

# Package: fredr (via r-universe)

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**Title** An R Client for the 'FRED' API

**Version** 2.1.0.9000

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**Description** An R client for the 'Federal Reserve Economic Data' ('FRED') API <<https://research.stlouisfed.org/docs/api/>>. Functions to retrieve economic time series and other data from 'FRED'.

**License** MIT + file LICENSE

**URL** <https://github.com/sboysel/fredr>

**BugReports** <https://github.com/sboysel/fredr/issues>

**Depends** R (>= 3.2.2)

**Imports** httr, jsonlite, rlang, tibble

**Suggests** covr, dplyr, ggplot2, knitr, purrr, rmarkdown, testthat, xts, zoo

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**Repository** <https://sboysel.r-universe.dev>

**RemoteUrl** <https://github.com/sboysel/fredr>

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|           |                     |
|-----------|---------------------|
| fredr-key | <i>FRED API key</i> |
|-----------|---------------------|

---

**Description**

Users of fredr must authenticate with the FRED API by use of an API key. This key should be stored as an environment variable, FRED\_API\_KEY.

- fredr\_get\_key() will retrieve the key, if set, or it will return NULL if the key is unset.
- fredr\_set\_key() will set the key *for the current R session*. For persistence across sessions, set the environment variable. See the Details section for more information.
- fredr\_has\_key() returns TRUE if a key can be found. Otherwise it returns FALSE.

**Usage**

```
fredr_set_key(key)
```

```
fredr_get_key()
```

```
fredr_has_key()
```

**Arguments**

**key** A valid FRED API key as a string. Obtain one at the [API Keys](#) page. Can also be NULL to unset the key for the current R session.

**Details**

The preferred method to set the key is to set the FRED\_API\_KEY environment variable in an `.Renviron` file. The easiest way to do this is by calling `usethis::edit_r_environ()`. Don't forget to restart R after setting the key.

**References**

See St. Louis Fed Web Services [API Keys](#) to obtain an API key.

**See Also**

Note that by using a FRED API key, you agree to the FRED API [Terms of Use](#).

**Examples**

```
original_key <- fredr_get_key()

# Set a once per session key
fredr_set_key("foo")

# Get it
fredr_get_key()

# Reset to original key
fredr_set_key(original_key)
```

---

|                |                            |
|----------------|----------------------------|
| fredr_category | <i>Get a FRED category</i> |
|----------------|----------------------------|

---

**Description**

Get a FRED category

**Usage**

```
fredr_category(category_id)
```

**Arguments**

`category_id` An integer ID for the category.

**Value**

A tibble object containing the name and parent ID for the category indicated by `category_id`.

**API Documentation**

[fred/category](#)

**See Also**

[fredr\\_category\\_children\(\)](#), [fredr\\_category\\_related\(\)](#), [fredr\\_category\\_series\(\)](#), [fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {  
  # Root category  
  fredr_category(category_id = 0L)  
  # "Production & Business Activity" category  
  fredr_category(category_id = 1L)  
}
```

---

`fredr_category_children`

*Get the child categories for a specified FRED parent category*

---

**Description**

Get the child categories for a specified FRED parent category

**Usage**

```
fredr_category_children(  
  category_id,  
  ...,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

**Arguments**

|                |  |
|----------------|--|
| category_id    | An integer ID for the category.  |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object containing the name and ID for the children categories of the parent category indicated by category\_id.

**API Documentation**

[fred/category/children](#)

**See Also**

[fredr\\_category\(\)](#), [fredr\\_category\\_related\(\)](#), [fredr\\_category\\_series\(\)](#), [fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {  
  # Children of the root category  
  fredr_category_children(category_id = 0L)  
  # Children of the "Production & Business Activity" category  
  fredr_category_children(category_id = 1L)  
}
```

---

fredr\_category\_related

*Get the related categories for a FRED category.*

---

**Description**

Get the related categories for a FRED category.

**Usage**

```
fredr_category_related(  
  category_id,  
  ...,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

**Arguments**

|                |  |
|----------------|--|
| category_id    | An integer ID for the category. Default is 0 for the root category. <i>Required parameter.</i>   |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Details**

From the [FRED API documentation](#): "A related category is a one-way relation between 2 categories that is not part of a parent-child category hierarchy. Most categories do not have related categories."

**Value**

A tibble object containing the name and parent ID for categories related to the category indicated by category\_id.

**API Documentation**

[fred/category/related](#)

**See Also**

[fredr\\_category\(\)](#), [fredr\\_category\\_children\(\)](#), [fredr\\_category\\_series\(\)](#), [fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {
# Categories related to the "Employment Cost Index" category
fredr_category_related(category_id = 4L)
}
```

---

```
fredr_category_related_tags
```

*Get the related FRED tags within a category*

---

**Description**

Get the related FRED tags for one or more FRED tags within a category. Optionally, filter results by tag group or search. FRED tags are attributes assigned to series. Related FRED tags are the tags assigned to series that match *all* tags in the *tag\_names* parameter, *no* tags in the *exclude\_tag\_names* parameter, and the category set by the *category\_id* parameter. Series are assigned tags and categories. Indirectly through series, it is possible to get the tags for a category. No tags exist for a category that does not have series.

**Usage**

```
fredr_category_related_tags(
  category_id,
  tag_names,
  ...,
  exclude_tag_names = NULL,
  tag_group_id = NULL,
  search_text = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

**Arguments**

|                   |  |
|-------------------|--|
| category_id       | An integer ID for the category.  |
| tag_names         | A string indicating which series tags to match. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").   |
| ...               | These dots only exist for future extensions and should be empty.   |
| exclude_tag_names | A string indicating which series tags should <i>not</i> be matched. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").   |
| tag_group_id      | A string representing the tag group id to filter tags by type. No filtering by default. Possible values include: <ul style="list-style-type: none"> <li>• "freq" - Frequency</li> <li>• "gen" - General or Concept</li> <li>• "geo" - Geography</li> <li>• "geot" - Geography Type</li> <li>• "rls" - Release</li> <li>• "seas" - Seasonal Adjustment</li> <li>• "src" - Source</li> </ul> |
| search_text       | A string to match text of tags. No matching by default.  |
| limit             | An positive integer indicating maximum number of results to return. Possible values are any integer between 1 and 1000 (default), inclusive.   |
| offset            | An non-negative integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.   |
| order_by          | Order results by values of the specified attribute. Possible values include: "series_count" (default), "popularity"`, "created", "name", "group_id"`.  |
| sort_order        | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |

- `realtime_start` A Date indicating the start of the real-time period. Defaults to today's date. For more information, see [Real-Time Periods](#).
- `realtime_end` A Date indicating the end of the real-time period. Defaults to today's date. For more information, see [Real-Time Periods](#).

**Value**

A tibble object information on related tags matching the request. Data include tag name, group ID, popularity, series count, tag creation date, and additional notes.

