

R with RDBMs Database (PostgreSQL)

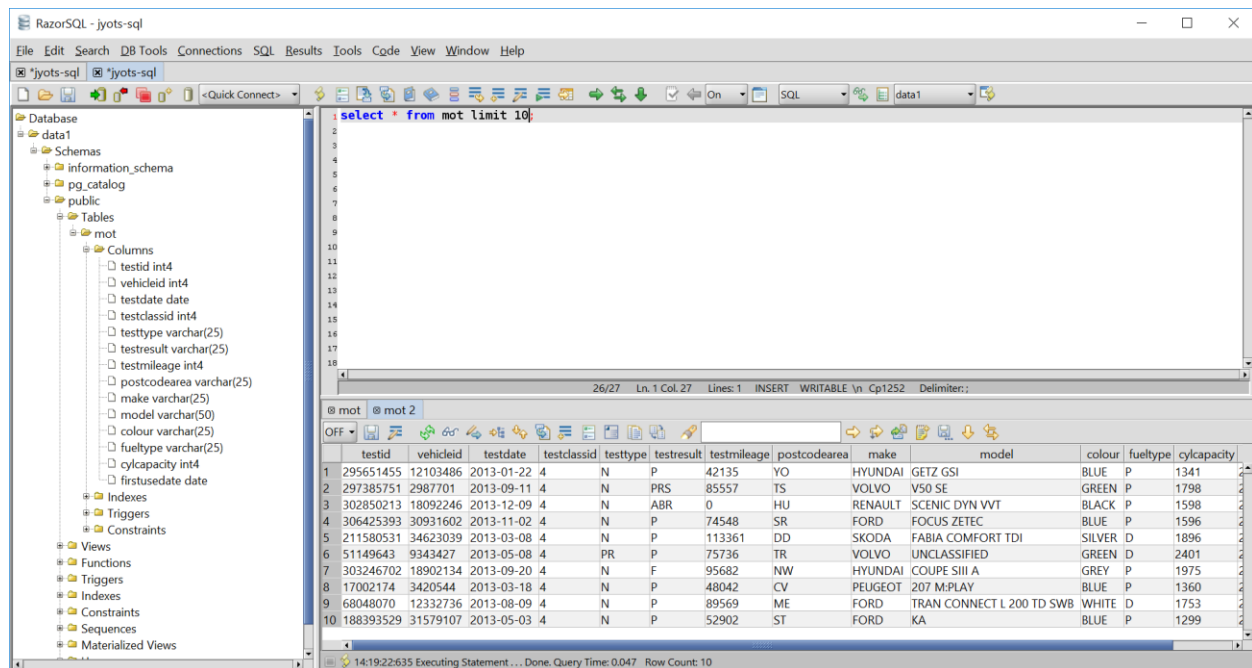
1: On Google Cloud Platform – SQL

Created a PostgreSQL instance

The screenshot shows the Google Cloud Platform console interface. The top navigation bar includes the Google Cloud logo, the project name 'My First Project', and a search bar. Below the navigation bar, the 'SQL' section is active, displaying a list of instances. A table lists the instances, with one instance named 'jyots-sql' highlighted. The table columns include Instance ID, Type, IP address, Instance connection name, High availability, Location, Storage used, and Labels. Below the table, there is a filter bar and a 'Columns' dropdown menu. At the bottom of the screenshot, a browser tab bar is visible, showing several open tabs including 'groceries.csv', '08 - Association ...ipynb', 'IS665 - Associatio...pdf', '07 - Clustering.ipynb', and 'Hierarchical and K...pdf'.

Instance ID	Type	IP address	Instance connection name	High availability	Location	Storage used	Labels
jyots-sql	PostgreSQL 9.6	35.194.29.232	cogent-bison-182100:us-central1:jyots-sql	—	us-central1-f	137 MB of 10 GB	

Connected to the database using RazorSQL



R studio integration components for PostgreSQL- Install

```
> devtools::install_github("RcppCore/Rcpp")
> devtools::install_github("rstats-db/DBI")
> devtools::install_github("rstats-db/RPostgres")
> library(DBI)
> library(RPostgres)
```

