

# Package: glitter (via r-universe)

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**Type** Package

**Title** glitter makes SPARQL

**Version** 0.2.999

**Description** This package aims at writing and sending SPARQL queries.  
It makes the exploration and use of Linked Open Data (Wikidata in particular) easier for those who do not know SPARQL.

**License** GPL-2

**URL** <https://lvaudor.github.io/glitter/>,  
<https://github.com/lvaudor/glitter>

**BugReports** <https://github.com/lvaudor/glitter/issues>

**Depends** R (>= 3.5.0)

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---

set_functions	<i>Correspondence between R-DSL functions and SPARQL functions/operators.</i>
---------------	---

---

### Description

Correspondence between R-DSL functions and SPARQL functions/operators.

### Usage

set\_functions

term\_functions

misc\_functions

string\_functions

numeric\_functions

datetime\_functions

operators

all\_correspondences

### Format

A data frame.

**R** R-DSL function

**SPARQL** SPARQL function

**args** list-column with R vs SPARQL argument names

An object of class tbl\_df (inherits from tbl, data.frame) with 21 rows and 2 columns.

An object of class tbl\_df (inherits from tbl, data.frame) with 9 rows and 2 columns.

An object of class tbl\_df (inherits from tbl, data.frame) with 12 rows and 3 columns.

An object of class tbl\_df (inherits from tbl, data.frame) with 4 rows and 2 columns.

An object of class tbl\_df (inherits from tbl, data.frame) with 7 rows and 2 columns.

An object of class tbl\_df (inherits from tbl, data.frame) with 6 rows and 2 columns.

An object of class tbl\_df (inherits from tbl, data.frame) with 66 rows and 3 columns.

---

spq

*SPARQL escaping.*

---

### Description

Like `dbplyr::spq()`.

### Usage

`spq(...)`

`is.spq(x)`

`as.spq(x)`

### Arguments

`...` Character vectors that will be combined into a single SPARQL expression.

`x` Object to coerce

spq\_add

*Add a triple pattern statement to a query***Description**

Add a triple pattern statement to a query

**Usage**

```
spq_add(
  .query = NULL,
  .triple_pattern = NULL,
  .subject = NULL,
  .verb = NULL,
  .object = NULL,
  .prefixes = NULL,
  .required = TRUE,
  .label = NA,
  .within_box = c(NA, NA),
  .within_distance = c(NA, NA),
  .filter = NULL,
  .sibling_triple_pattern = NA
)
```

**Arguments**

<code>.query</code>	query
<code>.triple_pattern</code>	the triple pattern statement (replaces arguments subject verb and object)
<code>.subject</code>	an anonymous variable (for instance, and by default, "?subject") or item (for instance "wd:Q456")
<code>.verb</code>	the property (for instance "wdt:P190")
<code>.object</code>	an anonymous variable (for instance, and by default, "?object") or item (for instance "wd:Q456")
<code>.prefixes</code>	Custom prefixes
<code>.required</code>	whether the existence of a value for the triple is required or not (defaults to TRUE). If set to FALSE, then other triples in the query are returned even if this particular triple is missing)
<code>.label</code>	<b>[Deprecated]</b> See <a href="#">spq_label()</a> .
<code>.within_box</code>	if provided, rectangular bounding box for the triple query. Provided as list(southwest=c(long=...,lat=...),north=c(long=...,lat=...))
<code>.within_distance</code>	if provided, circular bounding box for the triple query. Provided as list(center=c(long=...,lat=...),radius=...), with radius in kilometers. The center can also be provided as a variable (for instance, "?location") for the center coordinates to be retrieved directly from the query.

.filter Filter for the triple. Only use this with .required=FALSE  
 .sibling\_triple\_pattern Triple this triple is to be grouped with, especially (only?) useful if the sibling triple is optional.

### Details

The arguments .subject, .verb, .object are most useful for programmatic usage, they are actually used within glitter code itself.

