

[Audited]

<https://etherscan.io/address/0x4aa42145Aa6Ebf72e164C9bBC74fbD3788045016#code>

(EternalStorageProxy)

The above contract is a proxy for:

<https://etherscan.io/address/0x166124b75c798Cedf1B43655E9B5284eBd5203DB#code>

(XDaiForeignBridge)

## Scope of Audit

The scope of this audit was to analyze and document the EternalStorageProxy & XDaiForeignBridge smart contracts for quality, security, correctness and any possible vulnerabilities.

## Checked Vulnerabilities

- Access Management
- Arbitrary write to storage
- Centralization of control
- Ether theft
- Improper or missing events
- Logical issues and flaws
- Arithmetic Correctness
- Race conditions / front running
- SWC Registry
- Re-entrancy
- Timestamp Dependence
- Gas Limit and Loops
- Exception Disorder
- Gasless Send
- Use of tx.origin
- Malicious libraries
- Compiler version not fixed
- Address hardcoded
- Divide before multiply
- Integer overflow/underflow
- ERC's conformance
- Dangerous strict equalities
- Tautology or contradiction
- Return values of low-level calls
- Missing Zero Address Validation
- Private modifier
- Revert/require functions
- Multiple Sends
- Using suicide (As it is deprecated)
- Using delegatecall
- Upgradeable safety

- Using throw (As it is deprecated)
- Using inline assembly
- Style guide violation
- Unsafe type inference
- Implicit visibility level

## Techniques and Methods

Throughout the audit of the smart contracts, care was taken to ensure:

- The overall quality of the code in the contracts.
- Adherence to solidity's best practices.
- Code documentation, comments, mathematical logic, expected behavior etc.
- Efficient usage of gas.
- Code safety from re-entrancy and other well known vulnerabilities.

The following techniques, methods, and tools were used to review all the smart contracts

### **Structural Analysis**

In this stage, we meticulously analyzed the design patterns and structure of the smart contracts. Our objective was to ensure that the smart contract is meticulously structured to mitigate any potential issues that may arise in the future.

### **Static Analysis**

A comprehensive static analysis of the smart contracts was conducted to identify potential vulnerabilities. This involved leveraging a range of automated tools to thoroughly assess the security posture of the smart contracts.

### **Code Review / Manual Analysis**

Manual code analysis was conducted to uncover new vulnerabilities and validate those identified during static analysis. This involved a meticulous examination of the contracts, ensuring thorough coverage of potential risks. Additionally, the findings from automated analysis were manually verified to ensure accuracy and completeness.

### **Gas Consumption**

We meticulously monitored gas consumption to identify areas for optimization and enhance efficiency. This involved analyzing code execution to pinpoint opportunities for reducing gas usage while maintaining optimal functionality.

### **Tools and Platforms used for Audit**

Foundry, Solidity Visual Developer, Solhint, Slither, Static Analysis, Mythril  
Issue Categories

## Types of Severity

Each issue outlined in this report has been categorized according to its severity level, with four distinct classifications. Below, we have provided detailed explanations for each severity level to ensure clear understanding and appropriate action.

### High Severity Issues

A high severity issue or vulnerability indicates a critical risk to your smart contract's security. These issues have the potential to be exploited, posing significant threats to the performance and functionality of the contract. It is strongly recommended to prioritize the resolution of these issues before deploying the contract in a live environment.

### Medium Severity Issues

Medium severity issues typically stem from errors and deficiencies within the smart contract code. While they may not pose immediate critical risks, they have the potential to cause problems and should be addressed to ensure the contract's robustness and reliability.

### Low Severity Issues

Low-level severity issues typically have minimal impact and serve as warnings rather than critical vulnerabilities. While they may not require immediate attention, it is advisable to address them at some point in the future to maintain the overall integrity and quality of the smart contract.

### Informational

These levels indicate improvement requests, general questions, cosmetic or documentation errors, or requests for information. They have a low-to-no impact on the functionality or security of the smart contract.

## Types of Issues

### Open

Security vulnerabilities have been identified and must be resolved; however, they remain unresolved at present.

### Resolved

These are the issues identified during the initial audit and have been successfully resolved.

### Acknowledged

These are vulnerabilities that have been acknowledged but are pending resolution.

### Partially Resolved

Significant efforts have been made to mitigate the risk/impact of the security issue, but it has not been fully resolved yet.

## Introduction

XDaiForeignBridge inherits from ForeignBridgeErcToNative, SavingsDaiConnector, and GSNForeignERC20Bridge. The contract appears to be part of a bridge mechanism that allows for the transfer of ERC20 tokens (specifically DAI) between different blockchains or layers, with additional functionality for interacting with a savings mechanism (sDAI vault).

## Issues Found

### High Severity Issues

#### 1. Unchecked transfer

The return value of transfer/transferFrom is not checked.

- [ ] ID-1 InterestConnector.\_transferInterest(address,uint256) ignores return value by ERC20(\_token).transfer(receiver,\_amount)

[https://github.com/balajipachai/audit-challenge/blob/main/src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\\_contracts/erc20\\_to\\_native/InterestConnector.sol#L182-L193](https://github.com/balajipachai/audit-challenge/blob/main/src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/InterestConnector.sol#L182-L193)

```
function _transferInterest(address _token, uint256 _amount) internal {
    address receiver = interestReceiver(_token);
    require(receiver != address(0), "Receiver can't be Null");
    ERC20(_token).transfer(receiver, _amount);
    if (AddressUtils.isContract(receiver)) {
        IInterestReceiver(receiver).onInterestReceived(_token);
    }
    emit PaidInterest(_token, receiver, _amount);
}
```

