

# Package ‘rtimes’

October 8, 2015

**Title** Client for New York Times 'APIs'

**Description** Interface to Congress, Campaign Finance, Article Search, and Geographic 'APIs' from the New York Times. Documentation for New York Times 'APIs' (<http://developer.nytimes.com/docs/>). This client covers a subset of the New York Times 'APIs'.

**Version** 0.3.0

**License** MIT + file LICENSE

**URL** <https://github.com/ropengov/rtimes>

**BugReports** <https://github.com/ropengov/rtimes/issues>

**VignetteBuilder** knitr

**Imports** htr, jsonlite, dplyr

**Suggests** knitr, testthat, lubridate, ggplot2, scales, grid

**NeedsCompilation** no

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rtimes-package	<i>R interface to some of the New York Times APIs.</i>
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## Description

R interface to some of the New York Times APIs.

## Details

Functions that wrap these sets of APIs are prefixed by two letter acronyms fo reach API endpoint + the function name itself as for example ‘cg’ + ‘fxn’

**cg** for the Congress API

**as** for the Article Search API

**cf** for the Campaign Finance API

**geo** for the Geographic API

See the vignette for help.

Please get your own API keys at <http://developer.nytimes.com/apps/register> - you’ll need a different key for each API.

I set up the functions so that you can put the key in your .Rprofile file, which will be called on startup of R, and then you don’t have to enter your API key for each run of a function. Put these entries in your .Rprofile file

- `options(nytimes_cg_key = "YOURKEYHERE")`
- `options(nytimes_as_key = "YOURKEYHERE")`
- `options(nytimes_cf_key = "YOURKEYHERE")`
- `options(nytimes_geo_key = "YOURKEYHERE")`

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as\_search

*Search articles***Description**

Search articles

**Usage**

```
as_search(q, fq = NULL, sort = NULL, begin_date = NULL, end_date = NULL,
  key = NULL, fl = NULL, hl = FALSE, page = 0, facet_field = NULL,
  facet_filter = NULL, ..., callopts = list())
```

**Arguments**

q	Search query term. Search is performed on the article body, headline and byline.
fq	Filtered search query using standard Lucene syntax. The filter query can be specified with or without a limiting field: label. See <code>fq_fields</code> for the filter query fields.
sort	(character) Default NULL. One of newest or oldest . By default, search results are sorted by their relevance to the query term (q). Use the sort parameter to sort by <code>pub_date</code> .
begin_date	Begin date - Restricts responses to results with publication dates of the date specified or later. In the form YYYYMMDD
end_date	End date - Restricts responses to results with publication dates of the date specified or earlier. In the form YYYYMMDD
key	your New York Times API key; pass in, or loads from <code>.Rprofile</code> as <code>nytimes_as_key</code> , or from <code>.Renv</code> as <code>NYTIMES_AS_KEY</code>
fl	Fields to get back, as vector. See Details for the.
hl	(logical) Highlight or not, default is FALSE
page	Page number. The value of page corresponds to a set of 10 results (it does not indicate the starting number of the result set). For example, <code>page=0</code> corresponds to records 0-9. To return records 10-19, set page to 1, not 10.
facet_field	(character) Specifies the sets of facet values to include in the facets array at the end of response, which collects the facet values from all the search results. By default no facet fields will be returned. See details for options.
facet_filter	(logical) Fields to facet on, as vector. When set to true, facet counts will respect any applied filters (fq, date range, etc.) in addition to the main query term. To filter facet counts, specifying at least one <code>facet_field</code> is required.
...	Futher args pass into query
callopts	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**Details**

fl parameter options are: web\_url, snippet, lead\_paragraph, abstract, print\_page, blog, source, multimedia, headline, keywords, pub\_date, document\_type, news\_desk, byline, type\_of\_material, \_id, word\_count.

facet\_field param options are: section\_name, document\_type, type\_of\_material, source, day\_of\_week

**References**

[http://developer.nytimes.com/docs/article\\_search\\_api/](http://developer.nytimes.com/docs/article_search_api/)

**Examples**

```
## Not run:
as_search(q="bailout", begin_date = "20081001", end_date = '20081201')
as_search(q="bailout", facet_field = 'section_name', begin_date = "20081001",
  end_date = '20081201', fl = 'word_count')
as_search(q="money", fq = 'The New York Times')
as_search(q="money", fq = 'news_desk:("Sports" "Foreign"')')
as_search(q="bailout", hl = TRUE)

library('httr')
as_search("iowa caucus", callopts = verbose())

## End(Not run)
```

