additional computational resources for calculations and operations involving these variables. This can result in higher transaction costs, longer execution times, and potential scalability bottlenecks.

```
uint256 constant public fee_denominator = 1_000;
uint256 constant public maxFee = 150;
```

## Recommendation

To address the inefficiency associated with using an oversized unsigned integer data type, it is recommended to accurately determine the required size based on the range of values the variable needs to represent.

## RSW - Redundant Storage Writes

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L311 |
| **Status** | Unresolved |

### Description

There are code segments that could be optimized. A segment may be optimized so that it becomes a smaller size, consumes less memory, executes more rapidly, or performs fewer operations.

The contract updates the `_noFee` status of an account even if its current state is the same as the one passed as an argument. As a result, the contract performs redundant storage writes.

```
    function setNoFeeWallet(address account, bool enabled)
public onlyOwner {
        _noFee[account] = enabled;
    }
```

### Recommendation

The team is advised to take these segments into consideration and rewrite them so the runtime will be more performant. That way it will improve the efficiency and performance of the source code and reduce the cost of executing it.

# PTRP - Potential Transfer Revert Propagation

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L454,459,483 |
| **Status** | Unresolved |

## Description

The contract sends funds to `contestReceiver` and `marketingAddress` as part of the transfer flow. These address can either be a wallet address or a contract. If the addresses belongs to a contract then it may revert from incoming payment. As a result, the error will propagate to the token's contract and revert the transfer.

```
if (contestFee > 0) {
    success,) = contestReceiver.call{value: amountETHContest,
gas: 35000}("");
    require(success, "Failed to send ETH to contest receiver");
}

if (marketingFee > 0) {
    (success,) = marketingAddress.call{value:
amountETHMarketing, gas: 35000}("");
    require(success, "Failed to send ETH to marketing fee
receiver");
}
...
(success,) = marketingAddress.call{value: amountETH, gas:
35000}("");
require(success, "Failed to send ETH to marketing fee
receiver");
```

## Recommendation

The contract should tolerate the potential revert from the underlying contracts when the interaction is part of the main transfer flow. This could be achieved by not allowing set contract addresses or by sending the funds in a non-revertable way.

# RIC - Redundant If Condition

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L398 |
| **Status** | Unresolved |

## Description

The contract is using an if statement to check if `feeAmount` is greater than zero within the `takeTaxes` function. However, this check is redundant. However the `_transfer` function already requires `amount` to be greater than zero. and if the `fee` variable is zero, the function will return the `amount` variable in the previous check. Therefore, the condition `if (feeAmount > 0)` will always evaluate to `true`, making it unnecessary and potentially confusing.

```
function takeTaxes(address from, bool isbuy, bool issell,
uint256 amount) internal returns (uint256) {
    uint256 fee;
    if (isbuy)  fee = buyfee;  else if (issell)  fee = sellfee;
else  fee = transferfee;
    if (fee == 0)  return amount;
    uint256 feeAmount = amount * fee / fee_denominator;
    if (feeAmount > 0) {

        balance[address(this)] += feeAmount;
        emit Transfer(from, address(this), feeAmount);

    }
    return amount - feeAmount;
}
```

## Recommendation

It is recommended to remove the `if (feeAmount > 0)` statement, as it does not affect the actual implementation and adds unnecessary complexity to the code. Simplifying the function by removing this redundant check will make the contract easier to read, understand, and maintain.

# FSA - Fixed Swap Address

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L |
| **Status** | Unresolved |

## Description

The swap address is assigned once and it can not be changed. It is a common practice in decentralized exchanges to create new swap versions. A contract that cannot change the swap address may not be able to catch up to the upgrade. As a result, the contract will not be able to migrate to a new liquidity pool pair or decentralized exchange.

```
lpPair =
IFactoryV2(swapRouter.factory()).createPair(swapRouter.WETH(),
address(this));
```

## Recommendation

The team is advised to add the ability to change the pair and router address in order to cover potential liquidity pool migrations. It would be better to support multiple pair addresses so the token will be able to have the same behavior in all the decentralized liquidity pairs.

