

FRASER RESTful API

User Documentation

Version: 1.0.0.

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Overview

The FRASER REST API enables users to view or reuse data. If you are interested in contributing content to FRASER, refer to our [Collection Development Policy](#) or [contact us](#).

An API client is recommended for making requests. Command line environments are not currently supported.

Requests

API Key

In order to access the FRASER API, you'll need an API key. To request a FRASER API key, submit a POST request with your email in the body.

```
curl -v --data '{"email": "myemailaddress@test.com", "description": "my api key"}' https://fraser.stlouisfed.org/api/api_key
```

To make requests to the FRASER API, you'll need to include the API key as a request header. For example

```
curl --header '{"X-API-Key": "abcdefghijklmnopqrstuvwxy123456"}' https://fraser.stlouisfed.org/api/title
```

Users are limited to 5 API keys per email address. API keys expire after one year of inactivity. You will receive reminds when your API key is about to expire.

Rate Limits

Each API key is limited to 30 requests per minute. The FRASER API automatically enforces the throttle limit.

Endpoints Overview

Base URL: <https://fraser.stlouisfed.org/api>

The FRASER API supports five types of records:

- title,
- author,
- subject,
- theme,
- timeline.

Each of the record types has a unique endpoint as seen in table 1.

Table 1. Endpoints, part 1.

Path/Request URI	Description	Parameters	Example
/title	Returns all titles in FRASER.	format, fields, page, limit	/title?limit=57
/author	Returns an array of all authors in FRASER.	format, fields, page, limit	/author?format=xml
/subject	Returns an array of all subjects in FRASER.	format, fields, page, limit	/subject
/theme	Returns an array of all themes in FRASER.	format, fields, page, limit	/theme?page=4
/timeline	Returns an array of all timelines in FRASER.	format, fields, page, limit	/timeline

The endpoints listed in table 2 require a **resource identifier** and return a single record or set of records associated with the specific identifier.

Table 2. Endpoints, part 2.

Path/Request URI	Description	Parameters	Example
/title/{id}	Returns metadata for a single title record.	format, fields	/title/1
/title/{id}/items	Returns all child items for a single FRASER title. If a title has a more complex child-parent relationship (as in series and archival collection), endpoint returns all immediate children, regardless of whether they are items or titles.	format, fields, page, limit	/title/1/items
/title/{id}/toc	Returns table of contents entries for a specific FRASER title.	format, fields, page, limit	/title/41/toc
/item/{id}	Returns metadata for a single item record.	format, fields	/item/579676
/item/{id}/toc	Returns table of contents entries for a specific FRASER item.	format, fields, page, limit	/item/28/toc

/toc/{id}	Returns metadata for a single table of contents record.	format, fields	/toc/237707
/author/{id}	Returns metadata for a single author record.	format, fields	/author/23
/author/{id}/records	Returns all records associated with a single author.	format, fields, page, limit, role	/author/23/records?role=subject
/subject/{id}	Returns metadata for a single subject.	format, fields	/subject/5510
/subject/{id}/records	Returns an array of all records that have a specific subject, with corresponding metadata.	format, fields, page, limit	/subject/5510/records
/theme/{id}	Returns metadata for a single theme.	format, fields	/theme/5
/theme/{id}/records	Returns all the records associated with a specific theme, as well as with corresponding metadata.	format, fields, page, limit	/theme/5/records
/timeline/{id}	Returns metadata for a single timeline.	format, fields	/timeline/financial-crisis
/timeline/{id}/events	Returns all events associated with a specific timeline.	format, fields, page, limit	/timeline/financial-crisis/events

Search

In addition to record-type specific endpoints, all records can be searched across at the /search/ endpoint. Searchable fields include: title, date, full text, author, and subject.

Table 3. Search

Path/Request URI	Description
/search/	Searches all FRASER records identified in the data model . See Search Parameters in table 4. Advanced search for options to filter results.

Parameters

Table 4. Advanced search. These parameters are only applicable to the /search/ endpoint.

