Package: timeperiodsR (via r-universe)

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Type Package

Title Simple Definition Of Time Intervals

Version 0.7.3

License GPL-2

Author Alexey Seleznev [aut, cre]

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Description Simple definition of time intervals for the current, previous, and next week, month, quarter and year.

BugReports https://github.com/selesnow/timeperiodsR/issues

URL https://selesnow.github.io/timeperiodsR/, https://t.me/R4marketing, https://www.youtube.com/playlist?list=PLD2LDq8edf4qed2KVKfXmKdh0OQcdj9gw

Imports lubridate

VignetteBuilder knitr

Suggests knitr, rmarkdown, httr

Encoding UTF-8

Language ru

Repository https://selesnow.r-universe.dev

RemoteUrl https://github.com/selesnow/timeperiodsr

RemoteRef HEAD

RemoteSha 3ea59abcadf2363ef9148588930c50046f905c57

Contents

`timeperiodsR-package` *Simple Definition Of Time Intervals*

Description

Simple definition of time intervals for the current, previous, and next week, month, quarter and year.

Details

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Author(s)

Alexey Seleznev [aut, cre]

Maintainer: Alexey Seleznev <selesnow@gmail.com>

`as_timeperiod` *Convert date or string vector to timeperiod.*

Description

Convert any date or string vector to tpr class.

Usage

```
as_timeperiod(x)
```

Arguments

`x`	Date or string vector

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

See `custom_period()`

Examples

```
dates <- as.Date(c("2019-09-11",
                   "2019-09-02",
       "2019-10-11",
       "2019-08-30"))

dates_tpr <- as_timeperiod(dates)
```

check_dayoffs *Check if the day is an official day off*

Description

Check any date or date vector for is an official day off or not.

Usage

```
check_dayoffs(date  = NULL,
              year  = NULL,
              month = NULL,
              day   = NULL,
              cc    = getOption("timeperiodsR.official_day_offs_country"),
              pre   = getOption("timeperiodsR.official_day_offs_pre"),
              include_custom_day_offs = TRUE)
```

Arguments

year	Year for check
month	Month for check
day	Month for check.
date	Date, or date vector for checking
cc	Country, one of ru, ua, kz, by
pre	Including shorter working days, 0 or 1
include_custom_day_offs	Including custom dayoffs from options or global variables

Details

Function use 'isDayOff() API'.

For get official day offs for your country you must install httr package and switch options `timeperiodsR.official_day_off` to TRUE or set system variable `TPR_DAY_OFFS=TRUE`.

Now allow next country:

ru Russia

ua Ukraine

kz Kazakhstan

by Belarus

Also you can set default country by options or systen envarible:

option timeperiodsR.official_day_offs_country

system variable TPR_COUNTRY

And you can include or exclude shorter working days. Using option `timeperiodsR.official_day_offs_pre`:

0 Exclude shorter work days

1 Include shorter work days

Day marks:

0 Workday

1 Day off

2 Shorten day off

3 Custom day off

You can set your custom day offs, for example it can be your vacation. Using option `timeperiodsR.custom_day_offs` or system variable `TPR_CUSTOM_DAY_OFFS`. In `TPR_CUSTOM_DAY_OFFS` you can set custom day offs like comma or semicolon list of dates in format `YYYY-MM-DD`.

Value

Named vector with date and marks

Author(s)

Alexey Seleznev

References

Official documentation for isDayOff API

Examples

```
ld <- next_n_weeks(n = 2)
check_dayoffs(date = ld)
```

`custom_period` *Custopm period*

Description

Create tpr object between start and end dates

Usage

```
custom_period( start,
               end,
               part = getOption("timeperiodsR.parts"))
```

Arguments

start	Start date in YYYY-MM-DD format
end	End date in YYYY-MM-DD format
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length", "workdays", "weekends", "first_workday", "last_workday", "first_weekend", "last_weekend", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

Examples

```
## To create tpr object between two dates
customper <- custom_period(start = "2019-09-01",
                           end   = "2019-09-05")

## To get vector of date sequences
seq(customper)

## Get number of days of previous months
length(customper)

## To get start of end dates
start(customper)
end(customper)
```

first_weekend *Get first weekend day in period.*

Description

Method for get first weekend in timeperiod.