### Examples

```
# find the cities
spq_init() %>%
  spq_add("?city wdt:P31/wdt:P279* wd:Q486972") %>%
  spq_label(city) %>%
  spq_mutate(coords = wdt::P625(city),
             .within_distance=list(center=c(long=4.84,lat=45.76),
                                     radius=5)) %>%
  spq_perform()

# find the individuals of the species
spq_init() %>%
  spq_add("?mayor wdt:P31 ?species") %>%
  # dog, cat or chicken
  spq_set(species = c('wd:Q144', 'wd:Q146', 'wd:Q780')) %>%
  # who occupy the function
  spq_add("?mayor p:P39 ?node") %>%
  # of mayor
  spq_add("?node ps:P39 wd:Q30185") %>%
  # of some places
  spq_add("?node pq:P642 ?place") %>%
  spq_perform()
```

---

 spq\_arrange

*Arrange results by variable value*


---

### Description

Arrange results by variable value

### Usage

```
spq_arrange(.query, ..., .replace = FALSE)
```

**Arguments**

.query	a list with elements of the query
...	variables by which to arrange (or SPARQL strings escaped with spq(), or strings, see examples)
.replace	whether to replace the pre-existing arranging

**Value**

A query object

**Examples**

```
# descending length, ascending item_label, "R" syntax
spq_init() %>%
  spq_add("?item wdt:P31/wdt:P279* wd:Q4022") %>%
  spq_label(item) %>%
  spq_add("?item wdt:P2043 ?length") %>%
  spq_add("?item wdt:P625 ?location") %>%
  spq_arrange(desc(length), item_label) %>%
  spq_head(50)

# descending length, ascending item_label,
# "R" syntax with quotes e.g. for a loop
variable = "length"
spq_init() %>%
  spq_add("?item wdt:P31/wdt:P279* wd:Q4022") %>%
  spq_label(item) %>%
  spq_add("?item wdt:P2043 ?length") %>%
  spq_add("?item wdt:P625 ?location") %>%
  spq_arrange(sprintf("desc(%s)", variable), item_label) %>%
  spq_head(50)

# descending length, ascending item_label, SPARQL syntax
spq_init() %>%
  spq_add("?item wdt:P31/wdt:P279* wd:Q4022") %>%
  spq_label(item) %>%
  spq_add("?item wdt:P2043 ?length") %>%
  spq_add("?item wdt:P625 ?location") %>%
  spq_arrange(spq("DESC(?length) ?item_label")) %>%
  spq_head(50)

# descending xsd:integer(mort), R syntax
spq_init() %>%
  spq_add("?oeuvre dct:creator ?auteur") %>%
  spq_add("?auteur bio:death ?mort") %>%
  spq_add("?auteur foaf:familyName ?nom") %>%
  spq_filter(as.integer(mort) < as.integer("1924")) %>%
  spq_group_by(auteur, nom, mort) %>%
  spq_arrange(desc(as.integer(mort)))

# descending as.integer(mort), SPARQL syntax
```

```

spq_init() %>%
  spq_add("?oeuvre dcterms:creator ?auteur") %>%
  spq_add("?auteur bio:death ?mort") %>%
  spq_add("?auteur foaf:familyName ?nom") %>%
  spq_filter(as.integer(mort) < as.integer("1924")) %>%
  spq_group_by(auteur, nom, mort) %>%
  spq_arrange(spq("DESC(xsd:integer(?mort))"))

# Usage of the .replace argument
# .replace = FALSE (default)
spq_init() %>%
  spq_add("?item wdt:P31/wdt:P279* wd:Q4022") %>%
  spq_label(item) %>%
  spq_add("?item wdt:P2043 ?length") %>%
  spq_add("?item wdt:P625 ?location") %>%
  spq_arrange(desc(length)) %>%
  spq_arrange(location) %>%
  spq_head(50)

# .replace = TRUE
spq_init() %>%
  spq_add("?item wdt:P31/wdt:P279* wd:Q4022") %>%
  spq_label(item) %>%
  spq_add("?item wdt:P2043 ?length") %>%
  spq_add("?item wdt:P625 ?location") %>%
  spq_arrange(desc(length)) %>%
  spq_arrange(location, .replace = TRUE) %>%
  spq_head(50)

# Mixing syntaxes
spq_init() %>%
  spq_add("?item wdt:P31/wdt:P279* wd:Q4022") %>%
  spq_label(item) %>%
  spq_add("?item wdt:P2043 ?length") %>%
  spq_add("?item wdt:P625 ?location") %>%
  spq_arrange(desc(length), spq("?location")) %>%
  spq_head(50)