# MEE - Missing Events Emission

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L311 |
| **Status** | Unresolved |

## Description

The contract performs actions and state mutations from external methods that do not result in the emission of events. Emitting events for significant actions is important as it allows external parties, such as wallets or dApps, to track and monitor the activity on the contract. Without these events, it may be difficult for external parties to accurately determine the current state of the contract.

```
function setNoFeeWallet(address account, bool enabled) public
onlyOwner {
    _noFee[account] = enabled;
}
```

## Recommendation

It is recommended to include events in the code that are triggered each time a significant action is taking place within the contract. These events should include relevant details such as the user's address and the nature of the action taken. By doing so, the contract will be more transparent and easily auditable by external parties. It will also help prevent potential issues or disputes that may arise in the future.

# PVC - Price Volatility Concern

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L371 |
| **Status** | Unresolved |

## Description

The contract accumulates tokens from the taxes to swap them for ETH. The variable `swapThreshold` sets a threshold where the contract will trigger the swap functionality. If the variable is set to a big number, then the contract will swap a huge amount of tokens for ETH.

It is important to note that the price of the token representing it, can be highly volatile. This means that the value of a price volatility swap involving Ether could fluctuate significantly at the triggered point, potentially leading to significant price volatility for the parties involved.

```
if(is_sell(from, to) &&  !inSwap && canSwap(from, to)) {
    uint256 contractTokenBalance = balanceOf(address(this));
    if(swapEnabled && contractTokenBalance >= swapThreshold) {
internalSwap(contractTokenBalance); }
}
```

## Recommendation

The contract could ensure that it will not sell more than a reasonable amount of tokens in a single transaction. A suggested implementation could check that the maximum amount should be less than a fixed percentage of the total supply. Hence, the contract will guarantee that it cannot accumulate a huge amount of tokens in order to sell them.

## ULTW - Transfers Liquidity to Team Wallet

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | Token.sol#L435 |
| **Status** | Unresolved |

## Description

The contract owner has the authority to transfer funds without limit to the team wallet. These funds have been accumulated from fees collected from the contract. The owner may take advantage of it by calling the `setFeeDistribution` function and set the `sellfee` to zero.

```
function internalSwap(uint256 balanceBefore) internal
inSwapFlag {
        ...
        if (sellfee > 0) {
            ...
        } else if (balanceOf(address(this)) > 0) {

swapRouter.swapExactTokensForETHSupportingFeeOnTransferTokens(
                balanceOf(address(this)),
                0,
                path,
                address(this),
                block.timestamp
            );
            uint256 amountETH =
address(this).balance.sub(balanceBefore);
             (success,) = marketingAddress.call{value:
amountETH, gas: 35000}("");
            require(success, "Failed to send ETH to marketing
fee receiver");
        }
```

## Recommendation

The contract could embody a check for the maximum amount of funds that can be swapped, since a huge amount may volatile the token's price. The team should carefully manage the private keys of the owner’s account. We strongly recommend a powerful

security mechanism that will prevent a single user from accessing the contract admin functions. Some suggestions are:

- Introduce a time-locker mechanism with a reasonable delay.
- Introduce a multi-sign wallet so that many addresses will confirm the action.
- Introduce a governance model where users will vote about the actions.
- Renouncing the ownership will eliminate the threats but it is non-reversible.

## RSML - Redundant SafeMath Library

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol |
| **Status** | Unresolved |

### Description

SafeMath is a popular Solidity library that provides a set of functions for performing common arithmetic operations in a way that is resistant to integer overflows and underflows.

Starting with Solidity versions that are greater than or equal to 0.8.0, the arithmetic operations revert to underflow and overflow. As a result, the native functionality of the Solidity operations replaces the SafeMath library. Hence, the usage of the SafeMath library adds complexity, overhead and increases gas consumption unnecessarily.

```
library SafeMath {...}
```

### Recommendation

The team is advised to remove the SafeMath library. Since the version of the contract is greater than `0.8.0` then the pure Solidity arithmetic operations produce the same result.

If the previous functionality is required, then the contract could exploit the `unchecked { ... }` statement.

Read more about the breaking change on https://docs.soliditylang.org/en/v0.8.16/080-breaking-changes.html#solidity-v0-8-0-breaking-changes.

