CONTRACT WOLF

*Security Assessment*

# FUST

Verified on 11/18/25

## SUMMARY

| Project | CHAIN | METHODOLOGY |
|---|---|---|
| FUST | - | Manual & Automatic Analysis |

| FILES | DELIVERY | TYPE |
|---|---|---|
| Single | 11/18/25 | Standard Audit |

| Total Findings | Critical | Major | Medium | Minor | Informational | Resolved |
|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 0 | 1 |

| | |
|---|---|
| 🟥 0 Critical | An exposure that can affect the contract functions in several events that can risk and disrupt the contract |
| 🟧 1 Major | An opening & exposure to manipulate the contract in an unwanted manner |
| 🟧 0 Medium | An opening that could affect the outcome in executing the contract in a specific situation |
| ⬜ 0 Minor | An opening but doesn't have an impact on the functionality of the contract |
| 🟦 0 Informational | An opening that consists information but will not risk or affect the contract |
| 🟩 1 Resolved | ContractWolf's findings has been acknowledged & resolved by the project |

**STATUS** ✔️**AUDIT PASSED**

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## DISCLAIMER | FUSD

ContractWolf audits and reports should not be considered as a form of project's "Advertisement" and does not cover any interaction and assessment from "Project Contract" to "External Contracts" such as PancakeSwap, UniSwap, SushiSwap or similar.

**ContractWolf** does not provide any warranty on its released report and should not be used as a decision to invest into audited projects.

**ContractWolf** provides a transparent report to all its "Clients" and to its "Clients Participants" and will not claim any guarantee of bug-free code within its **SMART CONTRACT**.

**ContractWolf**'s presence is to analyze, audit and assess the Client's Smart Contract to find any underlying risk and to eliminate any logic and flow errors within its code.

*Each company or project should be liable to its security flaws and functionalities.*

## SCOPE OF WORK | FUSD

**FUST** team has agreed and provided us with the files that need to be tested (*Github, BSCscan, Etherscan, Local files etc*). The scope of audit is the main contract.

The goal of this engagement is to identify if there is a possibility of security flaws in the implementation of smart contract and its systems.

ContractWolf will be focusing on contract issues and functionalities along with the project claims from smart contract to their website, whitepaper, repository which has been provided by **FUST**.

## AUDITING APPROACH | FUST

Every line of code along with its functionalities will undergo manual review to check for security issues, quality of logic and contract scope of inheritance. The manual review will be done by our team that will document any issues that they discovered.

### METHODOLOGY

The auditing process follows a routine series of steps :

1. Code review that includes the following :
   - Review of the specifications, sources and instructions provided to ContractWolf to make sure we understand the size, scope and functionality of the smart contract.
   - Manual review of code. Our team will have a process of reading the code line-by-line with the intention of identifying potential vulnerabilities, underlying and hidden security flaws.
2. Testing and automated analysis that includes :
   - Testing the smart contract function with common test cases and scenarios to ensure that it returns the expected results.
3. Best practices and ethical review. The team will review the contract with the aim to improve efficiency, effectiveness, clarifications, maintainability, security and control within the smart contract.
4. Recommendations to help the project take steps to eliminate or minimize threats and secure the smart contract.

## TOKEN DETAILS | FUSD

The World's Leading Appreciating Stable Coin

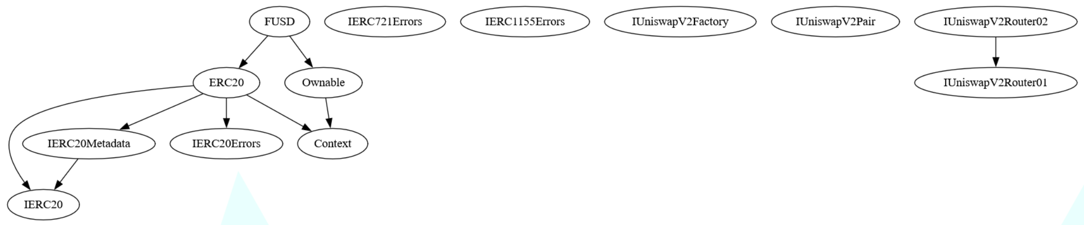
| Token Name | Symbol | Decimal | Total Supply | Chain |
|---|---|---|---|---|
| FUSD | FUSD | 18 | - | - |