**API Documentation**

[fred/category/related\\_tags](#)

**See Also**

[fredr\\_category\(\)](#), [fredr\\_category\\_children\(\)](#), [fredr\\_category\\_related\(\)](#), [fredr\\_category\\_series\(\)](#), [fredr\\_category\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {
  # First, get the tags for the "Production & Business Activity" category
  fredr_category_tags(1L)
  # Then, get the tags related to "business" and "monthly" for the
  # "Production & Business Activity" category
  fredr_category_related_tags(category_id = 1L, tag_names = "business;monthly")
}
```

---

`fredr_category_series` *Get the series in a category*

---

**Description**

Get the series in a category

**Usage**

```
fredr_category_series(
  category_id,
  ...,
  filter_variable = NULL,
  filter_value = NULL,
  tag_names = NULL,
  exclude_tag_names = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
```



```

    sort_order = NULL,
    realtime_start = NULL,
    realtime_end = NULL
)

```

### Arguments

|                   |  |
|-------------------|--|
| category_id       | An integer ID for the category.  |
| ...               | These dots only exist for future extensions and should be empty.   |
| filter_variable   | A string indicating which attribute to indicate the attribute that results are filtered by. Possible values include: "frequency", "units", "seasonal_adjustment". No filtering by default.   |
| filter_value      | A string giving the value of the filter_variable attribute to filter results by. filter_variable must be set. No filtering by default.   |
| tag_names         | A string indicating which series tags to match. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").   |
| exclude_tag_names | A string indicating which series tags should <i>not</i> be matched. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").   |
| limit             | An positive integer indicating maximum number of results to return. Possible values are any integer between 1 and 1000 (default), inclusive.   |
| offset            | An non-negative integer used in conjunction with limit for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by          | A string indicating an attribute by which the results are ordered by. Possible values include: <ul style="list-style-type: none"> <li>• "series_id" (default)</li> <li>• "title"</li> <li>• "units"</li> <li>• "frequency"</li> <li>• "seasonal_adjustment"</li> <li>• "realtime_start"</li> <li>• "realtime_end"</li> <li>• "last_updated"</li> <li>• "observation_start"</li> <li>• "observation_end"</li> <li>• "popularity"</li> <li>• "group_popularity"</li> </ul> |
| sort_order        | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |
| realtime_start    | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end      | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object with information for series matching the request for the category specified in `category_id`.

**API Documentation**

[fredr/category/series](#)

**See Also**

[fredr\\_category\(\)](#), [fredr\\_category\\_children\(\)](#), [fredr\\_category\\_related\(\)](#), [fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {  
  # Top 10 most popular series belonging to the "Employment Cost Index" category  
  fredr_category_series(category_id = 1L, limit = 10L, order_by = "popularity")  
  # Series in the "Employment Cost Index" category, ordered by descending observation frequency  
  fredr_category_series(category_id = 4L, order_by = "frequency", sort_order = "desc")  
}
```

---

fredr\_category\_tags    *Get the FRED tags for a category*

---

**Description**

Get the FRED tags for a category. Optionally, filter results by tag name, tag group, or search. Series are assigned tags and categories. Alternatively, it is possible to get the tags for a category through a call to a function in the `fredr/series` endpoint. See [fredr\\_series](#). No tags exist for a category that does not have series.

**Usage**

```
fredr_category_tags(  
  category_id,  
  ...,  
  tag_names = NULL,  
  tag_group_id = NULL,  
  search_text = NULL,  
  limit = NULL,  
  offset = NULL,  
  order_by = NULL,  
  sort_order = NULL,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

**Arguments**

|                |  |
|----------------|--|
| category_id    | An integer ID for the category.  |
| ...            | These dots only exist for future extensions and should be empty.   |
| tag_names      | A string indicating which series tags to match. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").   |
| tag_group_id   | A string representing the tag group id to filter tags by type. No filtering by default. Possible values include: <ul style="list-style-type: none"> <li>• "freq" - Frequency</li> <li>• "gen" - General or Concept</li> <li>• "geo" - Geography</li> <li>• "geot" - Geography Type</li> <li>• "rls" - Release</li> <li>• "seas" - Seasonal Adjustment</li> <li>• "src" - Source</li> </ul> |
| search_text    | A string to match text of tags. No matching by default.  |
| limit          | An positive integer indicating maximum number of results to return. Possible values are any integer between 1 and 1000 (default), inclusive.   |
| offset         | An non-negative integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.   |
| order_by       | Order results by values of the specified attribute. Possible values include: "series_count" (default), "popularity"`, "created", "name", "group_id"`.  |
| sort_order     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object information on tags matching the request and their descriptions. Data include tag name, group ID, popularity, series count, tag creation date, and additional notes.

**API Documentation**

[fred/category/tags](#)

**See Also**

[fredr\\_category\(\)](#), [fredr\\_category\\_children\(\)](#), [fredr\\_category\\_related\(\)](#), [fredr\\_category\\_series\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {
  # Tags assigned to series in the "Production & Business Activity" category
  fredr_category_tags(category = 1L)
  # Select the "nation" and "monthly" tags in the "Production & Business Activity" category
  fredr_category_tags(category = 3L, tag_names = "nation;monthly", order_by = "popularity")
}
```

---

fredr\_docs

*Open the web documentation for a certain FRED API topic.*


---

**Description**

Opens FRED API web documentation in a new web browser tab.

**Usage**

```
fredr_docs()
```

**API Documentation**

**FRED API**

**Examples**

```
if (interactive()) {
  fredr_docs()
}
```

---

fredr\_endpoints

*List of available FRED API endpoints.*


---

**Description**

List of available FRED API endpoints.

**Usage**

```
fredr_endpoints
```

**Format**

A tibble with 31 rows and 3 variables:

**endpoint** endpoint name (e.g. "fred/category", "fredr/series/observations", "fredr/tags"). This name can be supplied to the endpoint parameter in `fredr_docs()` to open the **FRED API endpoint documentation** in a web browser.

**type** endpoint type (e.g. "Categories", "Releases", "Series", "Sources", and "Tags".)

**note** endpoint details

**API Documentation****FRED API****See Also**

[fredr\\_request\(\)](#), [fredr\\_docs\(\)](#)

---

fredr\_related\_tags      *Get related FRED tags given one or more tags*

---

**Description**

Get related FRED tags. Optionally, filter results by tag group, or search text. Related FRED tags are the tags assigned to series that match *all* tags in the tag\_names parameter and *no* tags in the exclude\_tag\_names parameter.

**Usage**

```
fredr_related_tags(
    tag_names,
    ...,
    exclude_tag_names = NULL,
    tag_group_id = NULL,
    search_text = NULL,
    limit = NULL,
    offset = NULL,
    order_by = NULL,
    sort_order = NULL,
    realtime_start = NULL,
    realtime_end = NULL
)
```

**Arguments**

|                   |   |
|-------------------|---|
| tag_names         | A semicolon delimited string of tag names to be related to.   |
| ...               | These dots only exist for future extensions and should be empty.  |
| exclude_tag_names | A semicolon delimited string of tag names that series match <i>none</i> of. No exclusions are done by default.  |
| tag_group_id      | A string tag group id to filter tags by type. No filtering by tag group by default. Possible values are: <ul style="list-style-type: none"> <li>• "freq" = Frequency</li> <li>• "gen" = General or Concept</li> <li>• "geo" = Geography</li> <li>• "geot" = Geography Type</li> </ul> |

|                |  |
|----------------|--|
|                | <ul style="list-style-type: none"> <li>• "rls" = Release</li> <li>• "seas" = Seasonal Adjustment</li> <li>• "src" = Source</li> </ul>  |
| search_text    | A string indicating the words to find matching tags with. No filtering by search words by default.   |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by       | Order results by values of the specified attribute. Possible values are: <ul style="list-style-type: none"> <li>• "series_count" (default)</li> <li>• "popularity"</li> <li>• "created"</li> <li>• "name"</li> <li>• "group_id"</li> </ul> |
| sort_order     | A string representing the order of the resulting series, sorted by the attribute values specified by <code>order_by</code> . Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble containing tags related to `tag_names` and their descriptions. Data include tag name, group ID, popularity, series count, tag creation date, and additional notes.

