

Date Filtering and Pagination Queries

Quickly locate any transaction using Circle's date and pagination query parameters. [Suggest Edits](#)

Circle's API query parameters enable you to locate specific transactions quickly and confidently. They allow you to query by date range and/or by page number within a collection resource. These common query parameters are available across most of our collection resources.

Common Filters

The following section lists and describes common query parameters that are available across most of our collection resources.

Date Ranges

Our collection resources use createDate DESC to sort data, placing the most recent items at the top of the list.

But if you're only looking for items in a specific time range, you can specify this range via from and to query parameters:

Parameter Description Default from Inclusive start of the date range filter applied to the createDate property of the related item. * (All historic items are included) to Inclusive end of the date range filter applied to the createDate property of the related item. now() (defaults to the timestamp of request processing) The value format for both parameters is defined as an ISO 8601 Coordinated Universal Time (UTC) string.

Example: Let's say you want to review all payments from January 2020. Your request would look like this:

```
Bash JavaScript curl 'https://api-sandbox.circle.com/v1/payments?from=2020-01-01T00:00:00Z&to=2020-01-31T23:59:59Z'
/* * See installation instructions at * https://developers.circle.com/developer/docs/circle-sdk / import { Circle,
CircleEnvironments } from "@circle-fin/circle-sdk";
```

```
const circle = new Circle( "", CircleEnvironments.sandbox );
```

```
async function listPayments() { const resp = await circle.payments.listPayments( // Skip defining other query params
undefined, undefined, undefined, undefined, undefined,
```

```
    '2020-01-01T00:00:00Z', // 'from' query param
    '2020-01-31T23:59:59Z', // 'to' query param
);
console.log(resp.data);
```

```
} listPayments();
```

By Page Number

The amount of information accessible via Circle APIs can get quite vast. To keep things fresh and snappy all the time, our APIs will automatically paginate the returned items on all collection resources.

Example: Let's say you want to fetch some payments via the [Get a list of payments](#) resource.

Pagination characteristics:

1. Each API collection endpoint has its own defaults regarding the returned page size. You can specify the required page size via the
2. pageSize
3. query parameter, but be aware that each resource has a fixed maximum for returned items per page. Consult the appropriate API docs for the applicable values for your specific call.
4. To navigate through a collection, use the next/previous page cursors.
5. The pagination cursor is linked to the filter query parameters you provide when requesting the first page. To change a filter parameter, start again from the first page.
6. Once you reach the last page, the pagination cursor will no longer link to the next page, so your iteration ends there. In the same way, there is no previous page link available on the first page.

Link relations:

Circle APIs provide the pagination cursor information within a single [HTTP Link header](#) . The following link relations are used for pagination navigation:

Relation Description self Provides the URL pointing to the current page. first Provides the URL pointing to the first page. next

Provides the URL pointing to the next page. Will be omitted on the last page. prev Provides the URL pointing to the previous page. Will be omitted on the first page. Note: It's important to form calls with Link header values instead of constructing your own URLs.

Tutorial:

To familiarize yourself with pagination, try fetching payments via the Get a list of payments resource.

In the Circle [sandbox environment](#) , a pagination cursor Link header for a page of payments looks like this:

```
cURL JavaScript curl -I 'https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageAfter=5c5abf90-b2ad-4c8c-8ce3-dbb6a06a040e' /* * See installation instructions at * https://developers.circle.com/developer/docs/circle-sdk /
import { Circle, CircleEnvironments } from "@circle-fin/circle-sdk";
```

```
const circle = new Circle( "", CircleEnvironments.sandbox // API base url );
```

```
async function listPayments() { const resp = await circle.payments.listPayments( // Skip defining other query params
undefined, undefined, undefined, undefined, undefined, undefined,
```

```
    '2020-01-31T23:59:59Z',           // 'to' query param
    undefined,                       // skip 'pageBefore' query param
    '5c5abf90-b2ad-4c8c-8ce3-dbb6a06a040e' // 'pageAfter' query param
);
console.log(resp.data);
```

```
} listPayments(); Look for the relevant pagination cursor information in the response headers:
```

Link: <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageAfter=5c5abf90-b2ad-4c8c-8ce3-dbb6a06a040e>; rel="self", <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageAfter=5c5abf90-b2ad-4c8c-8ce3-dbb6a06a040e>; rel="first", <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageAfter=6f14b84d-7a98-4675-a6b9-d7b0c1912091>; rel="next", <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageBefore=5c5abf90-b2ad-4c8c-8ce3-dbb6a06a040e>; rel="prev" For this initial request, we are in the middle of paginating the result set and thus receive a previous and next page link. Let's check the first page and see what's different:

```
cURL JavaScript curl -I 'https://api-sandbox.circle.com/v1/payments /* * See installation instructions at *
https://developers.circle.com/developer/docs/circle-sdk / import { Circle, CircleEnvironments } from "@circle-fin/circle-sdk";
```

```
const circle = new Circle( "", CircleEnvironments.sandbox );
```

```
async function listPayments() { const resp = await circle.payments.listPayments(); console.log(resp.data); } listPayments();
The response Link header differs from the previous example:
```

Link: <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:01:00Z&pageAfter=12cd8527-5270-4acd-a1d4-431bd09f2a0e>; rel="self", <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageAfter=12cd8527-5270-4acd-a1d4-431bd09f2a0e>; rel="first", <https://api-sandbox.circle.com/v1/payments?to=2020-06-02T12:00:00Z&pageAfter=12cd8527-5270-4acd-a1d4-431bd09f2a0e>; rel="next" Even if not specified in the request, the response pagination links have two additional query parameters set: to and pageSize . This is necessary to keep the pagination stable. Let's say other payments are made while you are reviewing the result set. The first page will update to contain the new payments, changing the pagination. Updated 5 months ago * [Table of Contents](#) * * [Common Filters](#) * * * [Date Ranges](#) * * [By Page Number](#) * * * [Pagination characteristics](#): * * * [Link relations](#): * * [Tutorial](#):