

Package ‘fixerapi’

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Version 0.1.6

Title An R Client for the ``Fixer.io" Currency API

Description An R client for the ``fixer.io" currency conversion and exchange rate API. The API requires registration and some features are only available on paid accounts. The full API documentation is available at <<https://fixer.io/documentation>>.

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URL <https://docs.evanodell.com/fixerapi>

BugReports <https://github.com/evanodell/fixerapi/issues>

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ByteCompile true

Imports jsonlite, tibble, tidyr

Suggests testthat, covr, knitr, rmarkdown

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fixerapi	<i>fixerapi: an R client for the fixer.io currency api</i>
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Description

The [fixer.io](#) API provides real-time exchange rates for 170 currencies, covering 1999 to the present. [fixer.io](#) requires an account and a private key, and most features require a [paid account](#). See the [full API documentation](#) for more details on account features and pricing.

fixer_account_type	<i>Set account type</i>
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Description

Paid accounts have access to additional features, including SSL encryption of API requests using HTTPS. Account type must be set in order to use HTTPS requests. Setting account type to "paid" when using a free account will result in an error, even on features available to free accounts. Setting account type to "free" when using a paid account will have no impact on requests aside from using HTTP instead of HTTPS to access the API. If you have a paid account but do not set your account status you will not be able to use the HTTPS connection but there will be no other impact on your usage of the API.

The [fixer.io](#) API still checks the account type when receiving requests, so setting you account type here only forces HTTPS instead of HTTP.

Usage

```
fixer_account_type(type = c("free", "paid"))
```

Arguments

type	Your fixer.io account type. Accepts one of "free" or "paid". If no value or an incorrect value is given, account type will be set as "free". This parameter is not case sensitive.
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Examples

```
## Not run:
fixer_account_type("paid")

## End(Not run)
```

fixer_api_key	<i>Fixer API Key</i>
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Description

fixer.io requires an API key, which is saved as an environmental variable. In interactive mode, using `fixer_api_key` will prompt you to enter an API key. You can also use `Sys.setenv(FIXER_API_KEY = <key>)` to set the API key.

Usage

```
fixer_api_key(force = FALSE)
```

Arguments

force	If TRUE, resets the API key and requires a new key to be provided, even if one already exists. If FALSE and an API key already exists, that key will be printed to the console. If no key exists, you will be prompted to enter a key regardless of the value of force. Defaults to FALSE.
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fixer_convert	<i>Convert currencies</i>
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Description

Convert from one currency to another, on a given date or using the latest available exchange rates. Currency conversion is available on all paid plans.

Usage

```
fixer_convert(from, to, amount = 1, date = NULL)
```

Arguments

from	Symbol of currency to convert from.
to	Symbol of currency to convert to.
amount	The numeric value of the from currency to convert. Defaults to 1, and accepts integers greater than 0 and less than 100000.
date	Optional variable. A date in YYYY-MM-DD format, or any value that can be coerced to YYYY-MM-DD format with <code>as.Date()</code> . Defaults to NULL, which returns the latest conversion data.

Value

A list containing the value of the conversion, the exchange rate and the date and time of the currency conversion.

Examples

```
## Not run:

x <- fixer_convert(from = "GBP", to = "JPY", amount = 25)

y <- fixer_convert(from = "GBP", to = "JPY",
                  amount = 25, date = "2018-05-05")

## End(Not run)
```

fixer_fluctuation	<i>Currency fluctuation</i>
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Description

Returns fluctuation in currency exchange rates for one or more currencies compared to the base currency over a given period of time. The maximum time frame is 365 days.

Currency fluctuation data is only available for "Professional Plus" and "Enterprise" accounts.