**API Documentation**

[fred/related\\_tags](#)

**See Also**

[fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#), [fredr\\_docs\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_tags\\_series\(\)](#), [fredr\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {

  fredr_related_tags(tag_names = "monetary aggregates;weekly")

  fredr_related_tags(
    tag_names = "monetary aggregates;weekly",
    tag_group_id = "gen"
  )
}
```

```
)
}
```

---

|               |                                       |
|---------------|---------------------------------------|
| fredr_release | <i>Get a release of economic data</i> |
|---------------|---------------------------------------|

---

## Description

Get a release of economic data

## Usage

```
fredr_release(release_id, ..., realtime_start = NULL, realtime_end = NULL)
```

## Arguments

|                |  |
|----------------|--|
| release_id     | An integer ID of the release.  |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

## Value

A tibble object.

## API Documentation

[fred/release](#)

## See Also

[fredr\\_releases\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

## Examples

```
if (fredr_has_key()) {
# Release as of today
fredr_release(release_id = 20)

# For some releases, adding realtime dates returns the history of changes
# the release went through
fredr_release(9, realtime_start = as.Date("1950-01-01"))
}
```

---

fredr\_releases      *Get all releases of economic data*

---

### Description

Get all releases of economic data

### Usage

```
fredr_releases(
  ...,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

### Arguments

|                |   |
|----------------|---|
| ...            | These dots only exist for future extensions and should be empty.  |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| offset         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0. |
| order_by       | Order results by values of the specified attribute. Possible values include: 'release_id' (default), 'name', 'press_release', 'realtime_start', 'realtime_end'.                         |
| sort_order     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".  |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |

### Value

A tibble object.

### API Documentation

[fred/releases](#)



**See Also**

[fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\\_series\(\)](#),  
[fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#),

**Examples**

```
if (fredr_has_key()) {
  fredr_releases(limit = 20L)
}
```

---

fredr\_releases\_dates    *Get release dates for all releases of economic data.*

---

**Description**

Get release dates for *all* releases of economic data. Note that release dates are published by data sources and do not necessarily represent when data will be available on the FRED or ALFRED websites.

**Usage**

```
fredr_releases_dates(
  ...,
  limit = NULL,
  offset = NULL,
  sort_order = NULL,
  order_by = NULL,
  include_release_dates_with_no_data = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

**Arguments**

|            |   |
|------------|---|
| ...        | These dots only exist for future extensions and should be empty.  |
| limit      | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| offset     | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0. |
| sort_order | A string representing the order of the resulting series. Possible values are: "asc" and "desc" (default).   |
| order_by   | Order results by values of the specified attribute. Possible values include: 'release_date' (default), 'release_id', 'release_name'.  |

|                                    |   |
|------------------------------------|---|
| include_release_dates_with_no_data | A boolean value indicating if the results with no data available should be returned as well. Default is FALSE.  |
| realtime_start                     | A Date indicating the start of the real-time period. Defaults to the first day of the current year. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end                       | A Date indicating the end of the real-time period. Defaults to 9999-12-31 (latest available). For more information, see <a href="#">Real-Time Periods</a> .       |

**Value**

A tibble object.

**API Documentation**

[fred/releases/dates](#)

**See Also**

[fredr\\_releases\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

**Examples**

```
if (fredr_has_key()) {
  fredr_releases_dates(limit = 20L)
}
```

---

fredr\_release\_dates    *Get release dates for a single release of economic data*

---

**Description**

Get release dates for a single release of economic data

**Usage**

```
fredr_release_dates(
  release_id,
  ...,
  limit = NULL,
  offset = NULL,
  sort_order = NULL,
  include_release_dates_with_no_data = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

## Arguments

|                                    |   |
|------------------------------------|---|
| release_id                         | An integer ID of the release.   |
| ...                                | These dots only exist for future extensions and should be empty.  |
| limit                              | An integer limit on the maximum number of results to return. Defaults to 10000, the maximum.  |
| offset                             | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0. |
| sort_order                         | A string representing the order of the resulting release dates. Possible values are: "asc" (default), and "desc".   |
| include_release_dates_with_no_data | A boolean value indicating if the results with no data available should be returned as well. Default is FALSE.  |
| realtime_start                     | A Date indicating the start of the real-time period. Defaults to 1776-07-04 (earliest available). For more information, see <a href="#">Real-Time Periods</a> .                         |
| realtime_end                       | A Date indicating the end of the real-time period. Defaults to 9999-12-31 (latest available). For more information, see <a href="#">Real-Time Periods</a> .                             |

## Value

A tibble object.

## API Documentation

[fred/release/dates](#)

## See Also

[fredr\\_releases\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

## Examples

```
if (fredr_has_key()) {  
  fredr_release_dates(release_id = 20L)  
  
  # Call the function with an "as of" Date of 1997-03-14  
  fredr_release_dates(release_id = 20L, realtime_end = as.Date("1997-03-14"))  
}
```

---

fredr\_release\_related\_tags

*Get the related FRED tags for one or more FRED tags within a release*

---

## Description

FRED tags are attributes assigned to series. For this request, related FRED tags are the tags assigned to series that match all tags in the tag\_names parameter, no tags in the exclude\_tag\_names parameter, and the release set by the release\_id parameter.

## Usage

```
fredr_release_related_tags(
  release_id,
  tag_names,
  ...,
  exclude_tag_names = NULL,
  tag_group_id = NULL,
  search_text = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

## Arguments

|                   |  |
|-------------------|--|
| release_id        | An integer ID of the release.  |
| tag_names         | A semicolon delimited string of tag names to be related to.  |
| ...               | These dots only exist for future extensions and should be empty.   |
| exclude_tag_names | A semicolon delimited string of tag names that series match <i>none</i> of. No exclusions are done by default.   |
| tag_group_id      | A string tag group id to filter tags by type. No filtering by tag group by default. Possible values are: <ul style="list-style-type: none"> <li>• "freq" = Frequency</li> <li>• "gen" = General or Concept</li> <li>• "geo" = Geography</li> <li>• "geot" = Geography Type</li> <li>• "rls" = Release</li> <li>• "seas" = Seasonal Adjustment</li> <li>• "src" = Source</li> </ul> |

|                |  |
|----------------|--|
| search_text    | A string indicating the words to find matching tags with. No filtering by search words by default.   |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by       | Order results by values of the specified attribute. Possible values are: <ul style="list-style-type: none"><li>• "series_count" (default)</li><li>• "popularity"</li><li>• "created"</li><li>• "name"</li><li>• "group_id"</li></ul> |
| sort_order     | A string representing the order of the resulting series, sorted by the attribute values specified by <code>order_by</code> . Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

### Value

A tibble object.

### API Documentation

[fred/release/related\\_tags](#)

### See Also

[fredr\\_releases\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

### Examples

```
if (fredr_has_key()) {  
  fredr_release_related_tags(10, tag_names = "cpi")  
}
```

---

fredr\_release\_series *Get the series on a release of economic data*

---

## Description

Get the series on a release of economic data

## Usage

