

Package ‘fauxnaif’

September 4, 2020

Title Convert Values to NA

Version 0.6.1

Description Provides a replacement for dplyr::na_if(). Allows you to specify multiple values to be replaced with NA using a single function.

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URL <https://github.com/rossellhayes/fauxnaif>

BugReports <https://github.com/rossellhayes/fauxnaif/issues>

Depends R (>= 3.5)

Imports glue,
lifecycle,
rlang

Suggests covr,
dplyr,
intrval,
knitr,
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VignetteBuilder knitr

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R topics documented:

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faux_census *A small sample of a fabricated census-like dataset*

Description

A dataset containing fake demographic data, used in the `fauxnaif` vignette.

Usage

```
faux_census
```

Format

A tibble with 20 rows and 6 variables.

Source

Fabricated

na_if_in *Convert values to NA*

Description

This is a replacement for `dplyr::na_if()`. It is useful if you want to convert annoying values to NA. Unlike `dplyr::na_if()`, this function allows you to specify multiple values to be replaced with NA at the same time.

- `na_if_in()` replaces values that match its arguments with NA.
- `na_if_not()` replaces values that *do not* match its arguments with NA.

Usage

```
na_if_in(x, ...)
na_if(x, ...)
na_if_not(x, ...)
```

Arguments

- x Vector to modify
- ... Values to replace with NA, specified as either:
 - An object, vector of objects, or list of objects
 - A one-sided formula (see section "Formulas")

Value

A modified version of x with selected values replaced with NA.

Formulas

These functions accept one-sided formulas that can evaluate to logical vectors. The input is represented in these conditional statements as ". ". Valid formulas take the form $\sim . < 0$. See examples.

Lifecycle

Deprecated `na_if()` has been deprecated in favor of `na_if_in()` to avoid masking `dplyr::na_if()`.

See Also

- `dplyr::na_if()` to replace a single value with NA.
- `dplyr::coalesce()` to replace missing values with a specified value.
- `tidyverse::replace_na()` to replace NA with a value.
- `dplyr::recode()` and `dplyr::case_when()` to more generally replace values.

Examples

```
-1:10
# We can replace -1...
# ... explicitly
na_if_in(-1:10, -1)
# ... by specifying values to keep
na_if_not(-1:10, 0:10)
# ... using a formula
na_if_in(-1:10, ~ . < 0)
# ... or using a function
na_if_in(-1:10, min)

messy_string <- c("abc", "", "def", "NA", "ghi", 42, "jkl", "NULL", "mno")
# We can replace unwanted values...
# ... one at a time
na_if_in(messy_string, "")
# ... or all at once
na_if_in(messy_string, "", "NA", "NULL", 1:100)
na_if_in(messy_string, c("", "NA", "NULL", 1:100))
na_if_in(messy_string, list("", "NA", "NULL", 1:100))
# ... or using a clever formula
grepl("[a-z]{3,}", messy_string)
na_if_not(messy_string, ~ grepl("[a-z]{3,}", .))

# na_if_in() is particularly useful inside dplyr::mutate
library(dplyr)
```

```

faux_census %>%
  mutate(
    state = na_if_in(state, "Canada"),
    age   = na_if_in(age, ~ . < 18, ~ . > 120)
  )

# We get a message if our values to replace don't exist
na_if_in(-1:10, 11)
# And a warning if we use an invalid input...
# ... like a two-sided formula
na_if_in(-1:10, x ~ . < 0)
# ... NULL
na_if_in(-1:10, NULL)
# ... or nothing at all
na_if_in(-1:10)

# This function handles vector values differently than dplyr,
# and returns a different result with vector replacement values:
na_if_in(1:5, 5:1)
dplyr::na_if(1:5, 5:1)

```

scoped_na_if*Convert values to NA in multiple columns***Description****Deprecated****Usage**

```

na_if_all(.tbl, ...)
na_if_not_all(.tbl, ...)
na_if_at(.tbl, .vars, ...)
na_if_not_at(.tbl, .vars, ...)
na_if_if(.tbl, .predicate, ...)
na_if_not_if(.tbl, .predicate, ...)

```

Arguments

| | |
|--------------------|---|
| <code>.tbl</code> | A <code>tbl</code> object |
| <code>...</code> | Values to replace with <code>NA</code> , specified as either: <ul style="list-style-type: none"> An object, vector of objects, or list of objects A one-sided formula (see section "Formulas" in na_if()) |
| <code>.vars</code> | A list of columns generated by dplyr::vars() , a character vector of column names, a numeric vector of column positions, or <code>NULL</code> . |

| | |
|------------|---|
| .predicate | A predicate function to be applied to the columns or a logical vector. The variables for which .predicate is or returns TRUE are selected. This argument is passed to <code>rlang::as_function()</code> and thus supports quosure-style lambda functions and strings representing function names. |
|------------|---|

Details

The `dplyr::scoped` variants of `na_if()` and `na_if_not()` can be used directly within pipelines and can modify multiple variables at once.

- `*_all()` affects every variable
- `*_at()` affects variables selected with a character vector or `dplyr::vars()`
- `*_if()` affects variables selected with a predicate function

Value

A modified data frame. Matched values in selected columns are replaced with NA.

See Also

`na_if_in()` and `na_if_not()` operate directly on vectors

`dplyr::mutate_all()`, `dplyr::mutate_at()` and `dplyr::mutate_if()` can apply any function to variables selected in the same way

Examples

```
## Not run:  
df <- data.frame(a = 0:5, b = 5:0, c = as.numeric(0:5), d = letters[1:6])  
  
na_if_all(df, 0)  
na_if_not_all(df, 0:3, "c")  
  
na_if_at(df, c("a", "c"), 0)  
na_if_not_at(df, c("a", "c"), 0:3)  
  
na_if_if(df, is.integer, 0)  
na_if_not_if(df, is.integer, 0:3)  
  
## End(Not run)
```

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