# Package: diffdf (via r-universe)

August 23, 2024

```
Version 1.0.4.900
Description Functions for comparing two data.frames against each
     other. The core functionality is to provide a detailed
     breakdown of any differences between two data.frames as well as
     providing utility functions to help narrow down the source of
     problems and differences.
Encoding UTF-8
LazyData true
Language en-GB
Depends R (>= 3.1.2)
Imports tibble, assertthat, methods
Suggests testthat, lubridate, knitr, rmarkdown, purrr, dplyr, stringi,
     stringr, devtools, covr, bit64
RoxygenNote 7.3.2
Roxygen list(markdown = TRUE)
VignetteBuilder knitr
License MIT + file LICENSE
URL https://gowerc.github.io/diffdf/,
     https://github.com/gowerc/diffdf/
Config/testthat/edition 3
BugReports https://github.com/gowerc/diffdf/issues
Repository https://gowerc.r-universe.dev
RemoteUrl https://github.com/gowerc/diffdf
RemoteRef HEAD
RemoteSha 8cf2a2d6974f0ade9f2526d726735eec6ac8be3c
```

Type Package

Title Dataframe Difference Tool

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as\_character

as\_character

#### **Description**

Stub function to enable mocking in unit tests

#### Usage

```
as_character()
```

diffdf

diffdf

#### Description

Compares 2 dataframes and outputs any differences.

#### Usage

```
diffdf(
  base,
  compare,
  keys = NULL,
  suppress_warnings = FALSE,
  strict_numeric = TRUE,
  strict_factor = TRUE,
  file = NULL,
  tolerance = sqrt(.Machine$double.eps),
  scale = NULL,
  check_column_order = FALSE,
  check_df_class = FALSE
)
```

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#### **Arguments**

base input dataframe comparison dataframe compare keys vector of variables (as strings) that defines a unique row in the base and compare dataframes suppress\_warnings Do you want to suppress warnings? (logical) strict\_numeric Flag for strict numeric to numeric comparisons (default = TRUE). If False diffdf will cast integer to double where required for comparisons. Note that variables specified in the keys will never be casted. strict\_factor Flag for strict factor to character comparisons (default = TRUE). If False diffdf will cast factors to characters where required for comparisons. Note that variables specified in the keys will never be casted. file Location and name of a text file to output the results to. Setting to NULL will cause no file to be produced. tolerance Set tolerance for numeric comparisons. Note that comparisons fail if (x-y)/scale scale Set scale for numeric comparisons. Note that comparisons fail if (x-y)/scale > tolerance. Setting as NULL is a slightly more efficient version of scale = 1. check\_column\_order

Should the column ordering be checked? (logical)

check\_df\_class Do you want to check for differences in the class between base and compare? (logical)

#### **Examples**

```
x <- subset(iris, -Species)</pre>
x[1, 2] < -5
COMPARE <- diffdf(iris, x)
print(COMPARE)
#### Sample data frames
DF1 <- data.frame(</pre>
    id = c(1, 2, 3, 4, 5, 6),
    v1 = letters[1:6],
    v2 = c(NA, NA, 1, 2, 3, NA)
)
DF2 <- data.frame(</pre>
    id = c(1, 2, 3, 4, 5, 7),
    v1 = letters[1:6],
    v2 = c(NA, NA, 1, 2, NA, NA),
    v3 = c(NA, NA, 1, 2, NA, 4)
)
diffdf(DF1, DF1, keys = "id")
```

diffdf\_has\_issues

```
# We can control matching with scale/location for example:
DF1 <- data.frame(</pre>
    id = c(1, 2, 3, 4, 5, 6),
    v1 = letters[1:6],
    v2 = c(1, 2, 3, 4, 5, 6)
DF2 <- data.frame(</pre>
    id = c(1, 2, 3, 4, 5, 6),
    v1 = letters[1:6],
    v2 = c(1.1, 2, 3, 4, 5, 6)
diffdf(DF1, DF2, keys = "id")
diffdf(DF1, DF2, keys = "id", tolerance = 0.2)
diffdf(DF1, DF2, keys = "id", scale = 10, tolerance = 0.2)
# We can use strict_factor to compare factors with characters for example:
DF1 <- data.frame(</pre>
    id = c(1, 2, 3, 4, 5, 6),
    v1 = letters[1:6],
    v2 = c(NA, NA, 1, 2, 3, NA),
    stringsAsFactors = FALSE
)
DF2 <- data.frame(</pre>
    id = c(1, 2, 3, 4, 5, 6),
    v1 = letters[1:6],
    v2 = c(NA, NA, 1, 2, 3, NA)
)
diffdf(DF1, DF2, keys = "id", strict_factor = TRUE)
diffdf(DF1, DF2, keys = "id", strict_factor = FALSE)
```

diffdf\_has\_issues

diffdf\_has\_issues

#### **Description**

Utility function which returns TRUE if an diffdf object has issues or FALSE if an diffdf object does not have issues

# Usage

```
diffdf_has_issues(x)
```

diffdf\_issuerows 5

#### **Arguments**

x diffdf object

#### **Examples**

```
# Example with no issues
x <- diffdf(iris, iris)
diffdf_has_issues(x)

# Example with issues
iris2 <- iris
iris2[2, 2] <- NA
x <- diffdf(iris, iris2, suppress_warnings = TRUE)
diffdf_has_issues(x)</pre>
```

diffdf\_issuerows

Identify Issue Rows

#### **Description**

This function takes a diffdf object and a dataframe and subsets the data. frame for problem rows as identified in the comparison object. If vars has been specified only issue rows associated with those variable(s) will be returned.

## Usage

```
diffdf_issuerows(df, diff, vars = NULL)
```

#### **Arguments**

df dataframe to be subsetted

diff diffdf object

vars (optional) character vector containing names of issue variables to subset dataframe

on. A value of NULL (default) will be taken to mean available issue variables.

#### **Details**

Note that diffdf\_issuerows can be used to subset against any dataframe. The only requirement is that the original variables specified in the keys argument to diffdf are present on the dataframe you are subsetting against. However please note that if no keys were specified in diffdf then the row number is used. This means using diffdf\_issuerows without a keys against an arbitrary dataset can easily result in nonsense rows being returned. It is always recommended to supply keys to diffdf.

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#### **Examples**

```
iris2 <- iris
for (i in 1:3) iris2[i, i] <- 99
x <- diffdf(iris, iris2, suppress_warnings = TRUE)
diffdf_issuerows(iris, x)
diffdf_issuerows(iris2, x)
diffdf_issuerows(iris2, x, vars = "Sepal.Length")
diffdf_issuerows(iris2, x, vars = c("Sepal.Length", "Sepal.Width"))</pre>
```

print.diffdf

Print diffdf objects

#### **Description**

Print nicely formatted version of an diffdf object

## Usage

```
## S3 method for class 'diffdf'
print(x, row_limit = 10, as_string = FALSE, ...)
```

# Arguments

```
    x comparison object created by diffdf().
    row_limit Max row limit for difference tables (NULL to show all rows)
    as_string Return printed message as an R character vector?
    ... Additional arguments (not used)
```

# **Examples**

```
x <- subset(iris, -Species)
x[1, 2] <- 5
COMPARE <- diffdf(iris, x)
print(COMPARE)
print(COMPARE, row_limit = 5)</pre>
```

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