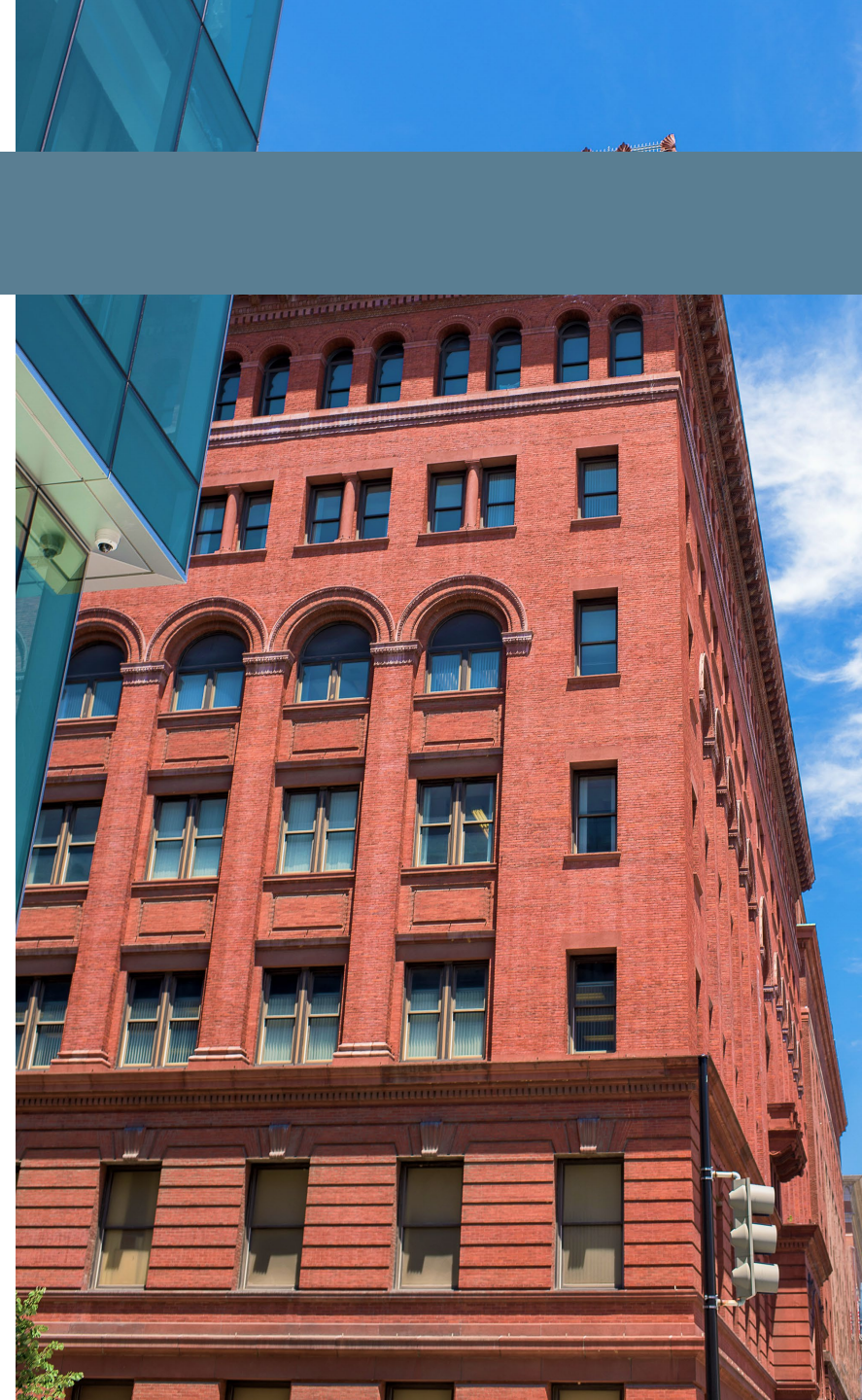# GOVINFO API

2023-07-12 | JON QUANDT, DEPUTY PROGRAM MANAGER (jquandt@gpo.gov)

GPO

AGENDA

- API services overview

- API Demo

- Other Developer Resources

- Q&A

GovInfo

content management system

manages digital content to ensure authenticity and integrity

preservation repository

follows preservation standards enabling access to digital content

public website

combines extensive metadata, robust search, and modern design

API OVERVIEW

- What is an API?

