

Package: HARr (via r-universe)

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Type Package

Title HAR (GEMPACK) File Read/Write Utility

Version 1.1.0

Description HAR files are generated and consumed by GEMPACK applications. This package reads/writes HAR files (and SL4 files) directly using basic R functions.

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Encoding UTF-8

LazyData true

RoxygenNote 7.3.2

Imports stringi

Config/pak/sysreqs libicu-dev

Repository <https://mivanic.r-universe.dev>

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read_har	<i>Read a GEMPACK HAR file into R</i>
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Description

Reads in a GEMPACK HAR file and returns its representation a list. Currently can only process integer headers, real full headers and character headers

Usage

```
read_har(
  con,
  useCoefficientsAsNames = FALSE,
  toLowerCase = TRUE,
  headersToRead = NULL
)
```

Arguments

con	Connection or path to HAR file
useCoefficientsAsNames	If a coefficient name is present in the header, use that instead of the four-letter header
toLowerCase	= TRUE Turn all strings to lower case
headersToRead	= NULL A vector of header names to read in

Value

A list of headers

read_SL4	<i>Read an SL4 solution file</i>
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Description

This function reads SL4 solution files into a list

Usage

```
read_SL4(filename, toLowerCase = TRUE)
```

Arguments

filename	Path to SL4 file
toLowerCase	Logical: should all text from the SL4 file be turned to lowercase

Value

A list of variables

write_har	<i>Write an R list to GEMPACK HAR</i>
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Description

This function writes a HAR file based on a list. If a list element contains attribute "description," then it is used to define the long header name

Some warnings: (1) you cannot have NA's in a HAR file, (2) empty strings are not allowed, (3) some programs (e.g., GEMPACK models) read chunks of data no longer than 1e4 bytes (set maxSize = 1e4), (4) all dimensions in arrays must have names (see example)

Usage

```
write_har(data, filename, maxSize = 10000)
```

Arguments

data	A list
filename	Path to the file to be created
maxSize	Maximum size of data chunk in real array, default of 10,000

Examples

```
myList = list(TEST = c('Test'))  
attr(myList$TEST, 'description') = "This is the long header name"  
## Not run: write_har(myList, 'harfile.har')
```

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