- [ ] ID-2 ForeignBridgeErcToNative.relayTokens(address,uint256) ignores return value by erc20token().transferFrom(msg.sender,address(this),\_amount)

[https://github.com/balajipachai/audit-challenge/blob/main/src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\\_contracts/erc20\\_to\\_native/ForeignBridgeErcToNative.sol#L64-L75](https://github.com/balajipachai/audit-challenge/blob/main/src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#L64-L75)

```
function relayTokens(address _receiver, uint256 _amount) public {
    require(_receiver != bridgeContractOnOtherSide(), "Relayed to Bridge address");
    require(_receiver != address(0), "Relayed to Null address");
    require(_receiver != address(this), "Relayed to this address");
```

```

    require(_amount > 0, "Relayed zero funds");
    require(withinLimit(_amount), "Exceeds bridge daily limit");
    addTotalSpentPerDay(getCurrentDay(), _amount);
    erc20token().transferFrom(msg.sender, address(this), _amount);
    emit UserRequestForAffirmation(_receiver, _amount);
}

```

- [ ] ID-3 ERC20Bridge.relayTokens(address,uint256) ignores return value by erc20token().transferFrom(msg.sender,address(this),\_amount)

[https://github.com/balajipachai/audit-challenge/blob/main/src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\\_contracts/ERC20Bridge.sol#L19-L28](https://github.com/balajipachai/audit-challenge/blob/main/src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ERC20Bridge.sol#L19-L28)

```

function relayTokens(address _receiver, uint256 _amount) public {
    require(_receiver != address(0), "Receiver can't be Null");
    require(_receiver != address(this), "Receiver can't be the Bridge");
    require(_amount > 0, "Relayed zero tokens");
    require(withinLimit(_amount), "Relayed above limit");
    addTotalSpentPerDay(getCurrentDay(), _amount);
    erc20token().transferFrom(msg.sender, address(this), _amount);
    emit UserRequestForAffirmation(_receiver, _amount);
}

```

Several tokens do not revert in case of failure and return false.

### Recommendation:

Use SafeERC20, or ensure that the transfer/transferFrom return value is checked.

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### Automated Tests Slither

#### INFO:Detectors:

SafeERC20.safeTransferFrom(address,address,uint256)

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#38-48) uses arbitrary from in transferFrom: LegacyERC20(\_token).transferFrom(\_from,address(this),\_value)

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#39)

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#arbitrary-from-in-transferfrom>

#### INFO:Detectors:

ERC20Bridge.relayTokens(address,uint256)

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#19-28) ignores return value by erc20token().transferFrom(msg.sender,address(this),\_amount)

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#26)

ForeignBridgeErcToNative.relayTokens(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#64-75) ignores return value by  
erc20token().transferFrom(msg.sender,address(this),\_amount)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#73)  
InterestConnector.\_transferInterest(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#182-193) ignores return value by ERC20(\_token).transfer(receiver,\_amount)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#186)

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#unchecked-transfer>

#### INFO:Detectors:

BaseRelayRecipient.\_msgSender()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#18-29) is declared view but contains assembly code  
BaseRelayRecipient.\_msgData()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#39-56) is declared view but contains assembly code  
Message.parseMessage(bytes)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#29-41) is declared view but contains assembly code  
Message.recoverAddressFromSignedMessage(bytes,bytes,bool)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#51-70) is declared view but contains assembly code  
Message.hasEnoughValidSignatures(bytes,bytes,IBridgeValidators,bool)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#95-128) is declared view but contains assembly code

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#constant-functions-using-assembly-code>

#### INFO:Detectors:

LegacyERC20  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ERC677.sol#13-16) has incorrect ERC20 function interface:LegacyERC20.transfer(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ERC677.sol#14)  
LegacyERC20  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ERC677.sol#13-16) has incorrect ERC20 function interface:LegacyERC20.transferFrom(address,address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ERC677.sol#15)  
Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-erc20-interface>

#### INFO:Detectors:

DecimalShiftBridge.\_shiftUint(uint256,int256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#55-63) uses a dangerous strict equality:  
- \_shift == 0  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#56)  
InterestConnector.\_withdraw(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#219-226) uses a dangerous strict equality:  
- withdrawal == 0  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#222)

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#dangerous-strict-equalities>

#### INFO:Detectors:

Reentrancy in InterestConnector.\_withdraw(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#219-226):  
External calls:  
- redeemed = \_safeWithdrawTokens(\_token,withdrawal)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#223)  
- ERC20(\_token).balanceOf(address(this))  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#281)  
State variables written after the call(s):  
- \_setInvestedAmount(\_token,invested - redeemed)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#225)  
- uintStorage[keccak256()(abi.encodePacked(investedAmount,\_token))] = \_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#210)  
EternalStorage.uintStorage  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#8)  
can be used in cross function reentrancies:  
- BasicBridge.\_setGasPrice(uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicBridge.sol#57-60)  
- InterestConnector.\_setInvestedAmount(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#209-211)  
- InterestConnector.\_setMinCashThreshold(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#252-254)  
- InterestConnector.\_setMinInterestPaid(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#261-263)  
- BasicBridge.\_setRequiredBlockConfirmations(uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicBridge.sol#43-47)  
- BasicTokenBridge.addTotalSpentPerDay(uint256,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#62-64)  
- BasicTokenBridge.dailyLimit()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#28-30)  
- DecimalShiftBridge.decimalShift()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#27-29)  
- InitializableBridge.deployedAtBlock()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/InitializableBridge.sol#8-10)  
- BasicTokenBridge.executionDailyLimit()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#32-34)  
- BasicTokenBridge.executionMaxPerTx()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#40-42)

```

- BasicBridge.gasPrice()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#35-37)
- InterestConnector.investedAmount(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#155-157)
- BasicTokenBridge.maxPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#36-38)
- InterestConnector.minCashThreshold(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#80-82)
- InterestConnector.minInterestPaid(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#99-101)
- BasicTokenBridge.minPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#44-46)
- BasicBridge.requiredBlockConfirmations()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#49-51)
- BasicTokenBridge.setDailyLimit(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#70-74)
- BasicTokenBridge.setExecutionDailyLimit(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#76-80)
- BasicTokenBridge.setExecutionMaxPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#82-85)
- BasicTokenBridge.setMaxPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#87-90)
- BasicTokenBridge.setMinPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#92-95)
- BasicTokenBridge.totalExecutedPerDay(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#24-26)
- BasicTokenBridge.totalSpentPerDay(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#20-22)
- _setInvestedAmount(_token,0)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#225)
- uintStorage[keccak256()(abi.encodePacked(investedAmount,_token))] = _amount
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#210)
EternalStorage.uintStorage
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#8)
can be used in cross function reentrancies:
- BasicBridge._setGasPrice(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#57-60)