  "An API (Application Programming Interface) is **a set of features and rules** that exist inside a software program (the application) **enabling interaction** with it through software - as opposed to a human user interface. The API can be seen as a simple contract (the interface) between the application offering it and other items, such as third-party software or hardware."

  - Mozilla MDN Web Docs Glossary

  - Primarily intended for developer/system usage
  - Consistent structure to requests and responses, enabling consistent usage

API OVERVIEW

- Documentation: https://api.govinfo.gov/docs

  - Allows trying requests lives, fillable fields
  - Uses OpenAPI specification and Swagger
  - Api.data.gov key – signup
    - One key for multiple Federal APIs

GovInfo API

The GovInfo API provides services for developers and webmasters to access GovInfo content and metadata. For more information on other developer resources, see our developer hub. If you have feedback or would like to learn more about plans for the api, please see our Github repo

This API requires the use of an API.data.gov key - signup here. If you already have one, click on Authorize and enter your key. Then you can make all the requests via this page.

Developer Hub - Website

License

Authorize
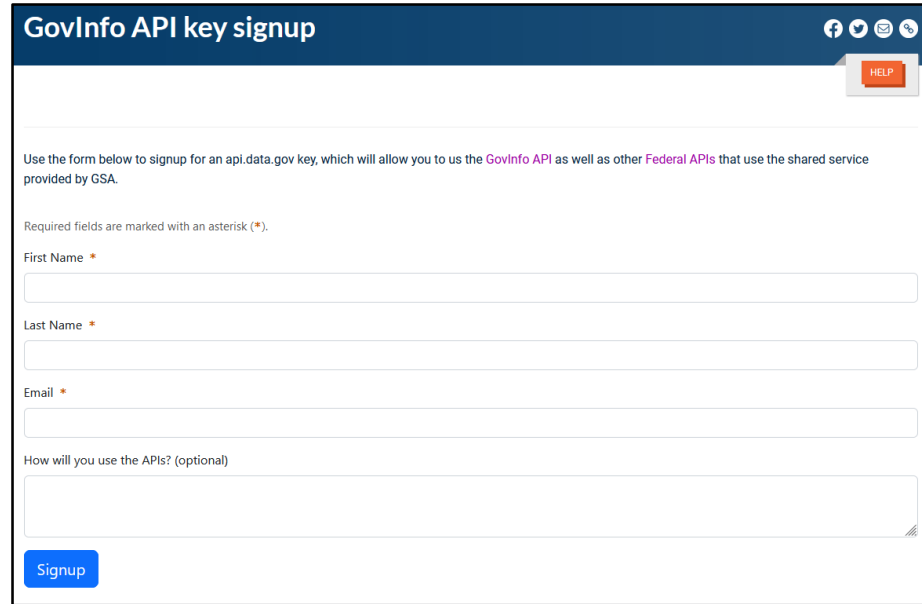
Collections Identify new and updated documents based on lastModified value

GET /collections Request list of collections. Response includes collectionCode,collectionName, package and granule counts

GET /collections/{collection}/{lastModifiedStartDate} Retrieve new or updated packages for a collection given a start date and time

GET /collections/{collection}/{lastModifiedStartDate} /{lastModifiedEndDate} Retrieve new or updated packages for a collection within a date range

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API - SIGNUP

1. Go to the Signup Form
2. Put in your information
3. Check your email for your key
4. Go to the API Docs
5. Click on the Authorize Button and enter your key
6. Now you can use the API documentation to make requests

GovInfo API key signup

Use the form below to signup for an api.data.gov key, which will allow you to us the GovInfo API as well as other Federal APIs that use the shared service provided by GSA.

Required fields are marked with an asterisk (*).

