

# Deployment Verification of the Ink Smart Contracts

17 March 2025

Produced for



**USDf0**

by



**CHAINSECURITY**

# Contents

<b>1</b>	<b>Executive Summary</b>	<b>3</b>
<b>2</b>	<b>Assessment Overview</b>	<b>4</b>
<b>3</b>	<b>Limitations and use of report</b>	<b>6</b>
<b>4</b>	<b>Deployment Validation</b>	<b>7</b>

# 1 Executive Summary

Dear all,

We are pleased to deliver this Deployment Verification report for Ink. All security-relevant parameters of deployed contracts mentioned in the section [Assessment Overview](#) have been carefully examined. Additionally, the evolution of these parameters starting from the block of the deployment of each contract until the following blocks has been reviewed:

- Ink: 8723485
- Ethereum Mainnet: 22067202
- Arbitrum: 316661155
- Flare: 38865111
- Berachain: 2464625

All contracts have been deployed with secure parameters in accordance with our security audits of the smart contracts. Furthermore, configurations of associated LayerZero contracts on all associated chains are consistent and allow for safe usage of the bridge. In particular, the confirmations of the OApp contracts in LayerZero's SendUln302 and ReceiveUln302 contracts have been set to a sufficiently high amount to guarantee that no tokens can be bridged from Arbitrum to Mainnet before the Mainnet OApp has received all outstanding tokens from the Arbitrum L1 Gateway. As soon as the bridged tokens have been received from the Arbitrum L1 gateway, it is assumed that the confirmations are reset to a sufficiently low value. Furthermore, sending and receiving sides of the bridge are consistently configured and the library contracts have been fixed.

Sincerely yours,

ChainSecurity

## 2 Assessment Overview

In this section, we briefly describe the overall structure and scope of the engagement, including the code commit which is referenced throughout this report.

### 2.1 Scope

The assessment was performed on the source code files inside the given repositories based on the documentation files. The table below indicates the code versions relevant to this report and when they were received.

#### usdt0-tether-contracts-hardhat

V	Date	Commit Hash	Note
1	20 February 2025	b0851cbb7940ec5e2e167ef9789e813aa7220b6d	Initial Version

#### usdt0-oft-contracts

V	Date	Commit Hash	Note
1	20 February 2025	bcbfac3c8a54e6f184103480bee18584def7a849	Initial version

For the solidity smart contracts, the compiler versions 0.8.4 and ^0.8.22 were chosen.

The following contracts were validated on Flare mainnet:

#### usdt0-oft-contracts

- OUpgradeable

#### usdt0-tether-contracts-hardhat

- TetherTokenOFTEExtension

### 2.2 Verified Contracts

Name	Address
TransparentUpgradeableProxy (TetherTokenOFTEExtension)	0x0200c29006150606b650577bbe7b6248f58470c1
TetherTokenOFTEExtension	0x4a5cd36c33d9f2986e5d39ff5b9918af547a6e0e
TransparentUpgradeableProxy (OUpgradeable)	0x1cb6de532588fca4a21b7209de7c456af8434a65
OUpgradeable	0x2257df4b93d2a55ed553194cabecd851a346ff89
EndpointV2	0xca29f3a6f966cb2fc0de625f8f325c0c46db e958
SendUIn302	0x76111de813f83aaadb62773bf41247634e2319a
ReceiveUIn302	0x473132bb594caef281c68718f4541f73fe14dc89

SendUIn302 (Mainnet)	0xbb2ea70c9e858123480642cf96acbcce1372dce1
ReceiveUIn302 (Mainnet)	0xc02ab410f0734efa3f14628780e6e695156024c2
SendUIn302 (Arbitrum)	0x975bcd720be66659e3eb3c0e4f1866a3020e493a
ReceiveUIn302 (Arbitrum)	0x7b9e184e07a6ee1ac23eae0fe8d6be2f663f05e6
SendUIn302 (Flare)	0xe1844c5d63a9543023008d332bd3d2e6f1fe1043
ReceiveUIn302 (Flare)	0x2367325334447c5e1e0f1b3a6fb947b262f58312
SendUIn302 (Berachain)	0xc39161c743d0307eb9bcc9fef03eeb9dc4802de7
ReceiveUIn302 (Berachain)	0xe1844c5d63a9543023008d332bd3d2e6f1fe1043