RStudio

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Go to file/function Add

```
con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=5432,
+               + user = 'postgres',
+               + password = 'lqazlQAZ')
Error: unexpected ')' in "
+               + password = 'lqazlQAZ')
Error: unexpected ')' in "
+               + password = 'lqazlQAZ')
> con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=5432,
+               + user = 'postgres',
+               + password = 'lqazlQAZ')
Error: unexpected '=' in:
"con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=
+               + user='postgres',
+               + password=lqazlQAZ)
Error: unexpected symbol in "
+               + password=lqaz"
> con
Error: unexpected '>' in ">"
>
> con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=5432,
+               + user = 'postgres',
+               + password = 'lqazlQAZ')
Error: unexpected '=' in:
"con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=
+               + user='postgres',
+               + password=lqazlQAZ)
Error: unexpected symbol in "
+               + password=lqaz"
>
> con
Error: object 'con' not found
> con <-
+
+
+
+
+ jlj
Error: object 'jlj' not found
> con <- dbConnect(RPostgres::Postgres(), dbname = 'data1',
+               + host = '35.194.29.232',
+               + port = 5432,
+               + user = 'postgres',
+               + password = 'lqazlQAZ')
> con
<PqConnection> data1@35.194.29.232:5432
> dbListTables(con)
[1] "mot"
> |
```

Environment History

Global Environment

Values

con Formal class PqConnection

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct (stats)

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```
## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rnchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, ilev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
arima0.diag(...)
plot.mts(x, plot.type = c("multiple", "single"), panel = lines,
        log = "", col = par("col"), bg = NA, pch = par("pch"),
```

RStudio

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Go to file/function Add

```
con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=
+               + user='postgres',
+               + password=lqazlQAZ)
Error: unexpected '=' in:
"con <- dbConnect(RPostgres::Postgres(), dbname = 'postgres', host = '35.194.29.232',
+               + port=
+               + user='postgres',
+               + password=lqazlQAZ)
Error: unexpected symbol in "
+               + password=lqaz"
>
> con
Error: object 'con' not found
> con <-
+
+
+
+
+ jlj
Error: object 'jlj' not found
> con <- dbConnect(RPostgres::Postgres(), dbname = 'data1',
+               + host = '35.194.29.232',
+               + port = 5432,
+               + user = 'postgres',
+               + password = 'lqazlQAZ')
> con
<PqConnection> data1@35.194.29.232:5432
> dbListTables(con)
[1] "mot"
> dbListFields(con, "mot")
[1] "testid" "vehicleid" "testdate" "testclassid" "testtype" "testresult"
[7] "testmileage" "postcodearea" "make" "model" "colour" "fueltype"
[13] "cylcapacity" "firstusedate"
> query.1 <- dbSendQuery(con, "SELECT make, testresult,
+ COUNT(*) AS count
+ FROM mot
+ GROUP BY make, testresult
+ ORDER BY make, testresult ASC")
> query.1
<PqResult>
SQL SELECT make, testresult,
COUNT(*) AS count
FROM mot
GROUP BY make, testresult
ORDER BY make, testresult ASC
ROWS Fetched: 0 [incomplete]
changed: 0
>
```

Environment History

Global Environment

Values

con Formal class PqConnection

query.1 Formal class PqResult

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct (stats)

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```
## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rnchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, ilev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
arima0.diag(...)
plot.mts(x, plot.type = c("multiple", "single"), panel = lines,
        log = "", col = par("col"), bg = NA, pch = par("pch"),
```

RStudio

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Go to file/function Addins

```

Console
> pgResult<-
  SQL SELECT make, testresult,
COUNT(*) AS count
FROM mot
GROUP BY make, testresult
ORDER BY make, testresult ASC
ROWS Fetched: 0 [incomplete]
Changed: 0
> query.1.res <- dbFetch(query.1, n = -1)
> query.1.res
  make testresult count
1  ALFA ROMEO      P      2
2  ASTON MARTIN   P      1
3    AUDI         F      8
4    AUDI         F     25
5    AUSTIN       P      1
6     BMW        F      3
7     BMW        P     30
8     BMW        PRS     4
9  CHEVROLET      P      2
10 CHRYSLER       P      2
11 CITROEN        F      6
12 CITROEN        P     34
13 CITROEN        PRS     4
14 DAEWOO         F      1
15 DAEWOO         P      1
16 DAIHATSU       F      1
17 DAIHATSU       PRS     2
18 FIAT           F      4
19 FIAT           P     24
20 FIAT           PRS     3
21 FORD           ABA      1
22 FORD           ABR      1
23 FORD           F     44
24 FORD           P     90
25 FORD           PRS     14
26 HONDA          F      7
27 HONDA          P     23
28 HONDA          PRS     4
29 HYUNDAI        F      4
30 HYUNDAI        P     10
31 ISUZU          P      3
32 JAGUAR          F      3
33 JAGUAR          P      3
34 JAGUAR          PRS     1
35 JEEP           F      1

```

Environment History

Global Environment

Data

- query.1.res 121 obs. of 3 variables

Values

- con Formal class PgConnection
- query.1 Formal class PgResult

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct [stats]

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```

## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rpnchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, ilev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
arima0.diag(...)
plot.mts(x, plot.type = c("multiple", "single"), panel = lines,
        log = "", col = par("col"), bg = NA, pch = par("pch"),

```

8.Second query

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

