

Package ‘conquestr’

February 7, 2020

Type Package

Title An R Front End for 'ACER ConQuest'

Version 0.5.1

URL <https://www.acer.org/au/conquest>,
<https://conquest-forums.acer.edu.au>,
<https://shop.acer.edu.au/acer-conquest-4>

Description Extends 'ACER ConQuest' by allowing R users to call 'ACER ConQuest' from within R. Users can also read 'ACER ConQuest' System Files (generated by the command 'put'). This is of particular use to those who are parsing text file output (e.g., 'show' files) as this is not consistent across releases of 'ACER ConQuest'. Requires 'ACER ConQuest' version 4.34.0 or later. A demonstration version can be downloaded from <<https://shop.acer.edu.au/acer-conquest-4>>.

License GPL-3

Encoding UTF-8

LazyData true

SystemRequirements ACER ConQuest (>=4.34.0)

Suggests dplyr, knitr, rmarkdown

Collate 'RcppExports.R' 'ReadConQuestLibrary.R' 'ReadConQuestState.R'
'ReadConQuestState_createDF.R' 'conquestrFunc.R' 'conquestr.R'

VignetteBuilder knitr

RoxygenNote 7.0.2

LinkingTo Rcpp

Imports Rcpp, stats, reshape

NeedsCompilation yes

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ConQuestCall	<i>ConQuestCall</i>
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Description

Call 'ACER ConQuest' and run a control file.

Usage

```
ConQuestCall(cqInstallLocation, cqc)
```

Arguments

cqInstallLocation	The location of the 'ACER ConQuest' executable.
cqc	The locaiton of the control file to be run.

Value

prints 'ACER ConQuest' output to stdout.

Examples

```
## Not run:
ConQuestCall(cqInstallLocation = file.path("/Applications", "ConQuest BETA", "ConQuest"))

## End(Not run)
```

ConQuestRout	<i>ConQuestRout</i>
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Description

Read an "ACER ConQuest" rout file created by a 'plot' command in 'ACER ConQuest'.

Usage

```
ConQuestRout(myRout)
```

Arguments

myRout	The location of an 'ACER ConQuest' rout file created by 'ACER ConQuest' > 5.1.4.
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Value

A list containing the data objects created by 'ACER ConQuest' plot command.

Examples

```
myPlot<- ConQuestRout()  
## Not run:  
# if you run the above example you will have the points from a plot ICC command.  
str(myPlot)  
  
## End(Not run)
```

ConQuestSys	<i>ConQuestSys</i>
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Description

Read an "ACER ConQuest" system file created by a 'put' command in 'ACER ConQuest'. The system file must not be compressed. Use the option 'compressed=no' in the put command within 'ACER ConQuest'.

Usage

```
ConQuestSys(myCqs)
```

Arguments

myCqs	The location of an uncompressed 'ACER ConQuest' system file created by 'ACER ConQuest' > 4.30.2.
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Value

A list containing the data objects created by 'ACER ConQuest'.

Examples

```
mySysData<- ConQuestSys()  
myEx1SysData<- ConQuestSys(myCqs = system.file("extdata", "Ex1.cqs", package = "conquestr"))  
## Not run:  
# if you run the above example this will return your original 'ACER ConQuest' syntax.  
cat(unlist(myEx1SysData$gCommandHistory))  
  
## End(Not run)
```

createDfFromSys	<i>createDfFromSys</i>
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Description

Internal function to read an R object of class ConQuestSys (which returns a list) and create neat R data frame objects. Called by `conquestr::ConQuestSysDf`.

Usage

```
createDfFromSys(mySys)
```

Arguments

`mySys` An R object of class ConQuestSys, returned by the function `conquestr::ConQuestSys`

Value

A list containing R data frames based on the list objects in the ConQuest system file that has been read in.

See Also

```
conquestr::ConQuestSys()
```

ReadSys	<i>ReadSys</i>
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Description

Internal function to read an 'ACER ConQuest' system file. Called by `conquestr::ConQuestSys`.

Usage

```
ReadSys(myFile)
```

Arguments

<code>myFile</code>	An 'ACER ConQuest' system file created by the 'put' command in 'ACER ConQuest'. The put command must use the option 'compressed = no'.
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Value

A list containing the data objects created by 'ACER ConQuest'.

See Also

```
conquestr::ConQuestSys()
```

<code>replaceInDataFrame</code>	<i>iterate through a data frame and use replaceInVector</i>
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Description

iterate through a data frame and use `replaceInVector`

Usage

```
replaceInDataFrame(d, r, x)
```

Arguments

<code>d</code>	A <code>DataFrame</code> .
<code>r</code>	A double - the value to be replaced if it is $< -1e300$.
<code>x</code>	A double - the value to replace <code>r</code> with.

replaceInVector	<i>replace a very large neagtive number with something - usually NA_REAL</i>
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Description

replace a very large neagtive number with something - usually NA_REAL

Usage

```
replaceInVector(v, r, x)
```

Arguments

v	A NumericVector.
r	A double - the value to be replaced if it is < -1e300.
x	A double - the value to repalce r with.

searchConQuestSys	<i>searchConQuestSys</i>
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Description

Search for object names within a ConQuest System file object.

Usage

```
searchConQuestSys(searchString, mySys, value = TRUE, ignore.case = TRUE)
```

Arguments

searchString	A string to search within the names of mySys.
mySys	An 'ACER ConQuest' system file object created using the conquestr::ConQuestSys function.
value	Should searchConQuestSys return the name of the object or its index.
ignore.case	Should searchConQuestSys ignore the case of the search term.

Value

a string including object names mathching the search term

timesTwo	<i>Multiply a number by two</i>
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Description

Multiply a number by two

Usage

```
timesTwo(x)
```

Arguments

x	A single integer.
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transformPvs	<i>transformPvs</i>
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Description

Helper function to Transform PVs onto a new metric (e.g., PISA Mean = 500, SD = 100). Uses the method described in the PISA 2012 technical manual.

Usage

```
transformPvs(x, mT = 0, sdT = 1, weights, data, addToDf = FALSE, debug = TRUE)
```

Arguments

x	A concatenated vector of varnames in data, PV1, PV2, ..., PVm.
mT	The desired mean of the PVs
sdT	The desired sd of the PVs
weights	The name of the weight variable in 'data' used to calculate the mean and SD across the PVs
data	The data frame that contains the PVs and weights.
addToDf	A Boolean, if TRUE, the transformed PVs are coerced into the DF, data, with name data\$x_T (not yet implemented).
debug	A temporary flag to spit-out objects to global env for checking. Will be removed when pushed to CRAN

Value

a List of transformed PVs with as many elements as PVs were listed in 'x'.

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