## SOURCE

| | |
|---|---|
| Source | - |

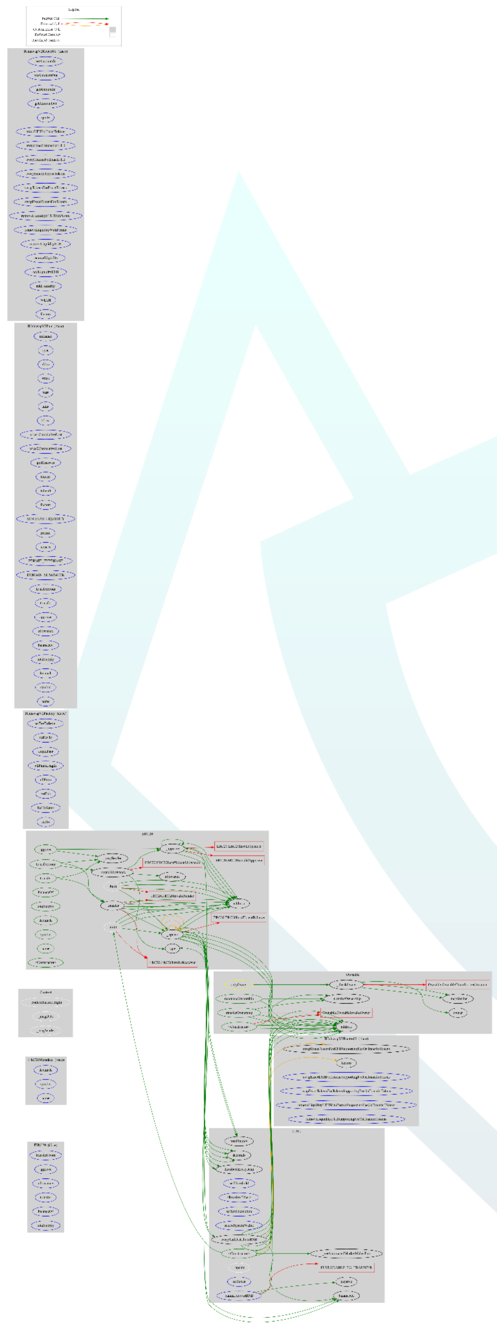
## INHERITANCE GRAPH | FUST

Inheritance Graph of Contract Functions



## CALL GRAPH | FUST

Call Graph of Contract Functions



## FINDINGS | FUSD

| Total Findings | Critical | Major | Medium | Minor | Informational | Resolved |
|---|---|---|---|---|---|---|
| 1 | 0 | 1 | 0 | 0 | 0 | 1 |

This report has been prepared to state the issues and vulnerabilities for FUSD through this audit. The goal of this report findings is to identify specifically and fix any underlying issues and errors

| ID | Title | File & Line # | Severity | Status |
|---|---|---|---|---|
| SWC-169 | Reentrancy | FUSDV2.sol, L: 170 | Critical | ● Resolved |

## SWC ATTACKS | FUST

Smart Contract Weakness Classification and Test Cases

| ID | Description | Status |
|---|---|---|
| SWC-100 | Function Default Visibility | ● Passed |
| SWC-101 | Integer Overflow and Underflow | ● Passed |
| SWC-102 | Outdated Compiler Version | ● Passed |
| SWC-103 | Floating Pragma | ● Passed |
| SWC-104 | Unchecked Call Return Value | ● Passed |
| SWC-105 | Unprotected Ether Withdrawal | ● Passed |
| SWC-106 | Unprotected SELF DESTRUCT Instruction | ● Passed |
| SWC-107 | Reentrancy | ● Passed |
| SWC-108 | State Variable Default Visibility | ● Passed |
| SWC-109 | Uninitialized Storage Pointer | ● Passed |
| SWC-110 | Assert Violation | ● Passed |
| SWC-111 | Use of Deprecated Solidity Functions | ● Passed |
| SWC-112 | Delegatecall to Untrusted Callee | ● Passed |
| SWC-113 | DoS with Failed Call | ● Passed |
| SWC-114 | Transaction Order Dependence | ● Passed |
| SWC-115 | Authorization through tx.origin | ● Passed |
| SWC-116 | Block values as a proxy for time | ● Passed |
| SWC-117 | Signature Malleability | ● Passed |
| SWC-118 | Incorrect Constructor Name | ● Passed |
| SWC-119 | Shadowing State Variables | ● Passed |
| SWC-120 | Weak Sources of Randomness from Chain Attributes | ● Passed |
| SWC-121 | Missing Protection against Signature Replay Attacks | ● Passed |
| SWC-122 | Lack of Proper Signature Verification | ● Passed |

