

Package ‘condusco’

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Type Package

Title Query-Driven Pipeline Execution and Query Templates

Version 0.1.0

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Description Runs a function iteratively over each row of either a dataframe or the results of a query. Use the 'BigQuery' and 'DBI' wrappers to iteratively pass each row of query results to a function. If a field contains a 'JSON' string, it will be converted to an object. This is helpful for queries that return 'JSON' strings that represent objects. These fields can then be treated as objects by the pipeline.

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URL <https://github.com/ras44/condusco>

BugReports <https://github.com/ras44/condusco/issues>

Encoding UTF-8

LazyData true

Suggests knitr, rmarkdown, whisker, testthat, RSQLite

VignetteBuilder knitr

Depends R (>= 3.3.2), jsonlite, assertthat, bigquery, DBI

RoxygenNote 6.0.1.9000

NeedsCompilation no

Repository CRAN

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run_pipeline	<i>Runs user-provided pipeline for each row of arguments in parameters, converting any JSON strings to objects</i>
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Description

Runs user-provided pipeline for each row of arguments in parameters, converting any JSON strings to objects

Usage

```
run_pipeline(pipeline, parameters)
```

Arguments

pipeline	User-provided function with one argument, a dataframe
parameters	An dataframe of fields to convert to json

Examples

```
library(whisker)

run_pipeline(
  function(params){
    query <- "SELECT result FROM {{table_prefix}}_results;"
    whisker.render(query,params)
  },
  data.frame(
    table_prefix = c('batman', 'robin')
  )
)
```

run_pipeline_dbi	<i>A wrapper for running pipelines with a DBI connection invocation query</i>
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Description

A wrapper for running pipelines with a DBI connection invocation query

Usage

```
run_pipeline_dbi(pipeline, query, con, ...)
```

Arguments

pipeline	User-provided function with one argument, one row of query results
query	A query to execute via the DBI connection
con	The DBI connection
...	Additional arguments passed to dbSendQuery() and dbFetch()

Examples

```
## Not run:
library(whisker)
library(RSQLite)

con <- dbConnect(RSQLite::SQLite(), ":memory:")

dbWriteTable(con, "mtcars", mtcars)

#for each cylinder count, count the number of top 5 hps it has
pipeline <- function(params){

  query <- "SELECT
    {{#list}}
    SUM(CASE WHEN hp='{{val}}' THEN 1 ELSE 0 END )as n_hp_{{val}},
  {{/list}}
  cyl
  FROM mtcars
  GROUP BY cyl
  ;"

  dbGetQuery(
    con,
    whisker.render(query,params)
  )
}

#pass the top 5 most common hps as val params
run_pipeline_dbi(
  pipeline,
  '
SELECT "[" || GROUP_CONCAT("{ ""val"": "" || hp || "" }") || "]" AS list
FROM (
  SELECT
    CAST(hp as INTEGER) as HP,
    count(hp) as cnt
  FROM mtcars
  GROUP BY hp
  ORDER BY cnt DESC
  LIMIT 5
)
```

```

    ',
    con
  )

dbDisconnect(con)

## End(Not run)

```

run_pipeline_gbq *A wrapper for running pipelines with a BigQuery invocation query*

Description

A wrapper for running pipelines with a BigQuery invocation query

Usage

```
run_pipeline_gbq(pipeline, query, project, ...)
```

Arguments

pipeline	User-provided function with one argument, one row of query results
query	A query to execute in Google BigQuery
project	The Google BigQuery project to bill
...	Additional arguments passed to query_exec()

Examples

```

## Not run:
library(whisker)

#Set GBQ project
project <- ''

#Set the following options for GBQ authentication on a cloud instance
options("httr_oauth_cache" = "~/httr-oauth")
options(httr_oob_default=TRUE)

#Run the below query to authenticate and write credentials to .httr-oauth file
query_exec("SELECT 'foo' as bar",project=project);

pipeline <- function(params){

  query <- "
  SELECT
    {{#list}}
    SUM(CASE WHEN author.name = '{{name}}' THEN 1 ELSE 0 END) as n_{{name_clean}},

```

```

        {/list}}
        repo_name
    FROM `bigquery-public-data.github_repos.sample_commits`
    GROUP BY repo_name
    ;"

res <- query_exec(
  whisker.render(query,params),
  project=project,
  use_legacy_sql = FALSE
);

print(res)
}

run_pipeline_gbq(pipeline, "
SELECT CONCAT('[',
STRING_AGG(
  CONCAT('{\"name\":\",name,\"',
    , '\"name_clean\":\", REGEXP_REPLACE(name, r'^[:alpha:]', ''),'\}')'
)
),
']') as list
FROM (
  SELECT author.name,
    COUNT(commit) n_commits
  FROM `bigquery-public-data.github_repos.sample_commits`
  GROUP BY 1
  ORDER BY 2 DESC
  LIMIT 10
)
",
project,
use_legacy_sql = FALSE
)

## End(Not run)

```

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