---

cf\_candidate\_details *Campaign finance NYTimes API - candidate details*

---

**Description**

Campaign finance NYTimes API - candidate details

**Usage**

```
cf_candidate_details(campaign_cycle = NULL, fec_id = NULL, key = NULL,
  ...)
```

**Arguments**

campaign_cycle	An even-numbered year in YYYY format. Presidential data: 2008-present; Congressional data: 2000-present
fec_id	FEC id
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cf_key, or from .Renviro as NYTIMES_CF_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**References**

[http://developer.nytimes.com/docs/campaign\\_finance\\_api/](http://developer.nytimes.com/docs/campaign_finance_api/)

**Examples**

```
## Not run:
cf_candidate_details(campaign_cycle = 2008, fec_id = 'P80003338')
cf_candidate_details(campaign_cycle = 2012, fec_id = 'P80003338')

## End(Not run)
```

---

cf\_candidate\_leaders *Campaign finance NYTimes API - candidate leaders*

---

**Description**

Campaign finance NYTimes API - candidate leaders

**Usage**

```
cf_candidate_leaders(campaign_cycle = NULL, category = NULL, key = NULL,
  ...)
```

**Arguments**

campaign_cycle	An even-numbered year in YYYY format. Presidential data: 2008-present; Congressional data: 2000-present
category	Category. Specify one of these categories: <ul style="list-style-type: none"> <li>• Candidate Loan ‘candidate-loan’</li> <li>• Contribution Total ‘contribution-total’</li> <li>• Debts Owed ‘debts-owed’</li> <li>• Disbursements Total ‘disbursements-total’</li> <li>• End Cash ‘end-cash’</li> <li>• Individual Total ‘individual-total’</li> <li>• PAC Total ‘pac-total’</li> <li>• Receipts Total ‘receipts-total’</li> <li>• Refund Total ‘refund-total’</li> </ul>
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cf_key, or from .Renviron as NYTIMES_CF_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**References**

[http://developer.nytimes.com/docs/campaign\\_finance\\_api/](http://developer.nytimes.com/docs/campaign_finance_api/)

**Examples**

```
## Not run:
cf_candidate_leaders(campaign_cycle = 2010, category='end-cash')
cf_candidate_leaders(campaign_cycle = 2008, category='receipts-total')

## End(Not run)
```

---

cg\_billscosponsor      *Get bill cosponsorship data for a particular member.*

---

**Description**

Get bill cosponsorship data for a particular member.

**Usage**

```
cg_billscosponsor(memberid = NULL, type = NULL, key = NULL, ...)
```

**Arguments**

memberid	The member's unique ID number (alphanumeric). To find a member's ID number, get the list of members for the appropriate House or Senate. You can also use the Biographical Directory of the United States Congress to get a member's ID. In search results, each member's name is linked to a record by index ID (e.g., <a href="http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041">http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041</a> ). Use the index ID as member-id in your request.
type	One of 'cosponsored' (the 20 bills most recently cosponsored by member-id) or 'withdrawn' (the 20 most recently withdrawn cosponsorships for member-id).
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviron as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**Value**

List of new members of the current Congress.

**Examples**

```
## Not run:
cg_billscosponsor(memberid='S001181', type='cosponsored')

## End(Not run)
```

---

cg_memberappear	<i>Get information about a particular member's appearances on the House or Senate floor.</i>
-----------------	--

---

**Description**

Get information about a particular member's appearances on the House or Senate floor.

**Usage**

```
cg_memberappear(memberid = NULL, key = NULL, ...)
```

**Arguments**

memberid	The member's unique ID number (alphanumeric). To find a member's ID number, get the list of members for the appropriate House or Senate. You can also use the Biographical Directory of the United States Congress to get a member's ID. In search results, each member's name is linked to a record by index ID (e.g., <a href="http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041">http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041</a> ). Use the index ID as member-id in your request.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviro as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**Value**

Get information about a particular member's appearances on the House or Senate floor.