## IDI - Immutable Declaration Improvement

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol#L261,277 |
| **Status** | Unresolved |

### Description

The contract declares state variables that their value is initialized once in the constructor and are not modified afterwards. The `immutable` is a special declaration for this kind of state variables that saves gas when it is defined.

```
swapRouter
lpPair
```

### Recommendation

By declaring a variable as immutable, the Solidity compiler is able to make certain optimizations. This can reduce the amount of storage and computation required by the contract, and make it more gas-efficient.

## L02 - State Variables could be Declared Constant

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol#L201,225,226 |
| **Status** | Unresolved |

### Description

State variables can be declared as constant using the constant keyword. This means that the value of the state variable cannot be changed after it has been set. Additionally, the constant variables decrease gas consumption of the corresponding transaction.

```
address public MKT = 0xebb733EAB3C98975dEdd7341F0C1b5E7752F38D1
uint256 public targetLiquidity = 20
uint256 public targetLiquidityDenominator = 100
```

### Recommendation

Constant state variables can be useful when the contract wants to ensure that the value of a state variable cannot be changed by any function in the contract. This can be useful for storing values that are important to the contract's behavior, such as the contract's address or the maximum number of times a certain function can be called. The team is advised to add the constant keyword to state variables that never change.

## L04 - Conformance to Solidity Naming Conventions

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol#L111,201,236,237,238,247,248,249,250,251,252,253,254,327,332,337,353,389,411,419,499,507,519 |
| **Status** | Unresolved |

### Description

The Solidity style guide is a set of guidelines for writing clean and consistent Solidity code. Adhering to a style guide can help improve the readability and maintainability of the Solidity code, making it easier for others to understand and work with.

The followings are a few key points from the Solidity style guide:

1. Use camelCase for function and variable names, with the first letter in lowercase (e.g., myVariable, updateCounter).
2. Use PascalCase for contract, struct, and enum names, with the first letter in uppercase (e.g., MyContract, UserStruct, ErrorEnum).
3. Use uppercase for constant variables and enums (e.g., MAX_VALUE, ERROR_CODE).
4. Use indentation to improve readability and structure.
5. Use spaces between operators and after commas.
6. Use comments to explain the purpose and behavior of the code.
7. Keep lines short (around 120 characters) to improve readability.

```
function WETH() external pure returns (address);
address public MKT = 0xebb733EAB3C98975dEdd7341F0C1b5E7752F38D1
string constant private _name = "$PepeFace"
string constant private _symbol = "PPFACE"
uint8 constant private _decimals = 18
event _enableTrading();
event _setPresaleAddress(address account, bool enabled);
event _toggleCanSwapFees(bool enabled);
event _changePair(address newLpPair);
event _changeWallets(address marketing, address contest);
event _adminTokenRecovery(address tokenAddress, uint256
tokenAmount);
event _feeDistributionUpdated(uint256 liquidityFee,uint256
marketingFee,uint256 contestFee);
event _transferBuyFeeUpdated(uint256 transferFee,uint256
totalBuyFee);

...
```

## Recommendation

By following the Solidity naming convention guidelines, the codebase increased the readability, maintainability, and makes it easier to work with.

Find more information on the Solidity documentation https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-convention.

## L07 - Missing Events Arithmetic

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol#L521 |
| **Status** | Unresolved |

### Description

Events are a way to record and log information about changes or actions that occur within a contract. They are often used to notify external parties or clients about events that have occurred within the contract, such as the transfer of tokens or the completion of a task.

It's important to carefully design and implement the events in a contract, and to ensure that all required events are included. It's also a good idea to test the contract to ensure that all events are being properly triggered and logged.

```
swapThreshold = _amount
```

### Recommendation

By including all required events in the contract and thoroughly testing the contract's functionality, the contract ensures that it performs as intended and does not have any missing events that could cause issues with its arithmetic.

# L09 - Dead Code Elimination

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol#L337 |
| **Status** | Unresolved |

## Description

In Solidity, dead code is code that is written in the contract, but is never executed or reached during normal contract execution. Dead code can occur for a variety of reasons, such as:

- Conditional statements that are always false.
- Functions that are never called.
- Unreachable code (e.g., code that follows a return statement).