```
fredr_release_series(
  release_id,
  ...,
  filter_variable = NULL,
  filter_value = NULL,
  tag_names = NULL,
  exclude_tag_names = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

## Arguments

|                   |  |
|-------------------|--|
| release_id        | An integer ID of the release.  |
| ...               | These dots only exist for future extensions and should be empty.   |
| filter_variable   | A string indicating which attribute to indicate the attribute that results are filtered by. Possible values include: "frequency", "units", "seasonal_adjustment". No filtering by default. |
| filter_value      | A string giving the value of the filter_variable attribute to filter results by. filter_variable must be set. No filtering by default.   |
| tag_names         | A string indicating which series tags to match. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").   |
| exclude_tag_names | A string indicating which series tags should <i>not</i> be matched. Multiple tags can be delimited by a semicolon in a single string (e.g. "usa;gnp").                                     |
| limit             | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset            | An integer used in conjunction with limit for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.                 |

|                |  |
|----------------|--|
| order_by       | A string indicating an attribute by which the results are ordered by. Possible values include: <ul style="list-style-type: none"> <li>• "series_id" (default)</li> <li>• "title"</li> <li>• "units"</li> <li>• "frequency"</li> <li>• "seasonal_adjustment"</li> <li>• "realtime_start"</li> <li>• "realtime_end"</li> <li>• "last_updated"</li> <li>• "observation_start"</li> <li>• "observation_end"</li> <li>• "popularity"</li> <li>• "group_popularity"</li> </ul> |
| sort_order     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object.

**API Documentation**

[fred/release/series](#)

**See Also**

[fredr\\_releases\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

**Examples**

```
if (fredr_has_key()) {
  fredr_release_series(release_id = 20L)

  fredr_release_series(release_id = 20L, order_by = "popularity")

  # Extract the "catalog" of series from a release on a certain date
  fredr_release_series(
    release_id = 20L,
    realtime_end = as.Date("2018-07-13"),
    order_by = "popularity"
  )
}
```

---

fredr\_release\_sources *Get the sources for a release of economic data*

---

## Description

Get the sources for a release of economic data

## Usage

```
fredr_release_sources(  
  release_id,  
  ...,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

## Arguments

|                |  |
|----------------|--|
| release_id     | An integer ID of the release.  |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

## Value

A tibble object.

## API Documentation

[fred/release/sources](#)

## See Also

[fredr\\_releases\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

## Examples

```
if (fredr_has_key()) {  
  # Where does the data for ID 10 come from?  
  fredr_release_sources(release_id = 10L)  
}
```



---

fredr\_release\_tables *Get release table trees for a given release*

---

## Description

You can go directly to the tree structure by passing the appropriate `element_id`. You may also use a drill-down approach to start at the root (top most) element by leaving the `element_id` off.

## Usage

```
fredr_release_tables(  
  release_id,  
  ...,  
  element_id = NULL,  
  include_observation_values = NULL,  
  observation_date = NULL  
)
```

## Arguments

`release_id` An integer ID of the release.

... These dots only exist for future extensions and should be empty.

`element_id` An integer ID for the desired release table element.

`include_observation_values` A boolean indicating if observations should be returned with the release table element. Observations will only be returned for a series type element. Default is FALSE.

`observation_date` A Date indicating which observation date to include with the release table. Default is 9999-12-31 (latest date available).

## Value

A tibble object with nested results.

## API Documentation

[fred/release/tables](#)

## See Also

[fredr\\_releases\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#)

**Examples**

```

if (fredr_has_key()) {
  fredr_release_tables(release_id = 10L)

  # Digging further into a release element
  fredr_release_tables(release_id = 53L, element_id = 12886)
}

```

---

fredr\_release\_tags      *Get the FRED tags for a release*

---

**Description**

Get the FRED tags for a release. Optionally, filter results by tag name, tag group, or search text.

**Usage**

```

fredr_release_tags(
  release_id,
  ...,
  tag_names = NULL,
  tag_group_id = NULL,
  search_text = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)

```

**Arguments**

|              |  |
|--------------|--|
| release_id   | An integer ID of the release.  |
| ...          | These dots only exist for future extensions and should be empty.   |
| tag_names    | A semicolon delimited string of tag names to only include in the response. No filtering by tag names by default (i.e. <i>all</i> FRED tags returned).  |
| tag_group_id | A string tag group id to filter tags by type. No filtering by tag group by default. Possible values are: <ul style="list-style-type: none"> <li>• "freq" = Frequency</li> <li>• "gen" = General or Concept</li> <li>• "geo" = Geography</li> <li>• "geot" = Geography Type</li> <li>• "rls" = Release</li> <li>• "seas" = Seasonal Adjustment</li> </ul> |

|                |  |
|----------------|--|
|                | <ul style="list-style-type: none"> <li>• "src" = Source</li> </ul>   |
| search_text    | A string indicating the words to find matching tags with. No filtering by search words by default.   |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by       | Order results by values of the specified attribute. Possible values are: <ul style="list-style-type: none"> <li>• "series_count" (default)</li> <li>• "popularity"</li> <li>• "created"</li> <li>• "name"</li> <li>• "group_id"</li> </ul> |
| sort_order     | A string representing the order of the resulting series, sorted by the attribute values specified by <code>order_by</code> . Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object.

**API Documentation**

[fred/release/tags](#)

**See Also**

[fredr\\_releases\(\)](#), [fredr\\_releases\\_dates\(\)](#), [fredr\\_release\(\)](#), [fredr\\_release\\_dates\(\)](#), [fredr\\_release\\_series\(\)](#), [fredr\\_release\\_sources\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_release\\_tables\(\)](#)

**Examples**

```
if (fredr_has_key()) {
  fredr_release_tags(release_id = 10L)
}
```

---

|               |                                       |
|---------------|---------------------------------------|
| fredr_request | <i>Send a request to the FRED API</i> |
|---------------|---------------------------------------|

---

### Description

Send a general request to the FRED API by specifying an endpoint and a sequence of parameters. The `fredr_request()` function forms and submits a request to a specified endpoint of the FRED API. The result is either the response object from `httr::GET()` or the response parsed as a tibble.

### Usage

```
fredr_request(
  endpoint,
  ...,
  to_frame = TRUE,
  print_req = FALSE,
  retry_times = 3L
)
```

### Arguments

|                          |  |
|--------------------------|--|
| <code>endpoint</code>    | A string representing the FRED API endpoint of interest. See <a href="#">fredr_endpoints</a> for a list of endpoint possible values. <i>Required parameter.</i>  |
| <code>...</code>         | A series of named parameters to be used in the query. Must be of the form <code>param_key = "param_value"</code> . Acceptable parameters are endpoint-specific. See the <a href="#">fredr_endpoints</a> data frame for a list of endpoints and <code>fredr_docs()</code> to access the web documentation for each endpoint function. |
| <code>to_frame</code>    | A boolean value indicating whether or not the response should be parsed and formatted as a data frame. If <code>FALSE</code> , a response object is returned and further processing can be done with <code>httr::content()</code> . Default is <code>TRUE</code> .   |
| <code>print_req</code>   | A boolean value indicating whether or not the request should be printed as well. Useful for debugging. Default is <code>FALSE</code> .   |
| <code>retry_times</code> | An integer indicating the maximum number of requests to attempt. Passed directly to <code>httr::RETRY()</code> . Default is 3.   |

### Value

If `to_frame = TRUE`, a tibble containing the parsed response. If `to_frame = FALSE`, a response object returned directly from `httr::GET()`.

### API Documentation

[FRED API](#)

**Examples**