**Examples**

```
## Not run:
cg_memberappear(memberid='S001181')

## End(Not run)
```

---

cg_memberbioroles	<i>Member bio roles</i>
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---

**Description**

Get biographical and Congressional role information for a particular member of Congress.

**Usage**

```
cg_memberbioroles(memberid = NULL, key = NULL, ...)
```

**Arguments**

memberid	The member's unique ID number (alphanumeric). To find a member's ID number, get the list of members for the appropriate House or Senate. You can also use the Biographical Directory of the United States Congress to get a member's ID. In search results, each member's name is linked to a record by index ID (e.g., <a href="http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041">http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041</a> ). Use the index ID as member-id in your request.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviro as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**Value**

List of members of a particular chamber in a particular Congress.

**Examples**

```
## Not run:
cg_memberbioroles('S001181')

## End(Not run)
```

---

```
cg_memberbystatedistrict
```

*Get a list of the most recent new members of the current Congress.*

---

**Description**

Get a list of the most recent new members of the current Congress.

**Usage**

```
cg_memberbystatedistrict(chamber = NULL, state = NULL, district = NULL,
  key = NULL, ...)
```

**Arguments**

chamber	One of 'house' or 'senate'.
state	Limits the list of members by state; two-letter state code (e.g., CA).
district	Limits the list of members by district (House only). If you specify a district, you must also specify a state. If the district number you specify is higher than the total number of districts for that state, a 404 response will be returned.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviro as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>



**Value**

List of new members of he current Congress.

**Examples**

```
## Not run:
cg_memberbystatedistrict(chamber='senate', state='NH')

## End(Not run)
```

---

cg_membersleaving	<i>Get a list of members who have left the Senate or House or have announced plans to do so.</i>
-------------------	--

---

**Description**

Get a list of members who have left the Senate or House or have announced plans to do so.

**Usage**

```
cg_membersleaving(congress_no = NULL, chamber = NULL, key = NULL, ...)
```

**Arguments**

congress_no	The number of the Congress during which the members served.
chamber	One of 'house' or 'senate'.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviro as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

**Value**

List of new members of he current Congress.

**Examples**

```
## Not run:
cg_membersleaving(112, 'house')

## End(Not run)
```

---

cg_memberslist	<i>Get a list of members of a particular chamber in a particular Congress</i>
----------------	---

---

### Description

Get a list of members of a particular chamber in a particular Congress

### Usage

```
cg_memberslist(congress_no = NULL, chamber = NULL, state = NULL,  
               district = NULL, key = NULL, ...)
```

### Arguments

congress_no	The number of the Congress during which the members served.
chamber	One of 'house' or 'senate'.
state	Limits the list of members by state; two-letter state code (e.g., CA).
district	Limits the list of members by district (House only). If you specify a district, you must also specify a state. If the district number you specify is higher than the total number of districts for that state, a 404 response will be returned.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviron as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

### Value

List of members of a particular chamber in a particular Congress.

### Examples

```
## Not run:  
cg_memberslist(112, 'senate', "TX")  
cg_memberslist(112, 'senate', 'NH')  
cg_memberslist(110, 'senate', 'NH')  
  
## End(Not run)
```

---

 cg\_membersponsorcompare

*Compare bill sponsorship between two members who served in the same Congress and chamber.*

---

## Description

Compare bill sponsorship between two members who served in the same Congress and chamber.

## Usage

```
cg_membersponsorcompare(memberid_1 = NULL, memberid_2 = NULL,
  congress_no = NULL, chamber = NULL, key = NULL, ...)
```

## Arguments

memberid_1	The member's unique ID number (alphanumeric). To find a member's ID number, get the list of members for the appropriate House or Senate. You can also use the Biographical Directory of the United States Congress to get a member's ID. In search results, each member's name is linked to a record by index ID (e.g., <a href="http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041">http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041</a> ). Use the index ID as member-id in your request.
memberid_2	See description for memberid_1.
congress_no	The number of the Congress during which the members served.
chamber	One of 'house' or 'senate'.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renvirom as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

## Value

Compare bill sponsorship between two members who served in the same Congress and chamber.

## Examples

```
## Not run:
cg_membersponsorcompare('S001181', 'A000368', 112, 'senate')

## End(Not run)
```

---

cg\_membervotecompare *Get a list of members who have left the Senate or House or have announced plans to do so.*

---

### Description

Get a list of members who have left the Senate or House or have announced plans to do so.

