

Package ‘xmlparsedata’

August 31, 2020

Title Parse Data of 'R' Code as an 'XML' Tree

Version 1.0.4

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Description Convert the output of 'utils::getParseData()' to an 'XML' tree, that one can search via 'XPath', and easier to manipulate in general.

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LazyData true

URL <https://github.com/r-lib/xmlparsedata#readme>

BugReports <https://github.com/r-lib/xmlparsedata/issues>

RoxygenNote 6.0.1

Suggests covr, testthat, xml2

Depends R (>= 3.0.0)

Encoding UTF-8

NeedsCompilation no

Repository CRAN

Date/Publication 2020-08-31 08:10:02 UTC

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xmlparsedata	<i>Parse Data of R Code as an 'XML' Tree</i>
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Description

Convert the output of `'utils::getParseData()'` to an 'XML' tree, that is searchable and easier to manipulate in general.

xml_parse_data	<i>Convert R parse data to XML</i>
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Description

In recent R versions the parser can attach source code location information to the parsed expressions. This information is often useful for static analysis, e.g. code linting. It can be accessed via the [getParseData](#) function.

Usage

```
xml_parse_data(x, includeText = NA, pretty = FALSE)
```

Arguments

<code>x</code>	an expression returned from parse , or a function or other object with source reference information
<code>includeText</code>	logical; whether to include the text of parsed items in the result
<code>pretty</code>	Whether to pretty-indent the XML output. It has a small overhead which probably only matters for very large source files.

Details

`xml_parse_data` converts this information to an XML tree. The R parser's token names are preserved in the XML as much as possible, but some of them are not valid XML tag names, so they are renamed, see the [xml_parse_token_map](#) vector for the mapping.

The top XML tag is `<exprlist>`, which is a list of expressions, each expression is an `<expr>` tag. Each tag has attributes that define the location: `line1`, `col1`, `line2`, `col2`. These are from the [getParseData](#) data frame column names.

See an example below. See also the README at <https://github.com/r-lib/xmlparsedata#readme> for examples on how to search the XML tree with the `xml2` package and XPath expressions.

Value

An XML string representing the parse data. See details below.

See Also

[xml_parse_token_map](#) for the token names. <https://github.com/r-lib/xmlparsedata#readme> for more information and use cases.

Examples

```
code <- "function(a = 1, b = 2) {\n  a + b\n}\n"
expr <- parse(text = code, keep.source = TRUE)

# The base R way:
getParseData(expr)

cat(xml_parse_data(expr, pretty = TRUE))
```

`xml_parse_token_map` *Map token names of the R parser to token names in [xml_parse_data](#)*

Description

Some of the R token names are not valid XML tag names, so [xml_parse_data](#) needs to replace them to create a valid XML file.

Usage

```
xml_parse_token_map
```

Format

An object of class character of length 19.

See Also

[xml_parse_data](#)

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