| ID | Description | Status |
|---|---|---|
| SWC-123 | Requirement Violation | ● Passed |
| SWC-124 | Write to Arbitrary Storage Location | ● Passed |
| SWC-125 | Incorrect Inheritance Order | ● Passed |
| SWC-126 | Insufficient Gas Griefing | ● Passed |
| SWC-127 | Arbitrary Jump with Function Type Variable | ● Passed |
| SWC-128 | DoS With Block Gas Limit | ● Passed |
| SWC-129 | Typographical Error | ● Passed |
| SWC-130 | Right-To-Left-Override control character(U+202E) | ● Passed |
| SWC-131 | Presence of unused variables | ● Passed |
| SWC-132 | Unexpected Ether balance | ● Passed |
| SWC-133 | Hash Collisions With Multiple Variable Arguments | ● Passed |
| SWC-134 | Message call with hardcoded gas amount | ● Passed |
| SWC-135 | Code With No Effects | ● Passed |
| SWC-136 | Unencrypted Private Data On-Chain | ● Passed |

## CW ASSESSMENT | FUST

ContractWolf Vulnerability and Security Tests

| ID | Name | Description | Status |
|---|---|---|---|
| CW-001 | Multiple Version | Presence of multiple compiler version across all contracts | ✓ |
| CW-002 | Incorrect Access Control | Additional checks for critical logic and flow | ✓ |
| CW-003 | Payable Contract | A function to withdraw ether should exist otherwise the ether will be trapped | ✓ |
| CW-004 | Custom Modifier | major recheck for custom modifier logic | ✓ |
| CW-005 | Divide Before Multiply | Performing multiplication before division is generally better to avoid loss of precision | ✓ |
| CW-006 | Multiple Calls | Functions with multiple internal calls | ✓ |
| CW-007 | Deprecated Keywords | Use of deprecated functions/operators such as block.blockhash() for blockhash(), msg.gas for gasleft(), throw for revert(), sha3() for keccak256(), callcode() for delegatecall(), suicide() for selfdestruct(), constant for view or var for actual type name should be avoided to prevent unintended errors with newer compiler versions | ✓ |
| CW-008 | Unused Contract | Presence of an unused, unimported or uncalled contract | ✓ |
| CW-009 | Assembly Usage | Use of EVM assembly is error-prone and should be avoided or double-checked for correctness | ✓ |
| CW-010 | Similar Variable Names | Variables with similar names could be confused for each other and therefore should be avoided | ✓ |
| CW-011 | Commented Code | Removal of commented/unused code lines | ✓ |
| CW-012 | SafeMath Override | SafeMath is no longer needed starting with Solidity v0.8+. The compiler now has built-in overflow checking. | ✓ |

## FIXES & RECOMMENDATION

### SWC-107 | Reentrancy

unchecked external calls & reentrancy risks on **`swapAndDistributeBaseToken()`**
use reentrancyguard/nonReentrant on the function

**Recommendation**
always reset the state **BEFORE** external calls

```
function swapAndDistributeBaseToken() public nonReentrant {
    // Prevent multiple simultaneous swaps - optional checkpoint
    if (swapping) {
        return;
    }
    swapping = true;

    // Capture and reset state BEFORE external calls
    uint256 currentTokensLiquidity = totalTokensLiquidity;
    uint256 currentTokensOperations = totalTokensOperations;
    uint256 tokenBalance = balanceOf(address(this));

  totalTokensLiquidity = 0;
    totalTokensOperations = 0;

      if (tokenBalance == 0) {
        swapping = false;
        return;
    }

   address[] memory path = new address[](2); // and so on..

}
```

## AUDIT COMMENTS | FUST

Smart Contract audit comment for a non-technical perspective

🟢 Owner can renounce and transfer ownership
🟢 Owner can update buy and sell taxes up to 25% each
🟢 Owner can change ecosystem wallet
🟢 Owner can exclude/include addresses from taxes
🟢 Owner can update threshold between 0 and 10,000
🟢 Owner can collect BNB from contract
🟢 Owner can burn tokens
🟢 Owner cannot mint after initial deployment
🟢 Owner cannot block users
🟢 Owner cannot pause contract

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Blockchain Security - Smart Contract Audits