### Usage

```
cg_membervotecompare(memberid_1 = NULL, memberid_2 = NULL,
  congress_no = NULL, chamber = NULL, key = NULL, ...)
```

### Arguments

memberid_1,memberid_2	The member's unique ID number (alphanumeric). To find a member's ID number, get the list of members for the appropriate House or Senate. You can also use the Biographical Directory of the United States Congress to get a member's ID. In search results, each member's name is linked to a record by index ID (e.g., <a href="http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041">http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041</a> ). Use the index ID as member-id in your request.
congress_no	The number of the Congress during which the members served.
chamber	One of 'house' or 'senate'.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviro as NYTIMES.CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

### Value

List of new members of the current Congress.

### Examples

```
## Not run:
cg_membervotecompare('S001181', 'A000368', 112, 'senate')

## End(Not run)
```

---

 cg\_membervotepositions

*Get a list of members who have left the Senate or House or have announced plans to do so.*

---

### Description

Get a list of members who have left the Senate or House or have announced plans to do so.

### Usage

```
cg_membervotepositions(memberid = NULL, key = NULL, ...)
```

### Arguments

memberid	The member's unique ID number (alphanumeric). To find a member's ID number, get the list of members for the appropriate House or Senate. You can also use the Biographical Directory of the United States Congress to get a member's ID. In search results, each member's name is linked to a record by index ID (e.g., <a href="http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041">http://bioguide.congress.gov/scripts/biodisplay.pl?index=C001041</a> ). Use the index ID as member-id in your request.
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_cg_key, or from .Renviro as NYTIMES_CG_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>

### Value

List of new members of the current Congress.

### Examples

```
## Not run:
cg_membervotepositions('S001181')

## End(Not run)
```

---

 cg\_newmembers

*Get a list of the most recent new members of the current Congress.*

---

### Description

Get a list of the most recent new members of the current Congress.

### Usage

```
cg_newmembers(key = NULL, ...)
```

**Arguments**

key            your New York Times API key; pass in, or loads from .Rprofile as `nytimes_cg_key`,  
or from .Renviro as `NYTIMES_CG_KEY`

...            Curl options (debugging tools mostly) passed to [GET](#)

**Value**

List of new members of he current Congress.

**Examples**

```
## Not run:
cg_newmembers()

## End(Not run)
```

---

cg_rollcallvote	<i>Get a specific roll-call vote, including a complete list of member positions.</i>
-----------------	--

---

**Description**

Get a specific roll-call vote, including a complete list of member positions.

**Usage**

```
cg_rollcallvote(congress_no = NULL, chamber = NULL, session_no = NULL,
  rollcall_no = NULL, key = NULL, ...)
```

**Arguments**

congress\_no    The number of the Congress during which the members served.

chamber        One of 'house' or 'senate'.

session\_no     1, 2, or special session number (For a detailed list of Congressional sessions, see <http://www.senate.gov/reference/resources/pdf/congresses2.pdf>).

rollcall\_no    Integer. To get roll-call numbers, see the official sites of the US Senate (<http://www.senate.gov/pagelayout>) and US House ([http://artandhistory.house.gov/house\\_history/index.aspx](http://artandhistory.house.gov/house_history/index.aspx)).

key            your New York Times API key; pass in, or loads from .Rprofile as `nytimes_cg_key`,  
or from .Renviro as `NYTIMES_CG_KEY`

...            Curl options (debugging tools mostly) passed to [GET](#)

**Value**

Get a specific roll-call vote, including a complete list of member positions. A list with metadata about the bill, and vote results.

**Examples**

```
## Not run:
cg_rollcallvote(105, 'house', 2, 38)

## End(Not run)
```

---

 geo\_search

*Geographic search NYTimes API*


---

**Description**

Geographic search NYTimes API

**Usage**

```
geo_search(name = NULL, latitude = NULL, longitude = NULL,
  elevation = NULL, population = NULL, country_code = NULL,
  country_name = NULL, admin_code1 = NULL, admin_name1 = NULL,
  admin_code2 = NULL, admin_name2 = NULL, admin_code3 = NULL,
  admin_name3 = NULL, admin_code4 = NULL, admin_name4 = NULL,
  feature_class = NULL, feature_class_name = NULL,
  feature_code_name = NULL, time_zone_id = NULL, dst_offset = NULL,
  gmt_offset = NULL, bounding_box = NULL, nearby = NULL, offset = NULL,
  limit = 100, key = NULL, ...)
```

