Package 'ndjson'

October 17, 2022

Type Package

Title Wicked-Fast Streaming 'JSON' ('ndjson') Reader

Version 0.9.0 **Date** 2022-10-14

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Description Streaming 'JSON' ('ndjson') has one 'JSON' record per-line and many modern 'ndjson' files contain large numbers of records. These constructs may not be columnar in nature, but it is often useful to read in these files and ``flatten" the structure out to enable working with the data in an R 'data.frame'-like context. Functions are provided that make it possible to read in plain 'ndjson' files or compressed ('gz') 'ndjson' files and either validate the format of the records or create ``flat" 'data.table' structures from them.

URL https://github.com/hrbrmstr/ndjson

 $\pmb{BugReports} \ \text{https://github.com/hrbrmstr/ndjson/issues}$

SystemRequirements zlib, C++17

NeedsCompilation yes

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Encoding UTF-8

Suggests tinytest, covr

Depends R (>= 3.2.0)

Imports Rcpp, data.table, tibble

LinkingTo Rcpp

RoxygenNote 7.2.1

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Repository CRAN

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R topics documented:

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flatten

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Flatten a character vector of individual JSON lines into a data.table

Description

Flatten a character vector of individual JSON lines into a data. table

Usage

```
flatten(x, cls = c("dt", "tbl"))
```

Arguments

x character vector of individual JSON lines to flattencls the package uses data.table::rbindlist for speed but that's not always the

best return type for everyone, so you have option of keeping it a data. table or converting it to a tbl

Value

```
data.table or tbl
```

Examples

```
flatten('{"top":{"next":{"final":1,"end":true},"another":"yes"},"more":"no"}')
```

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ndjson

Wicked-fast Streaming JSON ('ndjson) Reader

Description

Streaming 'JSON' ('ndjson') has one 'JSON' record per-line and many modern 'ndjson' files contain large numbers of records. These constructs may not be columnar in nature, but it is often useful to read in these files and "flatten" the structure out to enable working with the data in an R 'data.frame'-like context. Functions are provided that make it possible to read in plain ndjson' files or compressed ('gz') 'ndjson' files and either validate the format of the records or create "flat" 'data.table' structures from them.

Author(s)

Bob Rudis (bob@rud.is)

stream_in

Stream in & flatten an ndjson file into a data.table

Description

Given a file of streaming JSON (ndjson) this function reads in the records and creates a flat data. table / tbl from it.

Usage

```
stream_in(path, cls = c("dt", "tbl"))
```

Arguments

path path to file (supports "gz" files)

cls the package uses data.table::rbindlist for speed but that's not always the

best return type for everyone, so you have option of keeping it a data. table or

converting it to a tbl

Value

data.table or tbl

References

http://ndjson.org/

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Examples

```
f <- system.file("extdata", "test.json", package="ndjson")
nrow(stream_in(f))

gzf <- system.file("extdata", "testgz.json.gz", package="ndjson")
nrow(stream_in(gzf))</pre>
```

validate

Validate ndjson file

Description

Given a file of streaming JSON (ndjson) this function reads in the records and validates that they are all legal JSON records. If the verbose parameter is TRUE and errors are found, the line numbers of the errant records will be displayed.

Usage

```
validate(path, verbose = FALSE)
```

Arguments

path path to file (supports "gz" files)

verbose display verbose information (filename and line numbers with bad records)

Value

logical

References

```
http://ndjson.org/
```

Examples

```
f <- system.file("extdata", "test.json", package="ndjson")
validate(f)

gzf <- system.file("extdata", "testgz.json.gz", package="ndjson")
validate(gzf)</pre>
```

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