DeepBookV3 Indexer

DeepBook Indexer provides streamlined, real-time access to order book and trading data from the DeepBook protocol. It acts as a centralized service to aggregate and expose critical data points for developers, traders, and analysts who interact with DeepBook.

DeepBook Indexer simplifies data retrieval by offering endpoints that enable:

You can either use a publicly available indexer or spin up your own service. The choice you make depends on a few factors.

Use the public service if:

Run your own indexer if:

Mysten Labs provides a public indexer for DeepBook. You can access this indexer at the following URL:

Volumes returned by the following endpoints are expressed in the smallest unit of the corresponding asset.

Following are the decimal places (scalars) used to determine the base unit for each asset.

To convert the returned volume to the standard asset unit, divide the value by 10^SCALAR. For example:

If the volume returned in the base asset for the SUI/USDC pool is 1,000,000,000 SUI UNIT, the correct volume in SUI is 1,000,000,000 / 10^(SUI_SCALAR) = 1 SUI. Similarly, if the volume returned in the quote asset for the SUI/USDC pool is 1,000,000,000 USDC UNIT, the correct volume is 1,000,000,000 / 10^(USDC_SCALAR) = 1,000 USDC.

Use these conversions to interpret the volumes correctly across all pools and assets.

You can perform the following tasks using the endpoints that the indexer API for DeepBook provides.

Returns a list of all available pools, each containing detailed information about the base and quote assets, as well as pool parameters like minimum size, lot size, and tick size.

Each pool object in the response includes the following fields:

A successful request to the following endpoint

produces a response similar to

Use this endpoint to get historical volume for pools for a specific time range. Delimit the pool_names with commas, and use Unix timestamp seconds for start_time and end_time values.

By default, this endpoint retrieves the last 24-hour trading volume in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for each specified pool within the given time range.

A successful request to the following endpoint

produces a response similar to

Use this endpoint to get historical volume for all pools. Include the optional start_time and end_time values as Unix timestamp seconds to retrieve the volume within that time range.

By default, this endpoint retrieves the last 24-hour trading volume in the quote asset. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for all available pools within the time range (if provided).

A successful request to the following endpoint

produces a response similar to

Get historical volume by balance manager for a specific time range. Delimit the pool_names with commas, and use Unix timestamp seconds for the optional start_time and end_time values.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

A successful request to the following endpoint

produces a response similar to

Get historical volume by BalanceManager for a specific time range with intervals. Delimit pool_names with commas and use Unix timestamp seconds for the optional start_time and end_time values. Use number of seconds for the interval value. As a simplified interval example, if start_time is 5, end_time is 10, and interval is 2, then the response includes volume from 5 to 7 and 7 to 9, with start time of the periods as keys.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

A successful request to the following endpoint with an interval of 24 hours

produces a response similar to

Returns a summary in JSON for all trading pairs in DeepBook.

Each summary object has the following form. The order of fields in the JSON object is not guaranteed.

A successful request to

produces a response similar to

Returns all trading pairs volume (already scaled), last price, and isFrozen value. Possible values for isFrozen is either:

A successful request to

produces a response similar to

Returns the most recent trade in the pool.

The timestamp value is in Unix milliseconds.

A successful request to

produces a response similar to

Returns the orders that were recently placed or canceled in the pool

The timestamp value is in Unix milliseconds.

A successful request to

produces a response similar to

Returns the bids and asks for the relevant pool. The bids and asks returned are each sorted from best to worst. There are two optional query parameters in the endpoint:

The timestamp returned is a string that represents a Unix timestamp in milliseconds.

A successful request to

produces a response similar to

Returns asset information for all coins being traded on DeepBook.

Each asset object has the following form:

A successful request to

produces a response similar to

Public DeepBook Indexer

Mysten Labs provides a public indexer for DeepBook. You can access this indexer at the following URL:

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By default, this endpoint retrieves the last 24-hour trading volume in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for each specified pool within the given time range.

A successful request to the following endpoint

produces a response similar to

Use this endpoint to get historical volume for all pools. Include the optional start_time and end_time values as Unix timestamp seconds to retrieve the volume within that time range.