Usage

```
fixer_fluctuation(start_date, end_date, base = "EUR", symbols = NULL)
```

Arguments

start_date	The start date of requested time series, in "YYYY-MM-DD" style, or any style convertible to "YYYY-MM-DD" using <code>as.Date()</code> .
end_date	The end date of requested time series, in "YYYY-MM-DD" style, or any style convertible to "YYYY-MM-DD" using <code>as.Date()</code> .
base	The base currency to index other currencies against. Defaults to "EUR". Other base currencies are only available on paid plans.
symbols	A character vector of the symbols of currencies to return exchange rates for, or a string for a single currency. Defaults to NULL and returns all available currencies. See fixer_symbols for details on symbol options.

Value

A tibble with the currency symbol, start rate, end rate, change and change percentage over the requested time period. Each currency is given its own row, with start rate, end rate, change and change percentage each in their own columns.

See Also

`fixer_time_series`

Examples

```
## Not run:  
  
x <- fixer_fluctuation(start_date = "2018-02-25", end_date = "2018-02-26",  
                      symbols = c("USD", "JPY"))  
  
## End(Not run)
```

fixer_historical	<i>Historic exchange rates</i>
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Description

Historical exchange rates are only available on paid fixer.io accounts.

Usage

```
fixer_historical(date = NULL, base = "EUR", symbols = NULL)
```

Arguments

date	A date in YYYY-MM-DD format, or any value that can be coerced to YYYY-MM-DD format with <code>as.Date()</code> . Defaults to <code>NULL</code> , which returns the latest conversion data.
base	The base currency to index other currencies against. Defaults to "EUR". Can only be changed with paid plans.
symbols	The symbols of currencies to return exchange rates for. Defaults to <code>NULL</code> and returns all available currencies. See fixer_symbols for details on symbol options.

Value

A tibble with exchange rates to the base currency on a given date.

Examples

```
## Not run:  
  
historical <- fixer_historical(date = "2017-05-18")  
  
## End(Not run)
```

fixer_latest *Latest exchange rates*

Description

Returns a tibble with the most recently available currency conversion data available from the Fixer API.

Usage

```
fixer_latest(base = "EUR", symbols = NULL)
```

Arguments

base The base currency to index other currencies against. Defaults to "EUR". Other base currencies are only available on paid plans.

symbols A character vector of the symbols of currencies to return exchange rates for, or a string for a single currency. Defaults to NULL and returns all available currencies. See [fixer_symbols](#) for details on symbol options.

Value

A tibble with the latest available currency exchange data.

Examples

```
## Not run:

today <- fixer_latest()

today_usd <- fixer_latest(base = "USD")

today_symbols <- fixer_latest(base = "USD",
                             symbols = c("EUR", "JPY", "CAD"))

## End(Not run)
```

fixer_symbols *Currency symbols*

Description

Returns a tibble with the symbol and name of all currencies available through the Fixer API.

Usage

```
fixer_symbols()
```

fixer_time_series *Exchange rate time series*

Description

Time series plans are only available on "professional" and above plans. The maximum allowed length in a single request is 365 days.

Each currency symbol is displayed in its own column, with a value relative to the base currency on the given date.

Time series data is only available for "Professional", "Professional Plus" and "Enterprise" accounts.

Usage

```
fixer_time_series(start_date, end_date, base = "EUR", symbols = NULL)
```

Arguments

start_date	The start date of requested time series, in "YYYY-MM-DD" style, or any style convertible to "YYYY-MM-DD" using <code>as.Date()</code> .
end_date	The end date of requested time series, in "YYYY-MM-DD" style, or any style convertible to "YYYY-MM-DD" using <code>as.Date()</code> .
base	The base currency to index other currencies against. Defaults to "EUR". Other base currencies are only available on paid plans.
symbols	A character vector of the symbols of currencies to return exchange rates for, or a string for a single currency. Defaults to NULL and returns all available currencies. See fixer_symbols for details on symbol options.

Value

A tibble with the exchange rate from the base currency to the given currency symbols for each date in the requested range.

See Also

[fixer_fluctuation](#)

Examples

```
## Not run:  
  
x <- fixer_time_series(start_date = "2017-04-30", end_date = "2017-06-20",  
                      base = "GBP", symbols = c("USD", "EUR"))  
  
## End(Not run)
```

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