First Name *

Last Name *

Email *

How will you use the APIs? (optional)

Signup

---------- Forwarded message ----------
From: <noreply@api.data.gov>
Date: Tue, Jul 11, 2023, 1:38 PM
Subject: Your API key
To: <

Hi,
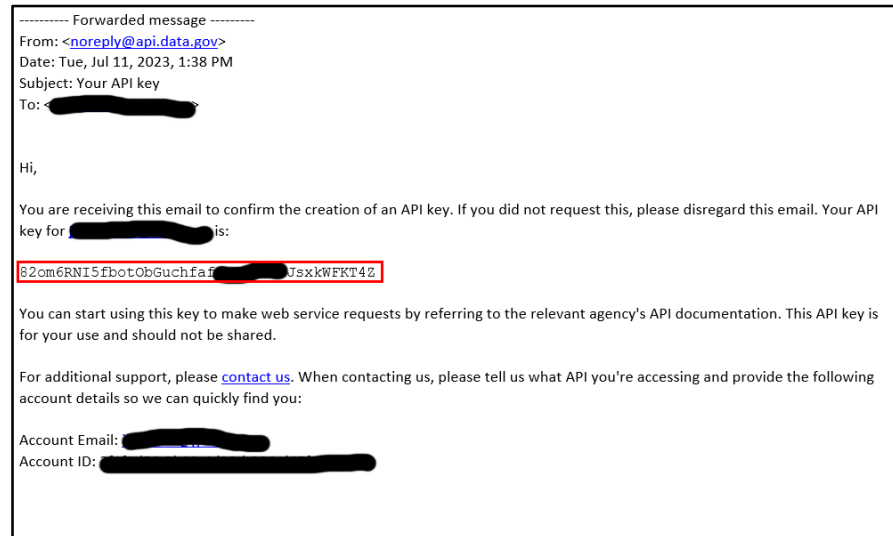
You are receiving this email to confirm the creation of an API key. If you did not request this, please disregard this email. Your API key for   is:

82om6RNI5fbotObGuchfaf   UsxkWFKT4Z

You can start using this key to make web service requests by referring to the relevant agency's API documentation. This API key is for your use and should not be shared.

For additional support, please contact us. When contacting us, please tell us what API you're accessing and provide the following account details so we can quickly find you:

Account Email:
Account ID:

GOVINFO COLLECTION – PACKAGE – GRANULE MODEL

Collection

Package   Package

Package   Package

Package   · · ·

Package   Package

Package

Granule

Granule

· · ·

Granule
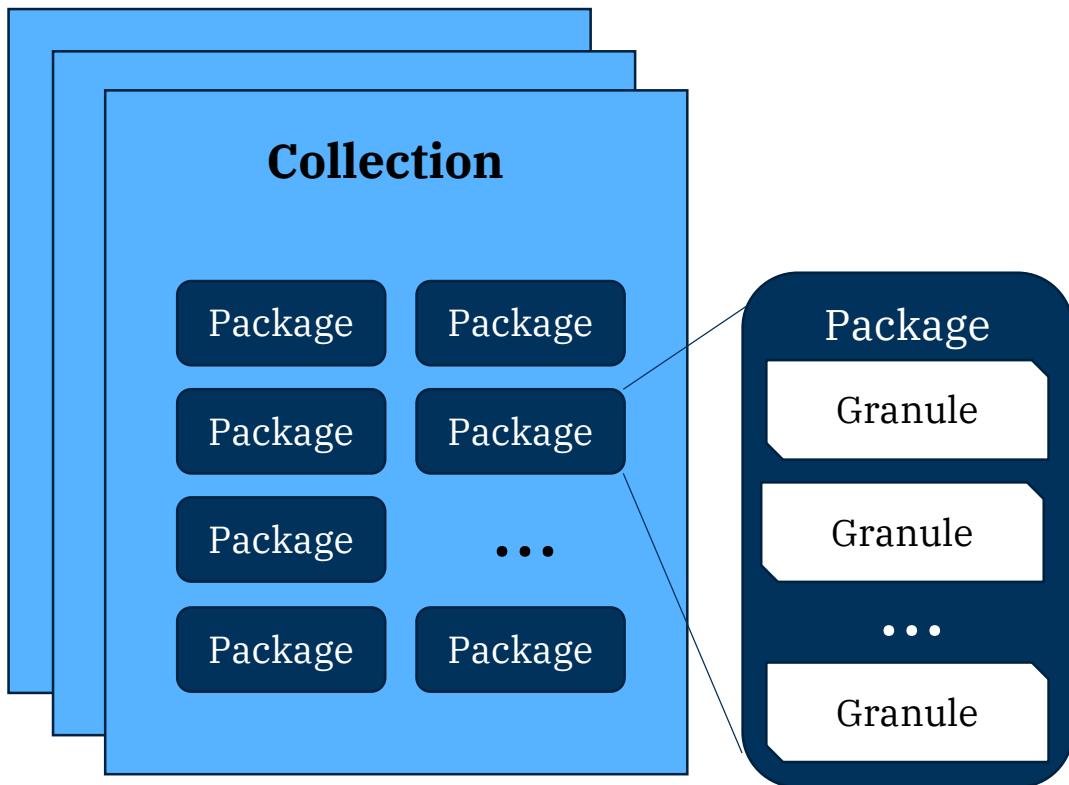
- **Collections** are logical groupings of content – e.g. the *Congressional Record*, *Federal Register*, *United States Courts Opinions*
- **Packages** are roughly equal to a single bound volume or individual instance of a **collection** – e.g. an individual daily issue of the *Record* or *Register*, an individual Case within the USCOURTS collection
- **Granules** are a subsection of a package –
  - single speech within the *Record*,
  - notice or proposed rule in the *Register*
  - an individual opinion within a court case
- **Note:** File content and metadata can exist at the **package** or **granule** level, and are organized differently for each collection. For example, the BILLS collection does not have granules – all content and metadata is at the package-level

API SERVICES

These endpoints are useful for initial discovery of what is currently available on GovInfo.

- ## Collections

    - Base request: https://api.govinfo.gov/collections?api_key=DEMO_KEY
    - Example: https://api.govinfo.gov/collections/CREC/2023-07-01T00:00:00Z?offsetMark=*&pageSize=100&api_key=DEMO_KEY
    - Similar to our sitemaps – generates list of packages within a given collection based **on date added or updated in system**
    - Filtering by *congress*, *docClass*, some collection-specific parameters (e.g. *billVersion*, *courtType*)
    - Useful for crawling/staying up to date

- ## Published

    - Example: https://api.govinfo.gov/published/2022-01-01/2022-12-31?offsetMark=*&pageSize=100&collection=CHRG,CRPT&api_key=DEMO_KEY
    - Lists packages within a specified date range by dateIssued – i.e. **the official date on the document**
    - Allows multi-collection results via collection parameter (collection=BILLS,BILLSTATUS,PLAW)
    - Can use *modifiedSince* Parameter to only get new/updated results since specified time

API SERVICES, CONTINUED

Use these endpoints to learn more about individual documents

- Packages

    - https://api.govinfo.gov/packages/CHRG-117hhrg46121/summary?api_key=DEMO_KEY
    - Returns content or metadata related to a given packageID
    - Summary: json equivalent to the details page
        - Access to related service for collections that have been enabled
        - Access to granule list

- Granules:

    - https://api.govinfo.gov/packages/FR-2022-05-03/granules?offsetMark=*&pageSize=100&api_key=DEMO_KEY
    - List of granules for a given package, filterable by granuleClass (e.g. House/Senate/Digest/Extensions sections within the Record)
    - Summary metadata or content for individual granules (example)

RELATED DOCUMENTS

- Official documents from all three branches

- *Keeping America Informed* → help our users understand how docs relate

- Evolution of FDsys related citations on details pages

- Key feature of initial GovInfo development

- Built using RDF, SPARQL, Apache Jena, Fuseki, and a shared ontology based on existing package and granule metadata

  - Some relationships also involve manual linking – e.g. CHRG by ILS ID via GPO Catalogers

