

Package ‘tzupdate’

October 11, 2020

Type Package

Title Time Zone Database Updater

Version 0.1.2

Author Sebastien Thonnard

Maintainer Sebastien Thonnard <sebastien.thonnard@icloud.com>

Description Download and compile any version of the
IANA Time Zone Database (also known as Olson database)
and make it current in your R session.
Beware: on Windows 'Cygwin' is required!

License MIT + file LICENSE

Encoding UTF-8

LazyData true

RoxygenNote 7.1.0

Imports utils

NeedsCompilation no

Repository CRAN

Date/Publication 2020-10-11 10:00:02 UTC

R topics documented:

get_active_tz_db	2
get_last_published_tz	2
install_last_tz	3
install_tz	4
tzupdate	5

Index

6

get_active_tz_db *get_active_tz_db*

Description

Get the active tz database version

Usage

```
get_active_tz_db()
```

Value

Active tz database for the current session.

Examples

```
# Get the active tz database in your session:  
get_active_tz_db()
```

get_last_published_tz *get_last_published_tz*

Description

Get the name of the latest version available at IANA website.

Usage

```
get_last_published_tz()
```

Value

Latest IANA tz db version name or Unknown if not found.

Examples

```
# Will return for instance "2019c"  
get_last_published_tz()
```

<i>install_last_tz</i>	<i>install_last_tz</i>
------------------------	------------------------

Description

Install latest tz database if required, and make it active.

Will stop in case it is not possible to know what the last version is.

If it happens browse IANA website at <https://www.iana.org/time-zones> and install last version with `install_tz(version)`.

?`install_tz` for details.

Usage

```
install_last_tz(  
  zic_path = NA,  
  target_folder = paste0(tempdir(), "/tzupdater/data/IANA_release"),  
  verbose = TRUE  
)
```

Arguments

<code>zic_path</code>	Optional for Windows: path to the zic compiler (if not in C:\Cygwin\usr\sbin).
<code>target_folder</code>	Optional target folder. Default will be tzupdater/data/IANA_release as subdirectory of your temp dir.
<code>verbose</code>	Print information to the console TRUE/FALSE. Default TRUE.

Value

None.

Examples

```
# Get the latest version available and compile.  
# If your tz database is already the latest, do nothing.  
install_last_tz()  
  
# Same, but more verbose.  
install_last_tz(verbose = TRUE)  
  
# On Windows: install latest tz database, with Cygwin installed in c:\Cygwin.  
install_last_tz(zic_path="C:\\Cygwin\\usr\\sbin")
```

<i>install_tz</i>	<i>install_tz</i>
-------------------	-------------------

Description

Download and compile a tz database from the IANA website and make it active as an option. In case the tz db exists already, do not download again.

Usage

```
install_tz(
  tgt_version = "2019c",
  zic_path = NA,
  target_folder = paste0(tempdir(), "/tzupdater/data/IANA_release"),
  show_zic_log = FALSE,
  err_stop = TRUE,
  activate_tz = TRUE,
  verbose = TRUE,
  fail_if_zic_missing = FALSE
)
```

Arguments

<code>tgt_version</code>	Version to download and compile (eg 2019c, 2019a).
<code>zic_path</code>	Optional for Windows: path to the zic compiler (if not in C:\Cygwin\usr\sbin)
<code>target_folder</code>	Optional target folder. Default will be tzupdater/data/IANA_release as in tempdir()
<code>show_zic_log</code>	Optional: show logs from the zic compiler (TRUE/FALSE). Default FALSE.
<code>err_stop</code>	Stop on error (TRUE/FALSE). Default TRUE. Recommended to TRUE.
<code>activate_tz</code>	Activate the tz database once installed. Default TRUE.
<code>verbose</code>	Print additional information to the console TRUE/FALSE. Default TRUE.
<code>fail_if_zic_missing</code>	Stop execution if zic is missing (default FALSE, will only display a message)

Examples

```
# Install tz database 2019c
install_tz("2019c")
```

tzupdater

tzupdater: A Tool For Automatically Download And Compile Tz Database From The IANA Website.

Description

Download and compile any version of the IANA Time Zone Database (also known as Olson database) and make it current in your R session. This will NOT replace your system tz database.

Details

Context:

It can be useful to download and compile the latest tz database because tz information are constantly changing, hence your system might not have the latest version. Outdated tz database can cause troubles when converting from UTC to local time and vice-versa. You won't have any obvious error, you will just get wrong UTC offset or zone name.

Prerequisite:

You need the timezone compiler (zic).

-On Windows you can get it by installing Cygwin (<https://www.cygwin.com>)

zic should be installed in C:\Cygwin\usr\sbin by default. If you installed Cygwin somewhere else, please add the zic path to your environment variable PATH or specify the path in the function call.

-On macOS zic is installed by default.

-On Linux zic is generally already available. Otherwise it is part of package tzdata.

Using Alpine Linux you can get it by running the following command:

apk add tzdata

Bugs report:

<https://github.com/sthonnard/tzupdater>

tzupdater functions**install_last_tz()**

Automatically get the latest version available and compile it. Once done make it active. If your tz database is already the latest, do nothing.

get_last_published_tz()

Get the name of the latest version available at IANA website.

get_active_tz_db()

Get the active tz database version on your session.

install_tz(version_to_install)

Download and install the IANA time zone specified in parameter.

Index

get_active_tz_db, 2
get_last_published_tz, 2

install_last_tz, 3
install_tz, 4

tzupdater, 5