Package 'redland'

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Title RDF Library Bindings in R

Date 2018-07-18 VignetteBuilder knitr **Description** Provides methods to parse, query and serialize information stored in the Resource Description Framework (RDF). RDF is described at http://www.w3.org/TR/rdf-primer. This package supports RDF by implementing an R interface to the Redland RDF C library, described at http://librdf.org/docs/api/index.html. In brief, RDF provides a structured graph consisting of Statements composed of Subject, Predicate, and Object Nodes. **Depends** R (>= 3.1.1), methods Imports roxygen2 Suggests spelling, knitr, testthat, rmarkdown, stringi **SystemRequirements** Mac OSX: redland (>= 1.0.14); Linux: librdf0 (>= 1.0.14), librdf0-dev (>= 1.0.14) Collate 'redland.R' 'World.R' 'Node.R' 'Statement.R' 'Storage.R' 'Model.R' 'Parser.R' 'Query.R' 'QueryResults.R' 'Serializer.R' 'mergeNamespace_roclet.R' 'redland-package.R' 'util.R' License Apache License 2.0 Copyright See file (inst/)COPYRIGHTS. BugReports https://github.com/ropensci/redland-bindings/issues RoxygenNote 6.0.1 URL https://github.com/ropensci/redland-bindings/tree/master/R/redland https://github.com/ropensci/redland-bindings/tree/master/R **Encoding UTF-8** Language en-US NeedsCompilation yes

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addStatement

Add a Statement object to the Model

Description

Add a Statement object to the Model

Usage

```
addStatement(.Object, statement)
## S4 method for signature 'Model,Statement'
addStatement(.Object, statement)
```

Arguments

.Object a Model object

statement the Statement that will be added

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")</pre>
```

executeQuery

Execute a query

Description

The initialize query is executed and the result is returned as a QueryResult object

Usage

```
executeQuery(.Object, model)
## S4 method for signature 'Query'
executeQuery(.Object, model)
```

Arguments

.Object a Query object

model a Model object containing the statements to query

Value

a QueryResults object

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freeModel

Free memory used by a librdf model.

Description

Free memory used by a librdf model.

Usage

```
freeModel(.Object)
## S4 method for signature 'Model'
freeModel(.Object)
```

Arguments

.Object

a Model object

Details

After this method is called, the Model object is no longer usable and should be deleted "rm(model)" and a new object created.

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
# At this point, some operations would be performed with the model.
# See '?redland' for a complete example.
# When the Model object is no longer needed, the resources it has allocated can be freed.
freeModel(model)
rm(model)</pre>
```

freeParser

Free memory used by a librdf parser

Description

Free memory used by a librdf parser

Usage

```
freeParser(.Object)
## S4 method for signature 'Parser'
freeParser(.Object)
```

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Arguments

.0bject a Node object

Details

After freeNode is called, the Node object is no longer usable and should be deleted "rm(nodeName)" and a new object created.

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
parser <- new("Parser", world)
filePath <- system.file("extdata/example.rdf", package="redland")
parseFileIntoModel(parser, world, filePath, model)
# At this point, some operations would be performed with the Model that has been populated
# with the parser.
# See '?redland' for a complete example.
# When the parser object is no longer needed, the resources it had allocated can be freed.
freeParser(parser)
rm(parser)</pre>
```

freeQuery

Free memory used by a librdf query

Description

Free memory used by a librdf query

Usage

```
freeQuery(.Object)
## S4 method for signature 'Query'
freeQuery(.Object)
```

Arguments

.Object a Query object

Details

After this method is called, the Query object is no longer usable and should be deleted "rm(query)" and a new object created.

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Examples

```
world <- new("World")</pre>
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")</pre>
stmt <- new("Statement", world=world,</pre>
  subject="https://orcid.org/0000-0002-2192-403X",
  predicate="http://www.w3.org/ns/prov#Agent",
  object="slaughter",
  objectType="literal", datatype_uri="http://www.w3.org/2001/XMLSchema#string")
status <- addStatement(model, stmt)</pre>
queryString <- paste("PREFIX orcid: <https://orcid.org/>",
                       "PREFIX dataone: <a href="https://cn.dataone.org/cn/v1/resolve/">https://cn.dataone.org/cn/v1/resolve/>",</a>
                       "PREFIX prov: <http://www.w3.org/ns/prov#>",
                       "SELECT ?a ?c WHERE { ?a prov:Agent ?c . }", sep=" ")
query <- new("Query", world, queryString, base_uri=NULL,</pre>
  query_language="sparql", query_uri=NULL)
queryResult <- executeQuery(query, model)</pre>
result <- getNextResult(queryResult)</pre>
# When the query object is no longer needed, the resources it had allocated can be freed.
freeQuery(query)
rm(query)
```

freeQueryResults

Free memory used by a librdf query results

Description

After this method is called, the QueryResults object is no longer usable and should be deleted with "rm(query)".

Usage

```
freeQueryResults(.Object)
## S4 method for signature 'QueryResults'
freeQueryResults(.Object)
```

Arguments

```
.0bject a QueryResults object
```

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
stmt <- new("Statement", world=world,
    subject="https://orcid.org/0000-0002-2192-403X",</pre>
```

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freeSerializer

Free memory used by a librdf serializer.

Description

Free memory used by a librdf serializer.

Usage

```
freeSerializer(.Object)
## S4 method for signature 'Serializer'
freeSerializer(.Object)
```

Arguments

. Object a Serializer object

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
filePath <- system.file("extdata/example.rdf", package="redland")
parser <- new("Parser", world)
parseFileIntoModel(parser, world, filePath, model)
# Creat the default "rdfxml" serizlizer
serializer <- new("Serializer", world)
# At this point, some operations would be performed with the Serializer object.
# See '?Serializer' for a complete example.
# When the serializer object is no longer needed, the resources it had allocated can be freed.
freeSerializer(serializer)
rm(serializer)</pre>
```

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freeStatement

Free memory used by a librdf statement

Description

Free memory used by a librdf statement

Usage

```
freeStatement(.Object)
## S4 method for signature 'Statement'
freeStatement(.Object)
```

Arguments

.Object

a Statement object

Details

After this method is called, the Statement object is no longer usable and should be deleted "rm(statement)" and a new object created. This method frees all resources for the statement, as well as each node in the statement.

Examples

freeStorage

Free memory used by a librdf storage object

Description

After this method is called, the Storage object is no longer usable and should be deleted "rm(storage)" and a new object created.

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Usage

```
freeStorage(.Object)
## S4 method for signature 'Storage'
freeStorage(.Object)
```

Arguments

.Object

a Storage object to free memory for

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
# At this point we would perform some operations using the storage object.
# See '?redland' for a complete example.
# When the Storage object is no longer needed, the resources it had allocated can be freed.
status <- freeStorage(storage)
rm(storage)</pre>
```

freeWorld

Free memory used by a librdf world object

Description

Free memory used by a librdf world object

Usage

```
freeWorld(.Object)
## S4 method for signature 'World'
freeWorld(.Object)
```

Arguments

.Object

a World object

Details

After this method is called, the World object is no longer usable and should be deleted "rm(world)" and a new object created.

Examples

```
world <- new("World")
# At this point we would perform some operations using the world object.
# When the world object is no longer needed, we can free the resources it has allocated.
result <- freeWorld(world)
rm(world)</pre>
```

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getBlankNodeId	Get the blank identifier that has been assigned for a specified Node object

Description

Get the blank identifier that has been assigned for a specified Node object

Usage

```
getBlankNodeId(.Object)
## S4 method for signature 'Node'
getBlankNodeId(.Object)
```

Arguments

.Object a Node object

Details

When a Node object is initialized with no value specified, i.e. node <- Node(""), a blank node is created and a locally unique identifier is generated by librdf. This method retrieves this identifier and returns in to the caller.

Value

a blank node identifier

Examples

```
world <- new("World")
# a blank node is created with a unique identifier generated by librdf
node <- new("Node", world, blank=NULL)
nodeId <- getBlankNodeId(node)</pre>
```

getNextResult

Get the next query result.

Description

The next query result is returned. .

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Usage

```
getNextResult(.Object)
## S4 method for signature 'QueryResults'
getNextResult(.Object)
```

Arguments

. Object a QueryResults object

getNodeType

Determine the node type and return as a string

Description

A Node has a type that is assigned at initialization and can have one of the following values: 'resource', 'literal', 'blank' and 'unknown'.

Usage

```
getNodeType(.Object)
## S4 method for signature 'Node'
getNodeType(.Object)
```

Arguments

.Object a Node object

Value

a character vector containing the Node type

Examples

```
world <- new("World")
node <- new("Node", world, uri="http://www.example.com")
nodeType <- getNodeType(node)</pre>
```

getNodeValue 17

getNodeValue

Get the value of the node as a string

Description

Get the value of the node as a string

Usage

```
getNodeValue(.Object)
## S4 method for signature 'Node'
getNodeValue(.Object)
```

Arguments

.Object

a Node object

Details

The value of the node is returned as a string. If the node type is 'blank', then the blank node identifier is returned. If the node type is 'literal', then the literal value is returned with the form "<value>"@<language>, e.g. "¡Hola, amigo! ¿Cómo estás?"@es". If the node type is 'uri' then the value is returned as a string.

Value

a string representation of the Node's value

Examples

```
world <- new("World")
node <- new("Node", world, literal="iHola, amigo! ¿Cómo estás?", language="es")
value <- getNodeValue(node)</pre>
```

getQueryResultLimit

Get the query result limit

Description

Get the query result limit

Usage

```
getQueryResultLimit(.Object)
## S4 method for signature 'Query'
getQueryResultLimit(.Object)
```

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Arguments

a Query object .Object

Value

the query result limit. If a limit is set then the value will be ≥ 0 . If the value is < 0, no limit is set

getResults

Return all query results

Description

Return all query results

Usage

```
getResults(.Object, model, ...)
## S4 method for signature 'Query'
getResults(.Object, model, formatName = "rdfxml")
```

Arguments

```
a Query object
.Object
model
                  a Model object
                  additional parameters
                  a string specifying the RDF format name. Currently the supported formats are
formatName
```

"rdfxml", "turtle", "json", "csv"

Details

After this method is called, the Query object is no longer usable and should be deleted "rm(query)" and a new object created.

Examples

```
world <- new("World")</pre>
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")</pre>
model <- new("Model", world, storage, options="")</pre>
stmt <- new("Statement", world=world,</pre>
  subject="https://orcid.org/0000-0002-2192-403X",
  predicate="http://www.w3.org/ns/prov#Agent",
  object="slaughter",
  objectType="literal", datatype_uri="http://www.w3.org/2001/XMLSchema#string")
  #objectType="literal", language="en")
status <- addStatement(model, stmt)</pre>
queryString <- paste("PREFIX orcid: <https://orcid.org/>",
```

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```
"PREFIX dataone: <a href="https://cn.dataone.org/cn/v1/resolve/"">" "PREFIX prov: <a href="http://www.w3.org/ns/prov#">" ("PREFIX prov: <a href="http://www.w3.org/ns/prov#")">" ("PREFIX prov: <a href="http://www.w3.org/ns/prov: New Prov: New Prov:
```

getTermType

Return the redland node type for the specified RDF term in a statement

Description

After a Statement object has been created, this method can be used to determine the RDF type ("uri", "literal", "blank") that has been assigned to the specified RDF term, i.e. "subject", "predicate", "object".

Usage

```
getTermType(.Object, term)
## S4 method for signature 'Statement, character'
getTermType(.Object, term)
```

Arguments

. Object a Statement object

term the RDF term for which the type will be returned

Examples

```
world <- new("World")
subject <- new("Node", blank="_:myid1", world)
predicate <- new("Node", uri="http://www.example.com/isa", world)
object <- new("Node", literal="thing", world)
stmt <- new("Statement", world, subject, predicate, object, world)
termType <- getTermType(stmt, "predicate")</pre>
```

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```
initialize, Model-method
```

Constructor for a Model object.

Description

Constructor for a Model object.

Usage

```
## S4 method for signature 'Model'
initialize(.Object, world, storage, options)
```

Arguments

.Object a Node objectworld a World objectstorage a Storage object

options extra options for model initialization

Value

the World object

```
initialize, Node-method
```

Initialize a Node object.

Description

A Node has an associated type corresponding to the RDF component that it is representing. The list of possible types is "resource", "literal" or "blank".