Usage

```
first_weekend(x)
```

Arguments

x	tpr object or date vector

Value

Vector of dates

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# get first weekend
pm_first_weekend <- first_weekend(pm)
```

first_workday *Get first workday day in period.*

Description

Method for get first workday in timeperiod.

Usage

```
first_workday(x)
```

Arguments

x	tpr object or date vector

Value

Vector of dates

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# get first workday
pm_first_workday <- first_workday(pm)
```

---

last_n_days *Start and end of last n days*

Description

Defines first and last date in previous period

Usage

```
last_n_days(x = Sys.Date(),
            n = 1,
         part = getOption("timeperiodsR.parts"),
          include_current = F)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
include_current	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use part for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see last_n_quarters(), last_n_months(), last_n_years(), last_n_weeks()

Examples

```
## To get start, end and sequence of last 10 days,
## exclude today
last10days <- last_n_days(n = 10)

## include today
last10days_2 <- last_n_days(n = 10, include_current = TRUE)

## To get vector of date sequences
last_n_days(n = 10, part = "sequence")
last_n_days(n = 10)$sequence
seq(last10days)
```

---

last_n_months *Start and end of last n months*

Description

Defines first and last date in previous period

Usage

```
last_n_months(x = Sys.Date(),
              n = 1,
              part = getOption("timeperiodsR.parts"),
              include_current = F)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
include_current	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `last_n_quarters()`, `last_n_days()`, `last_n_years()`, `last_n_weeks()`

Examples

```
## To get start, end and sequence of last 2 months,
## exclude current month
last2month <- last_n_months(n = 2)

## include current month
last2month_2 <- last_n_months(n = 2, include_current = TRUE)

## To get vector of date sequences
last_n_months(n = 2, part = "sequence")
last_n_months(n = 2)$sequence
seq(last2month)

## Get number of days of last 2 months
day_nums <- last_n_months(n = 2, part = "length")
last_n_months()$length
length(last2month)
```

`last_n_quarters` *Start and end of last n quarters*

Description

Defines first and last date in previous period

Usage

```
last_n_quarters(x = Sys.Date(),
                n = 1,
                part = getOption("timeperiodsR.parts"),
                include_current = F)
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
`include_current`	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `last_n_months()`, `last_n_days()`, `last_n_years()`, `last_n_weeks()`

Examples

```
## To get start, end and sequence of last 2 quarters,
## exclude current quarter
last2quarters <- last_n_quarters(n = 2)

## include current quarter
last2quarters_2 <- last_n_quarters(n = 2, include_current = TRUE)

## To get vector of date sequences
last_n_quarters(n = 2, part = "sequence")
last_n_quarters(n = 2)$sequence
seq(last2quarters)

## Get number of days of last 2 quarters
day_nums <- last_n_quarters(n = 2, part = "length")
last_n_quarters()$length
length(last2quarters)
```

---

last_n_weeks *Start and end of last n weeks*

Description

Defines first and last date in previous period

Usage

```
last_n_weeks(x = Sys.Date(),
             n = 1,
          part = getOption("timeperiodsR.parts"),
          week_start = 1,
          include_current = F)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
week_start	Start of week, default = 1 is Monday, 7 is Sunday
include_current	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `last_n_months()`, `last_n_days()`, `last_n_years()`, `last_n_quarters()`

Examples

```
## To get start, end and sequence of last 2 weeks,
## exclude current week
last2weeks <- last_n_weeks(n = 2)

## include current week
last2weeks_2 <- last_n_weeks(n = 2, include_current = TRUE)

## Get last 2 week with start on Sunday
lastWeek <- last_n_weeks(n = 2, week_start = 7)

## To get vector of date sequences
last_n_weeks(n = 2, part = "sequence")
last_n_weeks(n = 2)$sequence
seq(last2weeks)

## Get number of days of last 2 weeks
day_nums <- last_n_weeks(n = 2, part = "length")
last_n_weeks()$length
length(last2weeks)
```