```

Console
> dbClearResult(query.1)
> dbClearResult(query.1)
Warning message:
Expired, result set already closed
> query.2 <- dbSendQuery(con, "SELECT make, testresult,
+ COUNT(*) AS count,
+ AVG(testmileage) AS avg_miles
+ FROM mot
+ WHERE testresult = 'f'
+ GROUP BY make, testresult
+ ORDER BY avg_miles DESC")
> query.2.res <- dbFetch(query.2, n = -1)
> query.2.res
  make testresult count avg_miles
1  VOLKSWAGEN      F     11 125894.55
2    SUBARU       F      1 123960.00
3     SEAT        F      3 111549.33
4     AUDI        F      8 109310.25
5     VOLVO       F     44 105580.50
6     SKODA       F     23 102695.00
7  MERCEDES-BENZ   F     23  92886.00
8     FORD        F     44  90368.91
9  MITSUBISHI     F     44  86927.75
10    FIAT        F     44  84592.25
11  MERCEDES      F     63  83524.17
12     BMW        F     32  82034.00
13 VAUXHALL       F     36  81040.69
14     JEEP       F     17  79420.00
15    HONDA       F     23  79343.71
16  PEUGEOT       F     15  78651.80
17  TALBOT        F     17  77297.00
18    MAZDA       F     47  75726.25
19    NISSAN       F     87  74924.50
20     LDV        F     17  74543.00
21  LAND ROVER    F     77  72702.43
22    JAGUAR      F     33  69035.33
23 UNCLASSIFIED   F     46  68824.75
24    TOYOTA      F     56  68809.80
25     SAAB       F     26  64889.00
26     KIA        F     19  64192.06
27  RENAULT       F     19  64169.26
28 CITROEN        F     62  62609.17
29    ROVER       F     25  57328.00
30     MINI       F     16  56674.00
31  HYUNDAI       F     45  54353.75
32    LOTUS       F     17  47051.00

```

Environment History

Global Environment

Data

- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables

Values

- con Formal class PgConnection
- query.1 Formal class PgResult
- query.2 Formal class PgResult

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R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct [stats]

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```

## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rpnchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, ilev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
arima0.diag(...)
plot.mts(x, plot.type = c("multiple", "single"), panel = lines,
        log = "", col = par("col"), bg = NA, pch = par("pch"),

```

9: Install RpostgreSQL

RStudio

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Go to file/function Addins

Console

```
8      FORD      F 44 90368.91
9    MITSUBISHI F 4 86927.75
10     FIAT      F 4 84592.25
11  MERCEDES    F 6 83524.17
12     BMW      F 3 82034.00
13  VAUXHALL    F 36 81040.69
14     JEEP      F 1 79420.00
15    HONDA     F 7 79343.71
16  PEUGEOT     F 15 78651.80
17    TALBOT    F 1 77297.00
18    MAZDA     F 4 75726.25
19    NISSAN     F 8 74924.50
20     LDV      F 1 74543.00
21  LAND ROVER F 7 72702.43
22    JAGUAR    F 3 69035.33
23 UNCLASSIFIED F 4 68824.75
24    TOYOTA    F 5 68809.80
25    SAAB      F 2 64889.00
26     KIA      F 3 64192.00
27  RENAULT     F 19 64169.26
28  CITROEN     F 6 62609.17
29    ROVER     F 2 57328.00
30    MINI      F 1 56674.00
31  HYUNDAI     F 4 54553.75
32    LOTUS     F 1 47051.00
33     MG       F 1 39506.00
34  DAEWOO      F 1 34943.00
35  TRIUMPH     F 1 34188.00
36    LEXUS     F 1 30756.00
37  PIAGGIO     F 1 24432.00
38  DAIHATSU    F 1 0.00

> dbClearResult(query.2)
> dbDisconnect(con)
> install.packages("RPostgreSQL")
Installing package into 'C:/Users/jyots/Documents/R/win-library/3.4'
(as 'lib' is unspecified)
trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/RPostgreSQL_0.6-2.zip'
Content type 'application/zip' length 438635 bytes (428 KB)
downloaded 428 KB

package 'RPostgreSQL' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
  C:/Users/jyots/AppData/Local/Temp/RtmpiqfCH/downloaded_packages
>
```

Environment History

Global Environment

Data

- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables

Values

- con Formal class PgConnection
- query.1 Formal class PgResult
- query.2 Formal class PgResult

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct (stats)

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```
## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rpnchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, ilev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
arima0.diag(...)
```

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins

Console

