

Migrating from v3 to v4

Introduction

@arbitrum/sdk v4 introduces significant changes to improve support Orbit chains from Offchain Labs. This guide outlines the breaking changes to know before migrating your existing v3 code to v4.

Major Changes Overview

1. Terminology change from L1/L2 to parent/child
2. Network types and functions updated
3. Updates to AssetBridger
4. andErc20Bridger
5. classes
6. Changes to Message classes

Detailed Changes

1. Terminology change from L1/L2 to parent/child

Most instances of "L1" and "L2" have been replaced with "parent" and "child" respectively. This change reflects the more general parent-child relationship between chains in the Arbitrum ecosystem.

- In most circumstances, when referring to a parent-child relationship between chains, the terms "parent" and "child" are used.
- Though, when referring explicitly to "L1", "L2", or "L3", those specific terms are still used.

2. Network types and functions updated

- TheL1Network
- is no longer required to be registered before bridging.
- Only Arbitrum networks need to be registered.
- Arbitrum networks are defined as Arbitrum One, Arbitrum testnets, and any Orbit chain.
- If you need a full list of Arbitrum networks, you can use the new [getArbitrumNetworks](#) function.
- To list all of the children of a network, use the new [getChildrenForNetwork](#) function.

v3 Name v4 Name L2Network [ArbitrumNetwork](#) getL2Network [getArbitrumNetwork](#) l2Networks [getArbitrumNetworks](#)
addCustomNetwork [registerCustomArbitrumNetwork](#) Network removed L1Network removed getL1Network removed
getParentForNetwork removed

ArbitrumNetwork

type

Network type has been replaced with the [ArbitrumNetwork](#) type and some properties have been removed or renamed.

v3 Name v4 Name chainID chainId partnerChainID parentChainId explorerUrl removed isArbitrum removed partnerChainIDs
removed nitroGenesisBlock removed nitroGenesisL1Block removed depositTimeout removed blockTime removed

TokenBridge

type

TheTokenBridge type within the [ArbitrumNetwork](#) object has been updated.

v3 Name v4 Name l1CustomGateway parentCustomGateway l1ERC20Gateway parentErc20Gateway l1GatewayRouter
parentGatewayRouter l1MultiCall parentMultiCall l1ProxyAdmin parentProxyAdmin l1Weth parentWeth l1WethGateway
parentWethGateway l2CustomGateway childCustomGateway l2ERC20Gateway childErc20Gateway l2GatewayRouter
childGatewayRouter l2Multicall childMultiCall l2ProxyAdmin childProxyAdmin l2Weth childWeth l2WethGateway
childWethGateway

3. Updates to AssetBridger

andErc20Bridger classes

[AssetBridger](#)

Class Methods

The [AssetBridger](#) class methods and properties have been renamed to reflect the new parent-child terminology.

v3 Name v4 Name l2Network childNetwork checkL1Network checkParentNetwork checkL2Network checkChildNetwork

[AssetBridger](#)

Class Method Parameters

The objects passed to the class methods of classes that inherit from [AssetBridger](#) ([EthBridger](#) and [Erc20Bridger](#)) have been renamed.

v3 Name v4 Name erc20L1Address erc20ParentAddress l1Provider parentProvider l2Provider childProvider l1Signer parentSigner l2Signer childSigner

[Erc20Bridger](#)

Class Methods

v3 Name v4 Name getL1GatewayAddress getParentGatewayAddress getL2GatewayAddress getChildGatewayAddress getL2WithdrawalEvents getWithdrawalEvents getL1TokenContract getParentTokenContract getL1ERC20Address getParentErc20Address getL2TokenContract getChildTokenContract getL2ERC20Address getChildErc20Address l1TokenIsDisabled isDepositDisabled l1Provider parentProvider getL1GatewaySetEvents getParentGatewaySetEvents getL2GatewaySetEvents getChildGatewaySetEvents

[Erc20L1L3Bridger](#)

Class Methods

v3 Name v4 Name getL2ERC20Address getL2Erc20Address getL3ERC20Address getL3Erc20Address

4. Changes to Message classes

Message classes have been renamed and their methods updated:

v3 Name v4 Name L1TransactionReceipt ParentTransactionReceipt L1ContractTransaction ParentContractTransaction L1ToL2Message ParentToChildMessage L1ToL2MessageWriter ParentToChildMessageWriter L1ToL2MessageReader ParentToChildMessageReader L1ToL2MessageReaderClassic ParentToChildMessageReaderClassic L1ToL2MessageStatus ParentToChildMessageStatus L1ToL2MessageGasEstimator ParentToChildMessageGasEstimator L2TransactionReceipt ChildTransactionReceipt L2ContractTransaction ChildContractTransaction L2ToL1Message ChildToParentMessage L2ToL1MessageWriter ChildToParentMessageWriter L2ToL1MessageReader ChildToParentMessageReader L2ToL1MessageStatus ChildToParentMessageStatus EthDepositStatus EthDepositMessageStatus EthDepositMessageWaitResult EthDepositMessageWaitForResult L1ToL2MessageWaitResult ParentToChildMessageWaitForResult

ChildToParentMessageClassic

v3 Name v4 Name getL2ToL1Events getChildToParentEvents

ChildToParentChainMessageNitro

v3 Name v4 Name getL2ToL1Events getChildToParentEvents

ChildTransactionReceipt

v3 Name v4 Name getL2ToL1Events getChildToParentEvents getL2ToL1Messages getChildToParentMessages

ParentToChildMessage

v3 Name v4 Name EthDepositStatus EthDepositMessageStatus

ParentToChildMessageStatus

v3 Name v4 Name FUNDS_DEPOSITED_ON_L2 FUNDS_DEPOSITED_ON_CHILD

ParentTransactionReceipt

v3 Name v4 Name getL1ToL2MessagesClassic getParentToChildMessagesClassic getL1ToL2Messages
getParentToChildMessages

ParentEthDepositTransactionReceipt

v3 Name v4 Name waitForL2 waitForChildTransactionReceipt

ParentContractCallTransactionReceipt

v3 Name v4 Name waitForL2 waitForChildTransactionReceipt [Edit this page](#) [Previous](#) [Introduction](#) [Next](#) [Index](#)