`last_n_years` *Start and end of last n years*

Description

Defines first and last date in previous period

Usage

```
last_n_years(x = Sys.Date(),
             n = 1,
          part = getOption("timeperiodsR.parts"),
           include_current = F)
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
`include_current`	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `last_n_months()`, `last_n_days()`, `last_n_weeks()`, `last_n_quarters()`

Examples

```
## To get start, end and sequence of last 2 years,
## exclude current year
last2years <- last_n_years(n = 2)

## include current year
last2years_2 <- last_n_years(n = 2, include_current = TRUE)

## To get vector of date sequences
last_n_years(n = 2, part = "sequence")
last_n_years(n = 2)$sequence
seq(last2years)

## Get number of days of last 2 years
day_nums <- last_n_years(n = 2, part = "length")
last_n_years()$length
length(last2years)
```

---

last_weekend *Get last weekend day in period.*

Description

Method for get last weekend in timeperiod.

Usage

```
last_weekend(x)
```

Arguments

x	tpr object or date vector

Value

Vector of dates

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# get last weekend
pm_last_weekend <- last_weekend(pm)
```

last_workday *Get last workday day in period.*

Description

Method for get last workday in timeperiod.

Usage

```
last_workday(x)
```

Arguments

x	tpr object or date vector

Value

Vector of dates

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# get last workday
pm_last_workday <- last_workday(pm)
```

next_month *Start and end of next month*

Description

Defines first and last date in next month and all dates in month

Usage

```
next_month(x = Sys.Date(),
           n = 1,
           part = getOption("timeperiodsR.parts"))
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_week()`, `next_quarter()`, `next_year()`

Examples

```
## To get start, end and sequence of next month
nextmonth <- next_month()

## To get vector of date sequences
next_month(part = "sequence")
next_month()$sequence
seq(nextmonth)

## Get number of days of next months
day_nums <- next_month(part = "length")
next_month()$length
length(nextmonth)
```

---

next_n_days *Start and end of next n days*

Description

Defines first and last date in next period

Usage

```
next_n_days(x = Sys.Date(),
            n = 1,
         part = getOption("timeperiodsR.parts"),
         include_current = F)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
include_current	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_n_quarters()`, `next_n_months()`, `next_n_years()`, `next_n_weeks()`

Examples

```
## To get start, end and sequence of next 10 days,
## exclude today
next10days <- next_n_days(n = 10)

## include today
next10days_2 <- next_n_days(n = 10, include_current = TRUE)

## To get vector of date sequences
```

```
next_n_days(n = 10, part = "sequence")
next_n_days(n = 10)$sequence
seq(next10days)
```

`next_n_months` *Start and end of next n months*

Description

Defines first and last date in next period

Usage

```
next_n_months(x = Sys.Date(),
              n = 1,
           part = getOption("timeperiodsR.parts"),
             include_current = F)
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
`include_current`	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see next_n_quarters(), next_n_days(), next_n_years(), next_n_weeks()

Examples

```
## To get start, end and sequence of next 2 months,
## exclude current month
next2month <- next_n_months(n = 2)

## include current month
next2month_2 <- next_n_months(n = 2, include_current = TRUE)

## To get vector of date sequences
next_n_months(n = 2, part = "sequence")
next_n_months(n = 2)$sequence
seq(next2month)

## Get number of days of next 2 months
day_nums <- next_n_months(part = "length")
next_n_months()$length
length(next2month)
```

---

next_n_quarters *Start and end of next n quarters*

Description

Defines first and last date in next period

Usage

```
next_n_quarters(x = Sys.Date(),
                n = 1,
            part = getOption("timeperiodsR.parts"),
             include_current = F)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
include_current	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_n_months()`, `next_n_days()`, `next_n_years()`, `next_n_weeks()`

Examples