```

if (fredr_has_key()) {
  fredr_request(
    endpoint = "series/observations",
    series_id = "GNPCA",
    observation_start = "1990-01-01",
    observation_end = "2000-01-01"
  )

  # Compare to to_frame = `FALSE`
  resp <- fredr_request(
    endpoint = "series/observations",
    series_id = "GNPCA",
    observation_start = "1990-01-01",
    observation_end = "2000-01-01",
    to_frame = FALSE
  )
}

```

fredr\_series

*Return basic information for a FRED series.***Description**

Given a series ID, return basic information for a FRED series. Note that this function will *not* return the actual series data. For this functionality, see [fredr\\_series\\_observations\(\)](#).

**Usage**

```
fredr_series(series_id, ..., realtime_start = NULL, realtime_end = NULL)
```

**Arguments**

|                |  |
|----------------|--|
| series_id      | A string ID for the FRED series.   |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object (1 row) with information for the series specified by series\_id.

**API Documentation**

[fred/series](#)

**See Also**

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#),  
[fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\\_categories\(\)](#),  
[fredr\\_series\\_release\(\)](#), [fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

**Examples**

```
if (fredr_has_key()) {
# Return information for the "UNRATE" series
fredr_series(series_id = "UNRATE")
}
```

---

```
fredr_series_categories
```

*Get the categories for a FRED series*

---

**Description**

Given a series ID, return information on the categories to which a series belongs as a tibble object.

**Usage**

```
fredr_series_categories(
  series_id,
  ...,
  realtime_start = NULL,
  realtime_end = NULL
)
```

**Arguments**

|                             |  |
|-----------------------------|--|
| <code>series_id</code>      | A string ID for the FRED series.   |
| <code>...</code>            | These dots only exist for future extensions and should be empty.   |
| <code>realtime_start</code> | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| <code>realtime_end</code>   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object with information on the categories to which the series specified by `series_id` belongs. Data include category ID, name, parent category ID, and notes.

**API Documentation**

[fred/series/categories](#)

**See Also**

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#),  
[fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_release\(\)](#),  
[fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

**Examples**

```
if (fredr_has_key()) {  
  # Return the categories to which the "UNRATE" series belongs  
  fredr_series_categories(series_id = "UNRATE")  
}
```

---

fredr\_series\_observations

*Get observations of a FRED series*

---

**Description**

Given a series ID, return observations of that series as a tibble object. `fredr()` is an alias for `fredr_series_observations()`.

**Usage**

```
fredr_series_observations(  
  series_id,  
  ...,  
  observation_start = NULL,  
  observation_end = NULL,  
  frequency = NULL,  
  aggregation_method = NULL,  
  limit = NULL,  
  offset = NULL,  
  sort_order = NULL,  
  units = NULL,  
  realtime_start = NULL,  
  realtime_end = NULL,  
  vintage_dates = NULL,  
  output_type = NULL  
)
```

```
fredr(  
  series_id,  
  ...,  
  observation_start = NULL,  
  observation_end = NULL,  
  frequency = NULL,  
  aggregation_method = NULL,
```

```

limit = NULL,
offset = NULL,
sort_order = NULL,
units = NULL,
realtime_start = NULL,
realtime_end = NULL,
vintage_dates = NULL,
output_type = NULL
)

```

### Arguments

|                    |   |
|--------------------|---|
| series_id          | A string ID for the FRED series.  |
| ...                | These dots only exist for future extensions and should be empty.  |
| observation_start  | A Date indicating the start of the observation period. Defaults to 1776-07-04, the earliest available date.   |
| observation_end    | A Date indicating the end of the observation period. Defaults to 9999-12-31, the latest available date.   |
| frequency          | A string representing a lower frequency to aggregate to. Defaults to no frequency aggregation. Possible values are: <ul style="list-style-type: none"> <li>• "d" - Daily</li> <li>• "w" - Weekly</li> <li>• "bw" - Biweekly</li> <li>• "m" - Monthly</li> <li>• "q" - Quarterly</li> <li>• "sa" - Semiannual</li> <li>• "a" - Annual</li> <li>• "wem" - Weekly, ending Monday</li> <li>• "wetu" - Weekly, ending Tuesday</li> <li>• "wew" - Weekly, ending Wednesday</li> <li>• "weth" - Weekly, ending Thursday</li> <li>• "wef" - Weekly, ending Friday</li> <li>• "wesa" - Weekly, ending Saturday</li> <li>• "wesu" - Weekly, ending Sunday</li> <li>• "bwew" - Biweekly, ending Wednesday</li> <li>• "bwem" - Biweekly, ending Monday</li> </ul> |
| aggregation_method | A string representing the aggregation method used for frequency aggregation. This parameter has no affect is frequency is not set. Possible values are: <ul style="list-style-type: none"> <li>• "avg" for average</li> <li>• "sum" for sum</li> <li>• "eop" for end of period value</li> </ul>   |



|                             |   |
|-----------------------------|---|
| <code>limit</code>          | An integer limit on the maximum number of results to return. Defaults to 100000, the maximum.   |
| <code>offset</code>         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.   |
| <code>sort_order</code>     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".  |
| <code>units</code>          | A string indicating the data value transformation. Defaults to "lin". Possible values are: <ul style="list-style-type: none"> <li>• "lin" - Levels (No transformation)</li> <li>• "chg" - Change</li> <li>• "ch1" - Change from 1 year ago</li> <li>• "pch" - Percent change</li> <li>• "pc1" - Percent change from 1 year ago</li> <li>• "pca" - Compounded annual rate of change</li> <li>• "cch" - Continuously compounded rate of change</li> <li>• "cca" - Continuously compounded annual rate of change</li> <li>• "log" - Natural log</li> </ul> |
| <code>realtime_start</code> | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| <code>realtime_end</code>   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| <code>vintage_dates</code>  | A vector of Date objects to download data for. Vintage dates are used to download data as it existed on these specified dates in history. They can be specified instead of a real-time period using <code>realtime_start</code> and <code>realtime_end</code> . Defaults to no vintage dates.   |
| <code>output_type</code>    | An integer indicating the output type. Not used unless <code>realtime_start</code> is used. Possible values are: <ul style="list-style-type: none"> <li>• 1 for Observations by Real-Time Period (default)</li> <li>• 2 for Observations by Vintage Date, All Observations</li> <li>• 3 for Observations by Vintage Date, New and Revised Observations Only</li> <li>• 4 for Observations, Initial Release Only.</li> </ul>   |

**Value**

A tibble object with observation dates and values.

**API Documentation**

[fred/series/observations](#)

**See Also**

[fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_release\(\)](#), [fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

**Examples**

```

if (fredr_has_key()) {
# Observations for "UNRATE" series between 1980 and 2000. Units are in terms
# of change from previous observation.
fredr(
  series_id = "UNRATE",
  observation_start = as.Date("1980-01-01"),
  observation_end = as.Date("2000-01-01"),
  units = "chg"
)
# All observations for "OILPRICE" series. The data is first aggregated by
# quarter by taking the average of all observations in the quarter then
# transformed by taking the natural logarithm.
fredr(
  series_id = "OILPRICE",
  frequency = "q",
  aggregation_method = "avg",
  units = "log"
)

# To retrieve values for multiple series, use purrr's map_dfr() function.

if (requireNamespace("purrr", quietly = TRUE)) {

  library(purrr)
  purrr::map_dfr(c("UNRATE", "OILPRICE"), fredr)

  # Using purrr::pmap_dfr() allows you to use varying optional parameters
  params <- list(
    series_id = c("UNRATE", "OILPRICE"),
    frequency = c("m", "q")
  )

  purrr::pmap_dfr(
    .l = params,
    .f = ~ fredr(series_id = .x, frequency = .y)
  )

}

}

```

---

fredr\_series\_release *Get the release for a FRED series*

---

**Description**

Given a series ID, return information on a series as a tibble object.

## Usage

```
fredr_series_release(  
  series_id,  
  ...,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

## Arguments

|                |  |
|----------------|--|
| series_id      | A string ID for the FRED series.   |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

## Value

A tibble object with information on the release for the series specified by the `series_id` parameter. Data include release ID, real-time periods, release name, and links to press releases, if available.