```



```
- InterestConnector._setInvestedAmount(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#209-211)
- InterestConnector._setMinCashThreshold(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#252-254)
- InterestConnector._setMinInterestPaid(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#261-263)
- BasicBridge._setRequiredBlockConfirmations(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#43-47)
- BasicTokenBridge.addTotalSpentPerDay(uint256,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#62-64)
- BasicTokenBridge.dailyLimit()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#28-30)
- DecimalShiftBridge.decimalShift()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/DecimalShiftBri
dge.sol#27-29)
- InitializableBridge.deployedAtBlock()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/InitializableBridg
e.sol#8-10)
- BasicTokenBridge.executionDailyLimit()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#32-34)
- BasicTokenBridge.executionMaxPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#40-42)
- BasicBridge.gasPrice()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#35-37)
- InterestConnector.investedAmount(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#155-157)
- BasicTokenBridge.maxPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#36-38)
- InterestConnector.minCashThreshold(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#80-82)
- InterestConnector.minInterestPaid(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#99-101)
- BasicTokenBridge.minPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#44-46)
- BasicBridge.requiredBlockConfirmations()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#49-51)
- BasicTokenBridge.setDailyLimit(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#70-74)
```

```

- BasicTokenBridge.setExecutionDailyLimit(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#76-80)
- BasicTokenBridge.setExecutionMaxPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#82-85)
- BasicTokenBridge.setMaxPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#87-90)
- BasicTokenBridge.setMinPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#92-95)
- BasicTokenBridge.totalExecutedPerDay(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#24-26)
- BasicTokenBridge.totalSpentPerDay(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#20-22)
Reentrancy in XDaiForeignBridge.onExecuteMessageGSN(address,uint256,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#85-89):
  External calls:
  - ensureEnoughTokens(daiToken(),amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#86)
    - currentBalance = token.balanceOf(address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#92)
    - ERC20(_token).balanceOf(address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/InterestConnector.sol#281)
    - require(bool,string)(sDaiToken().withdraw(_amount,address(this),address(this)) > 0,Failed to withdraw)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/SavingsDaiConnector.sol#69)
    - super.onExecuteMessageGSN(recipient,amount,fee)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#88)
      - first = token.transfer(addressStorage[PAYMASTER],fee)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignERC20Bridge.sol#64)
      - second = token.transfer(recipient,amount - fee)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignERC20Bridge.sol#65)
  State variables written after the call(s):
  - super.onExecuteMessageGSN(recipient,amount,fee)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#88)
    - uintStorage[keccak256()(abi.encodePacked(totalExecutedPerDay,_day))] =
totalExecutedPerDay(_day).add(_value)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#67)

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    EternalStorage.uintStorage
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#8)
can be used in cross function reentrancies:
    - BasicTokenBridge._setExecutionLimits(uint256[2])
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#123-130)
    - BasicBridge._setGasPrice(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#57-60)
    - InterestConnector._setInvestedAmount(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/InterestConnector.sol#209-211)
    - BasicTokenBridge._setLimits(uint256[3])
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#109-121)
    - InterestConnector._setMinCashThreshold(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/InterestConnector.sol#252-254)
    - InterestConnector._setMinInterestPaid(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/InterestConnector.sol#261-263)
    - BasicBridge._setRequiredBlockConfirmations(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#43-47)
    - BasicTokenBridge.addTotalExecutedPerDay(uint256,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#66-68)
    - BasicTokenBridge.addTotalSpentPerDay(uint256,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#62-64)
    - BasicTokenBridge.dailyLimit()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#28-30)
    - DecimalShiftBridge.decimalShift()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/DecimalShiftBridge.sol#27-29)
    - InitializableBridge.deployedAtBlock()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/InitializableBridge.sol#8-10)
    - BasicTokenBridge.executionDailyLimit()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#32-34)
    - BasicTokenBridge.executionMaxPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#40-42)
    - BasicBridge.gasPrice()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#35-37)
    -
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#8-35)

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- InterestConnector.investedAmount(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#155-157)
- BasicTokenBridge.maxPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#36-38)
- InterestConnector.minCashThreshold(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#80-82)
- InterestConnector.minInterestPaid(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#99-101)
- BasicTokenBridge.minPerTx()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#44-46)
- BasicBridge.requiredBlockConfirmations()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#49-51)
- BasicTokenBridge.setDailyLimit(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#70-74)
- BasicTokenBridge.setExecutionDailyLimit(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#76-80)
- BasicTokenBridge.setExecutionMaxPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#82-85)
- BasicTokenBridge.setMaxPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#87-90)
- BasicTokenBridge.setMinPerTx(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#92-95)
- BasicTokenBridge.totalExecutedPerDay(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#24-26)
- BasicTokenBridge.totalSpentPerDay(uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#20-22)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#reentrancy-vulnerabilities-1
INFO:Detectors:
SavingsDaiConnector._invest(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/SavingsDaiConnector.sol#55-59) ignores return value by daiToken().approve(address(sDaiToken()),_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/SavingsDaiConnector.sol#57)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#unused-return
INFO:Detectors:
Reentrancy in InterestConnector.disableInterest(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#108-111):
    External calls:
```