```
## To get start, end and sequence of next 2 quarters,
## exclude current quarter
next2quarters <- next_n_quarters(n = 2)

## include current quarter
next2quarters_2 <- next_n_quarters(n = 2, include_current = TRUE)

## To get vector of date sequences
next_n_quarters(n = 2, part = "sequence")
next_n_quarters(n = 2)$sequence
seq(next2quarters)

## Get number of days of next 2 quarters
day_nums <- next_n_quarters(part = "length")
next_n_quarters()$length
length(next2quarters)
```

`next_n_weeks` *Start and end of next n weeks*

Description

Defines first and last date in next period

Usage

```
next_n_weeks(x = Sys.Date(),
             n = 1,
             part = getOption("timeperiodsR.parts"),
          week_start = 1,
          include_current = F)
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
`week_start`	Start of week, default = 1 is Monday, 7 is Sunday
`include_current`	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see last_n_months(), last_n_days(), last_n_years(), last_n_quarters()

Examples

```
## To get start, end and sequence of next 2 weeks,
## exclude current week
next2weeks <- next_n_weeks(n = 2)

## include current week
next2weeks_2 <- next_n_weeks(n = 2, include_current = TRUE)

## Get next 2 week with start on Sunday
nextWeek <- next_n_weeks(n = 2, week_start = 7)

## To get vector of date sequences
next_n_weeks(n = 2, part = "sequence")
next_n_weeks(n = 2)$sequence
seq(next2weeks)

## Get number of days of next 2 weeks
day_nums <- next_n_weeks(part = "length")
next_n_weeks()$length
length(next2weeks)
```

---

next_n_years *Start and end of next n weeks*

Description

Defines first and last date in next period

Usage

```
next_n_years(x = Sys.Date(),
             n = 1,
          part = getOption("timeperiodsR.parts"),
           include_current = F)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
include_current	If TRUE incliding current period in sequence

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_n_months()`, `next_n_days()`, `next_n_quarters()`, `next_n_weeks()`

Examples

```
## To get start, end and sequence of next 2 years,
## exclude current year
next2years <- next_n_years(n = 2)

## include current year
next2years_2 <- next_n_years(n = 2, include_current = TRUE)

## To get vector of date sequences
next_n_years(n = 2, part = "sequence")
next_n_years(n = 2)$sequence
seq(next2years)

## Get number of days of next 2 years
day_nums <- next_n_years(part = "length")
next_n_years()$length
length(next2years)
```

`next_quarter` *Start and end of next quarter*

Description

Defines first and last date in n next quarter

Usage

```
next_quarter(x = Sys.Date(),
             n = 1,
             part = getOption("timeperiodsR.parts"))
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_week()`, `next_month()`, `next_year()`

Examples

```
## To get start, end and sequence of next quarter
nextquarter <- next_quarter()

## To get vector of date sequences
next_quarter(part = "sequence")
next_quarter()$sequence
seq(nextquarter)

## Get number of days of next quarter
day_nums <- next_quarter(part = "length")
next_quarter()$length
length(nextquarter)
```

---

next_week *Start and end of next week*

Description

Defines first and next date in n next week

Usage

```
next_week(x = Sys.Date(),
          n = 1,
          part = getOption("timeperiodsR.parts"),
          week_start = 1)
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
week_start	Start of week, default = 1 is Monday, 7 is Sunday

Details

You can get object of tpr class with all components or specify which component you need, use part for manage this option:

- all - get all components
- start - get only first date of period
- end - get only next date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_month()`, `next_quarter()`, `next_year()`

Examples

```
## To get start, end and sequence of next weeks
nextweek <- next_week()

## Get next week with start on Sunday
nextweeksun <- next_week(week_start = 7)

## To get vector of date sequences
next_week(part = "sequence")
next_week()$sequence
seq(nextweek)

## Get number of days of next 2 weeks
day_nums <- next_week(part = "length")
next_week()$length
length(nextweek)
```

---

next_year *Start and end of next year*

Description

Defines first and last date in n next year

Usage

