

API Bulk Endpoints

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DrChrono APIs now have endpoints to grab data in bulk. Normally our API response has a page size limit of 250, but our bulk APIs can obtain up to 1000 results.

Our current list of bulk APIs.

[Appointments](#)

[Patients](#)

[Line Item](#)

[Transactions](#)

[Prescription Messages](#)

[Eligibility Checks](#)

[Clinical Notes](#)

[Clinical Note Field Values](#)

Steps to perform request

1. POST a request with the filter and pagination options
2. Make a GET request with the "uuid" field from the POST response to fetch the results list once available
-> While the list is being generated, the GET response will have "status": "In progress"

Note: *Higher page sizes will take longer to generate.*

The list generated is cached in DrChrono for 1 hour. If the list is expired, the UUID will return an invalid message. The POST request will need to be sent to generate a new list.

Example

In this example, we will use the Appointments API. The response includes a "uuid" value that will be used in the GET request to retrieve the result list.

POST REQUEST:

```
POST https://app.drchrono.com/api/appointments_list?verbose=true&since=2024-02-01&page=1&page_size=1000&order_by=updated_at
```

RESPONSE:

HTTP Status 201

```
{
  "status": "In progress",
  "uuid": "dfeb7fa2-13dd-4b73-902d-c86ffd8d7f54",
  "description": "Call https://drchrono.com/api/appointments_list?uuid=dfeb7fa2-13dd-4b73-902d-c86ffd8d7f54 to get the list"
}
```

GET REQUEST:

```
GET https://app.drchrono.com/api/appointments_list?uuid=dfeb7fa2-13dd-4b73-902d-c86ffd8d7f54
```

RESPONSE:

```
{
  "status": "Complete",
  "pagination": {
    "count": 4428,
    "pages": 5,
    "page_size": 1000,
    "page": 1
  },
  "uuid": "dfeb7fa2-13dd-4b73-902d-c86ffd8d7f54",
  "results": [
    {...}
  ]
}
```

To paginate to the next page you will need to make another POST request using the query parameter, "page=integer" [1 .. 1000].

EXPIRED RESULT RESPONSE

If the requested UUID is expired, the detail will specify the error.

```
{
  "detail": "Invalid uuid specified"
}
```

Python Example Code

This script can be used for any of our bulk API endpoints. The goal is to obtain all the data by iterating through all the pages.

```
import json
import time
import requests
import textwrap

token = '6pxClEj162QS80Ae6btWniZihkHHjv'
patient_data = []
```

```

mode='appointments'

def print_roundtrip(response, *args, **kwargs):
    """ print full req and resp """
    format_headers = lambda d: '\n'.join(f'{k}: {v}' for k, v in d.items())
    print(textwrap.dedent("""
    ----- request -----
    {req.method} {req.url}
    {reqhdrs}
    {req.body}
    ----- response -----
    {res.status_code} {res.reason} {res.url}
    {reshdrs}
    {res.text}
    """).format(
    req=response.request,
    res=response,
    reqhdrs=format_headers(response.request.headers),
    reshdrs=format_headers(response.headers),
    ))

hooks = { 'response': print_roundtrip }

def get_page(page=1, page_size=1000, since='2023-06-01'):
    """ call the {records}_list asynchronously to POST a batch request and poll for results """
    response = requests.post(
    f'https://drchrono.com/api/{mode}_list?page_size={page_size}&page={page}&since={since}&verbose=true',
    headers={
    'Authorization': f'Bearer {token}',
    'Content-Type': 'application/json'},
    hooks=hooks,
    )
    response.raise_for_status()
    handle = response.json()['uuid']
    # await the request to be complete. check periodically.
    while response.json()['status'] != 'Complete':
        time.sleep(10)
    response = requests.get(f'https://drchrono.com/api/{mode}_list?uuid={handle}',
    headers={f'Authorization': f'Bearer {token}'}, hooks=hooks,
    )
    response.raise_for_status()
    return response

print('fetching page 1 of UNKNOWN')
response = get_page(1)
print('initial submission complete. record counts: ' + json.dumps(response.json()['pagination']))
patient_data.extend(response.json()['results'])
total_records = int(response.json()['pagination']['count'])
total_pages = int(response.json()['pagination']['pages'])
current_page = int(response.json()['pagination']['page']) + 1
print(f'gathered {[x["id"] for x in response.json()["results"]]}')

while current_page <= total_pages:
    print(f'fetching page {current_page} of {total_pages}')
    response = get_page(current_page)
    patient_data.extend(response.json()['results'])
    print(f'gathered {[x["id"] for x in response.json()["results"]]}')
    current_page = current_page + 1

print(f'total records gathered: {len(patient_data)}. records reported by api: {total_records}')
print(f' {[x["id"] for x in patient_data]}')

```