## 2.3 Other known contracts

Name	Address
USDT0 owner	0xc95de55ce5e93f788a1faab2a9c9503f51a5dae2
USDT0 proxy admin	0x5be536efb28c8efbd2da6894996f5df88347d8b2
OUpgradeable proxy admin	0x4de7096b2131e84fd6b2042ad8cd9b4e43f728fc
LayerZero EndpointV2	0x1a44076050125825900e736c501f859c50fe728c

### 3 Limitations and use of report

Deployment assessments cannot uncover all existing mismatches; even an assessment in which no mismatches are found is not a guarantee of a correct setup. However, deployment assessments enable the discovery of unintended mismatches that were overlooked during development and areas where additional security measures are necessary. This is why we carry out a deployment validation aimed at determining all locations that mismatch the intended deployment. Within the customer-determined time frame, ChainSecurity has performed an assessment in order to discover as many inconsistencies as possible.

The focus of our assessment was limited to the deployed contracts defined in section [Verified Contracts](#). We draw attention to the fact that due to inherent limitations in any software development process and software product, an inherent risk exists that even major failures or malfunctions can remain undetected. Further uncertainties exist in any software product or application used during the development, which itself cannot be free from any error or failures. These preconditions can have an impact on the system and/or functions and/or operation. We did not assess any underlying third-party infrastructure which adds further inherent risks as we rely on the correct execution of the included third-party technology stack itself. Report readers should also take into account that over the life cycle of any software, changes to the product itself or to the environment in which it is operated can have an impact leading to operational behaviors other than those initially determined in the business specification. Further, they should be aware that no security assessment was performed.

# 4 Deployment Validation

## 4.1 TransparentUpgradeableProxy (TetherTokenOFTEExtension)

Deployed at: 0x0200c29006150606b650577bbe7b6248f58470c1

### 4.1.1 Bytecode

Codehash: 0x4d9be648c5bf39973670d9f8b481d5d0b971e6a2db2deccc6b98cde21c5dd83e

Bytecode Match except for Metadata hash

### 4.1.2 Immutables

### 4.1.3 Critical Storage Variables

- **\_initialized**
  - Value: 0x01
  - ValueHint: true
- **\_initializing**
  - Value: 0x00
- **\_PERMIT\_TYPEHASH**
  - Value:  
0x6e71edae12b1b97f4d1f60370fef10105fa2faae0126114a169c64845d6126c9
- **\_owner**
  - Value: 0xc95de55ce5e93f788a1faab2a9c9503f51a5dae2
- **tetherDecimals**
  - Value: 0x06
  - ValueHint: 6
- **oftContract**
  - Value: TransparentUpgradeableProxy (OUppgradeable)  
(0x1cb6de532588fca4a21b7209de7c456af8434a65)
- **\_newName (length=0)**
  - Value:  
0x00
- **\_newSymbol (length=0)**
  - Value:  
0x00
- **StorageSlot.\_IMPLEMENTATION\_SLOT.AddressSlot.value**
  - Value: TetherTokenOFTEExtension (0x4a5cd36c33d9f2986e5d39ff5b9918af547a6e0e)

- **StorageSlot.\_ADMIN\_SLOT.AddressSlot.value**

- Value: 0x5be536efb28c8efbd2da6894996f5df88347d8b2

## 4.1.4 Critical Events

1. AdminChanged(address, address)
2. Upgraded(address)
3. LogSetOFTContract(address)
4. OwnershipTransferred(address, address)

## 4.2 TetherTokenOFTExtension

Deployed at: 0x4a5cd36c33d9f2986e5d39ff5b9918af547a6e0e

### 4.2.1 Bytecode

Codehash: 0x49a681956f8c3406922b8a510611aa2929a3855051d64b05778237d846ac151b

Bytecode Match except for Metadata hash

### 4.2.2 Immutables

### 4.2.3 Critical Storage Variables

- **\_initialized**

- Value: 0x01
  - ValueHint: true

- **\_initializing**

- Value: 0x00

- **\_owner**

- Value: 0x00

### 4.2.4 Critical Events

1. OwnershipTransferred(address, address)

## 4.3 TransparentUpgradeableProxy (OUpgradeable)

Deployed at: 0x1cb6de532588fca4a21b7209de7c456af8434a65

### 4.3.1 Bytecode

Codehash: 0xe5e3693157141608a301682c8c228c0277eac7efc0b98b57f874ca49752b5fd8



## Bytecode Match except for Metadata hash

### 4.3.2 Immutables

### 4.3.3 Critical Storage Variables

- [illegible]