```
next_year(x = Sys.Date(),
          n = 1,
          part = getOption("timeperiodsR.parts"))
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `next_month()`, `next_quarter()`, `next_week()`

Examples

```
## To get start, end and sequence of next year
nextyear <- next_year()

## To get vector of date sequences
next_year(part = "sequence")
next_year()$sequence
seq(nextyear)

## Get number of days of next year
day_nums <- next_year(part = "length")
next_year()$length
length(nextyear)
```

`previous_month` *Start and end of previous month*

Description

Defines first and last date in n previous month

Usage

```
previous_month(x = Sys.Date(),
               n = 1,
               part = getOption("timeperiodsR.parts"))
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use part for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see previous_week(), previous_quarter(), previous_year()

Examples

```
## To get start, end and sequence of previous month
previousmonth <- previous_month()

## To get vector of date sequences
previous_month(part = "sequence")
previous_month()$sequence
seq(previousmonth)

## Get number of days of previous months
day_nums <- previous_month(part = "length")
previous_month()$length
length(previousmonth)
```

`previous_quarter` *Start and end of previous quarter*

Description

Defines first and last date in n previous quarter

Usage

```
previous_quarter(x = Sys.Date(),
                 n = 1,
                 part = getOption("timeperiodsR.parts"))
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `previous_week()`, `previous_month()`, `previous_year()`

Examples

```
## To get start, end and sequence of previous quarter
previousquarter <- previous_quarter()

## To get vector of date sequences
previous_quarter(part = "sequence")
previous_quarter()$sequence
seq(previousquarter)

## Get number of days of previous quarter
day_nums <- previous_quarter(part = "length")
previous_quarter()$length
length(previousquarter)
```

`previous_week` *Start and end of previous week*

Description

Defines first and last date in n previous week

Usage

```
previous_week(x = Sys.Date(),
              n = 1,
              part = getOption("timeperiodsR.parts"),
              week_start = 1)
```

Arguments

`x`	Date object
`n`	Number of periods for offset
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
`week_start`	Start of week, default = 1 is Monday, 7 is Sunday

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see previous_quarter(), previous_month(), previous_year()

Examples

```
## To get start, end and sequence of previous weeks
previousweek <- previous_week()

## Get previous week with start on Sunday
previousweeksun <- previous_week(week_start = 7)

## To get vector of date sequences
previous_week(part = "sequence")
previous_week()$sequence
seq(previousweek)

## Get number of days of previous 2 weeks
day_nums <- previous_week(part = "length")
previous_week()$length
length(previousweek)
```

---

previous_year *Start and end of previous year*

Description

Defines first and last date in n previous year

Usage

```
previous_year(x = Sys.Date(),
              n = 1,
              part = getOption("timeperiodsR.parts"))
```

Arguments

x	Date object
n	Number of periods for offset
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `previous_week()`, `previous_month()`, `previous_quarter()`

Examples

```
## To get start, end and sequence of previous year
previousyear <- previous_year()

## To get vector of date sequences
previous_year(part = "sequence")
previous_year()$sequence
seq(previousyear)

## Get number of days of previous year
day_nums <- previous_year(part = "length")
previous_year()$length
length(previousyear)
```

---

this_month *Start and end of month*

Description

Defines first and last date in month

Usage

```
this_month(x = Sys.Date(),
           part = getOption("timeperiodsR.parts"))
```

Arguments

x	Date object
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `this_week()`, `this_quarter()`, `this_year()`

Examples

```
## To get start, end and sequence of this month
thismonth <- this_month()

## To get vector of date sequences
this_month(part = "sequence")
this_month()$sequence
seq(thismonth)

## Get number of days of this months
day_nums <- this_month(part = "length")
this_month()$length
length(thismonth)
```

`this_quarter` *Start and end of quarter*

Description

Defines first and last date in quarter

Usage

```
this_quarter(x = Sys.Date(),
             part = getOption("timeperiodsR.parts"))
```