```

---

spq\_assemble

*Assemble query parts into a proper SPARQL query*


---

## Description

Assemble query parts into a proper SPARQL query

## Usage

```
spq_assemble(.query, strict = TRUE)
```

**Arguments**

.query	a list with elements of the query
strict	whether to perform some linting on the query, and error in case a problem is detected.

**Value**

A query object

**Examples**

```
spq_init() %>%
  spq_add("?city wdt:P31 wd:Q515") %>%
  spq_label(city, .languages = "fr$") %>%
  spq_add("?city wdt:P1082 ?pop") %>%
  spq_assemble() %>%
  cat()
```

---

spq\_control\_request *Create the request control object for spq\_init()*

---

**Description**

Create the request control object for spq\_init()

**Usage**

```
spq_control_request(
  user_agent = getOption("glitter.ua",
    "glitter R package (https://github.com/lvaudor/glitter)"),
  max_tries = getOption("glitter.max_tries", 3L),
  max_seconds = getOption("glitter.max_seconds", 120L),
  timeout = getOption("glitter.timeout", 1000L),
  request_type = c("url", "body-form"),
  rate = NULL,
  realm = NULL
)
```

**Arguments**

user_agent	a string indicating the user agent to send with the query.
max_tries, max_seconds	Cap the maximal number of attempts with max_tries or the total elapsed time from the first request with max_seconds.
timeout	maximum number of seconds to wait (http2::req_timeout()).
request_type	a string indicating how the query should be sent: in the URL (url, default, most common) or as a body form (body-form).



rate	Maximum rate, i.e. maximum number of requests per second. Usually easiest expressed as a fraction, number_of_requests / number_of_seconds, e.g. 15 requests per minute is 15 / 60.
realm	An unique identifier that for throttle pool. If not supplied, defaults to the host-name of the request.

**Value**

A list to be used in `spq_init()`'s `request_control` argument.

**Examples**

```
# Defaults
spq_control_request()
# Tweaking values
spq_control_request(
  user_agent = "Jane Doe https://example.com",
  max_tries = 1L,
  max_seconds = 10L,
  timeout = 10L,
  request_type = "url"
)
```

---

`spq_endpoint_info`      *Create the endpoint info object for `spq_init()`*

---

**Description**

Create the endpoint info object for `spq_init()`

**Usage**

```
spq_endpoint_info(label_property = "rdfs:prefLabel")
```

**Arguments**

`label_property` Property used by the endpoint for labelling.

**Value**

A list to be used in `spq_init()`'s `endpoint_info` argument.

**Examples**

```
spq_endpoint_info(label_property = "skos:preflabel")
```

---

 spq\_filter

*Filters results by adding conditions*


---

### Description

Filters results by adding conditions

### Usage

```
spq_filter(
  .query = NULL,
  ...,
  .label = NA,
  .within_box = c(NA, NA),
  .within_distance = c(NA, NA)
)
```

