

Package ‘hms’

March 10, 2018

Title Pretty Time of Day

Date 2018-03-10

Version 0.4.2

Description Implements an S3 class for storing and formatting time-of-day values, based on the 'difftime' class.

Imports methods, pkgconfig, rlang

Suggests crayon, lubridate, pillar (>= 1.1.0), testthat

License GPL-3

Encoding UTF-8

LazyData true

URL <https://github.com/tidyverse/hms>

BugReports <https://github.com/tidyverse/hms/issues>

RoxygenNote 6.0.1.9000

NeedsCompilation no

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Repository CRAN

Date/Publication 2018-03-10 21:33:37 UTC

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hms

A simple class for storing time-of-day values

Description

The values are stored as a [difftime](#) vector with a custom class, and always with "seconds" as unit for robust coercion to numeric. Supports construction from time values, coercion to and from various data types, and formatting. Can be used as a regular column in a data frame.

Usage

```
hms(seconds = NULL, minutes = NULL, hours = NULL, days = NULL)
```

```
is.hms(x)
```

```
as.hms(x, ...)
```

```
## Default S3 method:
```

```
as.hms(x, ...)
```

```
## S3 method for class 'difftime'
```

```
as.hms(x, ...)
```

```
## S3 method for class 'numeric'
```

```
as.hms(x, ...)
```

```
## S3 method for class 'character'
```

```
as.hms(x, ...)
```

```
## S3 method for class 'POSIXt'
```

```
as.hms(x, tz = pkgconfig::get_config("hms::default_tz", ""),  
      ...)
```

```
## S3 method for class 'POSIXlt'
```

```
as.hms(x, tz = pkgconfig::get_config("hms::default_tz", ""),  
      ...)
```

```
## S3 method for class 'hms'
```

```
as.POSIXct(x, ...)
```

```
## S3 method for class 'hms'
```

```
as.POSIXlt(x, ...)
```

```
## S3 method for class 'hms'
```

```
as.character(x, ...)
```

```
## S3 method for class 'hms'
```

```

as.data.frame(x, row.names = NULL, optional = FALSE, ...,
  nm = paste(deparse(substitute(x)), width.cutoff = 500L), collapse = " ")

## S3 method for class 'hms'
format(x, ...)

## S3 method for class 'hms'
print(x, ...)

```

Arguments

seconds, minutes, hours, days	Time since midnight. No bounds checking is performed.
x	An object.
...	Arguments passed on to further methods.
tz	The time zone in which to interpret a POSIXt time for extracting the time of day. The default is now the zone of x but was "UTC" for v0.3 and earlier. The previous behavior can be restored by calling <code>pkgconfig::set_config("hms::default_tz", "UTC")</code> , see pkgconfig::set_config() .
row.names	NULL or a character vector giving the row names for the data frame. Missing values are not allowed.
optional	logical. If TRUE, setting row names and converting column names (to syntactic names: see make.names) is optional. Note that all of R's base package <code>as.data.frame()</code> methods use <code>optional</code> only for column names treatment, basically with the meaning of <code>data.frame(*, check.names = !optional)</code> .
nm	Name of column in new data frame

Details

For `hms`, all arguments must have the same length or be NULL. Odd combinations (e.g., passing only seconds and hours but not minutes) are rejected.

Examples

```

hms(56, 34, 12)
hms()
as.hms(1)
as.hms("12:34:56")
as.hms(Sys.time())
as.POSIXct(hms(1))
data.frame(a = hms(1))
d <- data.frame(hours = 1:3)
d$hours <- hms(hours = d$hours)
d

```

`parse_hms`*Parsing hms values*

Description

These functions convert character vectors to objects of the `hms` class. NA values are supported.

Usage

```
parse_hms(x)
```

```
parse_hm(x)
```

Arguments

`x` A character vector

Details

`parse_hms()` accepts values of the form "HH:MM:SS", with optional fractional seconds.

`parse_hm()` accepts values of the form "HH:MM".

Examples

```
parse_hms("12:34:56")
parse_hms("12:34:56.789")
parse_hm("12:34")
```

`round_hms`*Round or truncate to a multiple of seconds*

Description

Convenience functions to round or truncate to a multiple of seconds.

Usage

```
round_hms(x, secs)
```

```
trunc_hms(x, secs)
```

Arguments

`x` A vector of class `hms`

`secs` Multiple of seconds, a positive numeric. Values less than one are supported

Value

The input, rounded or truncated to the nearest multiple of secs

Examples

```
round_hms(as.hms("12:34:56"), 5)
round_hms(as.hms("12:34:56"), 60)
trunc_hms(as.hms("12:34:56"), 60)
```

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