Package 'edgarWebR'

October 13, 2022

Title SEC Filings Access

Description A set of methods to access and parse live filing information from the U.S. Securities and Exchange Commission (SEC - <https://www.sec.gov/>) including company and fund filings along with all associated metadata.

Version 1.1.0

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Date 2021-04-18

Depends R (>= 3.4.0)

Imports xml2 (>= 1.3.2), methods, httr, jsonlite

Suggests covr, ggplot2, knitr, lintr, purrr, rmarkdown, httptest, tokenizers, devtools, dplyr, tidyr, roxygen2, pkgdown

VignetteBuilder knitr

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Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

URL <https://mwaldstein.github.io/edgarWebR/>,
  <https://github.com/mwaldstein/edgarWebR>

BugReports <https://github.com/mwaldstein/edgarWebR/issues>

NeedsCompilation no

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Repository CRAN

Date/Publication 2021-04-24 12:10:06 UTC

R topics documented:

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cik_search   *SEC CIK Search*

Description

Provides access to the SEC CIK search tool from here

Usage

```
cik_search(company)
```

Arguments

company   Search term to search for CIK

Value

A dataframe with one row per company with Includes the following columns -

- cik
- company_href
- company_name

Examples

```
try(cik_search("cloudera"))
```

---

company_details   *SEC Company Details*

Description

For a given company, either by ticker, CIK, or pre-fetched page, we extract 2 sets of information:

Company Information Filing date, accepted date, etc.

Filings Companies included in the filing

Usage

```
company_details(
  x,
  ownership = FALSE,
  type = "",
  before = "",
  count = 40,
  page = 1
)
```

Arguments

x	either a stock ticker, CIK number, or XML document for a company page
ownership	boolean for inclusion of company change filings
type	Type of filing to fetch. NOTE: due to the way the SEC EDGAR system works, it is actually is a 'starts-with' search, so for instance specifying 'type = "10-K" will return "10-K/A" and "10-K405" filings as well. To ensure you only get the type you want, best practice would be to filter the results.
before	yyyymmdd format of latest filing to fetch
count	Number of filings to fetch per page. Valid options are 10, 20, 40, 80, or 100. Other values will result in the closest count.
page	Which page of results to return.

Value

A list with the following components

information data.frame as returned by `company_information`

filings data.frame as returned by `company_filings`

Examples

```
try(company_details("AAPL", before = "20170810"))
```

---

company_filings   *SEC Company Filings*

Description

SEC Company Filings

Usage

```
company_filings(
  x,
  ownership = FALSE,
  type = "",
  before = "",
  count = 40,
  page = 1
)
```

Arguments

x	either a stock ticker, CIK number, or XML document for a company page
ownership	boolean for inclusion of company change filings
type	Type of filing to fetch. NOTE: due to the way the SEC EDGAR system works, it is actually is a 'starts-with' search, so for instance specifying 'type = "10-K" will return "10-K/A" and "10-K405" filings as well. To ensure you only get the type you want, best practice would be to filter the results.
before	yyyymmdd format of latest filing to fetch
count	Number of filings to fetch per page. Valid options are 10, 20, 40, 80, or 100. Other values will result in the closest count.
page	Which page of results to return.

Value

A dataframe of company filings

Examples

```
try(company_filings("AAPL", before = "20170810"))
```

---

company_href   *Company URL for a CIK*

Description

Given a CIK, provide a link to the company information page.

Usage

```
company_href(cik, ownership = FALSE, atom = FALSE)
```

Arguments

cik   Company code

ownership   (default: FALSE) boolean for inclusion of company change filings

atom   (default: FALSE) if the link should be to the atom XML feed

Value

A string with URL requested

Examples

```
company_href("0000037912")
```

---

company_information   *SEC Company Info*

Description

Fetches basic information on a given company from the SEC site

Usage

```
company_information(x)
```

Arguments

x   Either a stock symbol (for the 10,000 largest companies) or CIK code

Value

a dataframe with all SEC company information

Examples

```
try(company_information("INTC"))
```

---

company_search   *SEC Company Search*

Description

Provides access to the SEC Company Name Search from here using a company's formal name rather than its common name.