### Arguments

<code>.query</code>	a list with elements of the query
<code>...</code>	variables by which to arrange (or SPARQL strings escaped with <code>spq()</code> , or strings, see examples)
<code>.label</code>	<b>[Deprecated]</b> See <code>spq_label()</code> .
<code>.within_box</code>	if provided, rectangular bounding box for the triple query. Provided as <code>list(southwest=c(long=...,lat=...),northwest=c(long=...,lat=...),southeast=c(long=...,lat=...),southern=c(long=...,lat=...))</code>
<code>.within_distance</code>	if provided, circular bounding box for the triple query. Provided as <code>list(center=c(long=...,lat=...),radius=...)</code> , with radius in kilometers. The center can also be provided as a variable (for instance, <code>"?location"</code> ) for the center coordinates to be retrieved directly from the query.

### Value

A query object

### Some examples

```
spq_init() %>%
  spq_filter(item == wdt::P31(wd::Q13442814))

# Lexemes in English that match an expression
# here starting with "pota"
query <- spq_init() |>
  spq_prefix(prefixes = c(dct = "http://purl.org/dc/terms/")) |>
  spq_add(spq('?lexemeId dct:language wd:Q1860')) |>
  spq_mutate(lemma = wikibase::lemma(lexemeId)) |>
  spq_filter(str_detect(lemma, '^pota.*')) |>
  spq_select(lexemeId, lemma)
```

---

spq_group_by	<i>Group the results by one or more variables</i>
--------------	---

---

**Description**

Group the results by one or more variables

**Usage**

```
spq_group_by(.query, ...)
```

**Arguments**

.query	query
...	Either R-DSL or strings with variable names

**Value**

A query object

**Examples**

```
spq_init() %>%
  spq_add("?item wdt:P361 wd:Q297853") %>%
  spq_add("?item wdt:P1082 ?folkm_ngd") %>%
  spq_add("?area wdt:P31 wd:Q1907114") %>%
  spq_label(area) %>%
  spq_add("?area wdt:P527 ?item") %>%
  spq_group_by(area, area_label) %>%
  spq_summarise(total_folkm = sum(folkm_ngd))
```

---

spq_head	<i>Return the first lines of results</i>
----------	--

---

**Description**

Return the first lines of results

**Usage**

```
spq_head(.query, n = 5)
```

**Arguments**

.query	a list with elements of the query
n	the maximum number of lines to return

**Value**

A query object

**Subsetting**

`spq_offset()` and `spq_head()` are only useful when used with `spq_arrange()` that makes the order of results predictable.

**Examples**

```
# Return the default of 5 items
spq_init() %>%
spq_add("?item wdt:P31 wd:Q5") %>%
spq_label(item) %>%
spq_add("?item wdt:P19/wdt:P131* wd:Q60") %>%
spq_add("?item wikibase:sitelinks ?linkcount") %>%
spq_arrange(desc(linkcount)) %>%
spq_head()

# Return 42 items
spq_init() %>%
spq_add("?item wdt:P31 wd:Q5") %>%
spq_label(item) %>%
spq_add("?item wdt:P19/wdt:P131* wd:Q60") %>%
spq_add("?item wikibase:sitelinks ?linkcount") %>%
spq_arrange(desc(linkcount)) %>%
spq_head(42)
```

---

spq\_init

*Initialize a query object.*

---

**Description**

Initialize a query object.

**Usage**

```
spq_init(
  endpoint = "wikidata",
  request_control = spq_control_request(user_agent = getOption("glitter.ua",
    "glitter R package (https://github.com/lvador/glitter)"), max_tries =
    getOption("glitter.max_tries", 3L), max_seconds = getOption("glitter.max_seconds",
    120L), timeout = getOption("glitter.timeout", 1000L), request_type = c("url",
    "body-form")),
  endpoint_info = spq_endpoint_info(label_property = "rdfs:label")
)
```

**Arguments**

endpoint	Endpoint, either name if it is in usual_endpoints, or an URL
request_control	An object as returned by <code>spq_control_request()</code>
endpoint_info	Do not use for an usual endpoint in usual_endpoints! Information about the endpoint

**Value**

A query object

**Printing**

SPARQL queries are shown using the cli package, with a built-in theme. You can change it by using the `cli.user_theme` option. We use

- `.emph` for keywords and functions,
- `.field` for variables,
- `.pkg` for prefixes,
- `.val` for strings,
- `.url` for prefix URLs.