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- _withdraw(_token,uint256(- 1))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#109)
- ERC20(_token).balanceOf(address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#281)
State variables written after the call(s):
- _setInterestEnabled(_token,false)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#110)
- boolStorage[keccak256()(abi.encodePacked(interestEnabled,_token))] = _enabled
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#201)
Reentrancy in BasicForeignBridge.executeSignatures(bytes,bytes)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicForeignBri
dge.sol#22-39):
External calls:
- Message.hasEnoughValidSignatures(message,signatures,validatorContract(),false)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicForeignBri
dge.sol#23)
State variables written after the call(s):
- setRelayedMessages(txHash,true)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicForeignBri
dge.sol#33)
- boolStorage[keccak256()(abi.encodePacked(relayedMessages,_txHash))] = _status
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/MessageRelay.
sol#11)
Reentrancy in GSNForeignERC20Bridge.executeSignaturesGSN(bytes,bytes,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#38-58):
External calls:
- Message.hasEnoughValidSignatures(message,signatures,validatorContract(),false)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#41)
State variables written after the call(s):
- setRelayedMessages(txHash,true)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#52)
- boolStorage[keccak256()(abi.encodePacked(relayedMessages,_txHash))] = _status
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/MessageRelay.
sol#11)
Reentrancy in
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#7-34):
External calls:
- onlyRelevantSender()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#17)
- require(bool)(! address(this).call(abi.encodeWithSelector(UPGRADEABILITY_OWNER)) ||
msg.sender == IUpgradeabilityOwnerStorage(this).upgradeabilityOwner() || msg.sender == address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#34
-38)
State variables written after the call(s):

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- addressStorage[VALIDATOR_CONTRACT] = _validatorContract
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#21)
- setErc20token(_erc20token)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#22)
- addressStorage[ERC20_TOKEN] = _token
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ERC20Bridge.s
ol#16)
- _setOwner(_owner)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#29)
- addressStorage[OWNER] = newOwner
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#67
)
- _setBridgeContractOnOtherSide(_bridgeOnOtherSide)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#30)
- addressStorage[BRIDGE_CONTRACT] = _bridgeContract
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/OtherSideBridg
eStorage.sol#10)
- setInitialize()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#31)
- boolStorage[INITIALIZED] = true
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Initializable.sol#
9)
- uintStorage[DEPLOYED_AT_BLOCK] = block.number
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#23)
- _setRequiredBlockConfirmations(_requiredBlockConfirmations)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#24)
- uintStorage[REQUIRED_BLOCK_CONFIRMATIONS] = _blockConfirmations
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#45)
- _setGasPrice(_gasPrice)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#25)
- uintStorage[GAS_PRICE] = _gasPrice
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#58)
- _setLimits(_dailyLimitMaxPerTxMinPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#26)
- uintStorage[DAILY_LIMIT] = _limits[0]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#116)
- uintStorage[MAX_PER_TX] = _limits[1]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#117)
- uintStorage[MIN_PER_TX] = _limits[2]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#118)

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- _setExecutionLimits(_homeDailyLimitHomeMaxPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#27)
- uintStorage[EXECUTION_DAILY_LIMIT] = _limits[0]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#126)
- uintStorage[EXECUTION_MAX_PER_TX] = _limits[1]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#127)
- _setDecimalShift(_decimalShift)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#28)
- uintStorage[DECIMAL_SHIFT] = uint256(_shift)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/DecimalShiftBrid
ge.sol#20)
Reentrancy in
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#8-35):
  External calls:
  - onlyRelevantSender()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#18)
  - require(bool)(! address(this).call(abi.encodeWithSelector(UPGRADEABILITY_OWNER)) ||
msg.sender == IUpgradeabilityOwnerStorage(this).upgradeabilityOwner() || msg.sender == address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#34
-38)
  State variables written after the call(s):
  - addressStorage[VALIDATOR_CONTRACT] = _validatorContract
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#24)
  - _setOwner(_owner)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#30)
  - addressStorage[OWNER] = newOwner
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#67
)
  - _setBridgeContractOnOtherSide(_bridgeOnOtherSide)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#31)
  - addressStorage[BRIDGE_CONTRACT] = _bridgeContract
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/OtherSideBridg
eStorage.sol#10)
  - setInitialize()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#32)
  - boolStorage[INITIALIZED] = true
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Initializable.sol#
9)
  - uintStorage[DEPLOYED_AT_BLOCK] = block.number
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#25)

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- _setRequiredBlockConfirmations(_requiredBlockConfirmations)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#26)
- uintStorage[REQUIRED_BLOCK_CONFIRMATIONS] = _blockConfirmations
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#45)
- _setGasPrice(_gasPrice)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#27)
- uintStorage[GAS_PRICE] = _gasPrice
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol
#58)
- _setLimits(_dailyLimitMaxPerTxMinPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#28)
- uintStorage[DAILY_LIMIT] = _limits[0]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#116)
- uintStorage[MAX_PER_TX] = _limits[1]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#117)
- uintStorage[MIN_PER_TX] = _limits[2]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#118)
- _setExecutionLimits(_homeDailyLimitHomeMaxPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/XDaiForeignBridge.sol#29)
- uintStorage[EXECUTION_DAILY_LIMIT] = _limits[0]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#126)
- uintStorage[EXECUTION_MAX_PER_TX] = _limits[1]
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBrid
ge.sol#127)
Reentrancy in InterestConnector.invest(address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#164-174):
    External calls:
    - balance = _selfBalance(_token)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#165)
    - ERC20(_token).balanceOf(address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#281)
    State variables written after the call(s):
    - _setInvestedAmount(_token,investedAmount(_token).add(amount))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#171)
    - uintStorage[keccak256()(abi.encodePacked(investedAmount,_token))] = _amount
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#210)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#reentrancy-vulnerabilities-2
INFO:Detectors:

```



