

I1I3Bridger

Classes

Erc20L1L3Bridger

Bridger for moving ERC20 tokens from L1 to L3

Extends

- BaseL1L3Bridger

Properties

Property Modifier Type Default value Description
_l1FeeTokenAddress protected undefined |string undefined If the L3 network uses a custom fee token, this is the address of that token on L1
l2ForwarderFactoryDefaultGasLimit readonly BigNumber ... Default gas limit for L2ForwarderFactory.callForwarder of 1,000,000

Measured Standard: 361746

Measured OnlyGasToken: 220416

Measured NonGasTokenToCustomGas: 373449
l2GasTokenAddress readonly undefined |string undefined If the L3 network uses a custom (non-eth) fee token, this is the address of that token on L2
teleporter readonly Teleporter undefined
Addresses of teleporter contracts on L2

Methods

_checkL1Network()

protected

_checkL1Network (sop : SignerOrProvider) :

Promise < void

Check the signer/provider matches the l1Network, throws if not

Parameters

Parameter Type Description
sop SignerOrProvider

Returns

Promise <void

Inherited from

BaseL1L3Bridger._checkL1Network

Source

[assetBridger/I1I3Bridger.ts:306](#)

_checkL2Network()

protected

_checkL2Network (sop : SignerOrProvider) :

Promise < void

Check the signer/provider matches the l2Network, throws if not

Parameters

Parameter Type Description sop SignerOrProvider

Returns

Promise <void

Inherited from

BaseL1L3Bridger._checkL2Network

Source

[assetBridger/l1l3Bridger.ts:314](#)

_checkL3Network()

protected

_checkL3Network (sop : SignerOrProvider) :

Promise < void

Check the signer/provider matches the l3Network, throws if not

Parameters

Parameter Type Description sop SignerOrProvider

Returns

Promise <void

Inherited from

BaseL1L3Bridger._checkL3Network

Source

[assetBridger/l1l3Bridger.ts:322](#)

_decodeCallForwarderCalldata()

protected

_decodeCallForwarderCalldata (data :

string) : L2ForwarderParamsStruct Given raw calldata for a callForwarder call, decode the parameters

Parameters

Parameter Type data string

Returns

L2ForwarderParamsStruct

Source

[assetBridger/l1l3Bridger.ts:1402](#)

_decodeTeleportCalldata()

protected

_decodeTeleportCalldata (data :

string) : TeleportParamsStruct Given raw calldata for a teleport tx, decode the teleport parameters

Parameters

Parameter Type data string

Returns

TeleportParamsStruct

Source

[assetBridger/l1l3Bridger.ts:1388](#)

`_fillPartialTeleportParams()`

protected

`_fillPartialTeleportParams (partialTeleportParams : OmitTyped < TeleportParamsStruct ,`

`"gasParams"`

`, retryableOverrides : Erc20L1L3DepositRequestRetryableOverrides , l1Provider : Provider , l2Provider : Provider , l3Provider : Provider) :`

Promise < object

Given TeleportParams without the gas parameters, return TeleportParams with gas parameters populated. Does not modify the input parameters.

Parameters

Parameter Type partialTeleportParams [OmitTyped](#) <TeleportParamsStruct , "gasParams"

retryableOverrides Erc20L1L3DepositRequestRetryableOverrides l1Provider Provider l2Provider Provider l3Provider Provider