You can also turn off the cli behavior by setting the environment variable "GLITTER.NOCLI" to any non-empty string. That's what we do in glitter snapshot tests.

---

spq_label	<i>Label variables</i>
-----------	------------------------

---

**Description**

Label variables

**Usage**

```
spq_label(
  .query,
  ...,
  .required = FALSE,
  .languages = getOption("glitter.lang", "en$"),
  .overwrite = FALSE
)
```

**Arguments**

<code>.query</code>	a list with elements of the query
<code>...</code>	variables by which to arrange (or SPARQL strings escaped with <code>spq()</code> ), or strings, see examples)
<code>.required</code>	whether the existence of a value for the triple is required or not (defaults to TRUE). If set to FALSE, then other triples in the query are returned even if this particular triple is missing)
<code>.languages</code>	Languages for which to query labels. Use NULL for removing restrictions on language (defined or not), "*" for any defined language. If you write "en" you can get labels for regional variants such as "en-GB". If you want results for "en" only, write "en\$".
<code>.overwrite</code>	whether to replace variables with their labels. <code>spq_select(blop)</code> means you get both <code>blop</code> and <code>blop_label</code> . <code>spq_select(blop, .overwrite = TRUE)</code> means you get the label as <code>blop</code> , the "original" <code>blop</code> variable isn't returned.

**Details**

`spq_label()` uses the property:

- associated with the usual endpoint see `usual_endpoints`
- the property indicated in `spq_endpoint_info()`

**Value**

A query object

**Example**

```
spq_init() %>%
  spq_add("?mayor wdt:P31 ?species") %>%
  # dog, cat or chicken
  spq_set(species = c('wd:Q144', 'wd:Q146', 'wd:Q780')) %>%
  # who occupy the function
  spq_add("?mayor p:P39 ?node") %>%
  # of mayor
  spq_add("?node ps:P39 wd:Q30185") %>%
  # of some places
  spq_add("?node pq:P642 ?place") %>%
  spq_label(mayor, place, .languages = c("fr", "en", "de")) %>%
  spq_perform()
```

---

 spq\_mutate
 

---



---

 Create and modify variables in the results
 

---

**Description**

Create and modify variables in the results

**Usage**

```
spq_mutate(
  .query,
  ...,
  .label = NA,
  .within_box = c(NA, NA),
  .within_distance = c(NA, NA)
)
```

**Arguments**

<code>.query</code>	a list with elements of the query
<code>...</code>	variables by which to arrange (or SPARQL strings escaped with <code>spq()</code> , or strings, see examples)
<code>.label</code>	<b>[Deprecated]</b> See <a href="#">spq_label()</a> .
<code>.within_box</code>	if provided, rectangular bounding box for the triple query. Provided as <code>list(southwest=c(long=...,lat=...),northwest=c(long=...,lat=...))</code> .
<code>.within_distance</code>	if provided, circular bounding box for the triple query. Provided as <code>list(center=c(long=...,lat=...),radius=...)</code> , with radius in kilometers. The center can also be provided as a variable (for instance, <code>"?location"</code> ) for the center coordinates to be retrieved directly from the query.

**Value**

A query object

**Some examples**

```
# common name of a plant species in different languages
# the triplet pattern "wd:Q331676 wdt:P1843 ?statement"
# creates the variable statement
# hence our writing it in reverse within the spq_mutate() function
spq_init() %>%
  spq_mutate(statement = wdt::P1843(wd::Q331676)) %>%
  spq_mutate(lang = lang(statement))
```

---

 spq\_offset

*Offset the first generated result*


---

### Description

Offset the first generated result

### Usage

```
spq_offset(.query, n = 5)
```

### Arguments

.query	a list with elements of the query
n	the maximum number of lines to return

### Value

A query object

### Subsetting

[spq\\_offset\(\)](#) and [spq\\_head\(\)](#) are only useful when used with [spq\\_arrange\(\)](#) that makes the order of results predictable.