Usage

```
## S4 method for signature 'Node'
initialize(.Object, world, literal, uri, blank, datatype_uri,
  language)
```

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Arguments

. Object the Node object to be initialized

world a World object

literal a literal character value to be assigned to the node uri a uri character value to be assigned to the node blank a blank node identifier to be assigned to the node

datatype_uri a uri used to specify the datatype of a literal node, i.e. "http://www.w3.org/2001/XMLSchema#string"

language a character value specifying the RDF language tag (excluding the "@" symbol),

i.e. "fr"

Details

The url=' and 'literal=' arguments determine which type of Node is created. The Node type affects how the Node is processed in serialization, for example a Node created with 'node1 <- new("Node", literal="http://www.example.com")' is processed differently that a Node created with 'node1 <- new("Node", url="http://www.example.com")', with the former being processed as an RDF literal and the latter processed as an RDF resource.

Value

the Node object

Note

Refer to https://www.w3.org/TR/rdf11-concepts information on language tags.

initialize, Parser-method

Initialize a Parser object.

Description

A Parser object is initialized for a specific RDF serialization.

Usage

```
## S4 method for signature 'Parser'
initialize(.Object, world, name = "rdfxml",
    mimeType = "application/rdf+xml", typeUri = as.character(NA))
```

Arguments

. Object the Parser object world a World object

name name of the parser factory to use
mimeType a mime type of the syntax of the model
typeUri a URI for the syntax of the model

Details

The serialization format that are supported by

Value

the Parser object

```
initialize, Query-method
```

Initialize the Query object.

Description

Initialize the Query object.

Usage

```
## S4 method for signature 'Query'
initialize(.Object, world, querystring, base_uri = NULL,
   query_language = "sparql", query_uri = NULL)
```

Arguments

.Object the Query object world a World object

querystring a query string for the language specified in 'query_language'

base_uri a URI to prepend to relative URI in the document

query_language the query language to execute the querystring with

query_uri a URI to prepend to terms in the query

Value

the Query object

```
initialize,QueryResults-method
```

Initialize the QueryResults object.

Description

The QueryResults object is initialized with the librdf query result from return value of 'Query.execute()'.

Usage

```
## S4 method for signature 'QueryResults'
initialize(.Object, results)
```

Arguments

.Object the QueryResults object.
results a librdf query result

Details

A QueryResults object is returned by the Query.executeQuery() method, so typically a user does not initialize a QueryResult object by calling new("QueryResult", ...)

Value

the QueryResults object

```
initialize, Serializer-method
```

Construct a Serializer object.

Description

Construct a Serializer object.

Usage

```
## S4 method for signature 'Serializer'
initialize(.Object, world, name = "rdfxml",
    mimeType = "application/rdf+xml", typeUri = as.character(NA))
```

Arguments

.Object the Serializer object world a World object

name of a previously created serializer factory to use

mimeType a mime type of the syntax of the model typeUri a URI for the syntax of the model

Value

the Serializer object

initialize, Statement-method

Construct a Statement object.

Description

Construct a Statement object.

Usage

```
## S4 method for signature 'Statement'
initialize(.Object, world, subject, predicate, object,
   subjectType = as.character(NA), objectType = as.character(NA),
   datatype_uri = as.character(NA), language = as.character(NA))
```

Arguments

.Object the Statement object world a World object subject a Node object predicate a Node object object a Node object

subjectType the Node type of the subject, i.e. "blank", "uri"

objectType the Node type of the object, i.e. "blank", "uri", "literal" the datatype_uri the datatype URI to associate with a object literal value

language a character value specifying the RDF language tag for an object literal value

(excluding the "@" symbol), i.e. "fr"

Value

the Statement object

```
initialize, Storage-method
```

Initialize a Storage object

Description

Initialize a Storage object

Usage

```
## S4 method for signature 'Storage'
initialize(.Object, world, type = "hashes", name = "",
    options = "hash-type='memory'")
```

Arguments

.Object the Storage object world the World object

type the Redland storage type
name storage instance name

options storage options

Value

the Storage object

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")</pre>
```

```
initialize, World-method
```

Initialize the World object.

Description

Initialize the World object.

Usage

```
## S4 method for signature 'World'
initialize(.Object)
```

Arguments

.Object

the World object

Value

the World object

is.null.externalptr

Determine whether an externalptr object is NULL.

Description

The pointer is treated as an externalptr and checked via a call in C to see if it is NULL.

Usage

```
is.null.externalptr(pointer)
```

Arguments

pointer

externalptr to be checked for NULL value

Value

logical TRUE if the pointer is NULL, otherwise FALSE

length, SWIGArray-method

Return length of a SWIGArray

Description

Return length of a SWIGArray

Usage

```
## S4 method for signature 'SWIGArray'
length(x)
```

Arguments

Х

the SWIGArray

librdf_copyright_string

27

```
librdf_copyright_string
```

Copyright string (multiple lines).

Description

Copyright string (multiple lines).

Usage

```
librdf_copyright_string ( .copy )
```

Arguments

. сору

NA

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_copyright_string_get
```

Return Redland RDF copyright string

Description

Return the Redland RDF copyright

Usage

```
librdf_copyright_string_get (.copy)
```

Arguments

. copy logical

28 librdf_digest_final

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_digest_final

Finish the digesting of data.

Description

Finish the digesting of data.

Usage

```
librdf_digest_final ( digest )
```

Arguments

digest the digest ("_p_librdf_digest_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_digest_init 29

librdf_digest_init (Re)initialise the librdf_digest object.

Description

(Re)initialise the librdf_digest object.

Usage

```
librdf_digest_init ( digest )
```

Arguments

digest the digest ("_p_librdf_digest_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_digest_to_string
```

Get a string representation of the digest object.

Description

Get a string representation of the digest object.

Usage

```
librdf_digest_to_string ( digest )
```

Arguments

```
digest the digest ("_p_librdf_digest_s")
```

30 librdf_digest_update

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_digest_update Add more data to the librdf_digest object.

Description

Add more data to the librdf_digest object.

Usage

```
librdf_digest_update ( digest,
buf,
length )
```

Arguments

digest the digest ("_p_librdf_digest_s")
buf the data buffer ("character")
length the length of the data ("integer")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
{\tt librdf\_digest\_update\_string}
```

Add a string to the librdf_digest object.

Description

Add a string to the librdf_digest object.

Usage

```
librdf_digest_update_string ( digest,
string )
```

Arguments

```
digest the digest ("_p_librdf_digest_s")
string string to add ("character")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_digest

Destructor - destroy a librdf_digest object.

Description

Destructor - destroy a librdf_digest object.

Usage

```
librdf_free_digest ( digest )
```

Arguments

```
digest the digest ("_p_librdf_digest_s")
```

32 librdf_free_hash

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_hash

Destructor - destroy a librdf_hash object.

Description

Destructor - destroy a librdf_hash object.

Usage

```
librdf_free_hash ( hash )
```

Arguments

hash

hash object ("_p_librdf_hash_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_iterator 33

Description

Destructor - destroy a librdf_iterator object.

Usage

```
librdf_free_iterator ( s_arg1 )
```

Arguments

s_arg1

the librdf_iterator object ("_p_librdf_iterator_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_model

Destructor - Destroy a librdf_model object.

Description

Destructor - Destroy a librdf_model object.

Usage

```
librdf_free_model ( model )
```

Arguments

model

librdf_model model to destroy ("_p_librdf_model_s")

Value

void

34 librdf_free_node

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_node

Destructor - destroy an librdf_node object.

Description

Destructor - destroy an librdf_node object.

Usage

```
librdf_free_node ( r )
```

Arguments

```
r librdf_node object ("_p_librdf_node_s")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_parser 35

librdf_free_parser

Destructor - destroys a librdf_parser object.

Description

Destructor - destroys a librdf_parser object.

Usage

```
librdf_free_parser ( parser )
```

Arguments

parser

the parser ("_p_librdf_parser_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_query

Destructor - destroy a librdf_query object.

Description

Destructor - destroy a librdf_query object.

Usage

```
librdf_free_query ( query )
```

Arguments

query

librdf_query object ("_p_librdf_query")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_free_query_results
```

Destructor - destroy a librdf_query_results object.

Description

Destructor - destroy a librdf_query_results object.

Usage

```
librdf_free_query_results ( query_results )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_serializer 37

```
librdf_free_serializer
```

Destructor - destroys a librdf_serializer object.

Description

Destructor - destroys a librdf_serializer object.

Usage

```
librdf_free_serializer ( serializer )
```

Arguments

```
serializer the serializer ("_p_librdf_serializer_s")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_free_statement Destructor - destroy a librdf_statement.
```

Description

```
Destructor - destroy a librdf_statement.
```

Usage

```
librdf_free_statement ( statement )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
```

38 librdf_free_storage

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_storage

Destructor - destroy a librdf_storage object.

Description

Destructor - destroy a librdf_storage object.

Usage

```
librdf_free_storage ( storage )
```

Arguments

storage

librdf_storage object ("_p_librdf_storage_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

librdf_free_stream 39

librdf_free_stream

Destructor - destroy an libdf_stream object.

Description

Destructor - destroy an libdf_stream object.

Usage

```
librdf_free_stream ( stream )
```

Arguments

stream

librdf_stream object ("_p_librdf_stream_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_uri

Destructor - destroy a librdf_uri object.

Description

Destructor - destroy a librdf_uri object.

Usage

```
librdf_free_uri ( uri )
```

Arguments

uri

librdf_uri object ("_p_librdf_uri_s")

Value

void

40 librdf_free_world

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_free_world

Terminate the library and frees all allocated resources.

Description

Terminate the library and frees all allocated resources.

Usage

```
librdf_free_world ( world )
```

Arguments

world

redland world object ("_p_librdf_world_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

librdf_hash_to_string 41

librdf_hash_to_string Format the hash as a string, suitable for parsing by librdf_hash_from_string.

Description

Format the hash as a string, suitable for parsing by librdf_hash_from_string.

Usage

```
librdf_hash_to_string ( hash,
filter )
```

Arguments

hash librdf_hash object ("_p_librdf_hash_s")

filter NULL terminated list of keys to ignore ("_p_p_char")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_internal_test_error
```

For internal testing, not part of public API

Description

This funciton is for internal testing of the Redland software and is not part of the public API.

Usage

```
librdf_internal_test_error ( world )
```

Arguments

world librdf_world object ("_p_librdf_world_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_internal_test_warning
```

For internal testing, not part of public API

Description

This funciton is for internal testing of the Redland software and is not part of the public API.

Usage

```
librdf_internal_test_warning ( world )
```

Arguments

world librdf_world ("_p_librdf_world_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

librdf_iterator_end 43

Test if the iterator has finished.

Description

Test if the iterator has finished.

Usage

```
librdf_iterator_end ( iterator,
.copy )
```

Arguments

```
\begin{tabular}{ll} iterator & the $librdf\_iterator object ("\_p\_librdf\_iterator\_s") \\ . copy & NA \end{tabular}
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_iterator_get_context
```

Get the context of the current object on the iterator.

Description

Get the context of the current object on the iterator.

Usage

```
librdf_iterator_get_context ( iterator )
```

Arguments

```
iterator the librdf_iterator object ("_p_librdf_iterator_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_iterator_get_object
```

Get the current object from the iterator.

Description

Get the current object from the iterator.

Usage

```
librdf_iterator_get_object ( iterator )
```

Arguments

```
iterator the librdf_iterator object ("_p_librdf_iterator_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

librdf_iterator_next 45

Description

Move to the next iterator element.

Usage

```
librdf_iterator_next ( iterator,
.copy )
```

Arguments

```
iterator the librdf_iterator object ("_p_librdf_iterator_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_log_message_code
```

Retrieve error code from log message.

Description

Retrieve error code from log message.

Usage

```
librdf_log_message_code ( message,
.copy )
```

Arguments

```
message log message ("_p_librdf_log_message")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_log_message_facility
```

Retrieve facility that generated the message.

Description

Retrieve facility that generated the message.

Usage

```
librdf_log_message_facility ( message,
.copy )
```

Arguments

```
message log message ("_p_librdf_log_message")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_log_message_level
```

Retrieve severity of log message.

Description

Retrieve severity of log message.

Usage

```
librdf_log_message_level ( message,
.copy )
```

Arguments

```
message log message ("_p_librdf_log_message")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_log_message_locator
```

Retrieve locator of log entry.

Description

Retrieve locator of log entry.

Usage

```
librdf_log_message_locator ( message )
```

Arguments

```
message log message ("_p_librdf_log_message")
```

Value

```
_p_raptor_locator
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_log_message_message
```

Retrieve text message from log entry.

Description

Retrieve text message from log entry.

Usage

```
librdf_log_message_message ( message )
```

Arguments

```
message log message ("_p_librdf_log_message")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

librdf_model_add 49

librdf_model_add

Create and add a new statement about a resource to the model.