Returns

Promise

Member Type costs [BigNumber ,BigNumber ,number ,RetryableGasCostsStructOutput] &object teleportParams object
teleportParams.amount BigNumberish teleportParams.gasParams RetryableGasParamsStruct teleportParams.l1Token
string teleportParams.l1l2Router string teleportParams.l2l3RouterOrInbox string teleportParams.l3FeeTokenL1Addr string
teleportParams.to string ##### Source[](<https://docs.arbitrum.io/welcome/get-started#source-5>)
[[assetBridger/l1l3Bridger.ts:1194](#)](<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1194>) #####
_getL1L2FeeTokenBridgeGasEstimates()[](https://docs.arbitrum.io/welcome/get-started#_getL1L2feeTokenBridgeGasEstimates) protected _getL1L2FeeTokenBridgeGasEstimates (params : object) :
Promise < RetryableGasValues > Estimate the gasLimit and maxSubmissionFee for the L1 to L2 fee token bridge leg of a
teleportation ##### Parameters[](<https://docs.arbitrum.io/welcome/get-started#parameters-6>) Parameter Type params
object params.feeTokenAmount BigNumber params.l1GasPrice BigNumber params.l1Provider Provider
params.l2ForwarderAddress string params.l2Provider Provider params.l3FeeTokenL1Addr string ##### Returns[]
(<https://docs.arbitrum.io/welcome/get-started#returns-6>) Promise ##### Source[](<https://docs.arbitrum.io/welcome/get-started#source-6>) [assetBridger/l1l3Bridger.ts:1056](<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1056>) #####
_getL1L2TokenBridgeGasEstimates()[](https://docs.arbitrum.io/welcome/get-started#_getL1L2tokenBridgeGasEstimates)
protected _getL1L2TokenBridgeGasEstimates (params : object) : Promise < RetryableGasValues > Estimate the gasLimit
and maxSubmissionFee for the L1 to L2 token bridge leg of a teleportation ##### Parameters[]
(<https://docs.arbitrum.io/welcome/get-started#parameters-7>) Parameter Type params object params.amount BigNumberish
params.l1GasPrice BigNumber params.l1Provider Provider params.l1Token string params.l2ForwarderAddress string
params.l2Provider Provider ##### Returns[](<https://docs.arbitrum.io/welcome/get-started#returns-7>) Promise #####
Source[](<https://docs.arbitrum.io/welcome/get-started#source-7>) [assetBridger/l1l3Bridger.ts:1024]
(<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1024>) #####
_getL2ForwarderFactoryGasEstimates()[](https://docs.arbitrum.io/welcome/get-started#_getL2forwarderfactorygasestimates)
protected _getL2ForwarderFactoryGasEstimates (l1GasPrice : BigNumber , l1Provider : Provider) : Promise <
RetryableGasValues > Estimate the gasLimit and maxSubmissionFee for L2ForwarderFactory.callForwarder leg of a
teleportation. Gas limit is hardcoded to 1,000,000 ##### Parameters[](<https://docs.arbitrum.io/welcome/get-started#parameters-8>) Parameter Type l1GasPrice BigNumber l1Provider Provider ##### Returns[]
(<https://docs.arbitrum.io/welcome/get-started#returns-8>) Promise ##### Source[](<https://docs.arbitrum.io/welcome/get-started#source-8>)