### Examples

```
# Return 42 items
spq_init() %>%
spq_add("?item wdt:P31 wd:Q5") %>%
spq_label(item) %>%
spq_add("?item wdt:P19/wdt:P131* wd:Q60") %>%
spq_add("?item wikibase:sitelinks ?linkcount") %>%
spq_arrange(desc(linkcount)) %>%
spq_head(n=42)

# Return 42 items after the first 11 items
spq_init() %>%
spq_add("?item wdt:P31 wd:Q5") %>%
spq_label(item) %>%
spq_add("?item wdt:P19/wdt:P131* wd:Q60") %>%
spq_add("?item wikibase:sitelinks ?linkcount") %>%
spq_arrange(desc(linkcount)) %>%
spq_head(42) %>%
spq_offset(11)
```



---

spq_perform	<i>Assemble query parts into a sparql query and send it to endpoint to get a tibble as a result.</i>
-------------	--

---

## Description

Assemble query parts into a sparql query and send it to endpoint to get a tibble as a result.

## Usage

```
spq_perform(
  .query,
  endpoint = lifecycle::deprecated(),
  user_agent = lifecycle::deprecated(),
  max_tries = lifecycle::deprecated(),
  max_seconds = lifecycle::deprecated(),
  timeout = lifecycle::deprecated(),
  request_type = lifecycle::deprecated(),
  dry_run = FALSE,
  replace_prefixes = FALSE
)
```

## Arguments

.query	a list with elements of the query
endpoint	a string or url corresponding to a SPARQL endpoint. Defaults to "Wikidata"
user_agent	<b>[Deprecated]</b> a string indicating the user agent to send with the query.
max_tries, max_seconds	<b>[Deprecated]</b> Cap the maximal number of attempts with max_tries or the total elapsed time from the first request with max_seconds.
timeout	<b>[Deprecated]</b> maximum number of seconds to wait (httr2::req_timeout()).
request_type	<b>[Deprecated]</b> a string indicating how the query should be sent: in the URL (url, default, most common) or as a body form (body-form).
dry_run	Boolean indicating whether to return the output of httr2::req_dry_run() rather than of httr2::req_perform(). Useful for debugging.
replace_prefixes	Boolean indicating whether to replace used prefixes in the results table, for instance making, for instance "http://www.wikidata.org/entity/" "wd:".

## Value

A query object

**Request control**

Control the way the query is performed via the `control_request` argument of `spq_init()`. This way you can create a basic `spq` object with all the correct options corresponding to the SPARQL service you are using, and then use it as the basis of all your subsequent glitter pipelines.

**Examples**

```
## Not run:
spq_init() %>%
  spq_add(.subject="?city",.verb="wdt:P31",.object="wd:Q515") %>%
  spq_add(.subject="?city",.verb="wdt:P1082",.object="?pop") %>%
  spq_label(city) %>%
  spq_head(n=5) %>%
  spq_perform()

## End(Not run)
```

---

spq_prefix	<i>Add prefixes to the query</i>
------------	----------------------------------

---

**Description**

Add prefixes to the query

**Usage**

```
spq_prefix(.query = NULL, auto = TRUE, prefixes = NULL)
```

**Arguments**

<code>.query</code>	a list with elements of the query
<code>auto</code>	whether to use built-in prefixes
<code>prefixes</code>	a vector of prefixes

**Value**

A query object

**Examples**

```
spq_init() %>%
  spq_prefix(prefixes=c(dbo="http://dbpedia.org/ontology/"))
```

---

spq_select	<i>Select (and create) particular variables</i>
------------	---

---

## Description

Select (and create) particular variables

## Usage

```
spq_select(.query = NULL, ..., .spq_duplicate = NULL)
```

## Arguments

<code>.query</code>	a list with elements of the query
<code>...</code>	variables by which to arrange (or SPARQL strings escaped with <code>spq()</code> ), or strings, see examples)
<code>.spq_duplicate</code>	How to handle duplicates: keep them (NULL), eliminate (distinct) or reduce them (reduced, advanced usage).