```
trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/assertthat_0.2.0.zip'
Content type 'application/zip' length 43913 bytes (42 KB)
downloaded 42 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/bindrcpp_0.2.zip'
Content type 'application/zip' length 637468 bytes (622 KB)
downloaded 622 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/glue_1.2.0.zip'
Content type 'application/zip' length 75967 bytes (74 KB)
downloaded 74 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/magrittr_1.5.zip'
Content type 'application/zip' length 155565 bytes (151 KB)
downloaded 151 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/pkgconfig_2.0.1.zip'
Content type 'application/zip' length 20061 bytes (19 KB)
downloaded 19 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/rlang_0.1.4.zip'
Content type 'application/zip' length 463830 bytes (452 KB)
downloaded 452 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/tibble_1.3.4.zip'
Content type 'application/zip' length 676797 bytes (660 KB)
downloaded 660 KB

trying URL 'https://cran.rstudio.com/bin/windows/contrib/3.4/dplyr_0.7.4.zip'
Content type 'application/zip' length 2886689 bytes (2.8 MB)
downloaded 2.8 MB

package 'bindr' successfully unpacked and MD5 sums checked
package 'assertthat' successfully unpacked and MD5 sums checked
package 'bindrcpp' successfully unpacked and MD5 sums checked
package 'glue' successfully unpacked and MD5 sums checked
package 'magrittr' successfully unpacked and MD5 sums checked
package 'pkgconfig' successfully unpacked and MD5 sums checked
package 'rlang' successfully unpacked and MD5 sums checked
package 'tibble' successfully unpacked and MD5 sums checked
package 'dplyr' successfully unpacked and MD5 sums checked

The downloaded binary packages are in
  C:/Users/jyots/AppData/Local/Temp/RtmpiqfCH/downloaded_packages
>
```

Environment History

Global Environment

Data

- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables

Values

- con Formal class PgConnection
- query.1 Formal class PgResult
- query.2 Formal class PgResult

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct (stats)

Defunct Functions in Package stats

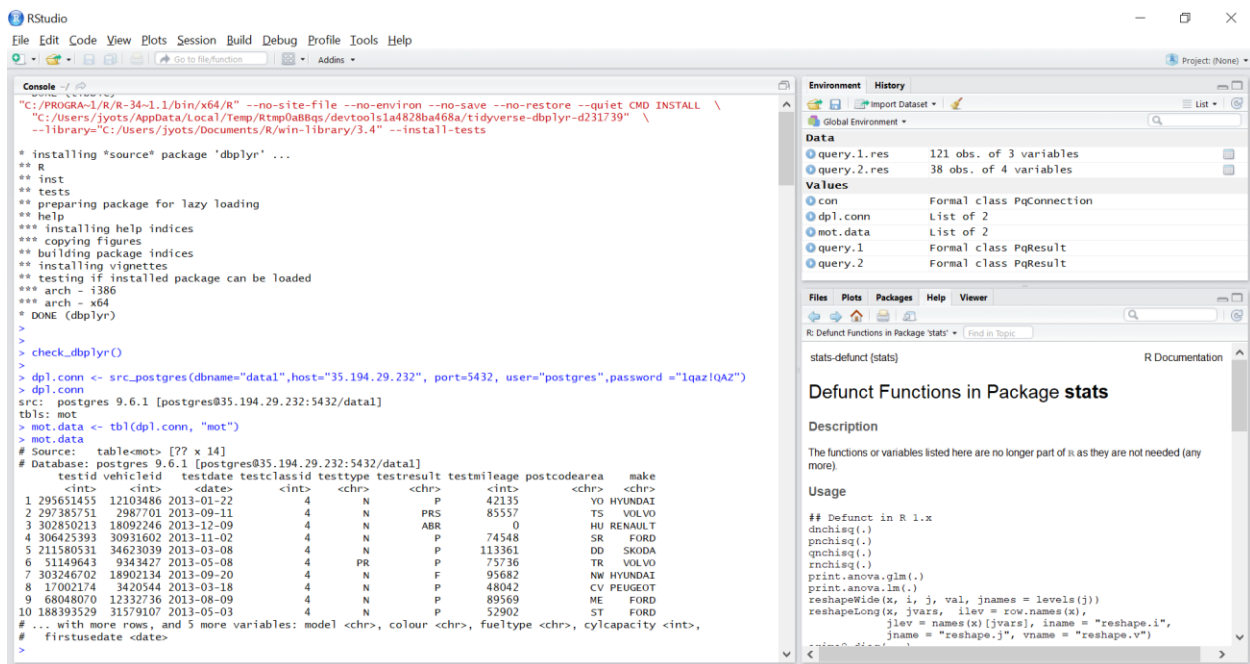
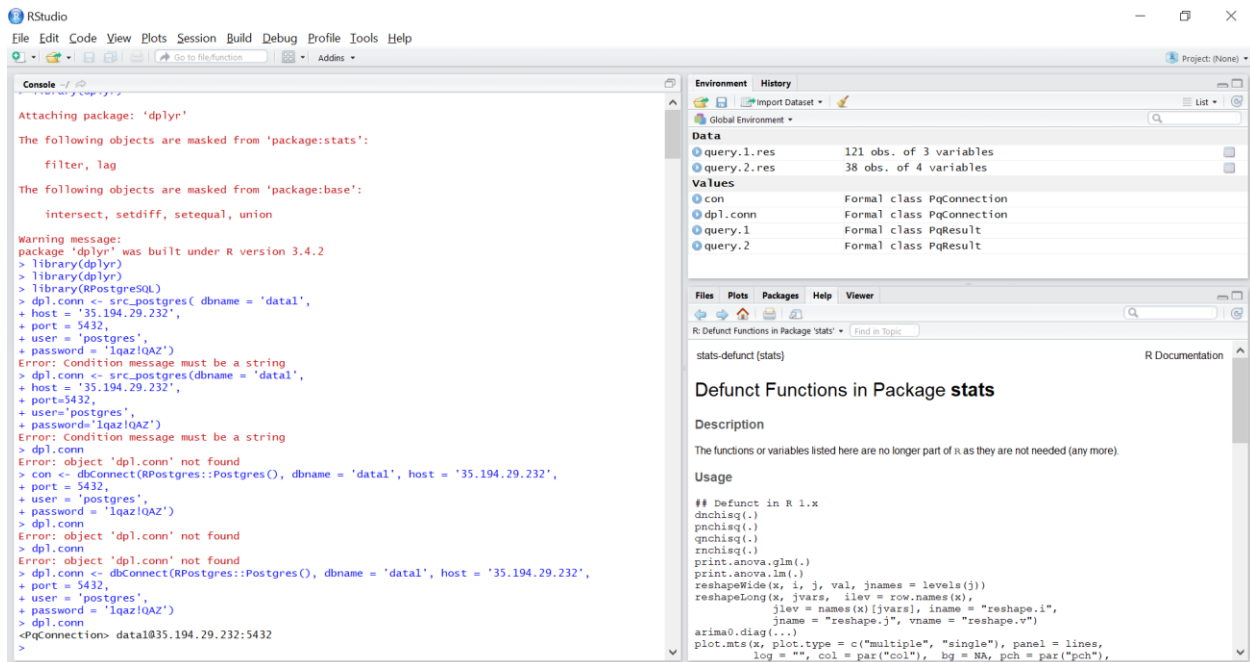
Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```
## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rpnchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, ilev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
arima0.diag(...)
```