#### 4.3.4 Critical Events

1. AdminChanged(address, address)
2. Upgraded(address)
3. Initialized(uint64)
4. MsgInspectorSet(address)
5. OwnershipTransferred(address, address)

## 7. PreCrimeSet (address)

Deployed at: 0x2257df4b93d2a55ed553194cabecd851a346ff89

Codehash: 0x729033c7560eda3ff65104b6d4391ea68163319f66fb98079a6416a147e204cc

Deployed at: 0xca29f3a6f966cb2fc0de625f8f325c0c46dbe958

Codehash: 0x8f7dc09c439f77c6ae07b7a7b0f44660a404524da67fbc654cde159e5763d74a

### Bytecode Match except for Metadata hash

### 4.5.2 Immutables

- **blockedLibrary**

- [illegible]

- eid

- [illegible]

### 4.5.3 Critical Storage Variables

• isRegisteredLibrary[0x473132bb594caef281c68718f4541f73fe14dc89]

- Value: 0x01
- ValueHint: true

• isRegisteredLibrary[0x76111de813f83aaadb62773bf41247634e2319a]

- Value: 0x01
- ValueHint: true

- `sendLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30101]`

- Value: SendUln302 (0x76111de813f83aaadb62773bf41247634e2319a)

- `sendLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30110]`

- Value: SendUln302 (0x76111de813f83aaadb62773bf41247634e2319a)

- **sendLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30295]**

- Value: SendUln302 (0x76111de813f83aaadb62773bf41247634e2319a)

- `sendLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30362]`

- Value: SendUln302 (0x76111de813f83aaadb62773bf41247634e2319a)

- `receiveLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30101]`

- Value: ReceiveUln302 (0x473132bb594caef281c68718f4541f73fe14dc89)

- `receiveLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30110]`

- Value: ReceiveUln302 (0x473132bb594caef281c68718f4541f73fe14dc89)

- `receiveLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30295]`

- Value: ReceiveUln302 (0x473132bb594caef281c68718f4541f73fe14dc89)

- receiveLibrary[0x1cb6de532588fca4a21b7209de7c456af8434a65][30362]

- Value: ReceiveUln302 (0x473132bb594caef281c68718f4541f73fe14dc89)

- delegates[0x1cb6de532588fca4a21b7209de7c456af8434a65]

- Value: 0xc95de55ce5e93f788a1faab2a9c9503f51a5dae2

#### 4.5.4 Critical Events

## 4.6 SendUn302

Deployed at: 0x76111de813f83aaadb62773bf41247634e2319a

### 4.6.1 Bytecode

Codehash: 0x7a3b420cf593811178a36c6e46ead981da36d6d743426b0d075a49b1de1dba2d

## Bytecode Match except for Metadata hash

### 4.6.2 *Immutableables*

- **endpoint**

- Value: EndpointV2 (0xca29f3a6f966cb2fc0de625f8f325c0c46dbe958)

- **treasuryGasLimit**

- [illegible]

### 4.6.3 Critical Storage Variables

- **ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].confirmations**

- Value: 0x0000000000000001e
- ValueHint: 30

- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].requiredDVNCount

- Value: 0x02
- ValueHint: 2

- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].optionalDVNCount

- Value: 0x00

- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].optionalDVNThreshold

- Value: 0x00

- `ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65][30101].requiredDVNs.length`

- [illegible]

- `ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].requiredDVNs[0]`

- Value: 0x174f2ba26f8adeafa82663bcf908288d5dbca649

- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].requiredDVNs[1]

- Value: 0xdf44a1594d3d516f7cdfb4dc275a79a5f6e3db1d

- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].confirmations
    - Value: 0x0000000000000001e
    - ValueHint: 30
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].optionalDVNCount
    - Value: 0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].optionalDVNThreshold
    - Value: 0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNs.length
    - Value:  
0x0002
    - ValueHint: 2
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNs[0]
    - Value: 0x174f2ba26f8adeafa82663bcf908288d5dbca649
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNs[1]
    - Value: 0xdf44a1594d3d516f7cdfb4dc275a79a5f6e3db1d
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].confirmations
    - Value: 0x0000000000000001e
    - ValueHint: 30
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].optionalDVNCount
    - Value: 0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].optionalDVNThreshold
    - Value: 0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].requiredDVNs.length