## API Documentation

[fred/series/release](#)

## See Also

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

## Examples

```
if (fredr_has_key()) {  
  # Get release information for the "UNRATE" series  
  fredr_series_release(series_id = "UNRATE")  
}
```

---

fredr\_series\_search\_related\_tags

*Get the related FRED tags for one or more FRED tags matching a series search*

---

### Description

FRED tags are attributes assigned to series. Return the *related* FRED tags for a search: tags assigned to series that match *all* tags in the tag\_names parameter (required), *no* tags in the exclude\_tag\_names (optional) and the search words set by the series\_search\_text parameter (required).

### Usage

```
fredr_series_search_related_tags(
    series_search_text,
    tag_names,
    ...,
    exclude_tag_names = NULL,
    tag_group_id = NULL,
    tag_search_text = NULL,
    limit = NULL,
    offset = NULL,
    order_by = NULL,
    sort_order = NULL,
    realtime_start = NULL,
    realtime_end = NULL
)
```

### Arguments

|                    |   |
|--------------------|---|
| series_search_text | A string containing the series search text.   |
| tag_names          | A semicolon delimited string of tag names to return.  |
| ...                | These dots only exist for future extensions and should be empty.  |
| exclude_tag_names  | A semicolon delimited string of tag names that series match <i>none</i> of. Defaults to no tag filtering.   |
| tag_group_id       | A string indicating the tag group id to filter tags by type. Defaults to no filtering by tag group. Possible values are <ul style="list-style-type: none"> <li>• "freq" = Frequency</li> <li>• "gen" = General or Concept</li> <li>• "geo" = Geography</li> <li>• "geot" = Geography Type</li> <li>• "r1s" = Release</li> <li>• "seas" = Seasonal Adjustment</li> </ul> |

|                 |   |
|-----------------|---|
|                 | <ul style="list-style-type: none"> <li>• "src" = Source</li> </ul>  |
| tag_search_text | A string to match tag names. Defaults to no filtering by tag name matching.   |
| limit           | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| offset          | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.   |
| order_by        | A string indicating the attribute to order results by. Defaults to "series_count". Possible values are: <ul style="list-style-type: none"> <li>• "series_count"</li> <li>• "popularity"</li> <li>• "created"</li> <li>• "name"</li> <li>• "group_id"</li> </ul> |
| sort_order      | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".  |
| realtime_start  | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| realtime_end    | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |

**Value**

A tibble object.

**References**

API Documentation:  
[series/search/related\\_tags](#)

**See Also**

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#),  
[fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_release\(\)](#),  
[fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

**Examples**

```
if (fredr_has_key()) {
# Search for all tags matching the series text "oil" and the tag "usa".
fredr_series_search_related_tags(
  series_search_text = "oil",
  tag_names = "usa"
)
# Search for tags matching the series text "oil", the tag text "usa", and
# are related to the tag "usa". Return only results in the "src" (Source)
```

```
# group.
fredr_series_search_related_tags(
  series_search_text = "oil",
  tag_names = "usa",
  tag_group_id = "src",
  tag_search_text = "usa"
)
}
```

---

fredr\_series\_search\_tags

*Get the FRED tags for a series search.*

---

### Description

Return the FRED tags by searching for matches in series text.

### Usage

```
fredr_series_search_tags(
  series_search_text,
  ...,
  tag_names = NULL,
  tag_group_id = NULL,
  tag_search_text = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

### Arguments

|                    |  |
|--------------------|--|
| series_search_text | A string containing the series search text.  |
| ...                | These dots only exist for future extensions and should be empty.   |
| tag_names          | A semicolon delimited string of tag names to return. Defaults no filtering by tag names.   |
| tag_group_id       | A string indicating the tag group id to filter tags by type. Defaults to no filtering by tag group. Possible values are <ul style="list-style-type: none"> <li>• "freq" = Frequency</li> <li>• "gen" = General or Concept</li> <li>• "geo" = Geography</li> <li>• "geot" = Geography Type</li> </ul> |

- "rls" = Release
- "seas" = Seasonal Adjustment
- "src" = Source

|                 |   |
|-----------------|---|
| tag_search_text | A string to match tag names. Defaults to no filtering by tag name matching.   |
| limit           | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| offset          | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.   |
| order_by        | A string indicating the attribute to order results by. Defaults to "series_count". Possible values are: <ul style="list-style-type: none"> <li>• "series_count"</li> <li>• "popularity"</li> <li>• "created"</li> <li>• "name"</li> <li>• "group_id"</li> </ul> |
| sort_order      | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".  |
| realtime_start  | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| realtime_end    | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |

**Value**

A tibble object where each row represents a series tag matching the query. Data include the tag name, group ID, tag creation date, popularity, series count, and additional notes.

**References**

API Documentation:

[series/search/tags](#)

**See Also**

[fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {
# Search for tags matching the series text "gnp"
fredr_series_search_tags("gnp")
# Search for tags matching the series text "oil" and the tag text "usa"
fredr_series_search_tags(
```

```
    series_search_text = "oil",
    tag_search_text = "usa"
)
# Search for tags matching the series text "oil" and the tag text "usa".
# Return only results in the "geo" (Geography) group
fredr_series_search_tags(
  series_search_text = "oil",
  tag_group_id = "geo",
  tag_search_text = "usa"
)
}
```

---

fredr\_series\_search\_text

*Search for a FRED series.*

---

### **Description**

Search FRED for a series by full text of series or by series ID.