Connection -dpl



Error while using glimpse : Error in if (width[i] <= max_width[i]) next :
missing value where TRUE/FALSE needed

RStudio interface showing a console window with R code and output, and an environment window displaying the current environment.

Console:

```
> glimpse
missing value where TRUE/FALSE needed
> glimpse
function (x, width = NULL, ...)
{
  UseMethod("glimpse")
}
<environment: namespace:tibble>
> glimpse(mot.data, width=25)
Observations: NA
Variables: 14
Error in if (width[i] <= max_width[i]) next :
missing value where TRUE/FALSE needed
> tbl_sql()
Error in tbl_sql(): could not find function "tbl_sql"
> tbl_sql(mot.data)
Error in tbl_sql(mot.data) : could not find function "tbl_sql"
> glimpse.tbl_sql(mot.data)
Error in glimpse.tbl_sql(mot.data) :
could not find function "glimpse.tbl_sql"
> library(dplyr)
>
> mot.data <- tbl(dpl.conn, "mot")
> mot.data
# Source:   table<mot> [?? x 14]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
  testid vehicleid  testdate testclassid testtype testresult testmileage postcodearea  make
    <int>      <int>      <date>      <int>      <chr>      <chr>      <int>      <chr>      <chr>
1 295651455 12103486 2013-01-22      4      N      P      42135      YO  HYUNDAI
2 297385751 2987701 2013-09-11      4      N      PRS     85557      TS  VOLVO
3 302850213 18092246 2013-12-09      4      N      ABR       0      HU  RENAULT
4 306425393 30931602 2013-11-02      4      N      P      74548      SR  FORD
5 211580531 34623039 2013-03-08      4      N      P     113361      DD  SKODA
6 51149643  9343427 2013-05-08      4      PR      P      75736      TR  VOLVO
7 303246702 18902134 2013-09-20      4      N      F     95682      NW  HYUNDAI
8 17002174  3420544 2013-03-18      4      N      P     48042      CV  PEUGEOT
9 68048070 12332736 2013-08-09      4      N      P     89569      ME  FORD
10 188393529 31579107 2013-05-03      4      N      P     52902      ST  FORD
# ... with more rows, and 5 more variables: model <chr>, colour <chr>, fuelttype <chr>, cylcapacity <int>,
# firstusedate <date>
> glimpse(mot.data)
Observations: NA
Variables: 14
Error in if (width[i] <= max_width[i]) next :
missing value where TRUE/FALSE needed
> |
```

Environment:

Object	Class
query.1.res	tbl_df, tbl, data.frame
query.2.res	tbl_df, tbl, data.frame
con	Formal class 'PgConnection'
dpl.conn	list of 2
mot.data	list of 2
query.1	Formal class 'PgResult'
query.2	Formal class 'PgResult'

RStudio interface showing a console window with R code and output, and an environment window displaying the current environment.