- Value:  
0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].requiredDVNs[0]
    - Value: 0x174f2ba26f8adeafa82663bcf908288d5dbca649
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].requiredDVNs[1]
    - Value: 0xdf44a1594d3d516f7cdfb4dc275a79a5f6e3db1d
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].confirmations
    - Value: 0x0000000000000001e
    - ValueHint: 30
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].optionalDVNCount
    - Value: 0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].optionalDVNThreshold
    - Value: 0x00
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].requiredDVNs.length
    - Value:  
0x0002
    - ValueHint: 2
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].requiredDVNs[0]
    - Value: 0x174f2ba26f8adeafa82663bcf908288d5dbca649
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].requiredDVNs[1]
    - Value: 0xdf44a1594d3d516f7cdfb4dc275a79a5f6e3db1d
  - ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].optionalDVNs.length
    - Value:  
0x00
  - executorConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].maxMessageSize
    - Value: 0x00002710
    - ValueHint: 1. \* 10^4
  - executorConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].executor
    - Value: 0xfebcf17b11376c724ab5a5229803c6e838b6eae5

- **executorConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].maxMessageSize**
  - Value: 0x00002710
  - ValueHint: 1. \* 10^4
- **executorConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].executor**
  - Value: 0xfebcf17b11376c724ab5a5229803c6e838b6eae5
- **executorConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].maxMessageSize**
  - Value: 0x00002710
  - ValueHint: 1. \* 10^4
- **executorConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30362].executor**
  - Value: 0xfebcf17b11376c724ab5a5229803c6e838b6eae5

## 4.7 ReceiveUln302

### 4.7.1 Bytecode

### 4.7.2 Immutables

### 4.7.3 Critical Storage Variables



- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].optionalDVNThreshold
  - Value: 0x00
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].requiredDVNs.length
  - Value:  
0x0002
  - ValueHint: 2
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].requiredDVNs[0]
  - Value: 0x174f2ba26f8adeafa82663bcf908288d5dbca649
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].requiredDVNs[1]
  - Value: 0xdf44a1594d3d516f7cdfb4dc275a79a5f6e3db1d
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30101].optionalDVNs.length
  - Value:  
0x00
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].confirmations
  - Value: 0x000000000000000003c
  - ValueHint: 60
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNCount
  - Value: 0x02
  - ValueHint: 2
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].optionalDVNCount
  - Value: 0x00
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].optionalDVNThreshold
  - Value: 0x00
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNs.length
  - Value:  
0x0002
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNs[0]
  - Value: 0x174f2ba26f8adeafa82663bcf908288d5dbca649
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].requiredDVNs[1]
  - Value: 0xdf44a1594d3d516f7cdfb4dc275a79a5f6e3db1d
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30110].optionalDVNs.length
  - Value:  
0x00
- ulnConfigs[0x1cb6de532588fca4a21b7209de7c456af8434a65] [30295].confirmations
  - Value: 0x0000000000000001f4



- [illegible]

- [illegible]

#### 4.7.4 Critical Events

### 4.8.1 Bytecode

Codehash: 0xdd60d5461da3a779567301a7f52c4de2fd7d4c829b3e8de663bb2149be857275

Bytecode Match except for Metadata hash

### 4.8.2 *Immutableables*

- [illegible]

### 4.8.3 Critical Storage Variables

- [illegible]

- [illegible]

- [illegible]

- Value: 0x00002710
- ValueHint: 1. \* 10^4
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30110].executor
  - Value: 0x173272739bd7aa6e4e214714048a9fe699453059
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30295].maxMessageSize
  - Value: 0x00002710
  - ValueHint: 1. \* 10^4
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30295].executor
  - Value: 0x173272739bd7aa6e4e214714048a9fe699453059
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30339].maxMessageSize
  - Value: 0x00002710
  - ValueHint: 1. \* 10^4
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30339].executor
  - Value: 0x173272739bd7aa6e4e214714048a9fe699453059
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30110].maxMessageSize
  - Value: 0x00002710
  - ValueHint: 1. \* 10^4
- executorConfigs[0x6c96de32cea08842dcc4058c14d3aaad7fa41dee] [30362].executor
  - Value: 0x173272739bd7aa6e4e214714048a9fe699453059

#### 4.8.4 Critical Events

## 4.9 ReceiveUln302 (Mainnet)

Deployed at: 0xc02ab410f0734efa3f14628780e6e695156024c2

### 4.9.1 Bytecode

Codehash: 0x013ab0590a1572bec93a59a784f56ba238c6a8da11a228704ba0d081d18a9d35

Bytecode Match except for Metadata hash

### 4.9.2 Immutables

- [illegible]