**Arguments**

name	(character) A displayable name for the specified place.
latitude	(numeric) The latitude of the specified place.
longitude	(numeric) The longitude of the specified place.
elevation	(character) The elevation of the specified place, in meters.
population	(numeric) Te population of the specified place.
country_code	(character) The country code, as given in ISO-3611, of the specified place.
country_name	(character) The country name of the specified place.
admin_code1	(character) A code for the first level administrative division containing the specified place. In the case of US locations this will be the containing state's postal code. All geonames admin_code1 records can be found at <a href="http://download.geonames.org/export/dump/ad">http://download.geonames.org/export/dump/ad</a>
admin_name1	(character) The name of the first level administrative division containing the specified place. In the case of US locations this will be the full name of the containing State.
admin_code2	(character) A code for the second level administrative division containing the specified place. In the case of US locations this will be a code for the containing county. All geonames admin_code2 records can be found at <a href="http://download.geonames.org/export/dump/a">http://download.geonames.org/export/dump/a</a>

admin_name2	(character) The name of the second level administrative division containing the specified place. In the case of US locations this will be the name of the containing county.
admin_code3	(character) A code for the third level administrative division containing the specified place. This is infrequently used and never used for US locations.
admin_name3	(character) The name of the third level administrative division containing the specified place. This is infrequently used and never used for US locations.
admin_code4	(character) A code for the fourth level administrative division containing the specified place. This is infrequently used and never used for US locations.
admin_name4	(character) The name of the fourth level administrative division containing the specified place. This is infrequently used and never used for US locations.
feature_class	(character) The high-level feature class of the location. The feature classes are as follows: <ul style="list-style-type: none"> <li>• A - Administrative Boundary Features</li> <li>• H - Hydrographic Features</li> <li>• L - Area Features</li> <li>• P - Populated Place Features</li> <li>• R - Road / Railroad Features</li> <li>• S - Spot Features</li> <li>• T - Hypsographic Features</li> <li>• U - Undersea Features</li> <li>• V - Vegetation Features</li> </ul>
feature_class_name	(character) See list of name values associated with feature_class above.
feature_code_name	(character) A code for the type of feature represented by this geonames record. The complete list of feature codes can be found at <a href="http://download.geonames.org/export/dump/featureCode">http://download.geonames.org/export/dump/featureCode</a>
time_zone_id	(character) The time zone containing this geonames record.
dst_offset	(numeric) The offset from GMT during daylight savings time.
gmt_offset	(numeric) The offset from GMT during standard time.
bounding_box	(numeric) Vector of coordinates in the following format <NE Latitude>, <NE Longitude>,<SW Latitude>,<SW Longitude>. For example: c(39.985417852135356,-93.18850617968747,37.84003257271992,-95.94607453906247)
nearby	(numeric) A latitude longitude pair (e.g. 41.9,12.5). When provided with this parameter, the geocodes API will return the 20 results that are geographically nearest to the specified latitude/longitude pair.
offset	(numeric) The offset in the results. BEWARE - this parameter doesn't work now (as of 2014-10-21).
limit	(numeric) If not specified 20 results are returned. Otherwise the specified number of results or a maximum of 20 results are returned. BEWARE - this parameter doesn't work now (as of 2015-08-10).
key	your New York Times API key; pass in, or loads from .Rprofile as nytimes_geo_key, or from .Renviro as NYTIMES_GEO_KEY
...	Curl options (debugging tools mostly) passed to <a href="#">GET</a>



**References**

[http://developer.nytimes.com/docs/geographic\\_api](http://developer.nytimes.com/docs/geographic_api)

**Examples**

```
## Not run:
geo_search(country_code = 'US')
geo_search(elevation = '2000_', feature_class='P')
geo_search(elevation = '_3000', feature_class='P')
geo_search(elevation = '2000_3000', feature_class='P')
geo_search(feature_class='P', country_code='US', population='50000_')
geo_search(nearby=c(38.920833,-94.622222), population='100000_', feature_class='P')

# curl options
library("httr")
geo_search(country_code = 'US', config = verbose())

## End(Not run)
```

# Index

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