Arguments

`x`	Date object
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `this_week()`, `this_month()`, `this_year()`

Examples

```
## To get start, end and sequence of this quarter
thisquarter <- this_quarter()

## To get vector of date sequences
this_quarter(part = "sequence")
this_quarter()$sequence
seq(thisquarter)

## Get number of days of this quarter
day_nums <- this_quarter(part = "length")
this_quarter()$length
length(thisquarter)
```

`this_week` *Start and end of week*

Description

Defines first and last date in week

Usage

```
this_week(x = Sys.Date(),
          part = getOption("timeperiodsR.parts"),
        week_start = 1)
```

Arguments

`x`	Date object
`part`	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.
`week_start`	Start of week, default = 1 is Monday, 7 is Sunday

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `this_quarter()`, `this_month()`, `this_year()`

Examples

```
## To get start, end and sequence of this weeks
thisweek <- this_week()

## Get this week with start on Sunday
thisweeksun <- this_week(week_start = 7)

## To get vector of date sequences
this_week(part = "sequence")
this_week()$sequence
seq(thisweek)

## Get number of days of this 2 weeks
day_nums <- this_week(part = "length")
this_week()$length
length(thisweek)
```

---

this_year *Start and end of year*

Description

Defines first and last date in year

Usage

```
this_year(x = Sys.Date(),
          part = getOption("timeperiodsR.parts"))
```

Arguments

x	Date object
part	Part of period you need to receive, one of "all", "start", "end","sequence", "length". See details.

Details

You can get object of tpr class with all components or specify which component you need, use `part` for manage this option:

- all - get all components
- start - get only first date of period
- end - get only last date of period
- start - get vector of all dates in period
- length - get number of dates in period

Value

Object of tpr class

Author(s)

Alexey Seleznev

See Also

For get next other periods see `this_week()`, `this_month()`, `this_year()`

Examples

```
## To get start, end and sequence of this year
thisyear <- this_year()

## To get vector of date sequences
this_year(part = "sequence")
this_year()$sequence
seq(thisyear)

## Get number of days of this year
day_nums <- this_year(part = "length")
this_year()$length
length(thisyear)
```

---

tpr_operators *Operators of tpr objects.*

Description

Filtring timeperiods operators.

Usage

```
x %.in% y
x %left_in% y
x %left_out% y
x %right_in% y
x %right_out% y
```

Arguments

x	left Date or tpr object
y	Right tpr object.

Value

Date sequence or logical vector

Author(s)

Alexey Seleznev

See Also

For get more examples see vignette: `vignette("tpr_intro", package = "timeperiodsR")`

Examples

```
period1 <- this_month("2019-11-07")
period2 <- previous_week("2019-11-07")

period1
period1
period1
period1
```

---

weekends *Get vector with weekends.*

Description

Method for get vector of weekends from timeperiod.

Usage

```
weekends(x)
```

Arguments

x	tpr object or date vector

Value

Vector of dates

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# get weekends
pm_weekends <- weekends(pm)
```

`weekends_length` *Number of weekdends days in the period.*

Description

Method for get number of weekdays days in period. Weekends is suturday and sunday.

Usage

```
weekends_length(x)
```

Arguments

`x`	tpr object or date vector

Value

Integer

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# weekends day number
pm_wd_len <- weekends_length(pm)
```

workdays *Get vector with workdays.*

Description

Method for get vector of workdays from timeperiod.

Usage

```
workdays(x)
```

Arguments

x	tpr object or date vector

Value

Vector of dates

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# get workdays
pm_workdays <- workdays(pm)
```

workdays_length *Number of workdays in the period.*

Description

Method for get number of workdays in period. workdays is monday - friday.

Usage

```
workdays_length(x)
```

Arguments

x	tpr object or date vector

Value

Integer

Author(s)

Alexey Seleznev

Examples

```
pm <- previous_month()
# workdays number
pm_wd_len <- workdays_length(pm)
```

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