```
Reentrancy in InterestConnector._transferInterest(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#182-193):
  External calls:
  - ERC20(_token).transfer(receiver,_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#186)
  - InterestReceiver(receiver).onInterestReceived(_token)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#189)
  Event emitted after the call(s):
  - PaidInterest(_token,receiver,_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/InterestConnector.sol#192)
Reentrancy in BasicForeignBridge.executeSignatures(bytes,bytes)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicForeignBri
dge.sol#22-39):
  External calls:
  - Message.hasEnoughValidSignatures(message,signatures,validatorContract(),false)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicForeignBri
dge.sol#23)
  Event emitted after the call(s):
  - RelayedMessage(recipient,amount,txHash)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicForeignBri
dge.sol#35)
Reentrancy in GSNForeignERC20Bridge.executeSignaturesGSN(bytes,bytes,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#38-58):
  External calls:
  - Message.hasEnoughValidSignatures(message,signatures,validatorContract(),false)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#41)
  - require(bool)(onExecuteMessageGSN(recipient,amount,maxTokensFee))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#53)
  - first = token.transfer(addressStorage[PAYMASTER],fee)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#64)
  - second = token.transfer(recipient,amount - fee)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#65)
  Event emitted after the call(s):
  - RelayedMessage(recipient,amount,txHash)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/GSNForeignER
C20Bridge.sol#54)
Reentrancy in
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#7-34):
  External calls:
  - onlyRelevantSender()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native
/ForeignBridgeErcToNative.sol#17)
```

```

- require(bool)(! address(this).call(abi.encodeWithSelector(UPGRADEABILITY_OWNER)) ||
msg.sender == IUpgradeabilityOwnerStorage(this).upgradeabilityOwner() || msg.sender == address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#34-38)

Event emitted after the call(s):
- DailyLimitChanged(_limits[0])
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#120)

- _setLimits(_dailyLimitMaxPerTxMinPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#26)
- ExecutionDailyLimitChanged(_limits[0])
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#129)

- _setExecutionLimits(_homeDailyLimitHomeMaxPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#27)
- GasPriceChanged(_gasPrice)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#59)

- _setGasPrice(_gasPrice)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#25)
- OwnershipTransferred(owner(),newOwner)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#66)

- _setOwner(_owner)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#29)
- RequiredBlockConfirmationChanged(_blockConfirmations)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#46)

- _setRequiredBlockConfirmations(_requiredBlockConfirmations)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#24)
Reentrancy in
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#8-35):
External calls:
- onlyRelevantSender()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#18)

- require(bool)(! address(this).call(abi.encodeWithSelector(UPGRADEABILITY_OWNER)) ||
msg.sender == IUpgradeabilityOwnerStorage(this).upgradeabilityOwner() || msg.sender == address(this))
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#34-38)

Event emitted after the call(s):
- DailyLimitChanged(_limits[0])
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#120)

- _setLimits(_dailyLimitMaxPerTxMinPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#28)

```

```

- ExecutionDailyLimitChanged(_limits[0])
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicTokenBridge.sol#129)

- _setExecutionLimits(_homeDailyLimitHomeMaxPerTxArray)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#29)

- GasPriceChanged(_gasPrice)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#59)

- _setGasPrice(_gasPrice)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#27)

- OwnershipTransferred(owner(),newOwner)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/Ownable.sol#66)

- _setOwner(_owner)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#30)

- RequiredBlockConfirmationChanged(_blockConfirmations)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/BasicBridge.sol#46)

