

Package ‘rjstat’

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Title Handle 'JSON-stat' Format in R

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Description Handle 'JSON-stat' format (<<https://json-stat.org>>) in R.
Not all features are supported, especially the extensive metadata features of 'JSON-stat'.

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Encoding UTF-8

URL <https://github.com/ajschumacher/rjstat>

BugReports <https://github.com/ajschumacher/rjstat/issues>

Imports jsonlite (>= 0.9.8), checkmate (>= 1.7.0)

Suggests testthat (>= 1.0.0), reshape (>= 0.7)

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as.json *Convert to jsonlite json object*

Description

Convert to jsonlite json object

Usage

```
as.json(x, ...)
```

Arguments

x an object to coerce to a json object.
... additional arguments to be passed to or from methods.

Details

Currently only methods for jsonstat objects are implemented.

as.jsonstat *Create a JSON-stat object*

Description

Create a JSON-stat object

Usage

```
as.jsonstat(x)  
is.jsonstat(x)  
is.jsonstat_dataset(x)  
is.jsonstat_collection(x)  
is.jsonstat_dimension(x)
```

Arguments

x a JSON-stat string, URL or file

Value

a JSON-stat object with subclass dataset, dimension or collection

Examples

```
file_path <- system.file("extdata", "oecd.json", package = "rjstat")
x <- as.jsonstat(file_path)
print(x)
is.jsonstat(x)
is.jsonstat_dataset(x)
is.jsonstat_dimension(x)
```

fromJSONstat	<i>Convert JSON-stat format to data frame(s)</i>
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Description

This function takes a JSON-stat format response and returns a data frame or a list of data frames, with columns for each dimension and one value column.

Usage

```
fromJSONstat(x, naming = "label", use_factors = FALSE, silent = FALSE)
```

Arguments

x	JSON-stat format response, or path or URL to such a response
naming	whether to use (longer) labels or (shorter) ids
use_factors	whether dimension categories should be factors or character objects
silent	suppress warnings

Value

For responses with class `dataset`: A data frame. For responses with class `collection`: An unnamed list of one or more lists or data frames. For responses with class `bundle`: A named list of one or more data frames.

Examples

```
## Not run:
oecd.canada.url <- "https://json-stat.org/samples/oecd-canada.json"
results <- fromJSONstat(oecd.canada.url)
names(results)

## End(Not run)
```

id	<i>id accessors of jsonstat objects</i>
----	---

Description

Access and change ids of jsonstat objects.

Usage

```
id(x)
```

```
id(x) <- value
```

Arguments

x	a jsonstat_dataset object
value	a character vector of up to the same length as id(x).

rjstat	<i>Read and write JSON-stat data sets</i>
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Description

JSON-stat is a JSON format for data dissemination. The **rjstat** package converts data frames to and from this format. The extensive metadata features of JSON-stat are not supported.

status	<i>status accessors of jsonstat objects</i>
--------	---

Description

Access and change status of jsonstat objects.

Usage

```
status(x)
```

```
status(x) <- value
```

Arguments

x	a jsonstat_dataset object
value	a character vector of up to the same length as as.vector(x) or a named list with index as vector names.

toJSONstat	<i>Convert data frame(s) to JSON-stat format</i>
------------	--

Description

This function takes a data frame or list of data frames and returns a string representation in JSON-stat format. The input data frame(s) must be in maximally long tidy format: with only one value column and all other columns representing dimensions.

Usage

```
toJSONstat(x, value = "value", ...)
```

Arguments

x	a data frame or list of data frames
value	name of value column
...	arguments passed on to toJSON

Value

For a data frame: A JSON-stat format response with class `dataset`. For a list of data frames: A JSON-stat format response with class `collection`.

Examples

```
library(reshape)
irises <- melt(cbind(iris, Specimen=rep(1:50, 3)),
              id.vars=c("Species", "Specimen"))
irisJSONstat <- toJSONstat(list(iris=irises))
cat(substr(irisJSONstat, 1, 76))

# Add indentation whitespace
toJSONstat(as.data.frame(Titanic), value = "Freq", pretty = TRUE)
```

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