Description

Create and add a new statement about a resource to the model.

Usage

```
librdf_model_add ( model,
subject,
predicate,
object,
.copy )
```

Arguments

```
model model object ("_p_librdf_model_s")
subject librdf_node of subject ("_p_librdf_node_s")
predicate librdf_node of predicate ("_p_librdf_node_s")
object librdf_node of object (literal or resource) ("_p_librdf_node_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_add_statement
```

Add a statement to the model.

Description

Add a statement to the model.

Usage

```
librdf_model_add_statement ( model,
statement,
.copy )
```

Arguments

```
\begin{tabular}{lll} model & model & object ("\_p\_librdf\_model\_s") \\ statement & statement & object ("\_p\_librdf\_statement\_s") \\ . copy & NA \\ \end{tabular}
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_add_statements
```

Add a stream of statements to the model.

Description

Add a stream of statements to the model.

Usage

```
librdf_model_add_statements ( model,
statement_stream,
.copy )
```

Arguments

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_add_string_literal_statement
```

Create and add a new statement about a literal to the model.

Description

Create and add a new statement about a literal to the model.

Usage

```
librdf_model_add_string_literal_statement ( model,
subject,
predicate,
literal,
inStrOrNull,
is_wf_xml,
.copy )
```

Arguments

```
model model object ("_p_librdf_model_s")
subject librdf_node of subject ("_p_librdf_node_s")
predicate librdf_node of predicate ("_p_librdf_node_s")
literal string literal conten ("character")
inStrOrNull language of literal ("character")
is_wf_xml literal is XML ("integer")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_add_typed_literal_statement
```

Create and add a new statement about a typed literal to the model.

Description

Create and add a new statement about a typed literal to the model.

Usage

```
librdf_model_add_typed_literal_statement ( model,
subject,
predicate,
string,
inStrOrNull,
inUriOrNull,
.copy )
```

Arguments

```
model model object ("_p_librdf_model_s")
subject librdf_node of subject ("_p_librdf_node_s")
predicate librdf_node of predicate ("_p_librdf_node_s")
string string literal content ("character")
inStrOrNull language of literal ("character")
inUriOrNull datatype librdf_uri ("_p_librdf_uri_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_as_stream
```

List the model contents as a stream of statements.

Description

List the model contents as a stream of statements.

Usage

```
librdf_model_as_stream ( model )
```

Arguments

```
model the model object ("_p_librdf_model_s")
```

Value

```
\_p\_librdf\_stream\_s
```

References

```
http://librdf.org/docs
```

See Also

librdf_model_contains_context

Check for a context in the model.

Description

Check for a context in the model.

Usage

```
librdf_model_contains_context ( model,
context,
.copy )
```

Arguments

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_contains_statement
```

Check for a statement in the model.

Description

Check for a statement in the model.

Usage

```
librdf_model_contains_statement ( model,
statement,
.copy )
```

Arguments

 $\label{eq:model_model_s} \begin{array}{ll} \mbox{model object ("_p_librdf_model_s")} \\ \mbox{statement} & \mbox{the statement ("_p_librdf_statement_s")} \\ \end{array}$

. copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_context_add_statement
```

Add a statement to a model with a context.

Description

Add a statement to a model with a context.

Usage

```
librdf_model_context_add_statement ( model,
context,
statement,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
context librdf_node context ("_p_librdf_node_s")
```

statement librdf_statement statement object ("_p_librdf_statement_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
{\tt librdf\_model\_context\_add\_statements}
```

Add statements to a model with a context.

Description

Add statements to a model with a context.

Usage

```
librdf_model_context_add_statements ( model,
context,
stream,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
context librdf_node context ("_p_librdf_node_s")
```

stream librdf_stream stream object ("_p_librdf_stream_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_context_as_stream
```

List all statements in a model context.

Description

List all statements in a model context.

Usage

```
librdf_model_context_as_stream ( model,
context )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
context librdf_node context ("_p_librdf_node_s")
```

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_context_remove_statement
```

Remove a statement from a model in a context.

Description

Remove a statement from a model in a context.

Usage

```
librdf_model_context_remove_statement ( model,
context,
statement,
.copy )
```

Arguments

model librdf_model object ("_p_librdf_model_s")
context librdf_node context ("_p_librdf_node_s")

statement librdf_statement statement ("_p_librdf_statement_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_context_remove_statements
```

Remove statements from a model with the given context.

Description

Remove statements from a model with the given context.

Usage

```
librdf_model_context_remove_statements ( model,
context,
.copy )
```

Arguments

model librdf_model object ("_p_librdf_model_s")
context librdf_node context ("_p_librdf_node_s")

.copy NA

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_find_statements
```

Find matching statements in the model.

Description

Find matching statements in the model.

Usage

```
librdf_model_find_statements ( model,
statement )
```

Arguments

```
model \hspace{1.5cm} model \hspace{1.5cm} object \hspace{1.5cm} ("\_p\_librdf\_model\_s")
```

statement the partial statement to match ("_p_librdf_statement_s")

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

librdf_model_get_arc

```
librdf_model_find_statements_in_context

Search the model for matching statements in a given context.
```

Description

Search the model for matching statements in a given context.

Usage

```
librdf_model_find_statements_in_context ( model,
statement,
inNodeOrNull )
```

Arguments

model librdf_model object ("_p_librdf_model_s")

statement librdf_statement partial statement to find ("_p_librdf_statement_s")

inNodeOrNull context librdf_node (or NULL) ("_p_librdf_node_s")

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_arc Return one arc (predicate) of an arc in an RDF graph given source (subject) and target (object).
```

Description

Return one arc (predicate) of an arc in an RDF graph given source (subject) and target (object).

librdf_model_get_arcs

Usage

```
librdf_model_get_arc ( model,
source,
target )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
source librdf_node source ("_p_librdf_node_s")
target librdf_node target ("_p_librdf_node_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_arcs Return the arcs (predicates) of an arc in an RDF graph given source (subject) and target (object).
```

Description

Return the arcs (predicates) of an arc in an RDF graph given source (subject) and target (object).

Usage

```
librdf_model_get_arcs ( model,
source,
target )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
source librdf_node source ("_p_librdf_node_s")
target librdf_node target ("_p_librdf_node_s")
```

Value

```
_p_librdf_iterator_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_arcs_in
```

Return the properties pointing to the given resource.

Description

Return the properties pointing to the given resource.

Usage

```
librdf_model_get_arcs_in ( model,
node )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
node librdf_node resource node ("_p_librdf_node_s")
```

Value

```
_p_librdf_iterator_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_get_arcs_out
```

Return the properties pointing from the given resource.

Description

Return the properties pointing from the given resource.

Usage

```
librdf_model_get_arcs_out ( model,
node )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")

node librdf_node resource node ("_p_librdf_node_s")
```

Value

```
_p_librdf_iterator_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_contexts
```

Return the list of contexts in the graph.

Description

Return the list of contexts in the graph.

Usage

```
librdf_model_get_contexts ( model )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
```

Value

```
_p_librdf_iterator_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_feature
```

Get the value of a graph feature.

Description

Get the value of a graph feature.

Usage

```
librdf_model_get_feature ( model,
feature )
```

Arguments

model librdf_model object ("_p_librdf_model_s")
feature librdf_uri feature property ("_p_librdf_uri_s")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_get_source
```

Return one source (subject) of arc in an RDF graph given arc (predicate) and target (object).

Description

Return one source (subject) of arc in an RDF graph given arc (predicate) and target (object).

Usage

```
librdf_model_get_source ( model,
arc,
target )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")

arc librdf_node arc ("_p_librdf_node_s")

target librdf_node target ("_p_librdf_node_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
{\tt librdf\_model\_get\_sources}
```

Return the sources (subjects) of arc in an RDF graph given arc (predicate) and target (object).

Description

Return the sources (subjects) of arc in an RDF graph given arc (predicate) and target (object).

Usage

```
librdf_model_get_sources ( model,
arc,
target )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
arc librdf_node arc ("_p_librdf_node_s")
target librdf_node target ("_p_librdf_node_s")
```

Value

```
_p_librdf_iterator_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_target
```

Return one target (object) of an arc in an RDF graph given source (subject) and arc (predicate).

Description

Return one target (object) of an arc in an RDF graph given source (subject) and arc (predicate).

Usage

```
librdf_model_get_target ( model,
source,
arc )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
source librdf_node source ("_p_librdf_node_s")
arc librdf_node arc ("_p_librdf_node_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_get_targets
```

Return the targets (objects) of an arc in an RDF graph given source (subject) and arc (predicate).

Description

Return the targets (objects) of an arc in an RDF graph given source (subject) and arc (predicate).

Usage

```
librdf_model_get_targets ( model,
source,
arc )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
source librdf_node source ("_p_librdf_node_s")
arc librdf_node arc ("_p_librdf_node_s")
```

Value

```
_p_librdf_iterator_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_has_arc_in
```

Check if a node has a given property pointing to it.

Description

Check if a node has a given property pointing to it.

Usage

```
librdf_model_has_arc_in ( model,
node,
property,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")

node librdf_node resource node ("_p_librdf_node_s")

property librdf_node property node ("_p_librdf_node_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_has_arc_out
```

Check if a node has a given property pointing from it.

Description

Check if a node has a given property pointing from it.

Usage

```
librdf_model_has_arc_out ( model,
node,
property,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")

node librdf_node resource node ("_p_librdf_node_s")

property librdf_node property node ("_p_librdf_node_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

70 librdf_model_load

librdf_model_load

Load content from a URI into the model.

Description

Load content from a URI into the model.

Usage

```
librdf_model_load ( model,
uri,
name,
mime_type,
type_uri,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")

uri the URI to read the content ("_p_librdf_uri_s")

name the name of the parser (or NULL) ("character")

mime_type the MIME type of the syntax (NULL if not used) ("character")

type_uri URI identifying the syntax (NULL if not used) ("_p_librdf_uri_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_model_query_execute
```

Execute a query against the model.

Description

Execute a query against the model.

Usage

```
librdf_model_query_execute ( model,
query )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
query librdf_query object ("_p_librdf_query")
```

Value

```
_p_librdf_query_results
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_remove_statement
```

Remove a known statement from the model.

Description

Remove a known statement from the model.

Usage

```
librdf_model_remove_statement ( model,
statement,
.copy )
```

Arguments

```
\label{eq:model_model_s} \begin{tabular}{ll} model & the model object ("\_p\_librdf\_model\_s") \\ statement & the statement ("\_p\_librdf\_statement\_s") \\ \end{tabular}
```

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_set_feature
```

Set the value of a graph feature.

Description

Set the value of a graph feature.

Usage

```
librdf_model_set_feature ( model,
feature,
value,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")

feature librdf_uri feature property ("_p_librdf_uri_s")
```

value librdf_node feature property value ("_p_librdf_node_s")

.copy NA

Value

integer

librdf_model_size 73

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_model_size

Get the number of statements in the model.

Description

Get the number of statements in the model.

Usage

```
librdf_model_size ( model,
.copy )
```

Arguments

```
model librdf_model object ("_p_librdf_model_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_model_sync

Synchronise the model to the model implementation.

Description

Synchronise the model to the model implementation.

Usage

```
librdf_model_sync ( model )
```

Arguments

model lib

librdf_model object ("_p_librdf_model_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_to_string
```

Write serialized model to a string.

Description

Write serialized model to a string.

```
librdf_model_to_string ( model,
uri,
name,
mime_type,
inUriOrNull )
```

Arguments

librdf_model object ("_p_librdf_model_s") model

base URI to use in serializing (or NULL if not used) ("_p_librdf_uri_s") uri

the name of the serializer (or NULL for default) ("character") name the MIME type of the syntax (NULL if not used) ("character") mime_type inUriOrNull URI identifying the syntax (NULL if not used) ("_p_librdf_uri_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_model_transaction_commit
```

Commit a transaction.

Description

Commit a transaction.

Usage

```
librdf_model_transaction_commit ( model,
.copy )
```

Arguments

the model object ("_p_librdf_model_s") mode1 NA

Value

integer

. сору

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
\label{librate} {\it libratemodel\_transaction\_rollback} \\ {\it Rollback\ a\ transaction}.
```

Description

Rollback a transaction.

Usage

```
librdf_model_transaction_rollback ( model,
.copy )
```

Arguments

```
model the model object ("_p_librdf_model_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

Description

Start a transaction

Usage

```
librdf_model_transaction_start ( model,
.copy )
```

Arguments

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_digest

Constructor - create a new librdf_digest object.

Description

Constructor - create a new librdf_digest object.

