

Pagination

Last Modified on 08/31/2021 10:07 am EDT

Pagination is used to save us the trouble of having to go through more number of records than necessary. It makes us easier to handle the results of any API calls that have been made. There are three common types of pagination that every API uses:

1. Page and pageSize
2. Limit and offset
3. Cursor

We have standard means of paginating in each connector.

Page and pageSize is our preferred method because it is easy to use and flexible. For this method, the **page** and **pageSize** need to be specified. `page` being the particular page of results you'd like to look at, and `pageSize` being the number of records that come up in that page.

Limit and offset, also known as **Offset pagination** is a method that makes use of the `limit` and `offset` commands. They work similar to the `page` and `pageSize` commands and therefore, can easily be converted to page and page size (`pageSize = limit`; `page = offset/limit`).

Cursor pagination is where you call `GET /accounts` and it returns a `nextPageToken`. This token is used on the next request to get the next page. It is not so easy to convert cursor based pagination to page and pageSize method of pagination.

Even though we want to use page/page size pagination across the board, it is not always possible. For this reason, you will find support for cursor based pagination everywhere in our platform. Every connector supports cursor based pagination no matter what. That way, you can maintain consistency in your integrations. So, if you have an connector that must be cursor based, you can use cursor based for every connector.

Every `GET /` returns the following header:

```
elements-next-page-token: eyJwYWdlU2l6ZSI6MiwicGFnZSI6Mn0
```

And on every one of these APIs, even if its not documented you can send the query parameter `nextPage=eyJwYWdlU2l6ZSI6MiwicGFnZSI6Mn0` and it will work the same as if you had sent `page` and `pageSize`.

Paginator 3.0

Paginator 3.0 is the new, more enhanced version of SAP Open Connectors original paginator. Here is a comparison of the two for your better understanding.

Paginator	Paginator 3.0
Requires more time to provide vendor responses.	Quicker vendor responses.
Default <code>pageSize</code> set to 200 .	Default set to 50 or the min/max Vendor pageSize . Default = min vendor pageSize,if Vendor min pageSize > 50 ; Default = max vendor pageSize,if Vendor max pageSize < 50
	Maximum <code>pageSize</code> set to 1000 or

Maximum <code>pageSize</code> is set to 2000.	the maximum vendor <code>pageSize</code> , which is lower.
Makes multiple calls to the vendor if the SAP Open Connectors page size is greater than the vendor max page size.	Throws an error if <code>pageSize</code> entered < vendor min <code>pageSize</code> . Throws an error if <code>pageSize</code> entered > vendor max <code>pageSize</code> .
Supports custom <code>pageSize</code> for Cursor pagination	Supports custom <code>pageSize</code> for Cursor pagination.