### 4.9.3 Critical Storage Variables

- [illegible]

- [illegible]







- [illegible]

- Value: 0xa8b8575fa41c305953f519c7d288cd7741727c7b

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30295].optionalDVNs.length

  - Value:  
0x00

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].confirmations

  - Value: 0x0000000000000003c
  - ValueHint: 60

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].requiredDVNCount

  - Value: 0x02
  - ValueHint: 2

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].optionalDVNCount

  - Value: 0x00

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].optionalDVNThreshold

  - Value: 0x00

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].requiredDVNs.length

  - Value:  
0x0002
  - ValueHint: 2

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].requiredDVNs[0]

  - Value: 0x2f55c492897526677c5b68fb199ea31e2c126416

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].requiredDVNs[1]

  - Value: 0xa8b8575fa41c305953f519c7d288cd7741727c7b

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30339].optionalDVNs.length

  - Value:  
0x00

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30362].confirmations

  - Value: 0x0000000000000003c
  - ValueHint: 60

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30362].requiredDVNCount

  - Value: 0x02
  - ValueHint: 2

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30362].optionalDVNCount

  - Value: 0x00

• ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30362].optionalDVNThreshold

  - Value: 0x00



## 4.11 ReceiveUln302 (Arbitrum)

Deployed at: 0x7b9e184e07a6ee1ac23eae0fe8d6be2f663f05e6

### 4.11.1 Bytecode

Codehash: 0xba4fecf1d817d9956727e7109c4337f767a13fe7ab9dc258a7959fb63f4dce72

## Bytecode Match except for Metadata hash

### 4.11.2 Immutables

- **endpoint**

- Value: LayerZero EndpointV2 (0x1a44076050125825900e736c501f859c50fe728c)

- **localEid**

- [illegible]

### 4.11.3 Critical Storage Variables

- **ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].confirmations**

- Value: 0x000000000000000f
- ValueHint: 15

- ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].requiredDVNCount

- Value: 0x02
- ValueHint: 2

- ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].optionalDVNCount

- Value: 0x00

- `ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].optionalDVNThreshold`

- Value: 0x00

- `ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].requiredDVNs.length`

- [illegible]

- `ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].requiredDVNs[0]`

- Value: 0x2f55c492897526677c5b68fb199ea31e2c126416

- `ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92][30101].requiredDVNs[1]`

- Value: 0xa8b8575fa41c305953f519c7d288cd7741727c7b

- `ulnConfigs[0x14e4a1b13bf7f943c8ff7c51fb60fa964a298d92] [30101].optionalDVNs.length`

- [illegible]

- [illegible]

- [illegible]

## 4.12 SendUln302 (Flare)

### 4.12.1 Bytecode

Codehash: 0x6c08361e92f3adfc1eaf00f11c80f6cb099f89a55c67d66265182b396466e2c8

## Bytecode Match except for Metadata hash

### 4.12.2 *Immutableables*

- **endpoint**

- Value: LayerZero EndpointV2 (0x1a44076050125825900e736c501f859c50fe728c)

- **treasuryGasLimit**

- [illegible]

### 4.12.3 Critical Storage Variables

- **ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].confirmations**

- Value: 0x00000000000001f4
- ValueHint: 500

- ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].requiredDVNCount

- Value: 0x02
- ValueHint: 2

- ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].optionalDVNCount

- Value: 0x00

- ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588][30101].optionalDVNThreshold

- Value: 0x00

- `ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].requiredDVNs.length`

- [illegible]

- ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].requiredDVNs[0]

- Value: 0x7cec38c06a2fec9fd525b1925544110204cbb5f6

- ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].requiredDVNs[1]

- Value: 0x9c061c9a4782294eef65ef28cb88233a987f4bdd

- `ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588][30101].optionalDVNs.length`

- [illegible]

- `executorConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588][30101].maxMessageSize`



- [illegible]



- [illegible]

- Value:  
0x0002
- ValueHint: 2

- **ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].requiredDVNs[0]**

- Value: 0x7cec38c06a2fec9fd525b1925544110204cbb5f6

- **ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].requiredDVNs[1]**

- Value: 0x9c061c9a4782294eef65ef28cb88233a987f4bdd

- **ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].optionalDVNs.length**

- Value:  
0x00

- **executorConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].maxMessageSize**