```
librdf_new_digest ( world,
name )
```

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Arguments

world redland world object ("_p_librdf_world_s")

name the digest name to use to create this digest ("character")

Value

```
_p_librdf_digest_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_hash

Constructor - create a new librdf_hash object.

Description

Constructor - create a new librdf_hash object.

Usage

```
librdf_new_hash ( world,
name )
```

Arguments

world redland world object ("_p_librdf_world_s")

name factory name ("character")

Value

```
_p_librdf_hash_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_hash_from_array_of_strings
```

Constructor - create a new librdf_hash object from an array of strings.

Description

Constructor - create a new librdf_hash object from an array of strings.

Usage

```
librdf_new_hash_from_array_of_strings ( world,
name,
string )
```

Arguments

world redland world object ("_p_librdf_world_s")

name hash name ("character")

string address of the start of the array of char* pointers ("character")

Value

```
_p_librdf_hash_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_hash_from_string
```

Constructor - create a new librdf_hash object from a string.

Description

Constructor - create a new librdf_hash object from a string.

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Usage

```
librdf_new_hash_from_string ( world,
name,
string )
```

Arguments

world redland world object ("_p_librdf_world_s")

name hash name ("character")

string hash encoded as a string ("character")

Value

```
_p_librdf_hash_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_model

Constructor - create a new storage librdf_model object.

Description

Constructor - create a new storage librdf_model object.

Usage

```
librdf_new_model ( world,
storage,
options_string )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
storage librdf_storage to use ("_p_librdf_storage_s")
options_string options to initialise model ("character")
```

Value

```
_p_librdf_model_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_model_from_model
```

Copy constructor - create a new librdf_model from an existing one.

Description

Copy constructor - create a new librdf_model from an existing one.

Usage

```
librdf_new_model_from_model ( model )
```

Arguments

```
model the existing librdf_model ("_p_librdf_model_s")
```

Value

```
_p_librdf_model_s
```

References

```
http://librdf.org/docs
```

See Also

82 librdf_new_node

```
librdf_new_model_with_options
```

Constructor - Create a new librdf_model with storage.

Description

Constructor - Create a new librdf_model with storage.

Usage

```
librdf_new_model_with_options ( world,
storage,
options )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
```

storage librdf_storage storage to use ("_p_librdf_storage_s")
options librdf_hash of options to use ("_p_librdf_hash_s")

Value

```
_p_librdf_model_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_node

Constructor - create a new librdf_node object with a private identifier.

Description

Constructor - create a new librdf_node object with a private identifier.

```
librdf_new_node ( world )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_node_from_blank_identifier
```

Constructor - create a new blank node librdf_node object from a blank node identifier.

Description

Constructor - create a new blank node librdf_node object from a blank node identifier.

Usage

```
librdf_new_node_from_blank_identifier ( world,
inStrOrNull )
```

Arguments

world redland world object ("_p_librdf_world_s")

 $in Str Or Null \qquad UTF-8 \ encoded \ blank \ node \ identifier \ or \ NULL \ ("character")$

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_node_from_literal
```

Constructor - create a new literal librdf_node object.

Description

Constructor - create a new literal librdf_node object.

Usage

```
librdf_new_node_from_literal ( world,
string,
inStrOrNull,
is_wf_xml )
```

Arguments

world redland world object ("_p_librdf_world_s")

string literal UTF-8 encoded string value ("character")

inStrOrNull literal XML language (or NULL, empty string) ("character")

is_wf_xml non 0 if literal is XML ("integer")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_node_from_node
```

Copy constructor - create a new librdf_node object from an existing librdf_node object.

Description

Copy constructor - create a new librdf_node object from an existing librdf_node object.

Usage

```
librdf_new_node_from_node ( node )
```

Arguments

node

librdf_node object to copy ("_p_librdf_node_s")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_node_from_normalised_uri_string
```

Constructor - create a new librdf_node object from a UTF-8 encoded URI string normalised to a new base URI.

Description

Constructor - create a new librdf_node object from a UTF-8 encoded URI string normalised to a new base URI.

```
librdf_new_node_from_normalised_uri_string ( world,
    uri_string,
    source_uri,
    base_uri )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
uri_string UTF-8 encoded string representing a URI ("character")
source_uri source URI ("_p_librdf_uri_s")
base_uri base URI ("_p_librdf_uri_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_node_from_typed_literal
```

Constructor - create a new typed literal librdf_node object.

Description

Constructor - create a new typed literal librdf_node object.

Usage

```
librdf_new_node_from_typed_literal ( world,
string,
inStrOrNull,
inUriOrNull )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
string literal UTF-8 encoded string value ("character")
```

inStrOrNull literal XML language (or NULL, empty string) ("character") inUriOrNull URI of typed literal datatype or NULL ("_p_librdf_uri_s")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_node_from_uri
```

Constructor - create a new resource librdf_node object with a given URI.

Description

Constructor - create a new resource librdf_node object with a given URI.

Usage

```
librdf_new_node_from_uri ( world,
uri )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
uri librdf_uri object ("_p_librdf_uri_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_node_from_uri_local_name
```

Constructor - create a new resource librdf_node object with a given URI and local name.

Description

Constructor - create a new resource librdf_node object with a given URI and local name.

Usage

```
librdf_new_node_from_uri_local_name ( world,
uri,
local_name )
```

Arguments

world redland world object ("_p_librdf_world_s")
uri librdf_uri object ("_p_librdf_uri_s")
local_name local name to append to URI ("character")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_node_from_uri_string
```

Constructor - create a new librdf_node object from a URI string.

Description

Constructor - create a new librdf_node object from a URI string.

librdf_new_parser 89

Usage

```
librdf_new_node_from_uri_string ( world,
string )
```

Arguments

world redland world object ("_p_librdf_world_s")
string string representing a URI ("character")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_parser

Constructor - create a new librdf_parser object.

Description

Constructor - create a new librdf_parser object.

Usage

```
librdf_new_parser ( world,
name,
mime_type,
type_uri )
```

Arguments

world redland world object ("_p_librdf_world_s")

name the parser factory name (or NULL or empty string if don't care) ("character")

mime_type the MIME type of the syntax (NULL if not used) ("character")

type_uri URI of syntax (NULL if not used) ("_p_librdf_uri_s")

Value

```
_p_librdf_parser_s
```

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References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_query

Constructor - create a new librdf_query object.

Description

Constructor - create a new librdf_query object.

Usage

```
librdf_new_query ( world,
name,
uri,
query_string,
base_uri )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
```

name the name identifying the query language ("character")

uri the URI identifying the query language (or NULL) ("_p_librdf_uri_s")

query_string the query string ("character")

base_uri the base URI of the query string (or NULL) ("_p_librdf_uri_s")

Value

```
_p_librdf_query
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_query_from_query
```

Copy constructor - create a new librdf_query object from an existing one

Description

Copy constructor - create a new librdf_query object from an existing one

Usage

```
librdf_new_query_from_query ( old_query )
```

Arguments

```
old_query the existing query librdf_query to use ("_p_librdf_query")
```

Value

```
_p_librdf_query
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_serializer Constructor - create a new librdf_serializer object.

Description

Constructor - create a new librdf_serializer object.

```
librdf_new_serializer ( world,
name,
mime_type,
type_uri )
```

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Arguments

world redland world object ("_p_librdf_world_s")

name the serializer factory name (or NULL or empty string if don't care) ("character")

mime_type the MIME type of the syntax (NULL if not used) ("character")

type_uri URI of syntax (NULL if not used) ("_p_librdf_uri_s")

Value

```
_p_librdf_serializer_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

Description

Constructor - create a new empty librdf_statement.

Usage

```
librdf_new_statement ( world )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
```

Value

```
_p_librdf_statement_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_statement_from_nodes
```

Constructor - create a new librdf_statement from existing librdf_node objects.

Description

Constructor - create a new librdf_statement from existing librdf_node objects.

Usage

```
librdf_new_statement_from_nodes ( world,
subject,
predicate,
object )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
subject librdf_node ("_p_librdf_node_s")
predicate librdf_node ("_p_librdf_node_s")
object librdf_node ("_p_librdf_node_s")
```

Value

```
_p_librdf_statement_s
```

References

```
http://librdf.org/docs
```

See Also

94 librdf_new_storage

```
librdf_new_statement_from_statement
```

Copy constructor - create a new librdf_statement from an existing librdf_statement. Creates a deep copy - changes to original statement nodes are not reflected in the copy.

Description

Copy constructor - create a new librdf_statement from an existing librdf_statement. Creates a deep copy - changes to original statement nodes are not reflected in the copy.

Usage

```
librdf_new_statement_from_statement ( statement )
```

Arguments

```
statement librdf_statement to copy ("_p_librdf_statement_s")
```

Value

```
_p_librdf_statement_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_storage

Constructor - create a new librdf_storage object.

Description

Constructor - create a new librdf_storage object.

```
librdf_new_storage ( world,
storage_name,
name,
options_string )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
storage_name the storage factory name ("character")
name an identifier for the storage ("character")
options_string options to initialise storage ("character")
```

Value

```
_p_librdf_storage_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_storage_from_storage
```

Copy constructor - create a new librdf_storage object from an existing one

Description

Copy constructor - create a new librdf_storage object from an existing one

Usage

```
librdf_new_storage_from_storage ( old_storage )
```

Arguments

```
{\tt old\_storage} \qquad \text{the existing storage librdf\_storage to use ("\_p\_librdf\_storage\_s")}
```

Value

```
_p_librdf_storage_s
```

References

```
http://librdf.org/docs
```

96 librdf_new_uri

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_uri

Constructor - create a new librdf_uri object from a URI string.

Description

Constructor - create a new librdf_uri object from a URI string.

Usage

```
librdf_new_uri ( world,
string )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
string URI in string form ("character")
```

Value

```
_p_librdf_uri_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_new_uri_from_filename
```

Constructor - create a new librdf_uri object from a filename.

Description

Constructor - create a new librdf_uri object from a filename.

Usage

```
librdf_new_uri_from_filename ( world,
filename )
```

Arguments

world Redland librdf_world object ("_p_librdf_world_s") filename ("character")

Value

```
_p_librdf_uri_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_new_uri_from_uri
```

Copy constructor - create a new librdf_uri object from an existing librdf_uri object.

Description

Copy constructor - create a new librdf_uri object from an existing librdf_uri object.

```
librdf_new_uri_from_uri ( uri )
```

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Arguments

```
uri librdf_uri object ("_p_librdf_uri_s")
```

Value

```
_p_librdf_uri_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_new_world

Create a new Redland execution environment.

Description

Create a new Redland execution environment.

Usage

```
librdf_new_world ( )
```

Value

```
_p_librdf_world_s
```

References

```
http://librdf.org/docs
```

See Also

librdf_node_equals 99

librdf_node_equals

Compare two librdf_node objects for equality.

Description

Compare two librdf_node objects for equality.

Usage

```
librdf_node_equals ( first_node,
second_node,
.copy )
```

Arguments

```
\begin{tabular}{ll} first\_node & first librdf\_node node ("\_p\_librdf\_node\_s") \\ second\_node & second librdf\_node node ("\_p\_librdf\_node\_s") \\ . copy & NA \\ \end{tabular}
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_get_blank_identifier
```

Get the blank node identifier as a UTF-8 encoded string.

Description

Get the blank node identifier as a UTF-8 encoded string.

```
librdf_node_get_blank_identifier ( node )
```

Arguments

node the node object ("_p_librdf_node_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_get_literal_value
```

Get the literal value of the node as a UTF-8 encoded string.

Description

Get the literal value of the node as a UTF-8 encoded string.

Usage

```
librdf_node_get_literal_value ( node )
```

Arguments

node the node object ("_p_librdf_node_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

```
librdf_node_get_literal_value_as_latin1
```

Get the string literal value of the node as ISO Latin-1.

Description

Get the string literal value of the node as ISO Latin-1.

