Feed Registry API Reference

This guide outlines the functions which can be used with Chainlink's Feed Registry. You can learn more about the feed registryere.

Functions

NameDescriptiondecimals The number of decimals in the responsedescription The description of the aggregator that the proxy points togetRoundDataGet data from a specific round.latestRoundDataGet data from the latest roundwersion The version representing the type of aggregator the proxy points togetFeedReturns the primary aggregator address of a base / quote pair.getPhaseFeedReturns the aggregator address of a base / quote pair at a specified phasesFeedEnabledReturns true if an aggregator is enabled as primary on the registry.getPhaseReturns the raw starting and ending aggregator round ids of a base / quote pair at a specified round.getPhaseRangeReturns the starting and ending round ids of a base / quote pair at a specified phasestPreviousRoundIdReturns the previous round id of a base / quote pair given a specified round.getPhaseRangeReturns the next round id of a base / quote pair given a specified round.getCurrentPhaseIdReturns the current phase id of a base / quote pair.

decimals

Get the number of decimals present in the response value.

functiondecimals(addressbase,addressquote)externalviewreturns(uint8)

Parameters

- · base: The base asset address.
- · quote: The quote asset address

Return values

• RETURN: The number of decimals.

description

Get the description of the underlying aggregator that the proxy points to.

functiondescription(addressbase,addressquote)externalviewreturns(stringmemory)

Parameters

- base: The base asset address.
- · quote: The quote asset address

Return values

· RETURN: The description of the underlying aggregator.

getRoundData

Get data about a specific round, using theroundId.

functiongetRoundData(addressbase,addressquote,uint80_roundId)externalviewreturns(uint80roundId,int256answer,uint256startedAt,uint256updatedAt,uint80answeredInRound)

Parameters

- base: The base asset address.
- quote: The quote asset address.
- roundld: The round ID.

Return values

- roundld: The round ID
- · answer: The price.
- startedAt: Timestamp of when the round started.
- updatedAt: Timestamp of when the round was updated.
- answeredInRound:Deprecated Previously used when answers could take multiple rounds to be computed

<u>latestRoundData</u>

Get the price from the latest round.

function latest Round Data (address base, address quote) external view returns (uint 80 round Id, int 256 answer, uint 256 started At, uint 256 updated At, uint 80 answered In Round) and the started At, uint 256 updated At, uint 256 updated At, uint 80 answered In Round) and the started At, uint 256 updated At, uint 256

Return values

- roundld: The round ID.
- · answer: The price.
- startedAt: Timestamp of when the round started.
- · updatedAt: Timestamp of when the round was updated.
- answeredInRound:Deprecated Previously used when answers could take multiple rounds to be computed

version

The version representing the type of aggregator the proxy points to

functionversion(addressbase,addressquote)externalviewreturns(uint256)

Parameters

- · base: The base asset address.
- quote: The quote asset address.

Return values

• RETURN: The version number.

getFeed

Returns the primary aggregator address of a base / quote pair. Note that onchain contracts cannot read from aggregators directly, only through Feed Registry or Proxy contracts.

 $functionget Feed (address base, address quote) external view returns (Aggregator V2V3 Interface\ aggregator);$

Parameters

- base: The base asset address.
- quote: The quote asset address.

Return values

· aggregator: The primary aggregator address.

getPhaseFeed

Returns the underlying aggregator address of a base / quote pair at a specified phase. Note that onchain contracts cannot read from aggregators directly, only through Feed Registry or Proxy contracts. Phase ids start at1. You can get the current Phase by callinggetCurrentPhaseId().

functiongetPhaseFeed(addressbase,addressquote,uint16phaseId)externalviewreturns(AggregatorV2V3Interface aggregator);

Parameters

- · base: The base asset address.
- · quote: The quote asset address
- phaseld: The phase id.

Return values

• aggregator: The primary aggregator address at the specified phase.

isFeedEnabled

Returns true if an aggregator is enabled as primary on the feed registry. This is useful to check if you should index events from an aggregator contract, because you want to only index events of primary aggregators.

functionisFeedEnabled(addressaggregator)externalviewreturns(bool);

Parameters

· aggregator: The aggregator address

Return values

• RETURN:trueif the supplied aggregator is a primary aggregator for any base / quote pair.

getPhase

Returns the starting and ending aggregator round ids of a base / quote pair.

functiong et Phase (address base, address quote, uint 16 phase Id) external view returns (Phase memory phase); Phases hold the following information:

 $struct Phase \{uint 16 phase Id; uint 80 starting Aggregator Round Id; uint 80 ending Aggregator Round Id; part of the properties of the$

<u>Parameters</u>

- · base: The base asset address
- quote: The quote asset address.
- · phaseld: The phase id.

Return values

• RETURN:Phasedetails of a base / quote pair.

getRoundFeed

Returns the underlying aggregator address of a base / quote pair at a specified round. Note that onchain contracts cannot read from aggregators directly, only through Feed Registry or Proxy contracts.

functiong et Round Feed (address base, address quote, uint 80 round Id) external view returns (Aggregator V2V3 Interface aggregator); and the result of th

<u>Parameters</u>

- base: The base asset address.
- quote: The quote asset address.
- · roundld: The round id.

Return values

• aggregator: The underlying aggregator address of a base / quote pair at the specified round.

getPhaseRange

Returns the starting and ending round ids of a base / quote pair at a specified phase.

Please note that thisroundldis calculated from the phase id and the underlying aggregator's round id. To get the raw aggregator round ids of a phase for indexing purposes, please usegetPhase().

function get Phase Range (address base, address quote, uint 16 phase Id) external view returns (uint 80 starting Round Id, uint 80 ending Round Id);

Parameters

- · base: The base asset address.
- quote: The quote asset address.
- · phaseld: The phase id.

Return values

startingRoundId: The starting round idendingRoundId: The ending round id

getPreviousRoundId

Returns the previous round id of a base / quote pair given a specified round. Note that rounds are non-monotonic across phases.

functiongetPreviousRoundId(addressbase,addressquote,uint80roundId)externalviewreturns(uint80previousRoundId);

Parameters

- base: The base asset address.
- quote: The quote asset address.
 roundld: The round id.

Return values

• previousRoundId: The previous round id of a base / quote pair.

getNextRoundId

Returns the next round id of a base / quote pair given a specified round. Note that rounds are non-monotonic across phases.

function getNextRoundId (address base, address quote, uint80 roundId) external view returns (uint80 nextRoundId);

Parameters

- base: The base asset address.
- quote: The quote asset address.
 roundld: The round id.

Return values

• nextRoundId: The next round id of a base / quote pair.

getCurrentPhaseId

Returns the current phase id of a base / quote pair.

function get Current Phase Id (address base, address quote) external view returns (uint 16 current Phase Id);

Parameters

- · base: The base asset address.
- quote: The quote asset address.

Return values

• phaseld: The current phase id of a base / quote pair.