By default, this endpoint retrieves the last 24-hour trading volume in the quote asset. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for all available pools within the time range (if provided).

A successful request to the following endpoint

produces a response similar to

Get historical volume by balance manager for a specific time range. Delimit the pool_names with commas, and use Unix timestamp seconds for the optional start_time and end_time values.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

A successful request to the following endpoint

produces a response similar to

Get historical volume by BalanceManager for a specific time range with intervals. Delimit pool_names with commas and use Unix timestamp seconds for the optional start_time and end_time values. Use number of seconds for the interval value. As a simplified interval example, if start_time is 5, end_time is 10, and interval is 2, then the response includes volume from 5 to 7 and 7 to 9, with start time of the periods as keys.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

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Returns the most recent trade in the pool.

The timestamp value is in Unix milliseconds.

A successful request to

produces a response similar to

Returns the orders that were recently placed or canceled in the pool

The timestamp value is in Unix milliseconds.

A successful request to

produces a response similar to

Returns the bids and asks for the relevant pool. The bids and asks returned are each sorted from best to worst. There are two optional query parameters in the endpoint:

The timestamp returned is a string that represents a Unix timestamp in milliseconds.

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Each asset object has the following form:

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Asset conversions

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Returns the historical volume for each specified pool within the given time range.

A successful request to the following endpoint

produces a response similar to

Use this endpoint to get historical volume for all pools. Include the optional start_time and end_time values as Unix timestamp seconds to retrieve the volume within that time range.

By default, this endpoint retrieves the last 24-hour trading volume in the quote asset. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for all available pools within the time range (if provided).

A successful request to the following endpoint

produces a response similar to

Get historical volume by balance manager for a specific time range. Delimit the pool_names with commas, and use Unix timestamp seconds for the optional start_time and end_time values.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

A successful request to the following endpoint

produces a response similar to

Get historical volume by BalanceManager for a specific time range with intervals. Delimit pool_names with commas and use Unix timestamp seconds for the optional start_time and end_time values. Use number of seconds for the interval value. As a simplified interval example, if start_time is 5, end_time is 10, and interval is 2, then the response includes volume from 5 to 7 and 7 to 9, with start time of the periods as keys.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

A successful request to the following endpoint with an interval of 24 hours

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The timestamp value is in Unix milliseconds.

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Returns the orders that were recently placed or canceled in the pool

The timestamp value is in Unix milliseconds.

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Returns the bids and asks for the relevant pool. The bids and asks returned are each sorted from best to worst. There are two optional query parameters in the endpoint:

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Each asset object has the following form:

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API endpoints

You can perform the following tasks using the endpoints that the indexer API for DeepBook provides.

Returns a list of all available pools, each containing detailed information about the base and quote assets, as well as pool parameters like minimum size, lot size, and tick size.

Each pool object in the response includes the following fields:

A successful request to the following endpoint

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Use this endpoint to get historical volume for pools for a specific time range. Delimit the pool_names with commas, and use Unix timestamp seconds for start_time and end_time values.

By default, this endpoint retrieves the last 24-hour trading volume in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for each specified pool within the given time range.

A successful request to the following endpoint

produces a response similar to

Use this endpoint to get historical volume for all pools. Include the optional start_time and end_time values as Unix timestamp seconds to retrieve the volume within that time range.

By default, this endpoint retrieves the last 24-hour trading volume in the quote asset. If you want to query the base asset instead, set volume_in_base to true .

Returns the historical volume for all available pools within the time range (if provided).

A successful request to the following endpoint

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Get historical volume by balance manager for a specific time range. Delimit the pool_names with commas, and use Unix timestamp seconds for the optional start_time and end_time values.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

A successful request to the following endpoint

produces a response similar to

Get historical volume by BalanceManager for a specific time range with intervals. Delimit pool_names with commas and use Unix timestamp seconds for the optional start_time and end_time values. Use number of seconds for the interval value. As a simplified interval example, if start_time is 5, end_time is 10, and interval is 2, then the response includes volume from 5 to 7 and 7 to 9, with start time of the periods as keys.

By default, this endpoint retrieves the last 24-hour trading volume for the balance manager in the quote asset for specified pools. If you want to query the base asset instead, set volume_in_base to true .

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