Usage

```
librdf_node_get_literal_value_as_latin1 ( node )
```

Arguments

node

the node object ("_p_librdf_node_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_get_literal_value_datatype_uri
```

Get the typed literal datatype URI of the literal node.

Description

Get the typed literal datatype URI of the literal node.

Usage

```
librdf_node_get_literal_value_datatype_uri ( node )
```

Arguments

node the node

the node object ("_p_librdf_node_s")

Value

```
_p_librdf_uri_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_get_literal_value_is_wf_xml

Get the XML well-formness property of the node.
```

Description

Get the XML well-formness property of the node.

Usage

```
librdf_node_get_literal_value_is_wf_xml ( node,
.copy )
```

Arguments

```
node the node object ("_p_librdf_node_s") .copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
\label{librdf_node_get_literal_value} I ibrdf\_node\_get\_literal\_value\_language \\ \textit{Get the XML language of the node}.
```

Description

Get the XML language of the node.

Usage

```
librdf_node_get_literal_value_language ( node )
```

Arguments

node the node object ("_p_librdf_node_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_get_li_ordinal
```

Get the node li object ordinal value.

Description

Get the node li object ordinal value.

Usage

```
librdf_node_get_li_ordinal ( node,
.copy )
```

Arguments

```
\begin{array}{ll} \text{node} & \text{the node object ("\_p\_librdf\_node\_s")} \\ \text{.copy} & \text{NA} \end{array}
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_get_type Get the type of the node.
```

Description

Get the type of the node.

Usage

```
librdf_node_get_type ( node,
.copy )
```

Arguments

```
node the node object ("_p_librdf_node_s") . \label{eq:node_s} NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_node_get_uri 105

Description

Get the URI for a node object.

Usage

```
librdf_node_get_uri ( node )
```

Arguments

```
node the node object ("_p_librdf_node_s")
```

Value

```
_p_librdf_uri_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

Description

Check node is a blank nodeID.

Usage

```
librdf_node_is_blank ( node,
.copy )
```

Arguments

```
node the node object ("_p_librdf_node_s") .copy NA
```

librdf_node_is_literal

Value

106

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_node_is_literal
```

Check node is a literal.

Description

Check node is a literal.

Usage

```
librdf_node_is_literal ( node,
.copy )
```

Arguments

```
node the node object ("_p_librdf_node_s") . \label{eq:node_s}.
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_node_is_resource
```

Check node is a resource.

Description

Check node is a resource.

Usage

```
librdf_node_is_resource ( node,
.copy )
```

Arguments

```
node the node object ("_p_librdf_node_s") . copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_node_to_string Format the node as a string in a debugging format.

Description

Format the node as a string in a debugging format.

Usage

```
librdf_node_to_string ( node )
```

Arguments

```
node the node object ("_p_librdf_node_s")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_check_name
```

Check if a parser name is known

Description

Check if a parser name is known

Usage

```
librdf_parser_check_name ( world,
name,
.copy )
```

Arguments

```
world redland world object ("_p_librdf_world_s")

name name of parser ("character")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_parser_get_accept_header
```

Get an HTTP Accept value for the parser.

Description

Get an HTTP Accept value for the parser.

Usage

```
librdf_parser_get_accept_header ( parser )
```

Arguments

```
parser ("_p_librdf_parser_s")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_get_feature
```

Get the value of a parser feature.

Description

Get the value of a parser feature.

Usage

```
librdf_parser_get_feature ( parser,
feature )
```

Arguments

```
parser librdf_parser object ("_p_librdf_parser_s")
feature librdf_Uuri feature property ("_p_librdf_uri_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf\_parser\_get\_namespaces\_seen\_count
```

Get the number of namespaces seen during parsing

Description

Get the number of namespaces seen during parsing

Usage

```
librdf_parser_get_namespaces_seen_count ( parser,
.copy )
```

Arguments

```
parser librdf_parser object ("_p_librdf_parser_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_parser_get_namespaces_seen_prefix

Get the prefix of namespaces seen during parsing
```

Description

Get the prefix of namespaces seen during parsing

Usage

```
\label{librdf_parser_get_namespaces_seen_prefix ( parser, offset )} % \begin{center} \begin{ce
```

Arguments

```
parser librdf_parser object ("_p_librdf_parser_s")
offset index into list of namespaces ("integer")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_get_namespaces_seen_uri

Get the uri of namespaces seen during parsing
```

Description

Get the uri of namespaces seen during parsing

```
librdf_parser_get_namespaces_seen_uri ( parser,
offset )
```

Arguments

```
parser librdf_parser object ("_p_librdf_parser_s")
offset index into list of namespaces ("integer")
```

Value

```
_p_librdf_uri_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_guess_name
```

Get a parser name for content with type or identifier

Description

Get a parser name for content with type or identifier

Usage

```
librdf_parser_guess_name ( mime_type,
buffer,
identifier )
```

Arguments

mime_type MIME type of syntax or NULL ("character")

buffer content buffer or NULL ("character")
identifier content identifier or NULL ("character")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_guess_name2
```

Get a parser name for content with type or identifier

Description

Get a parser name for content with type or identifier

Usage

```
librdf_parser_guess_name2 ( world,
mime_type,
buffer,
identifier )
```

Arguments

world librdf_world object ("_p_librdf_world_s")
mime_type MIME type of syntax or NULL ("character")
buffer content buffer or NULL ("character")

content identifier or NULL ("character")

Value

character

identifier

References

```
http://librdf.org/docs
```

See Also

```
librdf_parser_parse_as_stream
```

Parse a URI to a librdf_stream of statements.

Description

Parse a URI to a librdf_stream of statements.

Usage

```
librdf_parser_parse_as_stream ( parser,
uri,
inUriorNull )
```

Arguments

```
parser the parser ("_p_librdf_parser_s")
uri the URI to read ("_p_librdf_uri_s")
inUriorNull the base URI to use or NULL ("_p_librdf_uri_s")
```

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_parse_counted_string_as_stream
```

Parse a counted string of content to a librdf_stream of statements.

Description

Parse a counted string of content to a librdf_stream of statements.

Usage

```
librdf_parser_parse_counted_string_as_stream ( parser,
    string,
    length,
    base_uri )
```

Arguments

```
parser the parser ("_p_librdf_parser_s")
string the string to parse ("character")
```

length length of the string content (must be >0) ("integer")
base_uri the base URI to use or NULL ("_p_librdf_uri_s")

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_parse_counted_string_into_model
```

Parse a counted string of content into an librdf_model.

Description

Parse a counted string of content into an librdf_model.

```
librdf_parser_parse_counted_string_into_model ( parser,
    string,
    length,
    base_uri,
    model,
    .copy )
```

Arguments

```
parser the parser ("_p_librdf_parser_s")

string the content to parse ("character")

length length of content (must be >0) ("integer")

base_uri the base URI to use or NULL ("_p_librdf_uri_s")

model the model to use ("_p_librdf_model_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_parse_into_model
```

Parse a URI of content into an librdf_model.

Description

Parse a URI of content into an librdf_model.

Usage

```
librdf_parser_parse_into_model ( parser,
uri,
inUriOrNull,
model,
.copy )
```

Arguments

```
parser the parser ("_p_librdf_parser_s")
uri the URI to read the content ("_p_librdf_uri_s")
inUriOrNull the base URI to use or NULL ("_p_librdf_uri_s")
model the model to use ("_p_librdf_model_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_parser_parse_string_as_stream
```

Parse a string of content to a librdf_stream of statements.

Description

Parse a string of content to a librdf_stream of statements.

Usage

```
librdf_parser_parse_string_as_stream ( parser,
string,
base_uri )
```

Arguments

```
parser the parser ("_p_librdf_parser_s")
string the string to parse ("character")
```

base_uri the base URI to use or NULL ("_p_librdf_uri_s")

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_parser_parse_string_into_model
```

Parse a string of content into an librdf_model.

Description

Parse a string of content into an librdf_model.

Usage

```
librdf_parser_parse_string_into_model ( parser,
string,
base_uri,
model,
.copy )
```

Arguments

```
parser the parser ("_p_librdf_parser_s")

string the content to parse ("character")

base_uri the base URI to use or NULL ("_p_librdf_uri_s")

model the model to use ("_p_librdf_model_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_parser_set_feature
```

Set the value of a parser feature.

Description

Set the value of a parser feature.

Usage

```
librdf_parser_set_feature ( parser,
feature,
value,
.copy )
```

Arguments

```
parser librdf_parser object ("_p_librdf_parser_s")

feature librdf_uri feature property ("_p_librdf_uri_s")

value librdf_node feature property value ("_p_librdf_node_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_query_execute Run the query on a model.

Description

Run the query on a model.

Usage

```
librdf_query_execute ( query,
model )
```

Arguments

```
query librdf_query object ("_p_librdf_query")
model model to operate query on ("_p_librdf_model_s")
```

Value

```
_p_librdf_query_results
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_get_limit
```

Get the query-specified limit on results.

Description

Get the query-specified limit on results.

```
librdf_query_get_limit ( query,
.copy )
```

librdf_query_get_offset

Arguments

```
query librdf_query query object ("_p_librdf_query")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_get_offset
```

Get the query-specified offset on results.

Description

Get the query-specified offset on results.

Usage

```
librdf_query_get_offset ( query,
.copy )
```

Arguments

```
query librdf_query query object ("_p_librdf_query")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_query_results_as_stream
```

Get a query result as an RDF graph in librdf_stream form

Description

Get a query result as an RDF graph in librdf_stream form

Usage

```
librdf_query_results_as_stream ( query_results )
```

Arguments

```
query_results librdf_query_results query_results ("_p_librdf_query_results")
```

Value

```
_p_librdf_stream_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_finished
```

Find out if binding results are exhausted.

Description

Find out if binding results are exhausted.

Usage

```
librdf_query_results_finished ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf\_query\_results\_get\_bindings\_count
```

Get the number of bound variables in the result.

Description

Get the number of bound variables in the result.

Usage

```
librdf_query_results_get_bindings_count ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_query_results_get_binding_name

Get binding name for the current result.

Description

Get binding name for the current result.

Usage

```
librdf_query_results_get_binding_name ( query_results,
offset )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results")
offset of binding name into array of known names ("integer")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_get_binding_value

Get one binding value for the current result.
```

Description

Get one binding value for the current result.

```
librdf\_query\_results\_get\_binding\_value \ ( \ query\_results, \\ offset \ )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results") offset of binding name into array of known names ("integer")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_get_binding_value_by_name

Get one binding value for a given name in the current result.
```

Description

Get one binding value for a given name in the current result.

Usage

```
librdf_query_results_get_binding_value_by_name ( query_results,
name )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results")
name variable name ("character")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf_query_results_get_boolean

Get boolean query result.
```

Description

Get boolean query result.

Usage

```
librdf_query_results_get_boolean ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results query_results ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_get_count
```

Get number of bindings so far.

Description

Get number of bindings so far.

```
librdf_query_results_get_count ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_is_bindings
```

Test if librdf_query_results is variable bindings format.

Description

Test if librdf_query_results is variable bindings format.

Usage

```
librdf_query_results_is_bindings ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_query_results_is_boolean

Test if librdf_query_results is boolean format.

Description

Test if librdf_query_results is boolean format.

Usage

```
librdf_query_results_is_boolean ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_is_graph
```

Test if librdf_query_results is RDF graph format.

Description

Test if librdf_query_results is RDF graph format.

```
librdf_query_results_is_graph ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_is_syntax

Test if librdf_query_results is a syntax.
```

Description

Test if librdf_query_results is a syntax.

Usage

```
librdf_query_results_is_syntax ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_query_results_next
```

Move to the next result.

Description

Move to the next result.

Usage

```
librdf_query_results_next ( query_results,
.copy )
```

Arguments

```
query_results librdf_query_results query results ("_p_librdf_query_results")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_to_file
```

Write a query results to a file.

Description

Write a query results to a file.

```
librdf_query_results_to_file ( query_results,
name,
format_uri,
base_uri,
.copy )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
```

name filename to write to ("character")

base_uri Base URI of output formatted syntax (or NULL) ("_p_librdf_uri_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf\_query\_results\_to\_file2
```

Write a query results to a file.

Description

Write a query results to a file.