Console:

```
> mot.data <- tbl(dpl.conn, "mot")
> mot.data
# Source:   table<mot> [?? x 14]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
  testid vehicleid  testdate testclassid testtype testresult testmileage postcodearea  make
    <int>      <int>      <date>      <int>      <chr>      <chr>      <int>      <chr>      <chr>
1 295651455 12103486 2013-01-22      4      N      P      42135      YO  HYUNDAI
2 297385751 2987701 2013-09-11      4      N      PRS     85557      TS  VOLVO
3 302850213 18092246 2013-12-09      4      N      ABR       0      HU  RENAULT
4 306425393 30931602 2013-11-02      4      N      P      74548      SR  FORD
5 211580531 34623039 2013-03-08      4      N      P     113361      DD  SKODA
6 51149643  9343427 2013-05-08      4      PR      P      75736      TR  VOLVO
7 303246702 18902134 2013-09-20      4      N      F     95682      NW  HYUNDAI
8 17002174  3420544 2013-03-18      4      N      P     48042      CV  PEUGEOT
9 68048070 12332736 2013-08-09      4      N      P     89569      ME  FORD
10 188393529 31579107 2013-05-03      4      N      P     52902      ST  FORD
# ... with more rows, and 5 more variables: model <chr>, colour <chr>, fuelttype <chr>, cylcapacity <int>,
# firstusedate <date>
> glimpse(mot.data)
Observations: NA
Variables: 14
Error in if (width[i] <= max_width[i]) next :
missing value where TRUE/FALSE needed
> explain(avg.mileage)
Error in explain(avg.mileage) : object 'avg.mileage' not found
> mot.failed <- filter(mot.data, testresult == "F")
> mot.failed
# Source:   lazy query [?? x 14]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
  testid vehicleid  testdate testclassid testtype testresult testmileage postcodearea  make
    <int>      <int>      <date>      <int>      <chr>      <chr>      <int>      <chr>      <chr>
1 303246702 18902134 2013-09-20      4      N      F     95682      NW  HYUNDAI
2 59387545 10822249 2013-04-26      4      N      F     52727      HG  FORD
3 320181 106195 2013-02-11      4      N      F     82910      TF  MERCEDES
4 307090812 25673696 2013-11-14      4      N      F    128483      KI  FORD
5 185589215 31186307 2013-06-17      4      N      F     83428      NG  FORD
6 310147348 40494827 2013-09-06      4      N      F     68223      B  FORD
7 297419899 3027358 2013-09-25      4      N      F    102520      NR  FORD
8 164200812 28258322 2013-03-12      4      N      F     59972      FK  ROVER
9 98155343 17731364 2013-04-20      4      N      F     43601      FY  KIA
10 213246214 34848374 2013-02-06      4      N      F    153911      WS  VAUXHALL
# ... with more rows, and 5 more variables: model <chr>, colour <chr>, fuelttype <chr>, cylcapacity <int>,
# firstusedate <date>
>
```

Environment:

Object	Class
query.1.res	tbl_df, tbl, data.frame
query.2.res	tbl_df, tbl, data.frame
con	Formal class 'PgConnection'
dpl.conn	list of 2
mot.data	list of 2
mot.failed	list of 2
query.1	Formal class 'PgResult'
query.2	Formal class 'PgResult'