Name	Data Type	Values	Description	Example
q	string	n/a	Simple query term. May be a single word or phrase. For a phrase exact match, enclose the phrase in quotes.	?q=women in economics
aq	array	field: all, title, fulltext, author, subject, date; operator: and, not, or; value: any string	Advanced structured queries are nested arrays containing a field, operator, and value. field and operator are controlled vocabularies (see Values column), and value is the query term.	&aq[0][field]=all &aq[0][operator]=and&aq[0][value]=dog&aq[1][field]=title&aq[1][operator]=not&aq[1][value]=rover
facets	array	year, decade, partOf, series, collection, name, subject, genre, theme	Filters search results on a specified facet. Format facets as {field:value}, where field is a controlled vocabulary and value is the query term.	&facets[]=subject:MonetaryPolicy&facets[]=decade:2000
sort	string	_score desc (relevance), sort_date_text asc (date: ascending), sort_date_text desc (date: descending), title asc (title: ascending), title desc (title: descending)	Methods for sorting results.	?sort=sort_date_text+desc

Table 5. General parameters. With the exception of the role parameter, these parameters apply to all endpoints.

Name	Data type	Values	Description	Example
format	string	json, xml	Enables users to specify the preferred response. Users can request and . By default the API returns application/json.	/timeline?format=xml
fields	string	titleInfo, language, note, location, name, physicalDescription, subject, accessCondition, typeOfResource, abstract, classification, genre, tableOfContents, relatedItem, extension, originInfo, targetAudience, identifier, recordInfo	Allows users to specify a bang (!)-delimited list of metadata fields to return.	/author/770/records?fields=titleInfo
page	integer	n/a	Pages through a long list of results.	/theme?page=2
limit	integer	n/a	Specifies the number of results that return per page.	/title?limit=29
role	string	creator, contributor, editor, repository, uncertain, subject	Limits results based upon the author's role. Applicable only for the /author/{id}/records endpoint.	author/118/records?role=subject

FRASER Data Model

Record Type	Description
Title	Titles are the top-level FRASER record type. They can be standalone records that contain a single relationship to a file (or files) (such as a PDF or MP3) or they can contain multiple children, called items . Sometimes, however, titles have more complex relationships to other FRASER records. Archival collections are titles that can have nested relationships to both other titles and individual items. Similarly, series are aggregated collections of other titles. Both of these categories are subsumed under the title type.
Item	Item is the label given to records that are the children of parent titles . They almost always correspond to a file (sometimes multiple files), and cannot be parents themselves (though they may have tables of contents , see below). Because items always are always children, there is no root endpoint.
Table of Contents	Table of Contents entries are subunits of either titles or items that correspond to a specific page range within its parent record. They have associated descriptive metadata, as well as page range information, but do not relate to a unique file in any way.
Author	In FRASER, authors are name entities that have specific relationships to FRASER titles, items and table of contents entries. Authors can be of the type <i>personal, corporate</i> or <i>conference</i> , and roles that may be assigned to authors in relation to records are: <i>creator, contributor, editor, repository</i> and <i>uncertain</i> . In addition to these roles, authors can be have a subject relationship to titles, items and table of contents entries.
Subject	Subjects are standardized terms to describe record topics in FRASER. They can be of the type <i>topic, geographic, name</i> or <i>titleInfo</i> . However, note that no subject record is a <i>name</i> record – instead, authors are assigned as name subjects. Note that when requesting subject metadata, the key corresponding to the name of the subject will be the type of subject (that is, either <i>topic, geographic</i> or <i>titleInfo</i>).
Theme	Themes are aggregations of FRASER title and item records all centered around a particular topic.
Timeline	Timelines are FRASER records that track events for a particular topic over time. Events are the component pieces of the timeline. Events occasionally reference other FRASER records, but these references are not reciprocal – the referenced FRASER record does not reference back to the timeline. Note that timeline IDs are different from the other identifiers in that they are strings, as opposed to integers.