Dead code can make a contract more difficult to understand and maintain, and can also increase the size of the contract and the cost of deploying and interacting with it.

```
function is_transfer(address ins, address out) internal view
returns (bool) {
        bool _is_transfer = !isLpPair[out] && !isLpPair[ins];
        return _is_transfer;
    }
```

## Recommendation

To avoid creating dead code, it's important to carefully consider the logic and flow of the contract and to remove any code that is not needed or that is never executed. This can help improve the clarity and efficiency of the contract.

## L20 - Succeeded Transfer Check

| | |
|---|---|
| **Criticality** | Minor / Informative |
| **Location** | contracts/Token.sol#L509 |
| **Status** | Unresolved |

### Description

According to the ERC20 specification, the transfer methods should be checked if the result is successful. Otherwise, the contract may wrongly assume that the transfer has been established.

```
IERC20(_tokenAddress).transfer(address(msg.sender),
_tokenAmount)
```

### Recommendation

The contract should check if the result of the transfer methods is successful. The team is advised to check the SafeERC20 library from the Openzeppelin library.

# Functions Analysis

| Contract | Type | Bases | | |
|---|---|---|---|---|
| | **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
| | | | | |
| **SafeMath** | Library | | | |
| | add | Internal | | |
| | sub | Internal | | |
| | sub | Internal | | |
| | mul | Internal | | |
| | div | Internal | | |
| | div | Internal | | |
| | | | | |
| **Context** | Implementation | | | |
| | | Public | ✓ | - |
| | _msgSender | Internal | | |
| | _msgData | Internal | | |
| | | | | |
| **Ownable** | Implementation | Context | | |
| | | Public | ✓ | - |
| | owner | Public | | - |
| | renounceOwnership | Public | ✓ | onlyOwner |
| | transferOwnership | Public | ✓ | onlyOwner |

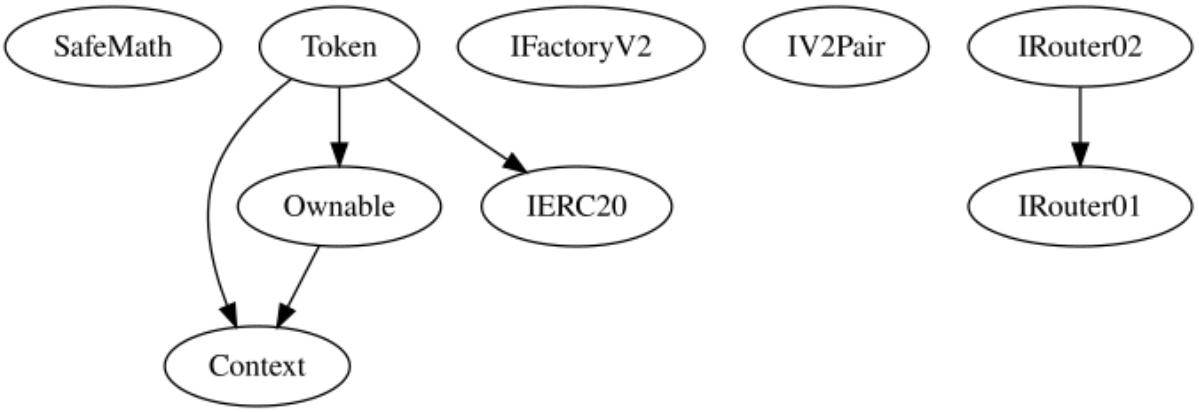
| | | | | |
|---|---|---|---|---|
| | _setOwner | Private | ✓ | |
| | | | | |
| **IFactoryV2** | Interface | | | |
| | getPair | External | | - |
| | createPair | External | ✓ | - |
| | | | | |
| **IV2Pair** | Interface | | | |
| | factory | External | | - |
| | getReserves | External | | - |
| | sync | External | ✓ | - |
| | | | | |
| **IRouter01** | Interface | | | |
| | factory | External | | - |
| | WETH | External | | - |
| | addLiquidityETH | External | Payable | - |
| | addLiquidity | External | ✓ | - |
| | swapExactETHForTokens | External | Payable | - |
| | getAmountsOut | External | | - |
| | getAmountsIn | External | | - |
| | | | | |
| **IRouter02** | Interface | IRouter01 | | |
| | swapExactTokensForETHSupportingFeeOnTransferTokens | External | ✓ | - |
| | swapExactETHForTokensSupportingFeeOnTransferTokens | External | Payable | - |