### **Usage**

```
fredr_series_search_text(
  search_text,
  ...,
  tag_names = NULL,
  exclude_tag_names = NULL,
  filter_variable = NULL,
  filter_value = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

```
fredr_series_search_id(
  search_text,
  ...,
  limit = 1000L,
  offset = 0,
  order_by = NULL,
  sort_order = "asc",
  filter_variable = NULL,
  filter_value = NULL,
  realtime_start = NULL,
  realtime_end = NULL,
```



```

    tag_names = NULL,
    exclude_tag_names = NULL
)

```

### Arguments

|                   |  |
|-------------------|--|
| search_text       | A string containing the words to match against economic data series. For use with <code>fredr_series_search_text</code> and <code>fredr_series_search_id</code> .  |
| ...               | These dots only exist for future extensions and should be empty.   |
| tag_names         | A semicolon delimited string of tag names that series match <i>all</i> of. Defaults to no tag filtering.   |
| exclude_tag_names | A semicolon delimited string of tag names that series match <i>none</i> of. Defaults to no tag filtering.  |
| filter_variable   | A string indicating the attribute to filter results by. Possible values are: "frequency", "units", "seasonal_adjustment". Defaults to no filter.   |
| filter_value      | The value of the <code>filter_variable</code> attribute to filter by. Possible values depend on the value of <code>filter_variable</code> . Defaults to no filter.   |
| limit             | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset            | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by          | A string indicating the attribute to order results by. Defaults to "search_rank" for <code>fredr_series_search_text()</code> and "series_id" for <code>fredr_series_search_id()</code> . Possible values are: <ul style="list-style-type: none"> <li>• "search_rank"</li> <li>• "series_id"</li> <li>• "title"</li> <li>• "units"</li> <li>• "frequency"</li> <li>• "seasonal_adjustment"</li> <li>• "realtime_start"</li> <li>• "realtime_end"</li> <li>• "last_updated"</li> <li>• "observation_start"</li> <li>• "observation_end"</li> <li>• "popularity"</li> <li>• "group_popularity"</li> </ul> |
| sort_order        | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |
| realtime_start    | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end      | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object where each row represents a series matching the query.

**References**

API Documentation:

[series/search](#)

**See Also**

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_release\(\)](#), [fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

**Examples**

```
if (fredr_has_key()) {  
  # search for series with text matching "oil" and return the top 10 most popular  
  # series  
  fredr_series_search_text(  
    search_text = "oil",  
    order_by = "popularity",  
    limit = 10  
  )  
  # search for series with text matching "oil" with the tag "usa" and return the  
  # top 10 search results  
  fredr_series_search_text(  
    search_text = "oil",  
    order_by = "search_rank",  
    limit = 10,  
    tag_names = "usa"  
  )  
  # search for series with text matching "unemployment" and return only series  
  # with monthly frequency  
  fredr_series_search_text(  
    search_text = "unemployment",  
    filter_variable = "frequency",  
    filter_value = "Monthly"  
  )  
  # search for series ID matching "UNRATE" and return oldest series first  
  fredr_series_search_id(  
    search_text = "UNRATE",  
    order_by = "observation_start"  
  )  
}
```

---

fredr\_series\_tags      *Get the tags for a FRED series*

---

## Description

Given a series ID, return associated tags for the series as a tibble object.

## Usage

```
fredr_series_tags(
  series_id,
  ...,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

## Arguments

|                |  |
|----------------|--|
| series_id      | A string ID for the FRED series.   |
| ...            | These dots only exist for future extensions and should be empty.   |
| order_by       | A string indicating the attribute by which to order the series. Possible values include "series_count" (default), "popularity", "created", "name", and "group_id". |
| sort_order     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .                       |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .                         |

## Value

A tibble object where each row represents a tag associated with the series specified by series\_id. Data include tag name, group ID, popularity, series count, tag creation date, and additional notes.

## API Documentation

[fred/series/tags](#)

## See Also

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_release\(\)](#), [fredr\\_series\\_updates\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

## Examples

```

if (fredr_has_key()) {
# Return all tags assigned to the "UNRATE" series and order the results by
# group ID.
fredr_series_tags(series_id = "UNRATE", order_by = "group_id")
}

```

---

fredr\_series\_updates *Get a set of recently updated FRED series*

---

## Description

Returns information on the recently updated series on the FRED server.

## Usage

```

fredr_series_updates(
  ...,
  filter_value = NULL,
  start_time = NULL,
  end_time = NULL,
  limit = NULL,
  offset = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)

```

## Arguments

|                |   |
|----------------|---|
| ...            | These dots only exist for future extensions and should be empty.  |
| filter_value   | Filter results by type of geographic region of economic the data series. Possible values include <ul style="list-style-type: none"> <li>"all" (default) - no filtering</li> <li>"macro" - filters results macroeconomic regions (e.g. entire countries)</li> <li>"regional" - filters results to series for regions of the United States such as states, counties, and Metropolitan Statistical Areas (MSA).</li> </ul> |
| start_time     | A datetime object indicating the start time to filter series updates results.   |
| end_time       | A datetime object indicating the start time to filter series updates results.   |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| offset         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |

**Value**

A tibble object where each row represents a series. Rows are sorted with most recently updated series appearing first.

**API Documentation**

[fred/series/updates](#)

**See Also**

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_release\(\)](#), [fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_vintagedates\(\)](#).

**Examples**

```
if (fredr_has_key()) {  
  # Get all recently updated "regional" series  
  fredr_series_updates(filter_value = "regional")  
  # Most recently updated series are returned first  
  updates <- fredr_series_updates(filter_value = "regional")$last_updated  
  is.unsorted(rev(as.POSIXct(updates)))  
}
```

---

fredr\_series\_vintagedates

*Get the data vintage dates for a FRED series*

---

**Description**

Given a series ID, return a sequence of dates in history when a series' data values were revised or new data values were released as a tibble object.

**Usage**

```
fredr_series_vintagedates(  
  series_id,  
  ...,  
  limit = NULL,  
  offset = NULL,  
  sort_order = NULL,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

**Arguments**

|                             |   |
|-----------------------------|---|
| <code>series_id</code>      | A string ID for the FRED series.  |
| <code>...</code>            | These dots only exist for future extensions and should be empty.  |
| <code>limit</code>          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| <code>offset</code>         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0. |
| <code>sort_order</code>     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".  |
| <code>realtime_start</code> | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| <code>realtime_end</code>   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |

**Value**

A tibble object where each row is a distinct vintage date.

**API Documentation**

[fred/series/vintagedates](#)

**See Also**

[fredr\\_series\\_observations\(\)](#), [fredr\\_series\\_search\\_text\(\)](#), [fredr\\_series\\_search\\_id\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_series\(\)](#), [fredr\\_series\\_release\(\)](#), [fredr\\_series\\_tags\(\)](#), [fredr\\_series\\_categories\(\)](#), [fredr\\_series\\_updates\(\)](#).

**Examples**

```
if (fredr_has_key()) {
  # All data vintages for the "UNRATE" series
  fredr_series_vintagedates(series_id = "UNRATE")
  # 10 most recent data vintages for the "UNRATE" series
  fredr_series_vintagedates(series_id = "UNRATE", limit = 10L, sort_order = "desc")
}
```

---

fredr\_source

*Get a source of economic data*

---

**Description**

Get a source of economic data

**Usage**

```
fredr_source(source_id, ..., realtime_start = NULL, realtime_end = NULL)
```

**Arguments**

|                |  |
|----------------|--|
| source_id      | An integer ID for the data source.   |
| ...            | These dots only exist for future extensions and should be empty.   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> . |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object.

**API Documentation**

[fred/source](#)

**See Also**

[fredr\\_sources\(\)](#), [fredr\\_source\\_releases\(\)](#)

**Examples**

```
if (fredr_has_key()) {  
  fredr_source(source_id = 14L)  
  
  # Has this source ID ever changed over time?  
  fredr_source(source_id = 14L, realtime_start = as.Date("1990-01-01"))  
}
```

---

|               |   |
|---------------|---|
| fredr_sources | <i>Get all sources of economic data</i> |
|---------------|---|

---

**Description**

Get *all* sources of economic data

**Usage**

```
fredr_sources(
  ...,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

**Arguments**

|                |  |
|----------------|--|
| ...            | These dots only exist for future extensions and should be empty.   |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset         | An integer used in conjunction with limit for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0. |
| order_by       | A string indicating which attribute should be used to order the results. Possible values: "source_id" (default), "name", "realtime_start", "realtime_end".                 |
| sort_order     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .                               |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .                                 |

**Value**

A tibble object.