RStudio

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```
> by.make <- group_by(mot.failed, make)
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50), desc(avg))
> avg.mileage
# Source:   lazy query [?? x 3]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
# Ordered by: desc(avg)
Warning message:
Missing values are always removed in SQL.
Use 'AVG(x, na.rm = TRUE)' to silence this warning
> avg
Error: object 'avg' not found
> AVG(x, na.rm = TRUE)
Error in AVG(x, na.rm = TRUE) : could not find function "AVG"
>
> AVG(avg.mileage, na.rm = TRUE)
Error in AVG(avg.mileage, na.rm = TRUE) : could not find function "AVG"
> avg.mileage <- arrange(filter(avg.mileage, count >= 50), desc(avg), na.rm=TRUE)
> avg.mileage
# Source:   lazy query [?? x 3]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
# Ordered by: desc(avg), desc(avg), TRUE
Warning message:
Missing values are always removed in SQL.
Use 'AVG(x, na.rm = TRUE)' to silence this warning
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage, na.rm=TRUE))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50, na.rm=TRUE), desc(avg, na.rm=TRUE))
> avg.mileage
Error in desc(avg, na.rm = TRUE) : unused argument (na.rm = TRUE)
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage, na.rm=TRUE))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50, na.rm=TRUE), desc(avg))
> avg.mileage
Error in postgresqlExecStatement(conn, statement, ...):
RS-DBI driver: (could not Retrieve the result : ERROR: syntax error at or near "AS"
LINE 7: WHERE ("count" >= 50.0) AND (TRUE AS "na.rm"))
                                ^
)
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage, na.rm=TRUE))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50), desc(avg))
> avg.mileage
# Source:   lazy query [?? x 3]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
# Ordered by: desc(avg)
```

Environment History

Global Environment

Data

- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables

Values

- avg.mileage List of 2
- by.make List of 2
- con Formal class 'PgConnection'
- dpl.conn List of 2
- mot.data List of 2
- mot.failed List of 2

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct [stats] R Documentation

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```
## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rncchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, illev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
```

RStudio

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Go to file/function Addins

```
# Source:   lazy query [?? x 3]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
# Ordered by: desc(avg), desc(avg), TRUE
Warning message:
Missing values are always removed in SQL.
Use 'AVG(x, na.rm = TRUE)' to silence this warning
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage, na.rm=TRUE))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50, na.rm=TRUE), desc(avg, na.rm=TRUE))
> avg.mileage
Error in desc(avg, na.rm = TRUE) : unused argument (na.rm = TRUE)
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage, na.rm=TRUE))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50, na.rm=TRUE), desc(avg))
> avg.mileage
Error in postgresqlExecStatement(conn, statement, ...):
RS-DBI driver: (could not Retrieve the result : ERROR: syntax error at or near "AS"
LINE 7: WHERE ("count" >= 50.0) AND (TRUE AS "na.rm"))
                                ^
)
> avg.mileage <- summarise(by.make, count = n(), avg = mean(testmileage, na.rm=TRUE))
> avg.mileage <- arrange(filter(avg.mileage, count >= 50), desc(avg))
> avg.mileage
# Source:   lazy query [?? x 3]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
# Ordered by: desc(avg)
> explain(avg.mileage)
<SQL>
SELECT *
FROM (SELECT "make", COUNT(*) AS "count", AVG("testmileage") AS "avg"
FROM (SELECT *
FROM "mot"
WHERE ("testresult" = 'F')) "phoyrdkiac"
GROUP BY "make")) "zolfagslwl"
WHERE ("count" >= 50.0)
ORDER BY "avg" DESC

<PLAN>
Sort (cost=31.03..31.17 rows=56 width=47)
Sort Key: (avg(mot.testmileage)) DESC
-> HashAggregate (cost=28.14..28.84 rows=56 width=47)
Group Key: mot.make
Filter: ((count(*)::numeric >= 50.0)
-> Seq Scan on mot (cost=0.00..25.86 rows=228 width=11)
Filter: ((testresult)::text = 'F')::text
```

Environment History

Global Environment

Data

- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables

Values

- avg.mileage List of 2
- by.make List of 2
- con Formal class 'PgConnection'
- dpl.conn List of 2
- mot.data List of 2
- mot.failed List of 2

Files Plots Packages Help Viewer

R: Defunct Functions in Package 'stats' Find in Topic

stats-defunct [stats] R Documentation

Defunct Functions in Package stats

Description

The functions or variables listed here are no longer part of R as they are not needed (any more).

Usage

```
## Defunct in R 1.x
dnchisq(.)
pnchisq(.)
qnchisq(.)
rncchisq(.)
print.anova.glm(.)
print.anova.lm(.)
reshapeWide(x, i, j, val, jnames = levels(j))
reshapeLong(x, jvars, illev = row.names(x),
            jlev = names(x)[jvars], iname = "reshape.i",
            jname = "reshape.j", vname = "reshape.v")
```


RStudio interface showing a console window with SQL and R code, and an environment window displaying the results of the code execution.