started#source-8) [assetBridger/l1l3Bridger.ts:1095](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1095) #####
_getL2L3BridgeGasEstimates()[(https://docs.arbitrum.io/welcome/get-started#_getl2l3bridgegasestimates) protected
_getL2L3BridgeGasEstimates (params : object) : Promise < RetryableGasValues > Estimate the gasLimit and
maxSubmissionFee for the L2 -> L3 leg of a teleportation. ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-9) Parameter Type params object params.l1Provider Provider params.l2ForwarderAddress string
params.l2GasPrice BigNumber params.l2Provider Provider params.l3Provider Provider params.partialTeleportParams
[OmitTyped]((https://docs.arbitrum.io/sdk/reference/utils/types#omittypedtk) ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-9) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-9) [assetBridger/l1l3Bridger.ts:1117](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1117) #####
_getTokenBridgeGasEstimates()[(https://docs.arbitrum.io/welcome/get-started#_gettokenbridgegasestimates) protected
_getTokenBridgeGasEstimates (params : object) : Promise < RetryableGasValues > Estimate the gasLimit and
maxSubmissionFee for a token bridge retryable ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-10) Parameter Type params object params.amount BigNumber params.childProvider Provider
params.from string params.isWeth boolean params.parentErc20Address string params.parentGasPrice BigNumber
params.parentGatewayAddress string params.parentProvider Provider params.to string ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-10) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-10) [assetBridger/l1l3Bridger.ts:976](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L976) #####
_l2ForwarderFactoryCalldataSize()[(https://docs.arbitrum.io/welcome/get-started#_l2forwarderfactorycalldatasize) protected
_l2ForwarderFactoryCalldataSize () : number ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-11) number The size of the calldata for a call to L2ForwarderFactory.callForwarder ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-11) [assetBridger/l1l3Bridger.ts:1366](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1366) #####
approveGasToken()[(https://docs.arbitrum.io/welcome/get-started#approvegastoken) approveGasToken (params :
TxRequestParams | object) : Promise < ContractTransaction > Approve the L3's fee token for teleportation. The tokens will
be approved for L1Teleporter. Will throw if the L3 network uses ETH for fees or the fee token doesn't exist on L1. #####
Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-11) Parameter Type params TxRequestParams
|object ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-12) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-12) [assetBridger/l1l3Bridger.ts:701](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L701) ##### approveToken()[(https://docs.arbitrum.io/welcome/get-started#approvetoken) approveToken (params : TxRequestParams |
TokenApproveParams & object) : Promise < ContractTransaction > Approve tokens for teleportation. The tokens will be
approved for L1Teleporter. ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-12) Parameter
Type params TxRequestParams |TokenApproveParams &object ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-13) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-13) [assetBridger/l1l3Bridger.ts:659](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L659) ##### deposit()[(https://docs.arbitrum.io/welcome/get-started#deposit) deposit (params : TxRequestParams |
Erc20L1L3DepositRequestParams & object) : Promise < ParentContractCallTransaction > Execute a teleportation of some
tokens from L1 to L3. ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-13) Parameter Type
params TxRequestParams |Erc20L1L3DepositRequestParams &object ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-14) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-14) [assetBridger/l1l3Bridger.ts:811](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L811) #####
getApproveGasTokenRequest()[(https://docs.arbitrum.io/welcome/get-started#getapprovegastokenrequest)
getApproveGasTokenRequest (params : object) : Promise < Required < Pick < TransactionRequest , "data" | "value" | "to"
>>> Get a tx request to approve the L3's fee token for teleportation. The tokens will be approved for L1Teleporter. Will throw
if the L3 network uses ETH for fees or the fee token doesn't exist on L1. ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-14) Parameter Type params object params.amount ? BigNumber
params.l1Provider Provider params.l2Provider Provider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-15) Promise >> ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-15) [assetBridger/l1l3Bridger.ts:682](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L682) #####
getApproveTokenRequest()[(https://docs.arbitrum.io/welcome/get-started#getapprovetokenrequest)
getApproveTokenRequest (params : TokenApproveParams) : Promise < Required < Pick < TransactionRequest , "data" |
"value" | "to" >>> Get a tx request to approve tokens for teleportation. The tokens will be approved for L1Teleporter. #####
Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-15) Parameter Type params TokenApproveParams
Returns[(https://docs.arbitrum.io/welcome/get-started#returns-16) Promise >> ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-16) [assetBridger/l1l3Bridger.ts:640](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L640) #####
getDepositParameters()[(https://docs.arbitrum.io/welcome/get-started#getdepositparameters) getDepositParameters (params : object & TxReference) : Promise < object > Given a teleportation tx, get the L1Teleporter parameters,
L2Forwarder parameters, and L2Forwarder address ##### Parameters[(https://docs.arbitrum.io/welcome/get-

