# Package: oddsapiR (via r-universe)

September 9, 2024

```
Title Access Live Sports Odds from the Odds API
Version 0.0.3
Description A utility to quickly obtain clean and tidy sports odds
      from The Odds API <a href="https://the-odds-api.com">https://the-odds-api.com</a>>.
License MIT + file LICENSE
URL https://oddsapiR.sportsdataverse.org/ (docs),
      https://github.com/sportsdataverse/oddsapiR (repo)
BugReports https://github.com/sportsdataverse/oddsapiR/issues
SystemRequirements pandoc (>= 1.12.3), pandoc-citeproc
Depends R (>= 4.0.0)
Imports cli (>= 3.4.1), data.table (>= 1.14.0), dplyr (>= 1.0.10),
      glue, httr (>= 0.5), janitor, jsonlite, magrittr, rlang (>=
      1.0.4), rvest (>= 1.0.0), tidyr (>= 1.0.0)
Suggests crayon (>= 1.3.4), curl, DBI, ggplot2, ggrepel, gt, knitr,
      progressr (>= 0.6.0), qs (>= 0.25.1), Rcpp (>= 1.0.7),
      RcppParallel (>= 5.1.4), rmarkdown, RSQLite, stats, stringi,
      stringr (>= 1.5.0), testthat, tibble (>= 3.0), tidyselect (>=
      1.2.0), usethis (>= 1.6.0), xml2 (>= 1.3)
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```

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csv\_from\_url

Load .csv / .csv.gz file from a remote connection

## Description

This is a thin wrapper on data.table::fread

#### Usage

```
csv_from_url(...)
```

## Arguments

... passed to data.table::fread

## Value

a dataframe as created by data.table::fread()

progressively

**Progressively** 

## Description

This function helps add progress-reporting to any function - given function f() and progressor p(), it will return a new function that calls f() and then (on-exiting) will call p() after every iteration.

## Usage

```
progressively(f, p = NULL)
```

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## **Arguments**

f a function to add progressr functionality to.

p a progressor function as created by progressr::progressor()

#### **Details**

This is inspired by purrr's safely, quietly, and possibly function decorators.

#### Value

a function that does the same as f but it calls p() after iteration.

rds\_from\_url

Load .rds file from a remote connection

## Description

Load .rds file from a remote connection

#### Usage

```
rds_from_url(url)
```

### **Arguments**

url

a character url

#### Value

a dataframe as created by readRDS()

register\_toa

**Odds API Key Registration** 

## Description

Save your API Key as a system environment variable ODDS\_API\_KEY

## Usage

```
toa_key()
has_toa_key()
check_toa_key()
```

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#### **Details**

To get access to an API key, follow the instructions at https://the-odds-api.com

#### Using the key:

You can save the key for consistent usage by adding ODDS\_API\_KEY=XXXX-YOUR-API-KEY-HERE-XXXXX to your .Renviron file (easily accessed via usethis::edit\_r\_environ()).

Run usethis::edit\_r\_environ(), a new script will pop open named .Renviron, **THEN** paste the following in the new script that pops up (without quotations)

```
ODDS_API_KEY = XXXX-YOUR-API-KEY-HERE-XXXXX
```

Save the script and restart your RStudio session, by clicking Session (in between Plots and Build) and click Restart R

(there also exists the shortcut Ctrl + Shift + F10 to restart your session).

If set correctly, from then on you should be able to use any of the toa\_ functions without any other changes.

## For less consistent usage:

At the beginning of every session or within an R environment, save your API key as the environment variable ODDS\_API\_KEY (**with** quotations) using a command like the following.

```
Sys.setenv(ODDS_API_KEY = "XXXX-YOUR-API-KEY-HERE-XXXXX")
```

#### Value

Called as a side-effect to ensure that a user has an API key stored in their environment before making a call to the Odds API service.

toa\_event\_odds

Find odds for the sports which are accessible through the Odds API

## **Description**

Get the odds for the sports which the Odds API provides coverage

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#### Usage

```
toa_event_odds(
   sport_key,
   event_id,
   regions = "us",
   markets = "spreads",
   odds_format = "decimal",
   date_format = "iso",
   bookmakers = NULL
)
```

#### **Arguments**

sport\_key

The sport\_key to look up odds for. See toa\_sports() for a full lookup of sport\_key values.

event\_id

The event\_id to look up odds for. See toa\_sports\_odds() for a full lookup of event\_id values.

regions

The region to pull odds from. Options include:

- us
- uk
- us
- eu
- au Multiple can be specified if comma delimited.

markets

The type of odds to return. Multiple can be specified if comma delimited. Options include:

- h2h
- spreads
- totals
- outrights
- h2h\_lay
- outrights\_lay
- alternate\_spreads
- alternate\_totals
- btts
- draw\_no\_bet
- h2h\_3\_way

#### NFL Player Props:

- player\_pass\_tds
- player\_pass\_yds
- player\_pass\_completions
- player\_pass\_attempts
- player\_pass\_interceptions
- player\_pass\_longest\_completion

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- player\_rush\_yds
- player\_rush\_attempts
- player\_rush\_longest
- player\_receptions
- player\_reception\_yds
- player\_reception\_longest

#### NBA + NCAAB Player Props:

- player\_points
- player\_rebounds
- player\_assists
- player\_threes
- player\_double\_double
- · player\_blocks
- player\_steals
- player\_turnovers
- player\_points\_rebounds\_assists
- player\_points\_rebounds
- player\_points\_assists
- player\_rebounds\_assists

#### NHL Player Props:

- player\_points
- player\_power\_play\_points
- player\_assists
- player\_blocked\_shots
- player\_shots\_on\_goal

#### Player Props Documentation

odds\_format

The format in which to return odds. Options include:

- · decimal
- · american

date\_format

Date format. Options include:

- iso
- unix

bookmakers

Comma-separated list of bookmakers to be returned. If both bookmakers and regions are specified, bookmakers takes precendence. Bookmakers can be from any region. Every group of 10 bookmakers counts as 1 request. For example for a single market, specifying up to 10 bookmakers counts as 1 request. Specifying between 11 and 20 bookmakers counts as 2 requests

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#### **Details**

#### Value

Sports for which The Odds API provides betting information for as a tibble:

types
character
numeric
numeric

toa\_requests

Find out your usage and remaining calls for your key from The Odds  $\ensuremath{\mathsf{API}}$ 

#### **Description**

Get your usage and remaining calls for your key from The Odds API