Usage

```
company_search(
  x,
  match = "start",
  file_number = FALSE,
  state = "",
  country = "",
  sic = "",
  ownership = FALSE,
  type = "",
  count = 40,
  page = 1
)
```

Arguments

x	Name of company to search or file number
match	(default: 'start') Either 'start' or 'contains' for where in the company name to search
file_number	(default: FALSE) if set to TRUE, x is treated as a file number
state	(default: '') Limit to a specific state of registration using 2-letter state abbreviations. Special values:

X1 The United States

A0 Alberta, Canada

A1 British Columbia, Canada

A2 Manitoba, Canada

A3 New Brunswick, Canada

A4 Newfoundland, Canada

A5 Nova Scotia, Canada

A6 Ontario, Canada

A7 Prince Edward Island, Canada

A8 Quebec, Canada

A9 Saskatchewan, Canada

B0 Yukon, Canada

country	2-character country code. The mapping is non-obvious, so unfortunately the best way to find it is to examine the company search page.
sic	SIC Code
ownership	boolean for inclusion of company change filings
type	Limit to companies with a given filing type - e.g. 'N-PX'
count	Number of filings to fetch per page. Valid options are 10, 20, 40, 80, or 100. Other values will result in the closest count.
page	Which page of results to return.

Details

Note On 'Fast Search' – The SEC Company Search page also includes a 'Fast Search' function to "search" by CIK or Stock Ticker. This doesn't actually search, but rather goes directly to the company details page if found. If you have a company's CIK or Ticker, use the `company_information`, `company_filings`, or `company_details` functions.

Value

A dataframe of companies

- cik
- company_href
- name
- location
- location_href
- formerly
- sic
- sic_description
- sic_href

Examples

```
try(company_search("Intel"))
```

---

current_events　　　　　　　　*SEC Current Events*

Description

Provides access to the SEC Current Events search tool from here

Usage

```
current_events(day, form)
```

Arguments

day　　　　　　　(0-5) Day to search for current forms. e.g. '2' returns forms from 2 business days ago.

form　　　　　　Form to return filings (e.g. '10-K')

Value

A dataframe with one row per company with Includes the following columns -

- cik
- type
- href
- company_name
- company_href
- filing_date

Examples

```
try(current_events(0, "10-K")[1:5,])
```

---

effectiveness　　　　　　　*SEC Notice of Effectiveness*

Description

Returns the current Notice of Effectiveness from the most recently completed business day from here

Usage

```
effectiveness()
```

Details

You can also see the same filings going further back by using 'latest_filings()' specifying the type = "EFFECT"

Value

a data.frame with each row as a submission with the following columns:

registration_number

file_href

registrant

registrant_href

filing_date

effective_date

division

type

Examples

```
try(effectiveness())
```

---

filing_details	*SEC Filing Details*

Description

The SEC generates a html page as an index for every filing it receives containing all the meta-information about the filing. We extract 3 main types of information:

Filing Information Filing date, accepted date, etc.

Documents All the documents included in the filing

Filers Companies included in the filing

Funds Funds included in the filing

Usage

```
filing_details(x)

## S3 method for class 'character'
filing_details(x)

## S3 method for class 'xml_node'
filing_details(x)
```

Arguments

x   URL to a SEC filing index page

Details

For a company, there is typically a single filer and no funds, but many filings for funds get more complicated - e.g. 400+ funds with 100's of companies

NOTE: This can get process intensive for large fund pages. If you don't need all components, try just using filing_info

Value

A list with the following components:

information A data.frame as returned by `filing_information`

documents A data.frame as returned by `filing_documents`

filers A data.frame as returned by `filing_filers`

funds A data.frame as returned by `filing_funds`

Examples

```
# Typically you'd get the URL from one of the search functions
x <- paste0("https://www.sec.gov/Archives/edgar/data/",
            "712515/000071251517000063/0000712515-17-000063-index.htm")
try(filing_details(x))
```

---

filing_documents   *SEC Filing Documents*

Description

If you know you're going to want all the details of a filing, including documents funds and filers, look at 'filing_details'

Usage

```
filing_documents(x)

## S3 method for class 'character'
filing_documents(x)

## S3 method for class 'xml_node'
filing_documents(x)
```

Arguments

x   URL or xml_document for a SEC filing index page

Details

Information returned:

- seq
- description
- document
- href
- type
- size

Value

A dataframe with all the documents in the filing along with their meta info

Examples

```
# Typically you'd get the URL from one of the search functions
x <- paste0("https://www.sec.gov/Archives/edgar/data/",
            "712515/000071251517000063/0000712515-17-000063-index.htm")
try(filing_documents(x))
```

---

filing_filers   *SEC Filing Included Filers*

Description

SEC Filing Included Filers

Usage

```
filing_filers(x)

## S3 method for class 'character'
filing_filers(x)

## S3 method for class 'xml_node'
filing_filers(x)
```

Arguments

x   URL to a SEC filing index page

Value

A dataframe with all the filers in the filing along with their info

Examples

```
# Typically you'd get the URL from one of the search functions
x <- paste0("https://www.sec.gov/Archives/edgar/data/",
            "712515/000071251517000063/0000712515-17-000063-index.htm")
try(filing_filers(x))
```

---

filing_funds   *SEC Filing Funds*

Description

SEC Filing Funds

Usage

```
filing_funds(x)

## S3 method for class 'character'
filing_funds(x)

## S3 method for class 'xml_node'
filing_funds(x)
```

Arguments

x   URL to a SEC filing index page

Value

A dataframe with all the funds associated with a given filing

Examples

```
# Typically you'd get the URL from one of the search functions
x <- paste0("https://www.sec.gov/Archives/edgar/data/",
            "933691/000119312517247698/0001193125-17-247698-index.htm")
try(filing_funds(x))
```

---

filing_information   *SEC Filing Information*

Description

The SEC generates a html page as an index for every filing it receives containing all the meta-information about the filing.

Usage

```
filing_information(x)

## S3 method for class 'character'
filing_information(x)

## S3 method for class 'xml_node'
filing_information(x)
```

Arguments

x   URL or xml_document for a SEC filing index page

Details

Information returned:

- type
- description
- accession_number
- filing_date
- accepted_date
- documents
- period_date
- changed_date
- effective_date
- filing_bytes

Not all details are valid for all filings, but the column will always be present

If you know you're going to want all the details of a filing, including documents funds and filers, look at 'filing_details'

Value

A dataframe with all the parsed meta-info on the filing

Examples

```
# Typically you'd get the URL from one of the search functions
x <- paste0("https://www.sec.gov/Archives/edgar/data/",
            "933691/000119312517247698/0001193125-17-247698-index.htm")
try(filing_information(x))
```

---

full_text   *SEC Full-Text Search*

Description

Provides access to the SEC fillings full-text search tool.

Usage

```
full_text(
  q = "*",
  type = "",
  reverse_order = FALSE,
  count = 100,
  page = 1,
  stemming = TRUE,
  name = "",
  cik = "",
  sic = "",
  from = "",
  to = "",
  location = "",
  incorporated_location = FALSE
)
```

Arguments

q	Search query. For details on special formatting, see the FAQ.
type	Type of forms to search - e.g. '10-K'. Can also be a list of types - e.g. c("10-K", "10-Q")
reverse_order	[DEP] If true, order by oldest first instead of newest first
count	[DEP] Number of results to return - will always try to return 100
page	Which page of results to return
stemming	[DEP] Search by base words(default) or exactly as entered
name	Company name OR individual's name. Cannot be combined with 'cik' or 'sik'.
cik	Company code to search. Cannot be combined with 'name' or 'sic'

sic	[DEP] Standard Industrial Classification of filer to search for. Cannot be combined with 'cik' or 'name'. Special options - 1: all, 0: Unspecified.
from	Start date. Must be in the form of 'mm/dd/yyyy'. Must also specify 'to'
to	End date. Must be in the form of 'mm/dd/yyyy'. Must also specify 'from'
location	Filter based on company's location
incorporated_location	
	boolean to use location of incorporation rather than location of HQ

Value

A dataframe list of results including the following columns -

- filing_date
- name
- href
- company_name
- cik
- sic
- content
- parent_href
- index_href

Examples

```
try(full_text('intel'))
```

---

fund_search	*SEC Mutual Fund Search*

Description

Provides access to the results of the SEC's Mutual fund search tool available here

Usage

```
fund_search(term)

fund_fast_search(identifier)
```

Arguments

term	Search term to search for in a fund name
identifier	A Series, Class/Contract ID, Ticker Symbol or CIK

Details

NOTE: This is really a specific version of the Variable Insurance search tool.