started#parameters-16) Parameter Type params object &TxReference ##### Returns[]
 (https://docs.arbitrum.io/welcome/get-started#returns-17) Promise Member Type I2ForwarderAddress Promise
 I2ForwarderParams L2ForwarderParamsStruct teleportParams TeleportParamsStruct ##### Source[]
 (https://docs.arbitrum.io/welcome/get-started#source-17) [assetBridger/l1l3Bridger.ts:837]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L837) #####
 getDepositRequest()[(https://docs.arbitrum.io/welcome/get-started#getdepositrequest) getDepositRequest (params :
 Erc20L1L3DepositRequestParams & object | object) : Promise < DepositRequestResult > Get a tx request for teleporting
 some tokens from L1 to L3. Also returns the amount of fee tokens required for teleportation. ##### Parameters[]
 (https://docs.arbitrum.io/welcome/get-started#parameters-17) Parameter Type params Erc20L1L3DepositRequestParams
 &object |object ##### Returns[][(https://docs.arbitrum.io/welcome/get-started#returns-18) Promise ##### Source[]
 (https://docs.arbitrum.io/welcome/get-started#source-18) [assetBridger/l1l3Bridger.ts:732]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L732) ##### getDepositStatus()
 [(https://docs.arbitrum.io/welcome/get-started#getdepositstatus) getDepositStatus (params : GetL1L3DepositStatusParams
) : Promise < Erc20L1L3DepositStatus > Fetch the cross chain messages and their status Can provide either the txHash,
 the tx, or the txReceipt ##### Parameters[][(https://docs.arbitrum.io/welcome/get-started#parameters-18) Parameter Type
 params GetL1L3DepositStatusParams ##### Returns[][(https://docs.arbitrum.io/welcome/get-started#returns-19) Promise
 ##### Source[][(https://docs.arbitrum.io/welcome/get-started#source-19) [assetBridger/l1l3Bridger.ts:878]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L878) #####
 getGasTokenOnL1()[(https://docs.arbitrum.io/welcome/get-started#getgastokenonl1) getGasTokenOnL1 (I1Provider :
 Provider , I2Provider : Provider) : Promise < string > If the L3 network uses a custom gas token, return the address of that
 token on L1. If the fee token is not available on L1, does not use 18 decimals on L1 and L2, or the L3 network uses ETH for
 fees, throw. ##### Parameters[][(https://docs.arbitrum.io/welcome/get-started#parameters-19) Parameter Type I1Provider
 Provider I2Provider Provider ##### Returns[][(https://docs.arbitrum.io/welcome/get-started#returns-20) Promise #####
 Source[][(https://docs.arbitrum.io/welcome/get-started#source-20) [assetBridger/l1l3Bridger.ts:431]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L431) #####
 getL1L2GatewayAddress()[(https://docs.arbitrum.io/welcome/get-started#getl1l2gatewayaddress) getL1L2GatewayAddress
 (erc20L1Address : string , I1Provider : Provider) : Promise < string > Given an L1 token's address, get the address of the
 token's L1 <-> L2 gateway on L1 ##### Parameters[][(https://docs.arbitrum.io/welcome/get-started#parameters-20)
 Parameter Type erc20L1Address string I1Provider Provider ##### Returns[][(https://docs.arbitrum.io/welcome/get-
 started#returns-21) Promise ##### Source[][(https://docs.arbitrum.io/welcome/get-started#source-21)
