

# ethBridger

## Classes

### EthBridger

Bridger for moving ETH back and forth between L1 to L2

#### Extends

- [AssetBridger](#)
- <EthDepositParams
- |EthDepositToParams
- |L1ToL2TxReqAndSigner
- ,EthWithdrawParams
- |L2ToL1TxReqAndSigner
- 

#### 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

[AssetBridger .checkL1Network](#)

#### Source

[assetBridger/assetBridger.ts:48](#)

**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

## [AssetBridger .checkL2Network](#)

### Source

[assetBridger/assetBridger.ts:56](#)

### deposit()

deposit ( params : EthDepositParams | L1ToL2TxReqAndSigner ) :

Promise < L1EthDepositTransaction

Deposit ETH from L1 onto L2

### Parameters

Parameter Type Description params EthDepositParams |L1ToL2TxReqAndSigner

### Returns

Promise <L1EthDepositTransaction

### Overrides

## [AssetBridger .deposit](#)

### Source

[assetBridger/ethBridger.ts:179](#)

### depositTo()

depositTo ( params : EthDepositToParams | L1ToL2TransactionRequest & object & object ) :

Promise < L1ContractCallTransaction

Deposit ETH from L1 onto a different L2 address

### Parameters

Parameter Type Description params EthDepositToParams [L1ToL2TransactionRequest](#) &object &object

### Returns

Promise <L1ContractCallTransaction

### Source

[assetBridger/ethBridger.ts:231](#)

### getDepositRequest()

getDepositRequest ( params : EthDepositRequestParams ) :

Promise < OmitTyped < L1ToL2TransactionRequest ,

"retryableData"

Get a transaction request for an eth deposit

### Parameters

Parameter Type Description params EthDepositRequestParams

### Returns

Promise <[OmitTyped](#) <[L1ToL2TransactionRequest](#) ,"retryableData"

#### Source

[assetBridger/ethBridger.ts:149](#)

#### **getDepositToRequest()**

getDepositToRequest ( params : EthDepositToRequestParams ) :

Promise < L1ToL2TransactionRequest

Get a transaction request for an ETH deposit to a different L2 address using Retryables

#### Parameters

Parameter Type Description params EthDepositToRequestParams

#### Returns

Promise < [L1ToL2TransactionRequest](#)

#### Source

[assetBridger/ethBridger.ts:204](#)

#### **getWithdrawalRequest()**

getWithdrawalRequest ( params : EthWithdrawParams ) :

Promise < L2ToL1TransactionRequest

Get a transaction request for an eth withdrawal

#### Parameters

Parameter Type Description params EthWithdrawParams

#### Returns

Promise < [L2ToL1TransactionRequest](#)

#### Source

[assetBridger/ethBridger.ts:260](#)

#### **withdraw()**

withdraw ( params : L2ToL1TxReqAndSigner | EthWithdrawParams & object ) :

Promise < L2ContractTransaction

Withdraw ETH from L2 onto L1

#### Parameters

Parameter Type Description params L2ToL1TxReqAndSigner | EthWithdrawParams & object

#### Returns

Promise < L2ContractTransaction

#### Overrides

[AssetBridger](#) .[withdraw](#)

#### Source

[assetBridger/ethBridger.ts:290](#)

**fromProvider()**

static

fromProvider ( I2Provider : Provider ) :

Promise < EthBridger

Instantiates a new EthBridger from an L2 Provider

#### Parameters

Parameter	Type	Description
I2Provider	Provider	

#### Returns

Promise <[EthBridger](#)

#### Source

[assetBridger/ethBridger.ts:140](#) [Edit this page](#) [Previous](#) [Erc20Bridger](#) [Next](#) [Address](#)