- _setRequiredBlockConfirmations(_requiredBlockConfirmations)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#26)
Reentrancy in ERC20Bridge.relayTokens(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ERC20Bridge.sol#19-28):
  External calls:
  - erc20token().transferFrom(msg.sender,address(this),_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ERC20Bridge.sol#26)
  Event emitted after the call(s):
  - UserRequestForAffirmation(_receiver,_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ERC20Bridge.sol#27)
Reentrancy in ForeignBridgeErcToNative.relayTokens(address,uint256)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#64-75):
  External calls:
  - erc20token().transferFrom(msg.sender,address(this),_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#73)
  Event emitted after the call(s):
  - UserRequestForAffirmation(_receiver,_amount)
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/ForeignBridgeErcToNative.sol#74)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#reentrancy-vulnerabilities-3
INFO:Detectors:
BaseRelayRecipient._msgSender()
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#18-29)
uses assembly
- INLINE ASM
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#23-26)

```

BaseRelayRecipient.\_msgData()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#39-56)  
uses assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#43-53)  
Message.parseMessage(bytes)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#29-41) uses  
assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#35-41)  
Message.recoverAddressFromSignedMessage(bytes,bytes,bool)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#51-70) uses  
assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#61-66)  
Message.hasEnoughValidSignatures(bytes,bytes,IBridgeValidators,bool)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#95-128) uses  
assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#104-107)  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#117-123)  
SafeERC20.safeTransfer(address,address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#20-30) uses  
assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#22-30)  
SafeERC20.safeTransferFrom(address,address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#38-48) uses  
assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#40-48)  
AddressUtils.isContract(address)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/Ad  
dressUtils.sol#16-27) uses assembly  
- INLINE ASM  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/Ad  
dressUtils.sol#25-26)  
Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#assembly-usage>  
INFO:Detectors:  
BaseRelayRecipient.\_msgData()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#39-56) is  
never used and should be removed  
BaseRelayRecipient.\_msgSender()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#18-29) is  
never used and should be removed  
DecimalShiftBridge.\_setDecimalShift(int256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBri  
dge.sol#17-21) is never used and should be removed  
DecimalShiftBridge.\_shiftUint(uint256,int256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBri  
dge.sol#55-63) is never used and should be removed

DecimalShiftBridge.\_shiftValue(uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#45-47) is never used and should be removed

DecimalShiftBridge.\_unshiftValue(uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#36-38) is never used and should be removed

ERC20Bridge.setErc20token(address)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#14-17) is never used and should be removed

ForeignBridgeErcToNative.onExecuteMessage(address,uint256,bytes32)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#51-58) is never used and should be removed

InterestConnector.\_transferInterest(address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#182-193) is never used and should be removed

Message.recoverAddressFromSignedMessage(bytes,bytes,bool)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#51-70) is never used and should be removed

SafeERC20.safeTransferFrom(address,address,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#38-48) is never used and should be removed

SafeMath.div(uint256,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#29-34) is never used and should be removed

SafeMath.mul(uint256,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#13-24) is never used and should be removed

SafeMath.sub(uint256,uint256)  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#39-42) is never used and should be removed

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#dead-code>

INFO:Detectors:

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/BaseRelayRecipient.sol#3) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/interfaces/IKnowForwarderAddress.sol#2) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/gsn/interfaces/IRelayRecipient.sol#2) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ERC677.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/IBridgeValidators.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/IInterestReceiver.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ISavingsDai.sol#18) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/IUpgradeabilityOwnerStorage.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Address.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicBridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicForeignBridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Claimable.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/GSNForeignERC20Bridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Initializable.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/InitializableBridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/MessageRelay.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/OtherSideBridgeStorage.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Ownable.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Sacrifice.sol#1) allows old versions



Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Upgradeable.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Validatable.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ValidatorStorage.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/VersionableBridge.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/SavingsDaiConnector.sol#1) allows old versions

Pragma version0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#1) allows old versions

Pragma version^0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/AddressUtils.sol#1) allows old versions

Pragma version^0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#1) allows old versions

Pragma version^0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/token/ERC20/ERC20.sol#1) allows old versions

Pragma version^0.4.24  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/token/ERC20/ERC20Basic.sol#1) allows old versions

solc-0.4.24 is not recommended for deployment

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity>

INFO:Detectors:

Pragma version^0.8.13 (script/Counter.s.sol#2) allows old versions

Pragma version^0.8.13 (src/Counter.sol#2) allows old versions

Pragma version^0.8.13 (test/Counter.t.sol#2) allows old versions

solc-0.8.22 is not recommended for deployment

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#incorrect-versions-of-solidity>

INFO:Detectors:

Function ISavingsDai.PERMIT\_TYPEHASH()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ISavingsDai.sol#32) is not in mixedCase

Function ISavingsDai.DOMAIN\_SEPARATOR()  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/interfaces/ISavingsDai.sol#33) is not in mixedCase

Parameter Address.safeSendValue(address,uint256).\_receiver  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Address.sol#15) is not in mixedCase

Parameter Address.safeSendValue(address,uint256).\_value  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Address.sol#15) is not in mixedCase

Parameter Message.isMessageValid(bytes).\_msg  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#43) is not in mixedCase

Parameter Message.hasEnoughValidSignatures(bytes,bytes,IBridgeValidators,bool).\_message  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#96) is not in mixedCase

Parameter Message.hasEnoughValidSignatures(bytes,bytes,IBridgeValidators,bool).\_validatorContract  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/Message.sol#98) is not in mixedCase

Parameter SafeERC20.safeTransfer(address,address,uint256).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#20) is not in mixedCase

Parameter SafeERC20.safeTransfer(address,address,uint256).\_to  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#20) is not in mixedCase

Parameter SafeERC20.safeTransfer(address,address,uint256).\_value  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#20) is not in mixedCase

Parameter SafeERC20.safeTransferFrom(address,address,uint256).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#38) is not in mixedCase

Parameter SafeERC20.safeTransferFrom(address,address,uint256).\_from  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#38) is not in mixedCase

Parameter SafeERC20.safeTransferFrom(address,address,uint256).\_value  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/libraries/SafeERC20.sol#38) is not in mixedCase

Parameter BasicBridge.setGasPrice(uint256).\_gasPrice  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicBridge.sol#31) is not in mixedCase

Parameter BasicBridge.setRequiredBlockConfirmations(uint256).\_blockConfirmations  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicBridge.sol#39) is not in mixedCase

Parameter BasicTokenBridge.totalSpentPerDay(uint256).\_day  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#20) is not in mixedCase

Parameter BasicTokenBridge.totalExecutedPerDay(uint256).\_day  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#24) is not in mixedCase

Parameter BasicTokenBridge.withinLimit(uint256).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#48) is not in mixedCase

Parameter BasicTokenBridge.withinExecutionLimit(uint256).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#53) is not in mixedCase

Parameter BasicTokenBridge.addTotalSpentPerDay(uint256,uint256).\_day  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#62) is not in mixedCase

Parameter BasicTokenBridge.addTotalSpentPerDay(uint256,uint256).\_value  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#62) is not in mixedCase



Parameter BasicTokenBridge.addTotalExecutedPerDay(uint256,uint256).\_day  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#66) is not in mixedCase

Parameter BasicTokenBridge.addTotalExecutedPerDay(uint256,uint256).\_value  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#66) is not in mixedCase

Parameter BasicTokenBridge.setDailyLimit(uint256).\_dailyLimit  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#70) is not in mixedCase

Parameter BasicTokenBridge.setExecutionDailyLimit(uint256).\_dailyLimit  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#76) is not in mixedCase

Parameter BasicTokenBridge.setExecutionMaxPerTx(uint256).\_maxPerTx  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#82) is not in mixedCase

Parameter BasicTokenBridge.setMaxPerTx(uint256).\_maxPerTx  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#87) is not in mixedCase

Parameter BasicTokenBridge.setMinPerTx(uint256).\_minPerTx  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#92) is not in mixedCase

Parameter Claimable.claimValues(address,address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Claimable.sol#28) is not in mixedCase

Parameter Claimable.claimValues(address,address).\_to  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Claimable.sol#28) is not in mixedCase

Parameter Claimable.claimNativeCoins(address).\_to  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Claimable.sol#40) is not in mixedCase

Parameter Claimable.claimErc20Tokens(address,address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Claimable.sol#50) is not in mixedCase

Parameter Claimable.claimErc20Tokens(address,address).\_to  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/Claimable.sol#50) is not in mixedCase

