# Package 'redland'

February 24, 2024

```
Version 1.0.17-18
Title RDF Library Bindings in R
Date 2024-02-23
VignetteBuilder knitr
Description Provides methods to parse, query and serialize information
              stored in the Resource Description Framework (RDF). RDF is described at <a href="https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https://example.com/https
              //www.w3.org/TR/rdf-primer/>.
              This package supports RDF by implementing an R interface to the Redland RDF C library,
              described at <https:
              //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'
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Copyright See file (inst/)COPYRIGHTS.
BugReports https://github.com/ropensci/redland-bindings/issues
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URL https://github.com/ropensci/redland-bindings/tree/master/R/redland
              https://github.com/ropensci/redland-bindings/tree/master/R
Encoding UTF-8
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# Description

Add a Statement object to the Model

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

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# **Arguments**

.0bject 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**

.0bject a Query object

model a Model object containing the statements to query

### Value

a QueryResults object

freeModel

Free memory used by a librdf model.

# Description

Free memory used by a librdf model.

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

freeParser 9

# Arguments

.0bject 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)
```

# Arguments

.Object 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.

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### **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.

# 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",
    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)
queryString <- paste("PREFIX orcid: <https://orcid.org/>",
```

freeQueryResults 11

```
"PREFIX dataone: <a href="https://cn.dataone.org/cn/v1/resolve/"">https://cn.dataone.org/cn/v1/resolve/>"</a>,

"PREFIX prov: <a href="https://www.w3.org/ns/prov#>"</a>,

"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
results <- getResults(query, model, "rdfxml")

# 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**

. Object a QueryResults object

freeSerializer

Free memory used by a librdf serializer.

# Description

Free memory used by a librdf serializer.

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

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# 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>
```

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.

freeStorage 13

### **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.

# 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>
```

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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>
```

 ${\tt getBlankNodeId}$ 

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

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

getNodeType 15

### **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>
```

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>
```

getQueryResultLimit

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 "string@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

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

getResults 17

### **Arguments**

.Object a Query object

#### Value

the query result limit. If a limit is set then the value will be  $\geq 0$ . 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**

```
.Object a Query object

model a Model object

... additional parameters

formatName a string specifying the RDF format name. Currently the supported formats are

"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")
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",
    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)
queryString <- paste("PREFIX orcid: <https://orcid.org/>",
```

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```
"PREFIX dataone: <a href="https://cn.dataone.org/cn/v1/resolve/"">https://cn.dataone.org/cn/v1/resolve/"</a>,

"PREFIX prov: <a href="https://www.w3.org/ns/prov#">https://www.w3.org/ns/prov#"</a>,

"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
results <- getResults(query, model, "rdfxml")
results <- getResults(query, model, "turtle")
results <- getResults(query, model, "json")

# When the query object is no longer needed, the resources it had allocated can be freed.
freeQuery(query)
rm(query)
```

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>
```

initialize,Model-method 19

```
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 object
world a World object
storage 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".

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

20 initialize,Parser-method

### **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.

```
## 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 to execute the querystring with

query\_uri a URI to prepend to terms in the query

### Value

the Query object

```
\label{lem:continuity} Initialize\, , \textit{QueryResults-method} \\ \textit{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

```
\label{local_construct} Initialize, Serializer-method \\ \textit{Construct a Serializer object}.
```

# Description

Construct a Serializer object.

```
## 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 25

```
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
```

Copyright string (multiple lines).

# Description

Copyright string (multiple lines).

# Usage

```
librdf_copyright_string ( .copy )
```

# Arguments

. copy

NA

#### Value

character

### References

```
https://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.

 ${\tt librdf\_copyright\_string\_get}$ 

Return Redland RDF copyright string

# **Description**

Return the Redland RDF copyright

# Usage

```
librdf_copyright_string_get (.copy)
```

# Arguments

.copy

logical

### Value

character

#### References

```
https://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")

28 librdf\_digest\_init

### Value

void

#### References

```
https://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

(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

```
https://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

```
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")
```

### Value

character

#### References

```
https://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**

Add more data to the librdf\_digest object.

```
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

```
https://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.

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

```
https://librdf.org/docs/
```

librdf\_free\_digest 31

# 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")

#### Value

void

### References

https://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.

```
librdf_free_hash ( hash )
```

32 librdf\_free\_iterator

# **Arguments**

hash object ("\_p\_librdf\_hash\_s")

### Value

void

### References

```
https://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 Destructor - destroy a librdf\_iterator object.

# Description

Destructor - destroy a librdf\_iterator object.

# Usage

```
librdf_free_iterator ( s_arg1 )
```

# **Arguments**

 $s\_arg1 \hspace{1cm} the \hspace{0.1cm} librdf\_iterator \hspace{0.1cm} object \hspace{0.1cm} ("\_p\_librdf\_iterator\_s")$ 

### Value

void

#### References

```
https://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 33

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

#### References

```
https://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

34 librdf\_free\_parser

### References

```
https://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

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

```
https://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 35

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

```
https://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")
```

36 librdf\_free\_serializer

# Value

void

# References

```
https://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
```

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

```
https://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 37

 ${\tt librdf\_free\_statement} \ \ \textit{Destructor-destroy a librdf\_statement}.$ 

## Description

Destructor - destroy a librdf\_statement.

