FunctionsClient API Reference

Add Chainlink to your project

If you need to integrate Chainlink into your project, install the @chainlink/contracts NPM package .

- If you use NPM :npm install @chainlink/contracts --save
- If you use Yarn :yarn add @chainlink/contracts

Functions contracts are available starting from version0.7.1.

Consumer contract developers inherit FunctionsClient to create Chainlink Functions requests.

Events

RequestSent

eventRequestSent(bytes32id)

RequestFulfilled

eventRequestFulfilled(bytes32id)

Errors

OnlyRouterCanFulfill

errorOnlyRouterCanFulfill()

Methods

constructor

constructor(addressrouter)

_sendRequest

function_sendRequest(bytesdata,uint64subscriptionId,uint32callbackGasLimit,bytes32donId)internalreturns(bytes32) Sends a Chainlink Functions request to the stored router address

Parameters

NameTypeDescriptiondatabytesThe CBOR encoded bytes data for a Functions requestsubscriptionIduint64The subscription ID that will be charged to service the requestcallbackGasLimituint32the amount of gas that will be available for the fulfillment callbackdonIdbytes32

Return Values

NameTypeDescription[0]bytes32requestId The generated request ID for this request

fulfillRequest

functionfulfillRequest(bytes32requestId,bytesresponse,byteserr)internalvirtual User defined function to handle a response from the DON

Either response or error parameter will be set, but never both

Parameters

NameTypeDescriptionrequestIdbytes32The request ID, returned by sendRequest()responsebytesAggregated response from the execution of the user's source codeerrbytesAggregated error from the execution of the user code or from the execution pipeline

handleOracleFulfillment

functionhandleOracleFulfillment(bytes32requestId,bytesresponse,byteserr)external Chainlink Functions response handler called by the Functions Router during fullilment from the designated transmitter node in an OCR round

Either response or error parameter will be set, but never both

Parameters

NameTypeDescriptionrequestIdbytes32The requestId returned by FunctionsClient.sendRequest().responsebytesAggregated response from the request's source code.errbytesAggregated error either from the request's source code or from the execution pipeline.