Parameter ERC20Bridge.setErc20token(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#14) is not in mixedCase

Parameter ERC20Bridge.relayTokens(address,uint256).\_receiver  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#19) is not in mixedCase

Parameter ERC20Bridge.relayTokens(address,uint256).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#19) is not in mixedCase

Parameter GSNForeignERC20Bridge.setTrustedForwarder(address).\_trustedForwarder  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/GSNForeignERC20Bridge.sol#20) is not in mixedCase

Parameter GSNForeignERC20Bridge.setPayMaster(address).\_paymaster  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/GSNForeignERC20Bridge.sol#28) is not in mixedCase

Parameter MessageRelay.relayedMessages(bytes32).\_txHash  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/MessageRelay.sol#6) is not in mixedCase

Parameter MessageRelay.setRelayedMessages(bytes32,bool).\_txHash  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/MessageRelay.sol#10) is not in mixedCase

Parameter MessageRelay.setRelayedMessages(bytes32,bool).\_status  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/MessageRelay.sol#10) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_validatorContract  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#8) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_erc20token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#9) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_requiredBlockConfirmations  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#10) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_gasPrice  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#11) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_dailyLimitMaxPerTxMinPerTxArray  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#12) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_homeDailyLimitHomeMaxPerTxArray  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#13) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_owner  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#14) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_decimalShift  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#15) is not in mixedCase

Parameter  
ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_bridgeOnOtherSide  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#16) is not in mixedCase

Parameter ForeignBridgeErcToNative.claimTokens(address,address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#45) is not in mixedCase

Parameter ForeignBridgeErcToNative.claimTokens(address,address).\_to  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/ForeignBridgeErcToNative.sol#45) is not in mixedCase

Parameter ForeignBridgeErcToNative.onExecuteMessage(address,uint256,bytes32).\_recipient  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/ForeignBridgeErcToNative.sol#52) is not in mixedCase

Parameter ForeignBridgeErcToNative.onExecuteMessage(address,uint256,bytes32).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/ForeignBridgeErcToNative.sol#53) is not in mixedCase

Parameter ForeignBridgeErcToNative.relayTokens(address,uint256).\_receiver  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/ForeignBridgeErcToNative.sol#64) is not in mixedCase

Parameter ForeignBridgeErcToNative.relayTokens(address,uint256).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/ForeignBridgeErcToNative.sol#64) is not in mixedCase

Parameter InterestConnector.isInterestEnabled(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#39) is not in mixedCase

Parameter InterestConnector.initializeInterest(address,uint256,uint256,address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#51) is not in mixedCase

Parameter InterestConnector.initializeInterest(address,uint256,uint256,address).\_minCashThreshold  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#52) is not in mixedCase

Parameter InterestConnector.initializeInterest(address,uint256,uint256,address).\_minInterestPaid  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#53) is not in mixedCase

Parameter InterestConnector.initializeInterest(address,uint256,uint256,address).\_interestReceiver  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#54) is not in mixedCase

Parameter InterestConnector.setMinCashThreshold(address,uint256).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#71) is not in mixedCase

Parameter InterestConnector.setMinCashThreshold(address,uint256).\_minCashThreshold  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#71) is not in mixedCase

Parameter InterestConnector.minCashThreshold(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#80) is not in mixedCase

Parameter InterestConnector.setMinInterestPaid(address,uint256).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#90) is not in mixedCase

Parameter InterestConnector.setMinInterestPaid(address,uint256).\_minInterestPaid  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#90) is not in mixedCase

Parameter InterestConnector.minInterestPaid(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#99) is not in mixedCase

Parameter InterestConnector.disableInterest(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#108) is not in mixedCase

Parameter InterestConnector.interestReceiver(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native  
/InterestConnector.sol#118) is not in mixedCase

Parameter InterestConnector.setInterestReceiver(address,address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#128) is not in mixedCase

Parameter InterestConnector.setInterestReceiver(address,address).\_receiver  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#128) is not in mixedCase

Parameter InterestConnector.payInterest(address,uint256).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#138) is not in mixedCase

Parameter InterestConnector.payInterest(address,uint256).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#138) is not in mixedCase

Parameter InterestConnector.investedAmount(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#155) is not in mixedCase

Parameter InterestConnector.invest(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/InterestConnector.sol#164) is not in mixedCase

Parameter SavingsDaiConnector.interestAmount(address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/SavingsDaiConnector.sol#32) is not in mixedCase

Parameter SavingsDaiConnector.previewWithdraw(address,uint256).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/SavingsDaiConnector.sol#78) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_validatorContract  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#9) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_erc20token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#10) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_requiredBlockConfirmations  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#11) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_gasPrice  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#12) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_dailyLimitMaxPerTxMinPerTxArray  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#13) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_homeDailyLimitHomeMaxPerTxArray  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#14) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_owner  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#15) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_decimal  
Shift  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#16) is not in mixedCase

Parameter  
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_bridgeO  
nOtherSide  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#17) is not in mixedCase

Parameter XDaiForeignBridge.claimTokens(address,address).\_token  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#64) is not in mixedCase

Parameter XDaiForeignBridge.claimTokens(address,address).\_to  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#64) is not in mixedCase

Parameter XDaiForeignBridge.onExecuteMessage(address,uint256,bytes32).\_recipient  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#73) is not in mixedCase

Parameter XDaiForeignBridge.onExecuteMessage(address,uint256,bytes32).\_amount  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/XDaiForeignBridge.sol#74) is not in mixedCase

Parameter SafeMath.mul(uint256,uint256).\_a  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#13) is not in mixedCase

Parameter SafeMath.mul(uint256,uint256).\_b  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#13) is not in mixedCase

Parameter SafeMath.div(uint256,uint256).\_a  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#29) is not in mixedCase

Parameter SafeMath.div(uint256,uint256).\_b  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#29) is not in mixedCase

Parameter SafeMath.sub(uint256,uint256).\_a  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#39) is not in mixedCase

Parameter SafeMath.sub(uint256,uint256).\_b  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#39) is not in mixedCase

Parameter SafeMath.add(uint256,uint256).\_a  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#47) is not in mixedCase

Parameter SafeMath.add(uint256,uint256).\_b  
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/node\_modules/openzeppelin-solidity/contracts/math/SafeMath.sol#47) is not in mixedCase

Reference: <https://github.com/crytic/slither/wiki/Detector-Documentation#conformance-to-solidity-naming-conventions>

INFO:Detectors:

Function CounterTest.test\_Increment() (test/Counter.t.sol#15-18) is not in mixedCase

Function CounterTest.testFuzz\_SetNumber(uint256) (test/Counter.t.sol#20-23) is not in mixedCase



Reference: <https://github.com/crytic/sliether/wiki/Detector-Documentation#conformance-to-solidity-naming-conventions>

#### INFO:Detectors:

Variable BasicTokenBridge.DAILY\_LIMIT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#16) is too similar to BasicTokenBridge.maxAvailablePerTx().\_dailyLimit

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#103)

Variable BasicTokenBridge.DAILY\_LIMIT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#16) is too similar to BasicTokenBridge.setExecutionDailyLimit(uint256).\_dailyLimit

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#76)

Variable BasicTokenBridge.DAILY\_LIMIT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#16) is too similar to BasicTokenBridge.setDailyLimit(uint256).\_dailyLimit

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/BasicTokenBridge.sol#70)

Variable GSNForeignERC20Bridge.TRUSTED\_FORWARDER

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/GSNForeignERC20Bridge.sol#10) is too similar to GSNForeignERC20Bridge.setTrustedForwarder(address).\_trustedForwarder

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/GSNForeignERC20Bridge.sol#20)

Variable OtherSideBridgeStorage.BRIDGE\_CONTRACT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/OtherSideBridgeStorage.sol#6) is too similar to OtherSideBridgeStorage.\_setBridgeContractOnOtherSide(address).\_bridgeContract

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/OtherSideBridgeStorage.sol#8)

Variable ERC20Bridge.ERC20\_TOKEN

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ERC20Bridge.sol#8) is too similar to

ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_erc20token

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#9)

Variable ValidatorStorage.VALIDATOR\_CONTRACT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/ValidatorStorage.sol#4) is too similar to

ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_validatorContract

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#8)

Variable DecimalShiftBridge.DECIMAL\_SHIFT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#9) is too similar to

ForeignBridgeErcToNative.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_decimalShift

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/erc20\_to\_native/ForeignBridgeErcToNative.sol#15)

Variable DecimalShiftBridge.DECIMAL\_SHIFT

(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable\_contracts/DecimalShiftBridge.sol#9) is too similar to

XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address).\_decimalShift