Value

A dataframe of funds found including the following columns -

- class_id
- class_filings_href
- class_name
- class_ticker
- series_id
- series_filings_href
- series_name
- series_funds_href
- cik
- cik_name
- cik_filings_href
- cik_funds_href

Functions

- `fund_fast_search`: Performs a 'Fast Search' based on a fund identifier

Examples

```
try(fund_search("precious metals"))
try(fund_fast_search("VMFVX"))
```

---

header_search   *SEC Header Search*

Description

Searches filing headers going back to 1994 excluding the most recent day using the interface here

Usage

```
header_search(q, page = 1, from = 1994, to = 2017)
```

Arguments

q	The search string. Documentation here
page	Which results page to return (default: 1)
from	Start year (default: 1994)
to	End year (default: Current year)

Value

A dataframe of funds found including the following columns -

- company_name
- filing_href
- form
- filing_date
- size

Examples

```
try(header_search("company-name = Apple"))
```

---

latest_filings	*SEC Latest Filings*

Description

Provides access to the latest SEC filings from here

Usage

```
latest_filings(
  name = "",
  cik = "",
  type = "",
  owner = "include",
  count = 40,
  page = 1
)
```

Arguments

`name`	Optional company name to limit filing results
`cik`	Optional company cik to limit filing results
`type`	Optional form type to limit filing results
`owner`	How to include ownership filings. Options are
	• include (default)
	• exclude
	• only
`count`	Number of results to return
`page`	Which page of results to return

Value

a dataframe list of recent results, ordered by descending accepted date. Includes the following columns -

- type
- href
- company_name
- company_type
- cik
- filing_date
- accepted_date
- accession_number
- size

Examples

```
try(latest_filings())
```

`parse_filing`	*Parse Filing*

Description

Given a link to filing document (e.g. the 10-K, 8-K) in HTML, process the file into parts and items. This enables follow-up processing of a desired section - e.g. just the Risk Factors. 'item.name' and 'part.name' are taken directly from the document without any attempt to normalize.

Usage

```
parse_filing(x, strip = TRUE, include.raw = FALSE, fix.errors = TRUE)
```

Arguments

`x`	- URL to a filing HTML document, html text or xml_document
`strip`	- Should non-text elements be removed? Default: true
`include.raw`	- Include unprocessed nodes in result? Default: false
`fix.errors`	- Try to fix document errors (e.g. missing part labels). WIP. Default: true

Details

NOTE: This has been tested on a range of documents, but formatting differences could cause failures. Please report an issue for any document that isn't parsed correctly.

FURTHER NOTE: Not all filings are well formed - missing headings, bad spacing, etc. These can all throw the parsing off!

Value

a dataframe with one row per paragraph

part.name Detected name of the Part

item.name Detected name of the Item

text Text of the paragraph / node

raw* Raw HTML of the node if `include.raw` = TRUE

Examples

```
try(head(parse_filing(paste0('https://www.sec.gov/Archives/edgar/data/',
    '712515/000071251517000010/ea12312016-q3fy1710qdoc.htm')), 6))
```

---

parse_submission	*Parse Submission*

Description

Raw SEC filings are sent in a SGML file - this parses that master submission into component documents, with content lines in list column 'TEXT'.

Usage

```
parse_submission(x, include.binary = T, include.content = T)
```

Arguments

x   - Input submission to parse. May be one of the following:

          URI URL to a SEC complete submission text file

          Text String with the full submission

          File path Path to local file containing the submission

include.binary - Default TRUE, determines if the content of binary documents is returned.

include.content

          - Default TRUE, determines if the content of documents is returned.

Details

Most of the time the information you need along with the specific files will be available by using
[filing_documents](), but there are scenarios where you may want to access the full contents of the
master submission -

Old Submissions Older submissions are not parsed into component documents by the SEC so
    access requires parsing the main filing

Full Document List The SEC only provides what it considers the relevant documents, but filings
    often include many more ancillary files

Efficient Downloading If you're fetching many documents from a filing over many filings, there
    can be efficiency gains from just downloading a single file.

NOTE: non-text documents are uuencoded and need a separate decoder to be viewed.