Usage

```
librdf_query_results_to_file2 ( query_results,
name,
mime_type,
format_uri,
base_uri,
.copy )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
```

name filename to write to ("character")
mime_type mime type (or NULL) ("character")

format_uri URI of syntax to format to (or NULL) ("_p_librdf_uri_s")

base_uri Base URI of output formatted syntax (or NULL) ("_p_librdf_uri_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_results_to_string

Turn a query results into a string.
```

Description

Turn a query results into a string.

Usage

```
librdf_query_results_to_string ( query_results,
format_uri,
base_uri )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")

format_uri URI of syntax to format to ("_p_librdf_uri_s")
```

base_uri Base URI of output formatted syntax (or NULL) ("_p_librdf_uri_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

```
librdf_query_results_to_string2
```

Turn a query results into a string.

Description

Turn a query results into a string.

Usage

```
librdf_query_results_to_string2 ( query_results,
name,
mime_type,
format_uri,
base_uri )
```

Arguments

```
query_results librdf_query_results object ("_p_librdf_query_results")
```

name format name ("character")

mime_type format mime type (or NULL) ("character")

format_uri URI of syntax to format to (or NULL) ("_p_librdf_uri_s")

base_uri Base URI of output formatted syntax (or NULL) ("_p_librdf_uri_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

```
librdf_query_set_limit
```

Set the query-specified limit on results.

Description

Set the query-specified limit on results.

Usage

```
librdf_query_set_limit ( query,
limit,
.copy )
```

Arguments

```
query librdf_query query object ("_p_librdf_query")
limit the limit on results, >=0 to set a limit, <0 to have no limit ("integer")
.copy NA</pre>
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_query_set_offset
```

Set the query-specified offset on results.

Description

Set the query-specified offset on results.

Usage

```
librdf_query_set_offset ( query,
  offset,
  .copy )
```

Arguments

query librdf_query query object ("_p_librdf_query")

offset offset for results, >=0 to set an offset, <0 to have no offset ("integer")

. copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_serializer_check_name
```

Check if a serializer name is known

Description

Check if a serializer name is known

Usage

```
librdf_serializer_check_name ( world,
name,
.copy )
```

Arguments

```
world \qquad \qquad red land \ world \ object \ ("\_p\_librdf\_world\_s")
```

name of serializer ("character")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_serializer_get_feature
```

Get the value of a serializer feature.

Description

Get the value of a serializer feature.

Usage

```
librdf_serializer_get_feature ( serializer,
feature )
```

Arguments

```
serializer serializer object ("_p_librdf_serializer_s")
feature URI of feature ("_p_librdf_uri_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
\label{librdf_serialize_model_to_file} Write~a~serialized~librdf\_model~to~a~file.
```

Description

Write a serialized librdf_model to a file.

Usage

```
librdf_serializer_serialize_model_to_file ( serializer,
name,
inUriOrNull,
model,
.copy )
```

Arguments

```
serializer the serializer ("_p_librdf_serializer_s")

name filename to serialize to ("character")

inUriOrNull the base URI to use (or NULL) ("_p_librdf_uri_s")

model the librdf_model model to use ("_p_librdf_model_s")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_serializer_serialize_model_to_string
```

Write a serialized librdf_model to a string. The returned string must be freed by the caller using librdf_free_memory().

Description

Write a serialized librdf_model to a string. The returned string must be freed by the caller using librdf_free_memory().

Usage

```
librdf_serializer_serialize_model_to_string ( serializer,
inUriOrNull,
model )
```

Arguments

serializer the serializer ("_p_librdf_serializer_s")

inUriOrNull the base URI to use (or NULL) ("_p_librdf_uri_s")
model the librdf_model model to use ("_p_librdf_model_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
\label{librdf_serialize_stream_to_file} I ibrdf\_serialize\_serialize\_stream\_to\_file. Write a librdf\_stream to a file.
```

Description

Write a librdf_stream to a file.

Usage

```
librdf_serializer_serialize_stream_to_file ( serializer,
name,
base_uri,
stream,
.copy )
```

Arguments

serializer the serializer ("_p_librdf_serializer_s")
name filename to serialize to ("character")

base_uri the base URI to use (or NULL) ("_p_librdf_uri_s")
stream the librdf_stream stream to use ("_p_librdf_stream_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_serializer_serialize_stream_to_string

Write a librdf_stream to a string.
```

Description

Write a librdf_stream to a string.

```
librdf_serializer_serialize_stream_to_string ( serializer,
base_uri,
stream )
```

Arguments

```
serializer the serializer ("_p_librdf_serializer_s")
```

base_uri the base URI to use (or NULL) ("_p_librdf_uri_s") stream the librdf_stream stream to use ("_p_librdf_stream_s")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_serializer_set_feature
```

Set the value of a serializer feature.

Description

Set the value of a serializer feature.

Usage

```
librdf_serializer_set_feature ( serializer,
feature,
value,
.copy )
```

Arguments

```
serializer serializer object ("_p_librdf_serializer_s")
```

feature URI of feature ("_p_librdf_uri_s") value value to set ("_p_librdf_node_s")

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_serializer_set_namespace

Set a namespace URI/prefix mapping.
```

Description

Set a namespace URI/prefix mapping.

Usage

```
librdf_serializer_set_namespace ( serializer,
nspace,
prefix,
.copy )
```

Arguments

```
serializer serializer object ("_p_librdf_serializer_s")

nspace URI of namespace or NULL ("_p_librdf_uri_s")

prefix prefix to use or NULL ("character")

.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

Description

Short copyright string (one line).

Usage

```
librdf_short_copyright_string ( .copy )
```

Arguments

. copy

NA

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_short_copyright_string_get

*Return Redland librdf copyright string*
```

Description

Return Redland librdf copyright string

Usage

```
librdf_short_copyright_string_get( .copy )
```

Arguments

. copy logical

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_statement_equals
```

Check if two statements are equal.

Description

Check if two statements are equal.

Usage

```
librdf_statement_equals ( statement1,
statement2,
.copy )
```

Arguments

```
statement1 first librdf_statement ("_p_librdf_statement_s")
statement2 second librdf_statement ("_p_librdf_statement_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_statement_get_object
```

Get the statement object.

Description

Get the statement object.

Usage

```
librdf_statement_get_object ( statement )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_statement_get_predicate
```

Get the statement predicate.

Description

Get the statement predicate.

Usage

```
librdf_statement_get_predicate ( statement )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

Description

Get the statement subject.

Usage

```
librdf_statement_get_subject ( statement )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
```

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

```
librdf\_statement\_is\_complete
```

Check if statement is a complete and legal RDF triple.

Description

Check if statement is a complete and legal RDF triple.

Usage

```
librdf_statement_is_complete ( statement,
.copy )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_statement_match
```

Match a statement against a 'partial' statement.

Description

Match a statement against a 'partial' statement.

Usage

```
librdf_statement_match ( statement,
partial_statement,
.copy )
```

Arguments

```
\begin{tabular}{ll} statement & statement ("\_p\_librdf\_statement\_s") \\ partial\_statement \\ & statement with possible empty parts ("\_p\_librdf\_statement\_s") \\ .copy & NA \end{tabular}
```

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

Description

Set the statement object.

Usage

```
librdf_statement_set_object ( statement,
object )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
object librdf_node of object ("_p_librdf_node_s")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_statement_set_predicate

Set the statement predicate.
```

Description

Set the statement predicate.

Usage

```
librdf_statement_set_predicate ( statement,
predicate )
```

Arguments

```
statement librdf_statement object ("_p_librdf_statement_s")
predicate librdf_node of predicate ("_p_librdf_node_s")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

```
librdf_statement_set_subject
```

Set the statement subject.

Description

Set the statement subject.

Usage

```
librdf_statement_set_subject ( statement,
subject )
```

Arguments

statement librdf_statement object ("_p_librdf_statement_s")
subject librdf_node of subject ("_p_librdf_node_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_statement_to_string
```

Format the librdf_statement as a string.

Description

Format the librdf_statement as a string.

Usage

```
librdf_statement_to_string ( statement )
```

150 librdf_stream_end

Arguments

```
statement ("_p_librdf_statement_s")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_stream_end

Test if the stream has ended.

Description

Test if the stream has ended.

Usage

```
librdf_stream_end ( stream,
.copy )
```

Arguments

```
stream librdf_stream object ("_p_librdf_stream_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_stream_get_context
```

Get the context of the current object on the stream.

Description

Get the context of the current object on the stream.

Usage

```
librdf_stream_get_context ( stream )
```

Arguments

```
stream the librdf_
```

the librdf_stream_object ("_p_librdf_stream_s")

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_stream_get_object
```

Get the current librdf_statement in the stream.

Description

Get the current librdf_statement in the stream.

Usage

```
librdf_stream_get_object ( stream )
```

Arguments

```
stream librdf_stream_object ("_p_librdf_stream_s")
```

librdf_stream_next

Value

```
_p_librdf_statement_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_stream_next

Move to the next librdf_statement in the stream.

Description

Move to the next librdf_statement in the stream.

Usage

```
librdf_stream_next ( stream,
.copy )
```

Arguments

```
stream librdf_stream object ("_p_librdf_stream_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_uri_compare 153

librdf_uri_compare

Compare two librdf_uri objects lexicographically.

Description

Compare two librdf_uri objects lexicographically.

Usage

```
librdf_uri_compare ( first_uri,
second_uri,
.copy )
```

Arguments

```
first_uri librdf_uri object 1 or NULL ("_p_librdf_uri_s")
second_uri librdf_uri object 2 or NULL ("_p_librdf_uri_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_uri_equals

Compare two librdf_uri objects for equality.

Description

Compare two librdf_uri objects for equality.

Usage

```
librdf_uri_equals ( first_uri,
second_uri,
.copy )
```

154 librdf_uri_to_string

Arguments

```
first_uri librdf_uri object 1 ("_p_librdf_uri_s")
second_uri librdf_uri object 2 ("_p_librdf_uri_s")
.copy NA
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_uri_to_string Format the URI as a string.
```

Description

Format the URI as a string.

Usage

```
librdf_uri_to_string ( uri )
```

Arguments

```
uri librdf_uri object ("_p_librdf_uri_s")
```

Value

character

References

```
http://librdf.org/docs
```

See Also

librdf_version_decimal

librdf_version_decimal

Library full version as a decimal integer.

Description

Library full version as a decimal integer.

Usage

```
librdf_version_decimal ( .copy )
```

Arguments

. сору

NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_version_decimal_get
```

Return Redland librdf copyright

Description

Return Redland librdf copyright

Usage

```
librdf_version_decimal_get ( .copy )
```

Arguments

. copy logical

156 librdf_version_major

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

Description

Library major version number as a decimal integer.

Usage

```
librdf_version_major ( .copy )
```

Arguments

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

librdf_version_major_get

Return the Redland librdf major version number

Description

Return the Redland librdf major version number

Usage

```
librdf_version_major_get ( .copy )
```

Arguments

.copy

logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_version_minor Library minor version number as a decimal integer.

Description

Library minor version number as a decimal integer.

Usage

```
librdf_version_minor ( .copy )
```

Arguments

.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_version_minor_get
```

Return the Redland librdf minor version number

Description

Return the Redland librdf minor version number

Usage

```
librdf_version_minor_get ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

librdf_version_release 159

librdf_version_release

Library release version number as a decimal integer.

Description

Library release version number as a decimal integer.

Usage

```
librdf_version_release ( .copy )
```

Arguments

. copy

NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_version_release_get
```

Return the Redland librdf release version number

Description

Return the Redland librdf release version number

Usage

```
librdf_version_release_get ( .copy )
```

Arguments

. copy logical

librdf_version_string

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_version_string Library full version as a string.

Description

Library full version as a string.

Usage

```
librdf_version_string ( .copy )
```

Arguments

.copy NA

Value

character

References

```
http://librdf.org/docs
```

See Also

librdf_version_string_get

Return the Redland librdf version as a string.

Description

Return the Redland librdf version as a string.