- Value: 0x2710
- ValueHint: 10000

- **executorConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].executor**

- Value: 0xcce466a522984415bc91338c232d98869193d46e

## 4.12.4 Critical Events

## 4.13 ReceiveUln302 (Flare)

Deployed at: 0x2367325334447c5e1e0f1b3a6fb947b262f58312

### 4.13.1 Bytecode

Codehash: 0xe5cca57a3c45c75ffb295fd4324da9def32e40ec76832f4b5eaddddfd686df70

Bytecode Match except for Metadata hash

### 4.13.2 Immutables

- **endpoint**

- Value: LayerZero EndpointV2 (0x1a44076050125825900e736c501f859c50fe728c)

- **localEid**

- Value:  
0x007657

### 4.13.3 Critical Storage Variables

- **ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30101].confirmations**

- Value: 0x0000000000000000f
- ValueHint: 15

- [illegible]

- ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30110].requiredDVNs[1]
    - Value: 0x9c061c9a4782294eef65ef28cb88233a987f4bdd
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30110].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].confirmations
    - Value: 0x0000000000000001e
    - ValueHint: 30
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].optionalDVNCount
    - Value: 0x00
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].optionalDVNThreshold
    - Value: 0x00
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].requiredDVNs.length
    - Value:  
0x0002
    - ValueHint: 2
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].requiredDVNs[0]
    - Value: 0x7cec38c06a2fec9fd525b1925544110204cbb5f6
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].requiredDVNs[1]
    - Value: 0x9c061c9a4782294eef65ef28cb88233a987f4bdd
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30339].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].confirmations
    - Value: 0x0000000000000003c
    - ValueHint: 60
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x567287d2A9829215a37e3B88843d32f9221E7588] [30362].optionalDVNCount
    - Value: 0x00

- [illegible]

#### 4.13.4 Critical Events

## 4.14 SendUln302 (Berachain)

Deployed at: 0xc39161c743d0307eb9bcc9fef03eeb9dc4802de7

### 4.14.1 Bytecode

Codehash: 0xcd2121f01434744b27de5bf44d17417ea7478f16068e183b4d3cc061505d832f

Bytecode Match except for Metadata hash

### 4.14.2 Immutables

- [illegible]

### 4.14.3 Critical Storage Variables

- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].confirmations
  - Value: 0x0000000000000003c
  - ValueHint: 60
- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].requiredDVNCount

- [illegible]

- [illegible]



- [illegible]



#### 4.14.4 Critical Events

## 4.15 ReceiveUln302 (Berachain)

Deployed at: 0xe1844c5d63a9543023008d332bd3d2e6f1fe1043

### 4.15.1 Bytecode

Codehash: 0xe048e02264f82f3f1ff58b74a8dadb3b35dba1fa96ca4a6f520071013039a82

## Bytecode Match except for Metadata hash

### 4.15.2 Immutables

- **endpoint**

- [illegible]

- **localEid**

- Value:  
0x000769a

### 4.15.3 Critical Storage Variables

- **ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].confirmations**

- Value: 0x000000000000000f
- ValueHint: 15

- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].requiredDVNCount

- Value: 0x02
- ValueHint: 2

- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].optionalDVNCount

- Value: 0x00

- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB][30101].optionalDVNThreshold

- Value: 0x00

- `ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB][30101].requiredDVNs.length`

- [illegible]

- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].requiredDVNs[0]

- Value: 0x282b3386571f7f794450d5789911a9804fa346b4

- ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].requiredDVNs[1]

- Value: 0xd01ae6905d48315f7be10c7330aecf8360ef5b12
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30101].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].confirmations
    - Value: 0x0000000000000003c
    - ValueHint: 60
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].optionalDVNCount
    - Value: 0x00
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB]  
[30110].optionalDVNThreshold
    - Value: 0x00
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].requiredDVNs.length
    - Value:  
0x002
    - ValueHint: 2
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].requiredDVNs[0]
    - Value: 0x282b3386571f7f794450d5789911a9804fa346b4
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].requiredDVNs[1]
    - Value: 0xd01ae6905d48315f7be10c7330aecf8360ef5b12
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30110].optionalDVNs.length
    - Value:  
0x00
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30295].confirmations
    - Value: 0x000000000000001f4
    - ValueHint: 500
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30295].requiredDVNCount
    - Value: 0x02
    - ValueHint: 2
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB] [30295].optionalDVNCount
    - Value: 0x00
  - ulnConfigs[0x3Dc96399109df5ceb2C226664A086140bD0379cB]  
[30295].optionalDVNThreshold

- [illegible]

#### 4.15.4 Critical Events