## Value

A query object

## Examples

```
spq_init() |>
  spq_prefix(prefixes = c(dct = "http://purl.org/dc/terms/")) |>
  spq_add(spq('?lexemeId dct:language wd:Q1860')) |>
  spq_add(spq("?lexemeId wikibase:lemma ?lemma")) |>
  spq_filter(str_detect(lemma, '^pota.*')) |>
  spq_select(- lemma)

spq_init() |>
  spq_prefix(prefixes = c(dct = "http://purl.org/dc/terms/")) |>
  spq_add(spq('?lexemeId dct:language wd:Q1860')) |>
  spq_add(spq("?lexemeId wikibase:lemma ?lemma")) |>
  spq_filter(str_detect(lemma, '^pota.*')) |>
  spq_select(lemma)
```

---

spq_set	<i>Set helper values for the query</i>
---------	--

---

**Description**

Set helper values for the query (helps with readability)

**Usage**

```
spq_set(.query, ...)
```

**Arguments**

.query	query
...	Helper values and their definition.

**Value**

A query object

**Some examples**

```
# find the individuals of the species
spq_init() %>%
# dog, cat or chicken
spq_set(species = c('wd:Q144', 'wd:Q146', 'wd:Q780'), mayorcode = "wd:Q30185") %>%
spq_filter(mayor == wdt::P31(species)) %>%
spq_add("?mayor p:P39 ?node") %>%
# of mayor
spq_add("?node ps:P39 ?mayorcode") %>%
# of some places
spq_add("?node pq:P642 ?place") %>%
spq_label(species, mayor, place) %>%
spq_select(-species, -place, -node, -mayor, -mayorcode) %>%
spq_perform()
```

---

spq_summarise	<i>Summarise each group of results to fewer results</i>
---------------	---

---

**Description**

Summarise each group of results to fewer results

**Usage**

```
spq_summarise(.query, ...)
```

```
spq_summarize(.query, ...)
```

**Arguments**

`.query` a list with elements of the query

`...` variables by which to arrange (or SPARQL strings escaped with `spq()`, or strings, see examples)

**Value**

A query object

**Examples**

```
result = spq_init() %>%
  spq_add("?item wdt:P361 wd:Q297853") %>%
  spq_add("?item wdt:P1082 ?folk_mngd") %>%
  spq_add("?area wdt:P31 wd:Q1907114") %>%
  spq_label(area) %>%
  spq_add("?area wdt:P527 ?item") %>%
  spq_group_by(area, area_label) %>%
  spq_summarise(total_folk_m = sum(folk_mngd))
```

---

spq\_tally

*Count the observations*

---

**Description**

These functions are inspired by `dplyr::count()` and `dplyr::tally()`. `spq_tally()` assumes you've already done the grouping.

**Usage**

```
spq_tally(.query, sort = FALSE, name = "n")
```

```
spq_count(.query, ..., sort = FALSE, name = "n")
```

**Arguments**

`.query` a list with elements of the query

`sort` If TRUE, will show the largest groups at the top. (like the `sort` argument of `dplyr::tally()`)

`name` Name for the count column (like the `name` argument of `dplyr::tally()`)

`...` variables by which to arrange (or SPARQL strings escaped with `spq()`, or strings, see examples)