Console:

```
> explain(avg.mileage)
<SQL>
SELECT *
FROM (SELECT "make", COUNT(*) AS "count", AVG("testmileage") AS "avg"
FROM (SELECT *
FROM "mot"
WHERE ("testresult" = 'F')) "pboyrdkiac"
GROUP BY "make") "zo1faqs1wi"
WHERE ("count" >= 50.0)
ORDER BY "avg" DESC

<PLAN>
Sort (cost=31.03..31.17 rows=56 width=47)
  Sort Key: (avg(mot.testmileage)) DESC
  -> HashAggregate (cost=28.14..28.84 rows=56 width=47)
    Group Key: mot.make
    Filter: ((count(*)::numeric >= 50.0))
    -> Seq Scan on mot (cost=0.00..25.86 rows=228 width=11)
      Filter: (testresult::text = 'F'::text)

> mileage.df <- collect(avg.mileage)
> mileage.df
Error: object 'mileage.df' not found
> mileage.df
# A tibble: 0 x 0
> ot.pf <- filter(mot.data, testresult == "F" | testresult == "P")
> mot.pf <- filter(mot.data, testresult == "F" | testresult == "P")
> mot.pf
# Source: lazy query [?? x 14]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
  testid vehicleid testdate testclassid testtype testresult testmileage postcodearea make
  <int> <int> <date> <int> <chr> <chr> <int> <chr> <chr>
1 295651455 12103486 2013-01-22 4 N P 42135 YO HYUNDAI
2 306425393 30931602 2013-11-02 4 N P 74548 SR FORD
3 211580531 34623039 2013-03-08 4 N P 113361 DO SKODA
4 51149643 9343427 2013-05-08 4 PR P 75736 TR VOLVO
5 303246702 18902134 2013-09-20 4 N F 95682 NW HYUNDAI
6 17002174 3420544 2013-03-18 4 N P 48042 CV PEUGEOT
7 68048070 12332736 2013-08-09 4 N P 89569 ME FORD
8 188393529 31579107 2013-05-03 4 N P 52902 ST FORD
9 59387545 10822249 2013-04-26 4 N F 52727 HG FORD
10 302789857 18015140 2013-09-19 4 N P 64254 PE TOYOTA
# ... with more rows, and 5 more variables: model <chr>, colour <chr>, fuelttype <chr>, cylcapacity <int>,
# firstusedate <date>
> |
```

Environment:

- Global Environment
- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables
- Values
 - avg.mileage List of 2
 - by.make List of 2
 - con Formal class PgConnection
 - dp1.conn List of 2
 - mot.data List of 2
 - mot.failed List of 2
 - mot.pf List of 2

RStudio interface showing a console window with SQL and R code, and an environment window displaying the results of the code execution.

Console:

```
Filter: ((count(*)::numeric >= 50.0))
-> Seq Scan on mot (cost=0.00..25.86 rows=228 width=11)
  Filter: (testresult::text = 'F'::text)

> mileage.df <- collect(avg.mileage)
> mileage.df
Error: object 'mileage.df' not found
> mileage.df
# A tibble: 0 x 0
> ot.pf <- filter(mot.data, testresult == "F" | testresult == "P")
> mot.pf <- filter(mot.data, testresult == "F" | testresult == "P")
> mot.pf
# Source: lazy query [?? x 14]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
  testid vehicleid testdate testclassid testtype testresult testmileage postcodearea make
  <int> <int> <date> <int> <chr> <chr> <int> <chr> <chr>
1 295651455 12103486 2013-01-22 4 N P 42135 YO HYUNDAI
2 306425393 30931602 2013-11-02 4 N P 74548 SR FORD
3 211580531 34623039 2013-03-08 4 N P 113361 DO SKODA
4 51149643 9343427 2013-05-08 4 PR P 75736 TR VOLVO
5 303246702 18902134 2013-09-20 4 N F 95682 NW HYUNDAI
6 17002174 3420544 2013-03-18 4 N P 48042 CV PEUGEOT
7 68048070 12332736 2013-08-09 4 N P 89569 ME FORD
8 188393529 31579107 2013-05-03 4 N P 52902 ST FORD
9 59387545 10822249 2013-04-26 4 N F 52727 HG FORD
10 302789857 18015140 2013-09-19 4 N P 64254 PE TOYOTA
# ... with more rows, and 5 more variables: model <chr>, colour <chr>, fuelttype <chr>, cylcapacity <int>,
# firstusedate <date>
> age <- tbl(dp1.conn, sql("SELECT testid, vehicleid, testdate::date -firstusedate::date as age from mot"))
> age
# Source: SQL [?? x 3]
# Database: postgres 9.6.1 [postgres@35.194.29.232:5432/data1]
  testid vehicleid age
  <int> <int> <int>
1 295651455 12103486 2692
2 297385751 2987701 2903
3 302850213 18092246 2170
4 306425393 30931602 4346
5 211580531 34623039 3812
6 51149643 9343427 3050
7 303246702 18902134 2428
8 17002174 3420544 2055
9 68048070 12332736 3444
10 188393529 31579107 3076
# ... with more rows
> |
```

Environment:

- Global Environment
- query.1.res 121 obs. of 3 variables
- query.2.res 38 obs. of 4 variables
- Values
 - age List of 2
 - avg.mileage List of 2
 - by.make List of 2
 - con Formal class PgConnection
 - dp1.conn List of 2
 - mot.data List of 2
 - mot.failed List of 2