| | | | | |
|---|---|---|---|---|
| | swapExactTokensForTokensSupportingFeeOnTransferTokens | External | ✓ | - |
| | swapExactTokensForTokens | External | ✓ | - |
| | | | | |
| **IERC20** | Interface | | | |
| | totalSupply | External | | - |
| | decimals | External | | - |
| | symbol | External | | - |
| | name | External | | - |
| | getOwner | External | | - |
| | balanceOf | External | | - |
| | transfer | External | ✓ | - |
| | allowance | External | | - |
| | approve | External | ✓ | - |
| | transferFrom | External | ✓ | - |
| | | | | |
| **Token** | Implementation | Context, Ownable, IERC20 | | |
| | totalSupply | External | | - |
| | decimals | External | | - |
| | symbol | External | | - |
| | name | External | | - |
| | getOwner | External | | - |
| | allowance | External | | - |
| | balanceOf | Public | | - |

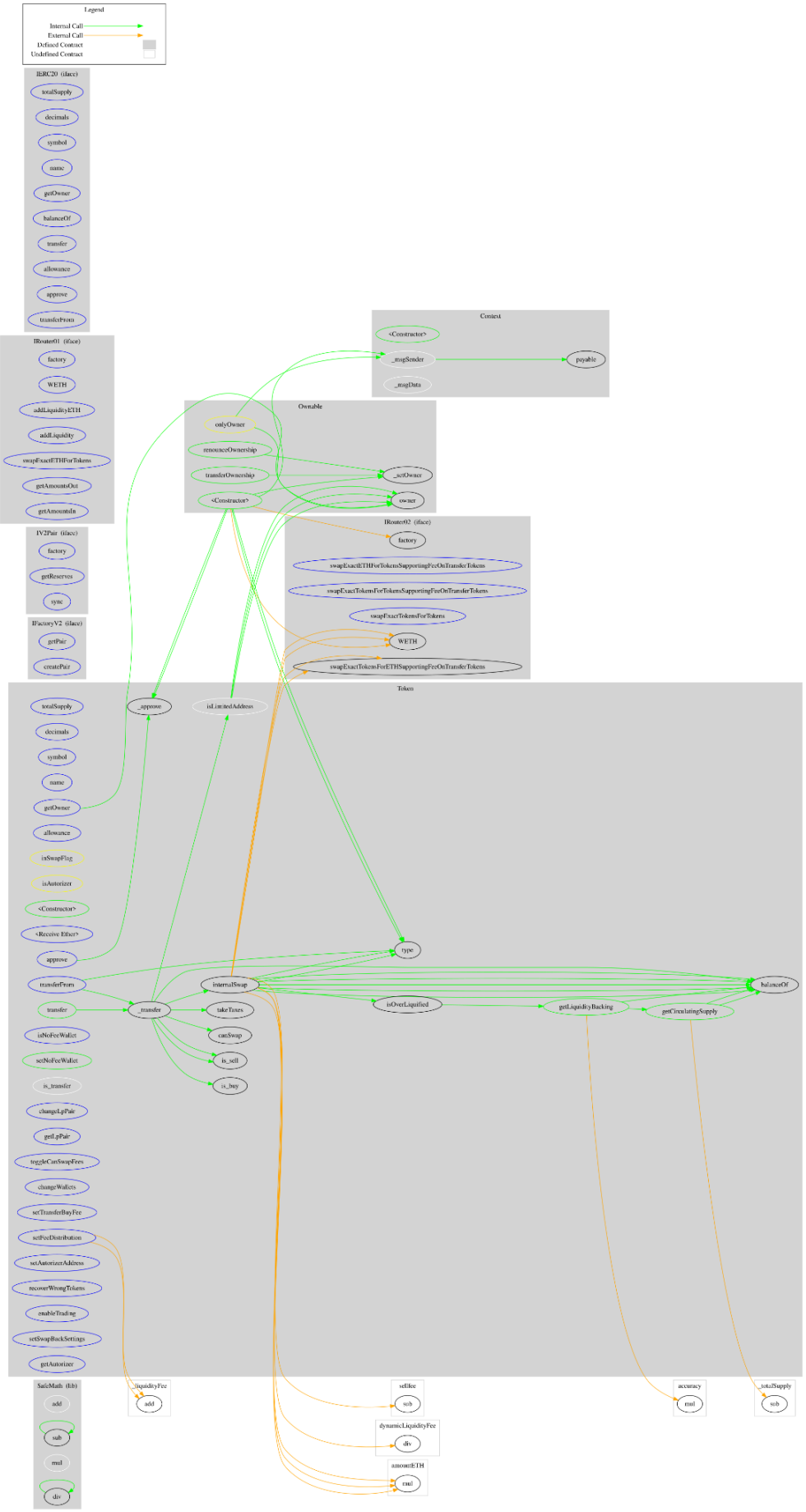
| | | | | |
|---|---|---|---|---|
| | | Public | ✓ | - |
| | | External | Payable | - |
| | transfer | Public | ✓ | - |
| | approve | External | ✓ | - |
| | _approve | Internal | ✓ | |
| | transferFrom | External | ✓ | - |
| | isNoFeeWallet | External | | - |
| | setNoFeeWallet | Public | ✓ | onlyOwner |
| | isLimitedAddress | Internal | | |
| | is_buy | Internal | | |
| | is_sell | Internal | | |
| | is_transfer | Internal | | |
| | canSwap | Internal | | |
| | changeLpPair | External | ✓ | isAutorizer |
| | getLpPair | External | | - |
| | toggleCanSwapFees | External | ✓ | onlyOwner |
| | _transfer | Internal | ✓ | |
| | changeWallets | External | ✓ | isAutorizer |
| | takeTaxes | Internal | ✓ | |
| | setTransferBuyFee | External | ✓ | onlyOwner |
| | setFeeDistribution | External | ✓ | onlyOwner |
| | internalSwap | Internal | ✓ | inSwapFlag |
| | setAutorizerAddress | External | ✓ | isAutorizer |

