Package 'StatDataML'

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Version 1.0-26

Title Read and Write StatDataML Files

Description
Support for reading and writing files in StatDataML---an XML-based data exchange format.

Depends R (>= 2.0.0), XML, utils

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NeedsCompilation no

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R topics documented:

`readSDML` *Read StatDataML Files*

Description

Read a StatDataML file and create a corresponding R object.

Usage

```
readSDML(file="", text=NULL, validate=FALSE, read.description=FALSE, ...)
```

Arguments

file	the StatDataML file to be read.
text	a string containing StatDataML code (if no file is specified).
validate	logical, should file be validated using the DTD specified in file?
read.description	logical, should the description tag in file be read?
...	arguments passed to xmlTreeParse

Details

For details on the StatDataML format see the proposal.

Value

a data object with an additional SDMLdescription attribute

Author(s)

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See Also

see also writeSDML

Examples

```
library(XML)

TEST <-
    function(x) identical(readSDML(text = capture.output(writeSDML(x))), x)

# write/read vector with names
a <- 1:15
names(a) <- paste("n", 1:15, sep="")
stopifnot(TEST(a))

# write/read a matrix
A <- matrix(1:16, ncol=4)
rownames(A) <- paste("row", 1:4, sep="")
colnames(A) <- paste("col", 1:4, sep="")
stopifnot(TEST(A))

# write/read a data.frame
data(iris)
stopifnot(TEST(iris))

# write/read a ts object
data(airmiles)
stopifnot(TEST(airmiles))
```

```
# write/read the islands data
data(islands)
stopifnot(TEST(islands))
```

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writeSDML *Write Data in StatDataML Format*

Description

Write data in StatDataML format, either in a file or to standard output

Usage

```
writeSDML(x, file = "", textdata = NULL, dtd = NULL, sep = " &#x000A;&#x000D;",
na.string = "NA", null.string = "NULL", posinf.string = "+Inf",
neginf.string = "-Inf", nan.string = "NaN", true = "1", false = "0",
title = deparse(substitute(x)), source = "R", version = " ",
date = NULL, comment = " ", properties = NULL)
```

Arguments

x	a data object.
file	the name of the file to write to.
textdata	save array elements as textdata blocks instead of data? Numeric arrays are by default (textdata=NULL) saved in textdata blocks, character arrays in data blocks.
dtd	location of the StatDataML DTD.
sep	field separator for textdata blocks.
na.string	the string which should be interpreted as NA element.
null.string	the string which should be interpreted as NULL string.
posinf.string	the string which should be interpreted as +Inf.
neginf.string	the string which should be interpreted as -Inf.
nan.string	the string which should be interpreted as NaN.
true, false	the strings which should be interpreted as TRUE/FALSE.
title	the title of the data being saved (string).
source	the source of the data being saved (string).
version	the version of the data being saved (string).
comment	a free form commentary for the data being saved (string).
date	a free form date element, date() by default.
properties	an arbitrary list or array.

Details

`info` attributes of arrays are used for the `info` attributes of the `e` / `ce` / `na` tags in StatDataML. For further details on the `StatDataML` format see the proposal.

Author(s)

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See Also

`readSDML`

Examples

```
A <- matrix(1:16, ncol=4)
rownames(A) <- paste("row", 1:4, sep="")
colnames(A) <- paste("col", 1:4, sep="")
writeSDML(A, "testmat.sdml")

I <- letters[1:16]
attr(A, "info") <- I
writeSDML(A, "testmat2.sdml", textdata = FALSE)
```

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