Package ‘RApiDatetime’

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Type Package
Title R API Datetime
Version 0.0.6
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Description Access to the C-level R date and datetime code is provided for
C-level API use by other packages via registration of native functions.
Client packages simply include a single header ‘RApiDatetime.h’ provided
by this package, and also ‘import’ it. The R Core group is the original
author of the code made available with slight modifications by this package.

URL https://github.com/eddelbuettel/rapidatet ime,
https://dirk.eddelbuettel.com/code/rapidatet ime.html

BugReports https://github.com/eddelbuettel/rapidatet ime/issues
License GPL (>= 2)
RoxygenNote 6.0.1
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asDatePOSIXct

Description

Conversion from POSIXct to Date

Usage

asDatePOSIXct(x, tz = "")

Arguments

x A POSIXct vector

 tz An optional timezone string
Details

This function provides a direct conversion from POSIXct to Date. As of R-3.5.1, conversion from POSIXct to Date creates an intermediate POSIXlt object. This intermediate POSIXlt object uses a non-trivial amount of memory. The direct conversion is more memory efficient, and therefore approximately twice as fast as the current solution in base R.

Value

A vector of Date objects

Author(s)

Joshua Ulrich

Examples

p <- .POSIXct(1540181413, "America/Chicago")
as.Date(p)  # Using UTC timezone
as.Date(p, "America/Chicago")  # Using local timezone
asDatePOSIXct(p)  # Direct, using local timezone

Description

Wrappers for C-level strftime, asPOSIXlt etc functions

Usage

rapistrptime(x, fmt, tz = "")
rapiAsPOSIXlt(x, tz = "")
rapiAsPOSIXct(x, tz = "")
rapiFormatPOSIXlt(x, fmt, usetz = FALSE)
rapiPOSIXlt2D(x)
rapiD2POSIXlt(x)

Arguments

x  Vector with one or character elements to be parsed
fmt  The format string, see help("strftime") for details.
tz  An optional timezone string
usetz  An optional logical variable selecting use of the timezone.
Details

These functions provide (additional) entry points from R to the C-level function of the R API. They are provided here mainly for testing (the C level access) as R itself exposes the function.

Value

A vector with POSIXlt datetime objects

Author(s)

Dirk Eddelbuettel

Examples

```r
op <- options(digits.secs=6)
x <- rapistrptime("2017-01-02 03:04:05.678", "%Y-%m-%d %H:%M:%OS")
format(x)
rapiAsPOSIXlt(as.POSIXct(x))
rapiAsPOSIXct(x)
rapiFormatPOSIXlt(x, "%Y-%b-%d %H:%M:%OS")
options(op)
rapiPOSIXlt2D(x)
rapiD2POSIXlt(as.Date("2017-01-02"))
```
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