**API Documentation**

[fred/sources](#)

**See Also**

[fredr\\_source\(\)](#), [fredr\\_source\\_releases\(\)](#)

**Examples**

```
if (fredr_has_key()) {
  fredr_sources(limit = 20L)
}
```



---

fredr\_source\_releases *Get the releases for a source*

---

### Description

Get the releases for a source

### Usage

```
fredr_source_releases(  
  source_id,  
  ...,  
  limit = NULL,  
  offset = NULL,  
  order_by = NULL,  
  sort_order = NULL,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

### Arguments

|                |   |
|----------------|---|
| source_id      | An integer ID for the data source.  |
| ...            | These dots only exist for future extensions and should be empty.  |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.   |
| offset         | An integer used in conjunction with limit for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by       | A string indicating which attribute should be used to order the results. Possible values: <ul style="list-style-type: none"><li>• "release_id" (default)</li><li>• "name"</li><li>• "press_release"</li><li>• "realtime_start"</li><li>• "realtime_end"</li></ul> |
| sort_order     | A string representing the order of the resulting series. Possible values are: "asc" (default), and "desc".  |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .  |

**Value**

A tibble object.

**API Documentation**

[fred/source/releases](#)

**See Also**

[fredr\\_sources\(\)](#), [fredr\\_source\(\)](#)

**Examples**

```
if (fredr_has_key()) {  
  # Board of Governors  
  fredr_source_releases(source_id = 1L)  
  
  # University of Michigan  
  fredr_source_releases(source_id = 14L, realtime_start = as.Date("1950-01-01"))  
}
```

---

fredr\_tags

*Get FRED series tags*

---

**Description**

Get FRED tags. Optionally, filter results by tag name, tag group, or search text. FRED tags are attributes assigned to a series. By default, all tags are returned, unfiltered, up to the `limit`.

**Usage**

```
fredr_tags(  
  ...,  
  tag_names = NULL,  
  tag_group_id = NULL,  
  search_text = NULL,  
  limit = NULL,  
  offset = NULL,  
  order_by = NULL,  
  sort_order = NULL,  
  realtime_start = NULL,  
  realtime_end = NULL  
)
```

**Arguments**

|                |  |
|----------------|--|
| ...            | These dots only exist for future extensions and should be empty.   |
| tag_names      | A semicolon delimited string of tag names to only include in the response. No filtering by tag names by default (i.e. <i>all</i> FRED tags returned).  |
| tag_group_id   | A string tag group id to filter tags by type. No filtering by tag group by default. Possible values are: <ul style="list-style-type: none"> <li>• "freq" = Frequency</li> <li>• "gen" = General or Concept</li> <li>• "geo" = Geography</li> <li>• "geot" = Geography Type</li> <li>• "rls" = Release</li> <li>• "seas" = Seasonal Adjustment</li> <li>• "src" = Source</li> </ul> |
| search_text    | A string indicating the words to find matching tags with. No filtering by search words by default.   |
| limit          | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset         | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by       | Order results by values of the specified attribute. Possible values are: <ul style="list-style-type: none"> <li>• "series_count" (default)</li> <li>• "popularity"</li> <li>• "created"</li> <li>• "name"</li> <li>• "group_id"</li> </ul>   |
| sort_order     | A string representing the order of the resulting series, sorted by the attribute values specified by <code>order_by</code> . Possible values are: "asc" (default), and "desc".   |
| realtime_start | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end   | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble containing tags and their descriptions. Data include tag name, group ID, popularity, series count, tag creation date, and additional notes.

**API Documentation**

[fred/tags](#)

**See Also**

[fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#), [fredr\\_docs\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_tags\\_series\(\)](#), [fredr\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key() && interactive()) {
# Information for all tags
fredr_tags()

# Information for just the "gdp" and "oecd" tags
fredr_tags(tag_names = "gdp;oecd")

# Information for all tags in the "geo" group
fredr_tags(tag_group_id = "geo")

# Information for tags matching the text "unemployment"
fredr_tags(search_text = "unemployment")
}
```

---

fredr\_tags\_series      *Find FRED series matching tag names*

---

**Description**

Get the series matching tags in the tag\_names parameter. Exclude tags in the exclude\_tag\_names parameter.

**Usage**

```
fredr_tags_series(
  tag_names,
  ...,
  exclude_tag_names = NULL,
  limit = NULL,
  offset = NULL,
  order_by = NULL,
  sort_order = NULL,
  realtime_start = NULL,
  realtime_end = NULL
)
```

**Arguments**

tag\_names      A semicolon delimited string of tag names to find series using.  
 ...            These dots only exist for future extensions and should be empty.

|                   |  |
|-------------------|--|
| exclude_tag_names | A semicolon delimited string of tag names that series match <i>none</i> of. No exclusions are done by default.   |
| limit             | An integer limit on the maximum number of results to return. Defaults to 1000, the maximum.  |
| offset            | An integer used in conjunction with <code>limit</code> for long series. This mimics the idea of <i>pagination</i> to retrieve large amounts of data over multiple calls. Defaults to 0.  |
| order_by          | A string indicating which attribute by which to order the results of the query. Possible values include: <ul style="list-style-type: none"> <li>• "series_id" (default)</li> <li>• "title"</li> <li>• "units"</li> <li>• "frequency"</li> <li>• "seasonal_adjustment"</li> <li>• "realtime_start"</li> <li>• "realtime_end"</li> <li>• "last_updated"</li> <li>• "observation_start"</li> <li>• "observation_end"</li> <li>• "popularity"</li> <li>• "group_popularity"</li> </ul> |
| sort_order        | A string representing the order of the resulting series, sorted by the attribute values specified by <code>order_by</code> . Possible values are: "asc" (default), and "desc".   |
| realtime_start    | A Date indicating the start of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |
| realtime_end      | A Date indicating the end of the real-time period. Defaults to today's date. For more information, see <a href="#">Real-Time Periods</a> .   |

**Value**

A tibble object containing FRED series with tags matching `tag_names` and their descriptions.

**API Documentation**

[fred/tags/series](#)

**See Also**

[fredr\\_category\\_tags\(\)](#), [fredr\\_category\\_related\\_tags\(\)](#), [fredr\\_docs\(\)](#), [fredr\\_release\\_tags\(\)](#), [fredr\\_release\\_related\\_tags\(\)](#), [fredr\\_series\\_search\\_tags\(\)](#), [fredr\\_series\\_search\\_related\\_tags\(\)](#), [fredr\\_tags\(\)](#), [fredr\\_related\\_tags\(\)](#)

**Examples**

```
if (fredr_has_key()) {  
  # All series tagged with "gdp"  
  fredr_tags_series(tag_names = "gdp")  
  # All series tagged with "gdp" and not tagged with "quarterly"  
  fredr_tags_series(  
    tag_names = "gdp",  
    exclude_tag_names = "quarterly"  
  )  
  # Top 100 most popular non-quarterly series matching GDP  
  fredr_tags_series(  
    tag_names = "gdp",  
    exclude_tag_names = "quarterly",  
    order_by = "popularity",  
    limit = 100L  
  )  
}
```

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