Class: OrderSigningUtils

Utility class for signing order intents and cancellations.

Remarks

This class only supportseth_sign and wallet-native EIP-712 signing. For use ofpresign andeip1271[see the docs](#) .

Example

import

{ OrderSigningUtils , SupportedChainId }

from

'@cowprotocol/cow-sdk' import

{ Web3Provider }

from

'@ethersproject/providers'

const account =

'YOUR_WALLET_ADDRESS' const chainId =

100

// Gnosis chain const provider =

new

Web3Provider (window . ethereum) const signer = provider . getSigner ( )

async

function

main ( )

{ const

{ order : Order }

=

{

...

} const orderSigningResult =

await OrderSigningUtils . signOrder (quote , chainId , signer)

const orderId =

await orderBookApi . sendOrder ({

... quote ,

... orderSigningResult })

const order =

await orderBookApi . getOrder (orderId)

const trades =

await orderBookApi . getTrades ({ orderId })

const orderCancellationSigningResult =

```
await OrderSigningUtils . signOrderCancellations ( [ orderId ] , chainId , signer )

const cancellationResult =

await orderBookApi . sendSignedOrderCancellations ( { ... orderCancellationSigningResult , orderUids :

[ orderId ]

} )

console . log ( 'Results: ' ,

{ orderId , order , trades , orderCancellationSigningResult , cancellationResult } ) ) }
```

Constructors

constructor

•new OrderSigningUtils ():OrderSigningUtils

Returns

OrderSigningUtils

Methods

getDomain

▸getDomain (chainId):Promise <TypedDataDomain

Get the EIP-712 typed domain data being used for signing.

Parameters

Name Type Description chainId SupportedChainId The CoW Protocol protocolchainId context that's being used.

Returns

Promise <TypedDataDomain

The EIP-712 typed domain data.

See

https://eips.ethereum.org/EIPS/eip-712

Defined in

external/cow-sdk/src/order-signing/orderSigningUtils.ts:98

getDomainSeparator

▸getDomainSeparator (chainId):Promise <string

Get the domain separator hash for the EIP-712 typed domain data being used for signing.

Parameters

Name Type Description chainId SupportedChainId {SupportedChainId} chainId The CoW Protocol protocolchainId context that's being used.

Returns

Promise <string

A string representation of the EIP-712 typed domain data hash.

Defined in

external/cow-sdk/src/order-signing/orderSigningUtils.ts:108

getEIP712Types

▶getEIP712Types ():Record <string ,any

Get the EIP-712 types used for signing a GPv2Order.Data struct. This is useful for when signing orders using smart contracts, whereby this SDK cannot do the EIP-1271 signing for you.

Returns

Record <string ,any

The EIP-712 types used for signing.

Defined in

external/cow-sdk/src/order-signing/orderSigningUtils.ts:119

signOrder

▶signOrder (order ,chainId ,signer):Promise <[SigningResult](#)

Sign the order intent with the specified signer.

Parameters

Name Type Description order [UnsignedOrder](#) The unsigned order intent to be placed. chainId[SupportedChainId](#) The CoW ProtocolchainId context that's being used. signer Signer The signer who is placing the order intent.

Returns

Promise <[SigningResult](#)

Encoded signature including signing scheme for the order.

Remarks

If the API reports an error with the signature, it is likely to be due to an incorrectly specifiedchainId . Please ensure that thechainId is correct for the network you are using.

Defined in

external/cow-sdk/src/order-signing/orderSigningUtils.ts:55

signOrderCancellation

▶signOrderCancellation (orderUid ,chainId ,signer):Promise <[SigningResult](#)

Sign a cancellation message of an order intent with the specified signer.

Parameters

Name Type Description orderUid string The unique identifier of the order to cancel. chainId[SupportedChainId](#) The CoW Protocolchainid context that's being used. signer Signer The signer who initially placed the order intent.

Returns

Promise <[SigningResult](#)

Encoded signature including signing scheme for the cancellation.

Defined in

external/cow-sdk/src/order-signing/orderSigningUtils.ts:67

signOrderCancellations

▶signOrderCancellations (orderUids ,chainId ,signer):Promise <[SigningResult](#)

Sign a cancellation message of multiple order intents with the specified signer.

Parameters

Name Type Description orderUids string [] An array oforderUid to cancel. chainId[SupportedChainId](#) The CoW Protocol protocolchainId context that's being used. signer Signer The signer who initially placed the order intents.

Returns

Promise <[SigningResult](#)

Encoded signature including signing scheme for the cancellation.

Defined in

external/cow-sdk/src/order-signing/orderSigningUtils.ts:83 [Previous OrderBookApiError](#) [Next SubgraphApi](#)