Usage

```
librdf_version_string_get ( .copy )
```

Arguments

. copy logical

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
librdf_world_get_feature
```

Get the value of a world feature.

Description

Get the value of a world feature.

Usage

```
librdf_world_get_feature ( world,
feature )
```

Arguments

```
world librdf_world object ("_p_librdf_world_s")
feature librdf_uri feature property ("_p_librdf_uri_s")
```

librdf_world_open

Value

```
_p_librdf_node_s
```

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

librdf_world_open

Open a created redland world environment.

Description

Open a created redland world environment.

Usage

```
librdf_world_open ( world )
```

Arguments

world

redland world object ("_p_librdf_world_s")

Value

void

References

```
http://librdf.org/docs
```

See Also

librdf_world_set_feature

Set the value of a world feature.

Description

Set the value of a world feature.

Usage

```
librdf_world_set_feature ( world,
feature,
value,
.copy )
```

Arguments

world librdf_world object ("_p_librdf_world_s")
feature librdf_uri feature property ("_p_librdf_uri_s")
value librdf_node feature property value ("_p_librdf_node_s")
.copy NA

Value

integer

References

```
http://librdf.org/docs
```

See Also

```
librdf_world_set_logger
```

Set the world log handling function.

Description

Set the world log handling function.

Usage

```
librdf_world_set_logger ( world,
user_data,
log_handler )
```

Arguments

```
world redland world object ("_p_librdf_world_s")
user_data user data to pass to function ("_p_void")
log_handler pointer to the function ("_p_librdf_log_func")
```

Value

void

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

mergeNamespace_roclet A custom Roxygen roclet that adds Redland RDF functions to NAMES-PACE file generated by Roxygen. Model-class 165

Description

The redland package uses the SWIG (Simplified Wrapper and Interface Generator) to create the bindings between the Redland RDF C/C++ libraries and R. SWIG creates a NAMESPACE file that contains the function names for the librdf wrapper that it creates, but as of swig 3.0.2 this NAMESPACE file is incorrect and will also be overwritten by Roxygen when 'roxygenize()' or 'devtools:document()' is called, as the wrapper R code doesn't contain Roxygen export annotations used by Roxygen to build the namespace file. To allow for building a NAMESPACE file from all programs in the redland package, this roclet determines the set of wrapper R functions and adds these to the Roxygen generated NAMESPACE file that contains all names from the native R code in the redland package.

Usage

```
mergeNamespace_roclet(x, ...)
```

Arguments

x a roclet

... additional parameters

Details

The following line must be present in the DESCRIPTION file for this roclet to be called automatically when 'roxygen2::roxygenize()' or 'devtools::document()' is called:

Roxygen: list(roclets = c("collate", "rd", "namespace", "mergeNamespace_roclet"))

The 'namespace' roclet must always run before the 'mergeNamespace' roclet.

Examples

```
## Not run:
roxygen2::roxygenize()
devtools::document()
## End(Not run)
```

Model-class

A Redland Model object

Description

A Model object is used to store the statements (triples) of an RDF model.

Details

A Model may be created manually by creating Statement and adding them to the Model using addStatement, or a Model may be read in from a previously saved file using parseFileIntoModel. Once a Model is created, it can be queried using Query.

Node-class

Slots

librdf_model A redland model object

Methods

- Model-initialize: Initialize a Model object
- addStatement: Add a Statement object to the Model
- freeModel: Free memory used by a librdf model object

See Also

View examples of creating models by viewing the 'redland_overview' vignette: 'vignette("redland_overview")' redland: redland package

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")</pre>
```

Node-class

A Redland Node, used to store one node in an RDF triple statement.

Description

A Node represents a RDF Resource, Property, Literal or an RDF blank Node.

Slots

librdf_node A redland node object

Methods

- Node-initialize: Initialize a Node object.
- getNodeType: Determine the node type and return as a string.
- getNodeValue: Determine the node type and return as a string.
- getBlankNodeId: Get the value of the node as a string.

See Also

redland: redland package

parseFileIntoModel 167

Examples

```
world <- new("World")
# a blank node is created with a unique identifier generated by librdf
node <- new("Node", world)
# a blank node is created with a unique identifier generated by librdf
node <- new("Node", world, blank=NULL)
# a blank node is created with the user specified identifier, i.e. "_:id1"
node <- new("Node", world, blank="someid")
# a node type of 'literal' is created
node <- new("Node", world, literal="A Node Value")
# a Node type of 'resource' is created
node <- new("Node", world, uri="http://www.example.com")
# Create a literal node, specifying a language encoding
node <- new("Node", world, literal="Gérard de La Martinière", language="fr")</pre>
```

parseFileIntoModel

Parse the contents of a file into a model

Description

The contents of a the specified file are read and parsed into the initialized Parser object

Usage

```
parseFileIntoModel(.Object, world, filePath, model, ...)
## S4 method for signature 'Parser,World,character,Model'
parseFileIntoModel(.Object, world,
   filePath, model, baseUri = as.character(NA))
```

Arguments

```
.0bject a Parser object
world a World object
filePath a file that contains the RDF content
model a Model object to parse the RDF content into
... (Additional parameters)
baseUri a base URI (i.e. XML base) to apply to the model
```

Details

The parser factory name specified during initialization determines how the content is parsed, for example, if 'rdfxml' was specified during parser initialization, then the parser expects RDF/XML content as specified in the W3C recommendation (http://www.we3.org/TR/REC-rdf-syntax)

Parser-class

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
# Create the default "rdfxml" parser
parser <- new("Parser", world)
filePath <- system.file("extdata/example.rdf", package="redland")
parseFileIntoModel(parser, world, filePath, model)</pre>
```

Parser-class

An RDF Parser object

Description

The Parser class provides methods to parse RDF content into a Redland RDF model.

Slots

librdf_parser A redland parser object

Methods

- Parser-initialize: Initialize a Parser object.
- parseFileIntoModel: Parse the contents of a file into a model.
- freeParser: Free memory used by a librdf parser.

See Also

```
redland: redland package
```

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
# Create the default "rdfxml" parser
parser <- new("Parser", world)
filePath <- system.file("extdata/example.rdf", package="redland")
parseFileIntoModel(parser, world, filePath, model)</pre>
```

Query-class 169

Query-class

Query an RDF model

Description

The Query class is used to execute a query on a Model object using the default query language SPARQL. For more information, please refer to http://librdf.org/rasqal/ for details on supported query languages.

Details

A Query is executed using the executeQuery method, which returns a QueryResults object that can be iterated over the query solution sequence.

Slots

```
librdf_query A redland query object
librdf_world A redland world object
```

Methods

- Query-initialize: Initialize a Query object.
- executeQuery: Execute a query.
- setQueryResultLimit: Set limit on returned query results.
- getQueryResultLimit: Get the query result limit.
- getResults: Return all query results.
- writeResults: Write query results to a file.
- freeParser: Free memory used by a librdf query.

References

www.example.com

See Also

```
redland: redland package
```

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
stmt <- new("Statement", world=world,
    subject="https://cn.dataone.org/cn/v1/resolve/urn:uuid:274a0c5c-3082-4562-bbd3-2b1288768cac",
    predicate="http://www.w3.org/ns/prov#hadPlan",
    object="https://cn.dataone.org/cn/v1/resolve/urn:uuid:01305f45-f22b-40c8-8d27-00357d01e4a5")</pre>
```

170 QueryResults-class

```
status <- addStatement(model, stmt)</pre>
stmt <- new("Statement", world=world,</pre>
           subject="https://orcid.org/0000-0002-2192-403X",
           predicate="http://www.w3.org/ns/prov#Agent",
           object="slaughter",
           objectType="literal",
           datatype_uri="http://www.w3.org/2001/XMLSchema#string")
status <- addStatement(model, stmt)</pre>
queryString <-
   paste("PREFIX orcid: <https://orcid.org/>",
          "PREFIX dataone: <a href="https://cn.dataone.org/cn/v1/resolve/">",
          "PREFIX prov: <http://www.w3.org/ns/prov#>",
          "SELECT ?a ?c WHERE { ?a prov:Agent ?c . }", sep=" ")
query <- new("Query", world, queryString, base_uri=NULL, query_language="sparql", query_uri=NULL)
queryResult <- executeQuery(query, model)</pre>
result <- getNextResult(queryResult)</pre>
```

QueryResults-class

A Redland QueryResults object is used to inspect query results from a Query object.

Description

The QueryResults object contains the RDF statements that were returned from a query on an RDF model.

Slots

librdf_query_results A redland query object

Methods

- QueryResults-initialize: Initialize a QueryResults object.
- getNextResult: Get the next query result.
- freeQueryResults: Free memory used by a librdf query result.

See Also

```
redland: redland package
```

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
stmt <- new("Statement", world=world,
    subject="https://cn.dataone.org/cn/v1/resolve/urn:uuid:274a0c5c-3082-4562-bbd3-2b1288768cac",
    predicate="http://www.w3.org/ns/prov#hadPlan",
    object="https://cn.dataone.org/cn/v1/resolve/urn:uuid:01305f45-f22b-40c8-8d27-00357d01e4a5")</pre>
```

raptor_locator_byte 171

raptor_locator_byte

Get the locator byte offset from locator.

Description

Get the locator byte offset from locator

Usage

```
raptor_locator_byte ( locator, .copy )
```

Arguments

```
locator raptor locator ("_p_raptor_locator")
.copy logical
```

Value

character

References

```
http://librdf.org/docs
```

See Also

172 raptor_locator_file

raptor_locator_column Get column number from locator

Description

Get column number from locator

Usage

```
raptor_locator_column ( locator,
.copy )
```

Arguments

```
locator raptor locator ("_p_raptor_locator")
.copy logical
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

Description

Get file name from locator.

Usage

```
raptor_locator_file ( locator )
```

Arguments

```
locator raptor locator ("_p_raptor_locator")
```

raptor_locator_line 173

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

raptor_locator_line G

Get line number from locator.

Description

Get line number from locator.

Usage

```
raptor_locator_line ( locator, .copy )
```

Arguments

```
locator raptor locator ("_p_raptor_locator")
.copy logical
```

Value

integer

References

```
http://librdf.org/docs
```

See Also

raptor_locator_uri

Get URI from locator.

Description

Get URI from locator.

Usage

```
raptor_locator_uri ( locator )
```

Arguments

locator

raptor locator ("_p_raptor_locator")

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
raptor_version_decimal
```

Raptor version as a decimal number

Description

Raptor version as a decimal number

Usage

```
raptor_version_decimal ( .copy )
```

Arguments

. copy logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
raptor_version_decimal_get
```

Raptor version as a decimal number.

Description

Raptor version as a decimal number.

Usage

```
raptor_version_decimal_get ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

raptor_version_major Raptor library major version

Description

Raptor library major version.

Usage

```
raptor_version_major ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
raptor_version_major_get
```

Get Raptor library major version

Description

Get Raptor library major version.

Usage

```
raptor_version_major_get ( .copy )
```

Arguments

. copy logical

raptor_version_minor 177

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

raptor_version_minor Raptor library minor version.

Description

Raptor library minor version.

Usage

```
raptor_version_minor ( .copy )
```

Arguments

. copy logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

178 raptor_version_release

```
raptor_version_minor_get
```

Get Raptor library minor version.

Description

Get Raptor library minor version.

Usage

```
raptor_version_minor_get ( .copy )
```

Arguments

. copy

logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
raptor_version_release
```

Raptor library release.

Description

Raptor library release.

Usage

```
raptor_version_release ( .copy )
```

Arguments

. copy logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
raptor_version_release_get
```

Raptor library release.

Description

Get Raptor library release.

Usage

```
raptor_version_release_get ( .copy )
```

logical

Arguments

. copy

Value

integer

References

http://librdf.org/docs

See Also

raptor_version_string Raptor library version string.

Description

Raptor library version string.

Usage

```
raptor_version_string ( .copy )
```

Arguments

.copy

logical

Value

character

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
{\tt raptor\_version\_string\_get}
```

Get Raptor library version string.

Description

Get Raptor library version string.

Usage

```
raptor_version_string_get ( .copy )
```

Arguments

. copy logical

Value

character

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
rasqal_version_decimal
```

Rasqal version as a decimal number.

Description

Rasqal version as a decimal number.

Usage

```
rasqal_version_decimal ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

rasqal_version_major

```
rasqal_version_decimal_get
```

Get the Rasgal version as a decimal number.

Description

Get the Rasqal version as a decimal number.

Usage

```
rasqal_version_decimal_get ( .copy )
```

Arguments

. copy

logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

rasqal_version_major Rasqal major version number.

Description

Rasqal major version number.

Usage

```
rasqal_version_major ( .copy )
```

Arguments

. copy logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
rasqal_version_major_get
```

Get Rasqal major version number.

Description

Get Rasqal major version number.

Usage

```
rasqal_version_major_get ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

rasqal_version_minor Rasqal minor version number.

Description

Rasqal minor version number.

Usage

```
rasqal_version_minor ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
{\tt rasqal\_version\_minor\_get}
```

Get the Rasqal minor version number.

Description

Get the Rasqal minor version number.

Usage

```
rasqal_version_minor_get ( .copy )
```

Arguments

. copy logical

rasqal_version_release 185

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
rasqal_version_release
```

Rasqal release version number.

Description

Rasqal release version number.