**Value**

A query object

**Examples**

```
## Not run:
spq_init() %>%
spq_add("?film wdt:P31 wd:Q11424") %>%
spq_mutate(narrative_location = wdt::P840(film)) %>%
spq_label(narrative_location) %>%
spq_tally(name = "n_films") %>%
spq_perform()

# the same with spq_count

spq_init() %>%
spq_add("?film wdt:P31 wd:Q11424") %>%
spq_mutate(narrative_location = wdt::P840(film)) %>%
spq_label(narrative_location) %>%
spq_count(name = "n_films") %>%
spq_perform()

# Now with grouping
spq_init() %>%
spq_add("?film wdt:P31 wd:Q11424") %>%
spq_mutate(narrative_location = wdt::P840(film)) %>%
spq_label(film, narrative_location) %>%
spq_group_by(narrative_location_label) %>%
spq_tally(sort = TRUE, name = "n_films") %>%
spq_perform()

# More direct with spq_count()
spq_init() %>%
spq_add("?film wdt:P31 wd:Q11424") %>%
spq_mutate(narrative_location = wdt::P840(film)) %>%
spq_label(film, narrative_location) %>%
spq_count(narrative_location_label, sort = TRUE, name = "n_films") %>%
spq_perform()

## End(Not run)
```

---

usual\_endpoints

*Usual endpoints: this dataset allows the user to refer to them using a simplified name rather than their full url.*

---

**Description**

Usual endpoints: this dataset allows the user to refer to them using a simplified name rather than their full url.

**Usage**

usual\_endpoints

**Format**

A data frame with usual SPARQL endpoints and abbreviated names

**name** the abbreviated name of the SPARQL endpoint

**url** the full address of the SPARQL endpoint

**label\_property** the property used for labelling

---

usual_prefixes	<i>Usual prefixes: this dataset allows the user to refer to usual prefixes in their queries without manually specifying the associated urls.</i>
----------------	--

---

**Description**

Usual prefixes: this dataset allows the user to refer to usual prefixes in their queries without manually specifying the associated urls.

**Usage**

usual\_prefixes

**Format**

A data frame with usual prefixes

**type** the type of prefix

**name** the prefix itself

**url** the corresponding ontology ...

---

wd_properties	<i>Wikidata properties</i>
---------------	----------------------------

---

**Description**

Wikidata properties

**Usage**

wd\_properties

**Format**

A data frame with 8939 rows and 5 variables:

**id** id

**type** property type

**label** property label

**description** property description

**altLabel** alternative labels ...

**Source**

Wikidata [https://query.wikidata.org/#SELECT%20%3Fproperty%20%3FpropertyType%20%3FpropertyLabel%20%3FpropertyDescription%20%3FpropertyAltLabel%0AWHERE%20%7B%0A%20%20%3Fproperty%20wikibase%3ApropertyType%20%3FpropertyType.%0A%20%20SERVICE%20wikibase%3Alabel%20%7Bbd%3AserviceParam%20wikibase%3Alanguage%20%22%5BAUTO\\_LANGUAGE%5D%2Cen%22.%20%7D%0A%7D%0AORDER%20BY%20ASC%20%28xsd%3Ainteger%28STRAFTER%28STR%28%3Fproperty%29%2C%20%27P%27%29%29%29](https://query.wikidata.org/#SELECT%20%3Fproperty%20%3FpropertyType%20%3FpropertyLabel%20%3FpropertyDescription%20%3FpropertyAltLabel%0AWHERE%20%7B%0A%20%20%3Fproperty%20wikibase%3ApropertyType%20%3FpropertyType.%0A%20%20SERVICE%20wikibase%3Alabel%20%7Bbd%3AserviceParam%20wikibase%3Alanguage%20%22%5BAUTO_LANGUAGE%5D%2Cen%22.%20%7D%0A%7D%0AORDER%20BY%20ASC%20%28xsd%3Ainteger%28STRAFTER%28STR%28%3Fproperty%29%2C%20%27P%27%29%29%29)



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