 [assetBridger/l1l3Bridger.ts:532](https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L532) #####
 getL1TokenContract()[(https://docs.arbitrum.io/welcome/get-started#getl1tokencontract) getL1TokenContract (I1TokenAddr
 : string , I1Provider : Provider) : IERC20 Get the L1 token contract at the provided address Note: This function just returns a
 typed ethers object for the provided address, it doesn't check the underlying form of the contract bytecode to see if it's an
 erc20, and doesn't ensure the validity of any of the underlying functions on that contract. ##### Parameters[]
 (https://docs.arbitrum.io/welcome/get-started#parameters-21) Parameter Type I1TokenAddr string I1Provider Provider
 ##### Returns[][(https://docs.arbitrum.io/welcome/get-started#returns-22) IERC20 ##### Source[]
 (https://docs.arbitrum.io/welcome/get-started#source-22) [assetBridger/l1l3Bridger.ts:560]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L560) #####
 getL2Erc20Address()[(https://docs.arbitrum.io/welcome/get-started#getl2erc20address) getL2Erc20Address (I1TokenAddr
 : string , I1Provider : Provider) : Promise < string > Get the corresponding L2 token address for the
 provided L1 token ##### Parameters[][(https://docs.arbitrum.io/welcome/get-started#parameters-22) Parameter Type
 erc20L1Address string I1Provider Provider ##### Returns[][(https://docs.arbitrum.io/welcome/get-started#returns-23)
 Promise ##### Source[][(https://docs.arbitrum.io/welcome/get-started#source-23) [assetBridger/l1l3Bridger.ts:508]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L508) #####
 getL2L3GatewayAddress()[(https://docs.arbitrum.io/welcome/get-started#getl2l3gatewayaddress) getL2L3GatewayAddress
 (erc20L1Address : string , I1Provider : Provider , I2Provider : Provider) : Promise < string > Get the address of the L2 <->
 L3 gateway on L2 given an L1 token address ##### Parameters[][(https://docs.arbitrum.io/welcome/get-started#parameters-
 23) Parameter Type erc20L1Address string I1Provider Provider I2Provider Provider ##### Returns[]
 (https://docs.arbitrum.io/welcome/get-started#returns-24) Promise ##### Source[][(https://docs.arbitrum.io/welcome/get-
 started#source-24) [assetBridger/l1l3Bridger.ts:545](https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L545) #####
 getL2TokenContract()[(https://docs.arbitrum.io/welcome/get-started#getl2tokencontract) getL2TokenContract (I2TokenAddr
 : string , I2Provider : Provider) : L2GatewayToken Get the L2 token contract at the provided address Note: This function just
 returns a typed ethers object for the provided address, it doesn't check the underlying form of the contract bytecode to see if
 it's an erc20, and doesn't ensure the validity of any of the underlying functions on that contract. ##### Parameters[]
 (https://docs.arbitrum.io/welcome/get-started#parameters-24) Parameter Type I2TokenAddr string I2Provider Provider
 ##### Returns[][(https://docs.arbitrum.io/welcome/get-started#returns-25) L2GatewayToken ##### Source[]
 (https://docs.arbitrum.io/welcome/get-started#source-25) [assetBridger/l1l3Bridger.ts:570]
 (https://github.com/OffchainLabs/arbitrum-
 sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L570) #####