Usage

```
rasqal_version_release ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

rasqal_version_string

```
rasqal_version_release_get
```

Get the Rasqal release version number.

Description

Get the Rasqal release version number.

Usage

```
rasqal_version_release_get ( .copy )
```

Arguments

.copy

logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

rasqal_version_string Rasqal version as a string

Description

Rasqal version as a string.

Usage

```
rasqal_version_string ( .copy )
```

Arguments

. copy logical

Value

integer

References

```
http://librdf.org/docs
```

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

```
rasqal_version_string_get
```

Get the Rasqal version as a string

Description

Get the Rasqal version as a string.

Usage

```
rasqal_version_string_get ( .copy )
```

Arguments

. copy logical

Value

integer

References

http://librdf.org/docs

See Also

This R function is a wrapper function that directly calls the Redland RDF C libraries. For more information about Redland RDF, view the online documentation indicated in the 'References' section.

188 redland

redland	Create, query and write RDF graphs.	

Description

The R package *redland* provides methods to create, query and write information stored in the Resource Description Framework (RDF). This package is implemented as R scripts that provide an R interface (aka "wrapper") to the Redland RDF C libraries. Documentation for the redland R package classes and functions are available from the standard R help facility, for example, 'help("Node-class")', '?getNodeType', etc.

An overview of the redland R package is available with the R command: 'vignette("redland_overview")'.

The Redland C library functions are described at http://librdf.org/docs/api/index.html.

An introduction to RDF can be found at http://www.w3.org/TR/rdf-primer.

Details

The redland R package classes and the corresponding Redland C library types are shown in the following table:

Concept	Redland C type	redland R class	Purpose
Resource / Literal	librdf_node	Node	RDF Model & Syntax nodes
Statement / Triple	librdf_statement	Statement	RDF Model & Syntax arcs (statements, triples)
Model	librdf_model	Model	Set of Statements usually held in one Storage.
Node	librdf_node	Node	The subject, predicate or object of a Statement
Storage	librdf_storage	Storage	Storage for Models either persistent or in-memory.
Parser	librdf_parser	Parser	Syntax parsers delivering Stream of Statements or writing to a
Query	librdf_query	Query	Querying of an Model delivering a QueryResults
QueryResults	librdf_query_results	QueryResults	Results of applying an Query to a Model giving either variable
Serializer	librdf_serializer	Serializer	Serializes a Model into a syntax such as RDF/XML
World	librdf_world	World	RDF wrapper class handling Redland startup/shutdown

Note

In order to communicate with the Redland RDF C libraries, the redland R package uses an interface layer that is created with the software package *Simplified Wrapper and Interface Generator* (SWIG). The relationship between the redland R package and the Redland C libraries is:

User script -> redland R package -> SWIG R interface -> Redland C libraries -> RDF data

It is recommended that the redland package R classes be used to interact with RDF, as these higher level classes take care of many of the the details of communicating with the Redland C libraries. However, all of the lower level R interface functions generated by SWIG are made available by the redland package. These interface functions usually have names beginning with 'librdf_', 'rasqal_' or 'raptor_' and are usually the same name as the underlying C library function. Documentation for the R SWIG interface functions can be found via R help i.e. '?librdf_iterator'.

Author(s)

Matthew B. Jones (NCEAS) and Peter Slaughter (NCEAS)

Examples

```
# This example creates the necessary R objects to hold an RDF model and reads
# in a file that contains RDF/XML statements. This model is then queried for
# and the query results inspected.
world <- new("World")</pre>
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")</pre>
model <- new("Model", world, storage, options="")</pre>
filePath <- system.file("extdata/example.rdf", package="redland")</pre>
parser <- new("Parser", world)</pre>
parseFileIntoModel(parser, world, filePath, model)
queryString <- paste("PREFIX dc: <http://purl.org/dc/elements/1.1/> ",
                      "SELECT ?a ?c WHERE { ?a dc:description ?c . }", sep="")
query <- new("Query", world, queryString, base_uri=NULL,</pre>
             query_language="sparql", query_uri=NULL)
# Get first (and only, in this case) result
queryResult <- executeQuery(query, model)</pre>
result <- getNextResult(queryResult)</pre>
```

 $roclet_output.roclet_mergeNamespace$

Roxygen output function that merges a base NAMESPACE file with the Roxygen dynamically created NAMSPACE file

Description

The 'roclet_output' function handles output of the results from the 'roc_process' function. This function merges the NAMESPACE file created by the 'namespace' roclet with the list of Redland RDF functions determined by the 'roc_process' function.

Usage

```
## S3 method for class 'roclet_mergeNamespace'
roclet_output(roclet, results, base_path, ...)
```

Arguments

roclet	the currently running roclet
results	the list of items to process that was generated by the ${\tt roc_process.mergedNamespace}$ function
base_path	the base directory path of the package
	additional parameters

190 Serializer-class

```
roclet_process.roclet_mergeNamespace
```

Roxygen process function for the 'mergeNamespace' roclet

Description

This function is called by the Roxygen2 roxygenize function.

Usage

```
## $3 method for class 'roclet_mergeNamespace'
roclet_process(roclet, partita, base_path,
   global_options = list())
```

Arguments

roclet the currently running roclet

partita a list of all .R files in the package being roxygenized (not used by this roclet)

base_path the top directory of the R package

global_options unused by this roclet

Details

This function loads the Redland interface file and tests each loaded function to see if it should be exported via the NAMESPACE file.

Serializer-class

An RDF Serializer object.

Description

The Serializer class provides methods to convert a Model object to other forms, for example, write out a Model to a file.

Slots

librdf_serializer A redland statement object

Methods

- Serializer-initialize: Initialize a Serializer object.
- setNameSpace: Set a namespace for the serializer.
- serializeToCharacter: Serialize a model to a character vector.
- serializeToFile: Serialize a model to a file.
- freeSerializer: Free memory used by a librdf serializer.

serializeToCharacter 191

See Also

```
redland: redland package
```

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")
filePath <- system.file("extdata/example.rdf", package="redland")
parser <- new("Parser", world)
parseFileIntoModel(parser, world, filePath, model)
# Creat the default "rdfxml" serizlizer
serializer <- new("Serializer", world)
# Add a namespace definition to the serializer
status <- setNameSpace(serializer, world, namespace="http://purl.org/dc/elements/1.1/", prefix="dc")
rdf <- serializeToCharacter(serializer, world, model, baseUri="")</pre>
```

serializeToCharacter Serialize a model to a character vector.

Description

Serialize a model to a character vector.

Usage

```
serializeToCharacter(.Object, world, model, ...)
## S4 method for signature 'Serializer, World, Model'
serializeToCharacter(.Object, world, model,
   baseUri = as.character(NA))
```

Arguments

```
.Object a Serializer object
world a World object
model a Model object
... Additional parameters
baseUri a URI to prepend to relative URIs in the document
```

Value

a character vector containing the serialized model

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serializeToFile

Serialize a model to a file.

Description

Serialize a model to a file.

Usage

```
serializeToFile(.Object, world, model, filePath, ...)
## S4 method for signature 'Serializer,World,Model,character'
serializeToFile(.Object, world,
    model, filePath, baseUri = as.character(NA))
```

Arguments

.Object a Serializer object
world a World object
model a Model object
filePath a file path that the serialized model will be written to
... Additional parameters
baseUri a base URI to use for the serialization

Value

an integer containing the return status where non zero indicates an error occurred during serialization

setNameSpace

Set a namespace for the serializer.

Description

Set a namespace for the serializer.

Usage

```
setNameSpace(.Object, world, namespace, prefix)
## S4 method for signature 'Serializer, World, character, character'
setNameSpace(.Object, world,
    namespace, prefix)
```

setQueryResultLimit 193

Arguments

. Object a Serializer object world a World object

namespace the namespace to add to the serializer

prefix the namespace prefix to associate with the namespace

setQueryResultLimit Set limit on returned query results

Description

Set limit on returned query results

Usage

```
setQueryResultLimit(.Object, limit)
## S4 method for signature 'Query'
setQueryResultLimit(.Object, limit)
```

Arguments

.0bject a Query object

limit the result set limit. Specify a value >= to have a limit, or a value < 0 to have no

limit.

Statement-class An RDF Statement object

Description

A Statement object is created using the provided subject, predicate and object.

Details

A Statement object can be created from Node objects that are provided for the subject, predicate and object. An alternative way to create a Statement object is to provide the subject, predicate and object as character values. If this later method is used, the character values will be evaluated to determine the appropriate RDF type for the subject and object. Note that the RDF type for the predicate will always be 'uri' (aka 'resource'). If the automatic determination of RDF types is not desired, then the subjectType and objectType parameters can be specified to explicitly set the RDF types.

194 Storage-class

Slots

librdf_statement A redland statement object

Methods

- Statement-initialize: Initialize a Statement object.
- getTermType: Return the redland node type for the specified RDF term in a statement.
- freeStatement: Free memory used by a librdf statement.

See Also

```
redland: redland package
```

Examples

```
world <- new("World")</pre>
# Create nodes manually and add to the statment
subject <- new("Node", blank="_:myid1", world)</pre>
predicate <- new("Node", uri="http://www.example.com/isa", world)</pre>
object <- new("Node", literal="thing", world)</pre>
stmt <- new("Statement", world, subject, predicate, object)</pre>
# Create the statement specifying node values directly
stmt <- new("Statement", world, subject="http://www.example.com/myevent",</pre>
                                  predicate="http://example.com/occurredAt",
                                  object="Tue Feb 17 14:05:13 PST 2015")
stmt <- new("Statement", world, subject=NULL,</pre>
                                  predicate="http://www.example.com/hasAddr",
                                  object="http://www.nothing.com", objectType="literal")
stmt <- new("Statement", world, subject="http://www.example.com/BobSmith",</pre>
                                  predicate="http://www.example.com/says",
                                  object="iHola, amigo! ¿Cómo estás?",
                                  objectType="literal",
                                  language="es")
```

Storage-class

A Redland Storage object

Description

A Redland Storage object

Slots

```
librdf_storage A redland storage object type the storage type to create, i.e. "hashes", "mysql", "postgresql", ...
```

World-class 195

Methods

- Storage-initialize: Initialize a Storage object
- freeStorage: Free memory used by a librdf storage object

See Also

```
redland: redland package
```

Examples

```
world <- new("World")
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")</pre>
```

World-class

A Redland World object, used to initialize the Redland RDF library.

Description

A World object is the top level object in the Redland RDF library implementation, so it contains all other objects needed to process RDF Models.

Slots

librdf_world A redland world object

Methods

- World-initialize: Initialize a World object
- freeWorld: Free memory used by a librdf world object

See Also

```
redland: redland package
```

Examples

```
world <- new("World")</pre>
```

196 writeResults

writeResults

Write query results to a file.

Description

Write query results to a file.

Usage

```
writeResults(.Object, model, ...)
## S4 method for signature 'Query'
writeResults(.Object, model, file,
 mimeType = "application/x-turtle", format_uri = NULL, base_uri = NULL)
```

Arguments

.Object a Query object model a Model object additional parameters . . . file a string specifying the output file a string specifying the mimeType of the output file. Currently supported values mimeType

are "application/x-turtle", "text/plain", "application/json", "text/html"

format_uri (not currently used) base_uri (not currently used)

Details

After this method is called, the Query object is no longer usable and should be deleted "rm(query)" and a new object created.

Examples

```
world <- new("World")</pre>
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
model <- new("Model", world, storage, options="")</pre>
stmt <- new("Statement", world=world,</pre>
  subject="https://orcid.org/0000-0002-2192-403X",
  predicate="http://www.w3.org/ns/prov#Agent",
  object="slaughter",
  objectType="literal", datatype_uri="http://www.w3.org/2001/XMLSchema#string")
status <- addStatement(model, stmt)</pre>
queryString <- paste("PREFIX orcid: <https://orcid.org/>",
                       "PREFIX dataone: <a href="https://cn.dataone.org/cn/v1/resolve/">https://cn.dataone.org/cn/v1/resolve/>",</a>
                       "PREFIX prov: <http://www.w3.org/ns/prov#>",
                       "SELECT ?a ?c WHERE { ?a prov:Agent ?c . }", sep=" ")
query <- new("Query", world, queryString, base_uri=NULL, query_language="sparql", query_uri=NULL)
```

```
# Return all results as a string
tf <- tempfile()
writeResults(query, model, file=tf, mimeType="application/x-turtle")
# When the query object is no longer needed, the resources it had allocated can be freed.
freeQuery(query)
rm(query)</pre>
```

[,ExternalReference-method

Subset a list of ExternalReferences

Description

Subset a list of ExternalReferences

Usage

```
## S4 method for signature 'ExternalReference' x[i, j, ..., drop = TRUE]
```

Arguments

x a list of ExternalReferences

i row subscript

j column subscript

... additional arguments

drop a logical

[<-,ExternalReference-method

Assign values in a list of ExternalReferences

Description

Assign values in a list of ExternalReferences

Usage

```
## S4 replacement method for signature 'ExternalReference' x[i, j, ...] <- value
```

Arguments

X	a list of ExternalReferences

i row subscript j column subscript

... additional arguments

value a value to assign

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