Value

a dataframe with one row per document. For the metadata (TYPE, DESCRIPTION, FILENAME)
it is important to note that these are provided by the filer and have little standardization or enforce-
ment.

SEQUENCE Sequence number of the file

TYPE The type of document, e.g. 10-K, EX-99, GRAPHIC

DESCRIPTION The type of document, e.g. 10-K, EX-99, GRAPHIC

FILENAME The document's filename

TEXT The text representation of the document. For text-based documents (txt, html) this is the
    actual file contents. For binary files (graphics, pdfs) this contains the uuencoded contents.

Examples

```
try(
  parse_submission(paste0('https://www.sec.gov/Archives/edgar/data/',
                  '37996/000003799617000084/0000037996-17-000084.txt'))[ ,
                  c('SEQUENCE', 'TYPE', 'DESCRIPTION', 'FILENAME')]
  )
```

parse_text_filing *Parse Text Filing*

Description

Given a link to a filing document (e.g. the 10-K, 8-K) in TXT, process the file into parts and items. This enables follow-up processing of a desired section - e.g. just the Risk Factors. 'item.name' and 'part.name' are taken directly from the document without any attempt to normalize.

Usage

```
parse_text_filing(x, strip = TRUE, include.raw = FALSE, fix.errors = TRUE)
```

Arguments

x	- URL to a filing text document or actual text
strip	- Should non-text elements be removed? Default: true
include.raw	- Include unprocessed nodes in result? Default: false
fix.errors	- Try to fix document errors (e.g. missing part labels). WIP. Default: true

Details

NOTE: This has been tested on a range of documents, but formatting differences could cause failures. Please report an issue for any document that isn't parsed correctly.

FURTHER NOTE: Not all filings are well formed - missing headings, bad spacing, etc. These can all throw the parsing off!

Value

a dataframe with one row per paragraph

part.name Detected name of the Part

item.name Detected name of the Item

text Text of the paragraph / node

raw* Raw HTML of the node if `include.raw = TRUE`

Examples

```
try(head(parse_text_filing(
  "https://www.sec.gov/Archives/edgar/data/37996/000003799602000015/v7.txt"
)))
```

---

sic_codes   *SIC Codes*

Description

SIC code table with structure.

Usage

    sic_codes

Format

A data frame with 1005 rows and 6 variables:

sic Standard Industrial Classification

industry Name of industry

division_id Letter code for the division

division Name of the division

major Name of the major group, identified by 1st 2 digits of the sic

group Name of the group, identified by the 1st 3 digits of the sic

Source

<https://www.osha.gov/data/sic-manual>

<https://www.sec.gov/info/edgar/siccodes.htm>

---

submission_index_href *Submission URL Tools*

Description

EDGAR submissions are organized fairly regularly. These functions help to fint the URL to submission components.

Usage

    submission_index_href(cik, accession)

    submission_href(cik, accession)

    submission_file_href(cik, accession, filename)

Arguments

`cik`	Company code
`accession`	accession number for a filing
`filename`	filename provided in a submission

Value

A string with URL requested

Functions

- `submission_href`: Creates a link to the master submission sgml submission file

- `submission_file_href`: provides the link to a given file within a particular submission.

Examples

```
submission_index_href("0000712515", "0000712515-17-000090")
submission_href("0000712515", "0000712515-17-000090")
submission_file_href("0000712515", "0000712515-17-000090",
                     "pressrelease-ueberroth.htm")
```

```
variable_insurance_search
```
SEC Variable Insurance Search

Description

Provides access to the results of the SEC's Variable Insurance Product search tool available here

Usage

```
variable_insurance_search(term)

variable_insurance_fast_search(identifier)
```

Arguments

`term`	Search term to search for in a company, fund or contract name
`identifier`	A Series, Class/Contract ID, Ticker Symbol or CIK

Value

A dataframe of products found including the following columns -

- class_id
- class_filings_href
- class_name
- class_ticker
- series_id
- series_filings_href
- series_name
- series_funds_href
- cik
- cik_name
- cik_filings_href
- cik_funds_href

Functions

- `variable_insurance_fast_search`: Performs a 'Fast Search' based on an identifier

Examples

```
try(variable_insurance_search("precious metals"))
try(variable_insurance_fast_search("VMFVX"))
```

Index