getL3Erc20Address()[(https://docs.arbitrum.io/welcome/get-started#getl3erc20address) getL3Erc20Address (erc20L1Address : string , I1Provider : Provider , I2Provider : Provider) : Promise < string > Get the corresponding L3 token address for the provided L1 token ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-25) Parameter Type erc20L1Address string I1Provider Provider I2Provider Provider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-26) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-26) [assetBridger/l1l3Bridger.ts:518](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L518) ##### getL3TokenContract()[(https://docs.arbitrum.io/welcome/get-started#getl3tokencontract) getL3TokenContract (I3TokenAddr : string , I3Provider : Provider) : L2GatewayToken Get the L3 token contract at the provided address Note: This function just returns a typed ethers object for the provided address, it doesn't check the underlying form of the contract bytecode to see if it's an erc20, and doesn't ensure the validity of any of the underlying functions on that contract. ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-26) Parameter Type I3TokenAddr string I3Provider Provider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-27) L2GatewayToken ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-27) [assetBridger/l1l3Bridger.ts:583](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L583) ##### I1TokenIsDisabled()[(https://docs.arbitrum.io/welcome/get-started#i1tokenisdisabled) I1TokenIsDisabled (I1TokenAddress : string , I1Provider : Provider) : Promise < boolean > Whether the L1 token has been disabled on the L1 <-> L2 router given an L1 token address ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-27) Parameter Type I1TokenAddress string I1Provider Provider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-28) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-28) [assetBridger/l1l3Bridger.ts:593](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L593) ##### I2ForwarderAddress()[(https://docs.arbitrum.io/welcome/get-started#i2forwarderaddress) I2ForwarderAddress (owner : string , routerOrInbox : string , destinationAddress : string , I1OrL2Provider : Provider) : Promise < string > Given some L2Forwarder parameters, get the address of the L2Forwarder contract ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-28) Parameter Type owner string routerOrInbox string destinationAddress string I1OrL2Provider Provider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-29) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-29) [assetBridger/l1l3Bridger.ts:613](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L613) ##### I2TokenIsDisabled()[(https://docs.arbitrum.io/welcome/get-started#i2tokenisdisabled) I2TokenIsDisabled (I2TokenAddress : string , I2Provider : Provider) : Promise < boolean > Whether the L2 token has been disabled on the L2 <-> L3 router given an L2 token address ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-29) Parameter Type I2TokenAddress string I2Provider Provider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-30) Promise ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-30) [assetBridger/l1l3Bridger.ts:603](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L603) ##### teleportationType()[(https://docs.arbitrum.io/welcome/get-started#teleportationtype) teleportationType (partialTeleportParams : Pick < TeleportParamsStruct , "I1Token" | "I3FeeTokenL1Addr" >) : TeleportationType Get the type of teleportation from the I1Token and I3FeeTokenL1Addr teleport parameters ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-30) Parameter Type partialTeleportParams Pick ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-31) TeleportationType ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-31) [assetBridger/l1l3Bridger.ts:953](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L953) ### EthL1L3Bridger[(https://docs.arbitrum.io/welcome/get-started#ethl1l3bridger) Bridge ETH from L1 to L3 using a double retryable ticket #### Extends[(https://docs.arbitrum.io/welcome/get-started#extends-1) * BaseL1L3Bridger #### Methods[(https://docs.arbitrum.io/welcome/get-started#methods-1) ##### _checkL1Network()[(https://docs.arbitrum.io/welcome/get-started#_checkl1network-1) protected _checkL1Network (sop : SignerOrProvider) : Promise < void > Check the signer/provider matches the I1Network, throws if not ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-31) Parameter Type Description sop SignerOrProvider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-32) Promise ##### Inherited from[(https://docs.arbitrum.io/welcome/get-started#inherited-from-3) BaseL1L3Bridger._checkL1Network ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-32) [assetBridger/l1l3Bridger.ts:306](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L306) ##### _checkL2Network()[(https://docs.arbitrum.io/welcome/get-started#_checkl2network-1) protected _checkL2Network (sop : SignerOrProvider) : Promise < void > Check the signer/provider matches the I2Network, throws if not ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-32) Parameter Type Description sop SignerOrProvider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-33) Promise ##### Inherited from[(https://docs.arbitrum.io/welcome/get-started#inherited-from-4) BaseL1L3Bridger._checkL2Network ##### Source[(https://docs.arbitrum.io/welcome/get-started#source-33) [assetBridger/l1l3Bridger.ts:314](https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L314) ##### _checkL3Network()[(https://docs.arbitrum.io/welcome/get-started#_checkl3network-1) protected _checkL3Network (sop : SignerOrProvider) : Promise < void > Check the signer/provider matches the I3Network, throws if not ##### Parameters[(https://docs.arbitrum.io/welcome/get-started#parameters-33) Parameter Type Description sop SignerOrProvider ##### Returns[(https://docs.arbitrum.io/welcome/get-started#returns-34) Promise ##### Inherited from]