```
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#16)
Variable ERC20Bridge.ERC20_TOKEN
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ERC20Bridge.sol#8) is too similar to
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)._erc20token
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#10)
Variable ValidatorStorage.VALIDATOR_CONTRACT
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/ValidatorStorage.sol#4) is too similar to
XDaiForeignBridge.initialize(address,address,uint256,uint256,uint256[3],uint256[2],address,int256,address)._validatorContract
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#9)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#variable-names-too-similar
INFO:Detectors:
EternalStorage.stringStorage
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#9) is never used in XDaiForeignBridge
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#7-99)
EternalStorage.bytesStorage
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#11) is never used in XDaiForeignBridge
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#7-99)
EternalStorage.intStorage
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeability/EternalStorage.sol#13) is never used in XDaiForeignBridge
(src/mainnet/0x166124b75c798Cedf1B43655E9B5284eBd5203DB/contracts/upgradeable_contracts/erc20_to_native/XDaiForeignBridge.sol#7-99)
Reference: https://github.com/crytic/slither/wiki/Detector-Documentation#unused-state-variable
```

## Results

Apart from unchecked transfers, no major issues were discovered. Some false positive errors were flagged by the tool. All remaining issues have been diligently categorized and documented in the GitHub repository file named '[AutomatedToolFindings.md](#)'.

## Closing Summary

Overall, the smart contracts are meticulously crafted. While several issues were uncovered during the audit process, with high severity issues a few and, most other issues are medium and low level issues, [AutomatedToolFindings.md](#) it is advised to the team to effectively address the majority of these concerns, ensuring the integrity and robustness of the contracts.