```
toa_requests()
```

## Usage

```
toa_requests()
```

#### Value

Returns a tibble of The Odds API key usage with the following columns:

8 toa\_sports

col\_name types requests\_remaining integer requests\_used integer

toa\_sports

Find sports for which odds are accessible through the Odds API

## Description

#### Get the Sports for which the Odds API provides coverage

```
toa_sports(all_sports=TRUE)
```

## Usage

```
toa_sports(all_sports = TRUE)
```

## **Arguments**

all\_sports

(Logical required): If true, returns all sports and if false, returns only active sports. Defaults to true.

#### Value

Sports for which The Odds API provides betting information for as a tibble:

col\_name types
key character
group character
title character
description character
active logical
has\_outrights logical

## **Examples**

```
try(toa_sports(all_sports = TRUE))
```

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toa\_sports\_keys

Sports for which odds are accessible through the Odds API

#### **Description**

A data set mapping Sports Events/League names to keys for end-user ease.

#### Usage

```
data(toa_sports_keys)
```

#### **Format**

A data frame with 5 variables:

key - Sport key group - Sport group (non-league description) title - Sport title description - Sport description has\_outrights - Whether the sport or event has outright victories.

toa\_sports\_odds

Find odds for the sports which are accessible through the Odds API

#### **Description**

Get the odds for the sports which the Odds API provides coverage

#### Usage

```
toa_sports_odds(
  sport_key,
  regions = "us",
  markets = "spreads",
  odds_format = "decimal",
  date_format = "iso"
)
```

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## Arguments

sport\_key The sport\_key to look up odds for. See toa\_sports() for a full lookup of

sport\_key values.

regions The region to pull odds from. Options include:

• us

• uk

• us

• eu

• au Multiple can be specified if comma delimited.

markets The type of odds to return. Multiple can be specified if comma delimited. Op-

tions include:

• h2h

• spreads

totals

odds\_format The format in which to return odds. Options include:

• decimal

· american

date\_format Date format. Options include:

• iso

• unix

### Value

Sports for which The Odds API provides betting information for as a tibble:

col\_name types id character sport\_key character sport\_title character commence\_time character home\_team character away\_team character bookmaker\_key character character bookmaker last\_update character market\_key character outcomes\_name character outcomes\_price numeric outcomes\_point numeric

## **Examples**

```
markets = 'spreads',
odds_format = 'decimal',
date_format = 'iso'))
```

toa\_sports\_odds\_history

Find odds history for the sports which are accessible through the Odds API

## **Description**

Get the odds history for the sports which the Odds API provides coverage

#### Usage

```
toa_sports_odds_history(
   sport_key,
   event_ids,
   date,
   regions = "us",
   markets = "spreads",
   odds_format = "decimal",
   date_format = "iso",
   bookmakers = NULL
)
```

#### **Arguments**

event\_ids

date

sport\_key The sport\_key to look up odds for. See toa\_sports() for a full lookup of sport\_key values.

The event\_id's to look up odds for. See toa\_sports\_odds() for a full lookup of event\_id values.

The timestamp of the data snapshot to be returned, specified in ISO8601 format.

The historical odds API will return the closest snapshot equal to or earlier than the provided date parameter Example : 2022-10-10T12:15:00Z

regions The region to pull odds from. Options include:

- us
- uk

- us
- eu
- au Multiple can be specified if comma delimited.

markets

The type of odds to return. Multiple can be specified if comma delimited. Options include:

- h2h
- spreads
- totals

odds\_format

The format in which to return odds. Options include:

- decimal
- american

date\_format

Date format. Options include:

- iso
- unix

bookmakers

Comma-separated list of bookmakers to be returned. If both bookmakers and regions are specified, bookmakers takes precendence. Bookmakers can be from any region. Every group of 10 bookmakers counts as 1 request. For example for a single market, specifying up to 10 bookmakers counts as 1 request. Specifying between 11 and 20 bookmakers counts as 2 requests

#### **Details**

#### Value

Sports for which The Odds API provides betting information for as a tibble:

col\_name types id character sport\_key character sport\_title character character commence\_time home\_team character away team character bookmaker\_key character bookmaker character last\_update character market\_key character toa\_sports\_scores 13

outcomes\_name character outcomes\_price numeric outcomes\_point numeric

toa\_sports\_scores

Find scores for the sports which are accessible through the Odds API

#### **Description**

Get the scores for the sports which the Odds API provides coverage

#### Usage

```
toa_sports_scores(sport_key, days_from = 1, date_format = "iso")
```

#### **Arguments**

sport\_key (*string*, required): The sport\_key to look up odds for. See toa\_sports() for a full lookup of sport\_key values.

days\_from (integer, optional): Integer from 1 to 3. Defaults to 1.

date\_format (string, optional): Date format. Options include:

• iso

• unix

#### Value

Sports scores which The Odds API provides scores information for as a tibble:

col\_name types id character sport\_key character sport\_title character commence\_time character completed logical home\_team character character away\_team scores logical last\_update logical

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