(<https://docs.arbitrum.io/welcome/get-started#inherited-from-5>) BaseL1L3Bridger._checkL3Network ##### Source[]
(<https://docs.arbitrum.io/welcome/get-started#source-34>) [assetBridger/l1l3Bridger.ts:322]
(<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L322>) ##### deposit()[]
(<https://docs.arbitrum.io/welcome/get-started#deposit-1>) deposit (params : TxRequestParams | EthL1L3DepositRequestParams & object) : Promise < ParentContractCallTransaction > Deposit ETH to L3 via a double retryable ticket ##### Parameters[](<https://docs.arbitrum.io/welcome/get-started#parameters-34>) Parameter Type params TxRequestParams | EthL1L3DepositRequestParams & object ##### Returns[](<https://docs.arbitrum.io/welcome/get-started#returns-35>) Promise ##### Source[](<https://docs.arbitrum.io/welcome/get-started#source-35>) [assetBridger/l1l3Bridger.ts:1521](<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1521>) #####
getDepositParameters()[](<https://docs.arbitrum.io/welcome/get-started#getdepositparameters-1>) getDepositParameters (params : object & TxReference) : Promise < object > Given an L1 transaction, get the retryable parameters for both l2 and l3 tickets ##### Parameters[](<https://docs.arbitrum.io/welcome/get-started#parameters-35>) Parameter Type params object & TxReference ##### Returns[](<https://docs.arbitrum.io/welcome/get-started#returns-36>) Promise Member Type l1l2TicketData [RetryableMessageParams]
(<https://docs.arbitrum.io/sdk/reference/dataEntities/message#retryablemessageparams>) l2l3TicketData [RetryableMessageParams](<https://docs.arbitrum.io/sdk/reference/dataEntities/message#retryablemessageparams>) ##### Source[](<https://docs.arbitrum.io/welcome/get-started#source-36>) [assetBridger/l1l3Bridger.ts:1547]
(<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1547>) #####
getDepositRequest()[](<https://docs.arbitrum.io/welcome/get-started#getdepositrequest-1>) getDepositRequest (params : EthL1L3DepositRequestParams & object | object) : Promise < ParentToChildTransactionRequest > Get a tx request to deposit ETH to L3 via a double retryable ticket ##### Parameters[](<https://docs.arbitrum.io/welcome/get-started#parameters-36>) Parameter Type params EthL1L3DepositRequestParams & object | object ##### Returns[]
(<https://docs.arbitrum.io/welcome/get-started#returns-37>) Promise <[ParentToChildTransactionRequest]
(<https://docs.arbitrum.io/sdk/reference/dataEntities/transactionRequest#parenttochildtransactionrequest>) > ##### Source[]
(<https://docs.arbitrum.io/welcome/get-started#source-37>) [assetBridger/l1l3Bridger.ts:1463]
(<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1463>) #####
getDepositStatus()[](<https://docs.arbitrum.io/welcome/get-started#getdepositstatus-1>) getDepositStatus (params : GetL1L3DepositStatusParams) : Promise < EthL1L3DepositStatus > Get the status of a deposit given an L1 tx receipt. Does not check if the tx is actually a deposit tx. ##### Parameters[](<https://docs.arbitrum.io/welcome/get-started#parameters-37>) Parameter Type params GetL1L3DepositStatusParams ##### Returns[]
(<https://docs.arbitrum.io/welcome/get-started#returns-38>) Promise Information regarding each step of the deposit and EthL1L3DepositStatus.completed which indicates whether the deposit has fully completed. ##### Source[]
(<https://docs.arbitrum.io/welcome/get-started#source-38>) [assetBridger/l1l3Bridger.ts:1577]
(<https://github.com/OffchainLabs/arbitrum-sdk/blob/f5b3d04baf62356032f5475057637d989da5b6c1/src/lib/assetBridger/l1l3Bridger.ts#L1577>) [Edit this page]
(<https://github.com/OffchainLabs/arbitrum-docs/edit/master/arbitrum-docs/sdk/reference/assetBridger/l1l3Bridger.md>) [Previous EthBridger](<https://docs.arbitrum.io/sdk/reference/assetBridger/ethBridger>) [Next Address]
(<https://docs.arbitrum.io/sdk/reference/dataEntities/address>)