

# Package: piamutils (via r-universe)

August 15, 2024

**Type** Package

**Title** Utilities for the piam-verse

**Version** 0.0.12

**Date** 2024-08-15

**Description** This package contains utilities and helpers needed in various piam libraries.

**License** LGPL-3

**URL** <https://github.com/pik-piam/piamutils>

**Imports** magclass, pkgload, quitte

**Suggests** testthat

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**Repository** <https://pik-piam.r-universe.dev>

**RemoteUrl** <https://github.com/pik-piam/piamutils>

**RemoteRef** HEAD

**RemoteSha** 5dad291da96ad1a410c4157151931e7381d68971

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deletePlus	<i>Delete "+" in Variable Names. Optionally Save in File with Suffix "_withoutPlus"</i>
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### Description

The function can take a multiple of input formats. It replaces "|+", "|++", "|+++|", ... by "|" in variable names and in this "deletes" the "plus-notation".

### Usage

```
deletePlus(mif, writemif = FALSE)
```

### Arguments

mif	A path to a mif-file (might be created by confGDX2MIF), a magpie object containing reporting, a quitte object, or a character vector or factor of variable names.
writemif	A single truth value. Only used when mif is a file path. Should the new mif with the adjusted names be saved? If yes the new name will have the suffix "_withoutPlus.mif".

### Value

If mif is a file path and writemif is FALSE, a MAGPIE object. If mif is not a file path the result is the object mif with replaced variable names.

### Examples

```
deletePlus(c(
  "ab|cd", # "ab|cd"
  "de|+|fgh", # "de|fgh"
  "i|j|++|k|l|+++|mno|p", # "i|j|k|l|mno|p"
  "++|q+|r|+p|u+v|+", # "++|q+|r|+p|u+v|+"
  "w|+|+|x")) # "w|x"
```

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getSystemFile	<i>Find the path to R System Files for a given R library</i>
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### Description

A wrapper around [system.file](#) to make sure that the correct paths are returned when working with devtools::load\_all() during development.

### Usage

```
getSystemFile(..., package = "base", mustWork = FALSE)
```

**Arguments**

... character vectors, specifying subdirectory and file(s) within some package  
 package a character string with the name of a single package  
 mustWork if TRUE, an error is given if there are no matching files

modifyVariableNames *Modify Variable Names*

**Description**

Modify Variable Names

**Usage**

modifyVariableNames(x, modify, writeMifSuffix = NULL, ...)

**Arguments**

x A path to a mif-file (might be created by confGDX2MIF), a magpie object containing reporting, a quitte object, or a character vector or factor of variable names.  
 modify A function that modifies a character vector.  
 writeMifSuffix NULL or a suffix for the file name if the result should be written as a mif-file.  
 ... Further arguments for the modify function.

**Value**

If x is a file path and writeMifSuffix is NULL, a MAgPIE object. If x is not a file path the result is the object x with replaced variable names.

niceround *niceround returns human-readable string for big and small numbers  
 Show everything before the dot and at least 'digits' significant digits  
 For a data.frame, convert all numeric columns*

**Description**

niceround returns human-readable string for big and small numbers Show everything before the dot and at least 'digits' significant digits For a data.frame, convert all numeric columns

**Usage**

niceround(x, digits = 3)

**Arguments**

x                    either a vector or list of numbers, or a dataframe  
 digits                number of significant digits that are definitely kept

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substitutePlaceholder *Substitute Placeholders in Variable Names.*

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**Description**

Substitute Placeholders in Variable Names.

**Usage**

```
substitutePlaceholder(x, writeMifSuffix = NULL, substitutions = c(. = "$dot$"))
```

**Arguments**

x                    A path to a mif-file (might be created by confGDX2MIF), a quitte object, or a character vector or factor of variable names.  
 writeMifSuffix    NULL or a suffix for the filename if the result should be written as a mif-file.  
 substitutions    A named character vector of placeholders with replacements as names.

**Value**

If x is not a file path the result is the object x with replaced variable names.

**Examples**

```
substitutePlaceholder(c(
  "3$dot$5", # "3.5"
  "3$dot5", # "3$dot5"
  "3.5", # "3.5"
  "$dot$dot$dot$dot$dot$") # ".dot.dot.")
```

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