| | | | | |
|---|---|---|---|---|
| | recoverWrongTokens | External | ✓ | isAutorizer |
| | enableTrading | External | ✓ | onlyOwner |
| | setSwapBackSettings | External | ✓ | onlyOwner |
| | getAutorizer | External | | - |
| | getCirculatingSupply | Public | | - |
| | getLiquidityBacking | Public | | - |
| | isOverLiquified | Public | | - |

# Inheritance Graph



# Flow Graph


Legend
Internal Call
External Call
Defined Contract
Undefined Contract
IERC20 (iface)
totalSupply
decimals
symbol
name
getOwner
balanceOf
transfer
allowance
approve
transferFrom
IRouter01 (iface)
factory
WETH
addLiquidityETH
addLiquidity
swapExactETHForTokens
getAmountsOut
getAmountsIn
IV2Pair (iface)
factory
getReserves
sync
IFactoryV2 (iface)
getPair
createPair
Context
<Constructor>
_msgSender
payable
_msgData
Ownable
onlyOwner
renounceOwnership
transferOwnership
<Constructor>
_setOwner
owner
IRouter02 (iface)
factory
swapExactETHForTokensSupportingFeeOnTransferTokens
swapExactTokensForTokensSupportingFeeOnTransferTokens
swapExactTokensForTokens
WETH
swapExactTokensForETHSupportingFeeOnTransferTokens
Token
totalSupply
decimals
symbol
name
getOwner
allowance
inSwapFlag
isAutorizer
<Constructor>
<Receive Ether>
approve
transferFrom
transfer
isNoFeeWallet
setNoFeeWallet
is_transfer
changeLpPair
getLpPair
toggleCanSwapFees
changeWallets
setTransferBuyFee
setFeeDistribution
setAutorizerAddress
recoverWrongTokens
enableTrading
setSwapBackSettings
getAutorizer
_approve
isLimitedAddress
type
internalSwap
_transfer
takeTaxes
canSwap
is_sell
is_buy
isOverLiquified
getLiquidityBacking
getCirculatingSupply
balanceOf
SafeMath (lib)
add
sub
mul
div
_liquidityFee
add
sellfee
sub
dynamicLiquidityFee
div
amountETH
mul
accuracy
mul
_totalSupply
sub

# Summary

PepeFace contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. There are some functions that can be abused by the owner like stop transactions. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats. There is also a limit of max 15% fees.

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Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.

**The Cyberscope team**

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