- Related Documents use cases in new development

RELATED DOCUMENTS – UI VS. API

API SERVICES, CONTINUED

- Related

  - https://api.govinfo.gov/related/BILLS-111s386enr?api_key=DEMO_KEY
  - Returns list of relationships available for a given access id
  - Some collections have relationships starting from the package-level, others at the granule
  - Each relationshipLink will return one or more related items, with basic metadata and links to the json summary

CURRENT COLLECTIONS/RELATIONSHIPS ENABLED IN API

- BILLS, BILLSTATUS, PLAW packages to: (example)
  - Bill Versions (BILLS)
  - Bill History (HOB)
  - Presidential Signing Statements (CPD)
  - Committee Prints (CPRT)
  - Congressional Record (CREC) – Coming September
  - Congressional Reports (CRPT)
  - Public and Private Laws (PLAW)
  - Statutes at Large (STATUTE)
  - U.S. Code (USCODE)
- CHRG granules to related CHRG by ILS ID (example)
- FR granules to: (example)
  - Federal Register granules related by Regulatory Identification Number (FR)
  - Code of Federal Regulations granules by Citation (CFR)

TYPICAL USAGE SCENARIOS

- Crawling/updating
  - Use **collections** or **published** endpoints to identify packages of interest
  - Follow *packageLinks* in results to go to individual package summaries
  - Pull metadata or download content
  - Depending on the collection, dig into individual granules
- View related documents
  - From a package or granule summary, identify related documents using *relatedLink*

SEARCH SERVICE– COMING SOON!

- New API Endpoint

  - Will allow users to search and return a list of results using similar queries as in the UI in JSON
  - Initial release will return default set of fields
  - Samples coming July 2023
  - Give feedback on GitHub

```
{
    "results": [
        {
            "title": "GPO Annual Report 2022",
            "packageId": "GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3",
            "granuleId": null,
            "lastModified": "2023-07-11T20:04:18Z",
            "governmentAuthor": [
                "Government Publishing Office"
            ],
            "dateIssued": "2023-04-11",
            "collectionCode": "GOVPUB",
            "resultLink": "https://api.govinfo.gov/packages/GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3/summary",
            "download": {
                "premisLink": "https://api.govinfo.gov/packages/GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3/premis",
                "zipLink": "https://api.govinfo.gov/packages/GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3/zip",
                "modsLink": "https://api.govinfo.gov/packages/GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3/mods",
                "pdfLink": "https://api.govinfo.gov/packages/GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3/pdf",
                "jpegLink": "https://api.govinfo.gov/packages/GOVPUB-GP-04aa9eb600bca60fd303adb2783801a3/jpeg"
            }
        },
```

GOVINFO API DEMO

HOW TO GET STARTED

1. Sign up for an API key (or use an existing api.data.gov key): https://www.govinfo.gov/api-signup

   Learn how to pass your key: https://api.data.gov/docs/api-key/

   HTTP Header

   Pass the API key into the X-Api-Key header:

   curl -H 'X-Api-Key: DEMO_KEY' 'https://api.govinfo.gov/collections'

   GET Query Parameter

   In some cases, the API may support passing the API key into the api_key GET query string parameter:

   curl 'https://api.govinfo.gov/packages/BILLS-117hr4346rh/summary?api_key=DEMO_KEY'

2. Check out the API documentation: https://api.govinfo.gov/docs

3. Give us your feedback! https://www.github.com/usgpo/api/issues/

API RESOURCES

- Related Documents Overview page (https://www.govinfo.gov/related-documents)

- Related Documents API Article (https://www.govinfo.gov/features/api-related-document-service)

- API Documentation (https://api.govinfo.gov/docs)

    - Sign up for a key: https://www.govinfo.gov/api-signup
- GitHub Repository (https://www.github.com/usgpo/api)

OTHER DEVELOPER RESOURCES

- Developer Hub (https://www.govinfo.gov/developers)

- Bulk Data Repository – machine-readable formats of multiple collections, with json/xml endpoints to access

- Link Service – create predictable and persistent links to resources based on certain criteria – e.g. XML of the latest version of a Bill

- Sitemaps – hierarchical, collection-based

- RSS – Feeds providing users with the latest published documents by GovInfo collection

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