### Usage

```
librdf_free_statement ( statement )
```

### **Arguments**

statement librdf\_statement object ("\_p\_librdf\_statement\_s")

### Value

void

### References

```
https://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**

Destructor - destroy a librdf\_storage object.

### Usage

```
librdf_free_storage ( storage )
```

## Arguments

```
storage librdf_storage object ("_p_librdf_storage_s")
```

### Value

void

38 librdf\_free\_stream

### References

```
https://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\_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

```
https://librdf.org/docs/
```

### See Also

librdf\_free\_uri 39

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

### References

```
https://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

```
https://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\_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

```
https://librdf.org/docs/
```

#### See Also

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

```
https://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")
```

42 librdf\_iterator\_end

### Value

void

#### References

```
https://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\_end

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

```
https://librdf.org/docs/
```

### See Also

```
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

```
https://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")
```

44 librdf\_iterator\_next

### Value

```
_p_librdf_node_s
```

#### References

```
https://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**

Move to the next iterator element.

### Usage

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

### **Arguments**

### Value

integer

### References

```
https://librdf.org/docs/
```

### See Also

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

```
https://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

```
https://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_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

```
https://librdf.org/docs/
```

#### See Also

```
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

```
https://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")
```

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### Value

character

### References

```
https://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

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

```
https://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_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

```
https://librdf.org/docs/
```

### See Also

```
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

```
https://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

```
https://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

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

### Value

```
_p_librdf_stream_s
```

### References

```
https://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_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

```
https://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**

### Value

integer

### References

```
https://librdf.org/docs/
```

### See Also

```
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

```
https://librdf.org/docs/
```

### See Also

```
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

```
https://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

```
https://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

```
https://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

```
https://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 the model object ("_p_librdf_model_s")
```

statement the partial statement to match ("\_p\_librdf\_statement\_s")

### Value

```
_p_librdf_stream_s
```

#### References

```
https://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

```
https://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).

# Usage

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

librdf\_model\_get\_arcs

### **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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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_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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://librdf.org/docs/
```

## See Also

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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

```
https://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

```
https://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

```
https://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")

 $value \qquad \qquad librdf\_node \ feature \ property \ value \ ("\_p\_librdf\_node\_s")$ 

.copy NA

### Value

integer

librdf\_model\_size 73

#### References

```
https://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

```
https://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

librdf\_model object ("\_p\_librdf\_model\_s")

#### Value

void

#### References

```
https://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**

model librdf\_model object ("\_p\_librdf\_model\_s")

uri base URI to use in serializing (or NULL if not used) ("\_p\_librdf\_uri\_s")

name the name of the serializer (or NULL for default) ("character")
mime\_type the MIME type of the syntax (NULL if not used) ("character")
URI identifying the syntax (NULL if not used) ("\_p\_librdf\_uri\_s")

#### Value

character

#### References

```
https://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**

 $\label{eq:model_model_s} \mbox{model} \qquad \qquad \mbox{the model object ("\_p\_librdf\_model\_s")}$ 

.copy NA

#### Value

integer

#### References

```
https://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

```
https://librdf.org/docs/
```

#### See Also

```
librdf_model_transaction_start

Start a transaction
```

### **Description**

Start a transaction

### Usage

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

### **Arguments**

```
\begin{array}{ll} \mbox{model} & \mbox{the model object ("\_p\_librdf\_model\_s")} \\ \mbox{. copy} & \mbox{NA} \end{array}
```

#### Value

integer

### References

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://librdf.org/docs/
```

### See Also

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```
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

```
https://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

```
https://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")

inStrOrNull UTF-8 encoded blank node identifier or NULL ("character")

#### Value

```
_p_librdf_node_s
```

### References

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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\_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

```
https://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

```
https://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.

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#### 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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
old_storage the existing storage librdf_storage to use ("_p_librdf_storage_s")
```

#### Value

```
_p_librdf_storage_s
```

#### References

```
https://librdf.org/docs/
```

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### 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

```
https://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

```
https://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

```
https://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

```
https://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

```
first_node first librdf_node node ("_p_librdf_node_s")
second_node second librdf_node node ("_p_librdf_node_s")
.copy NA
```

#### Value

integer

### References

```
https://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

```
https://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

```
https://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

```
https://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 object ("\_p\_librdf\_node\_s")

### Value

```
_p_librdf_uri_s
```

# References

```
https://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

```
https://librdf.org/docs/
```

### See Also

```
librdf_node_get_literal_value_language
```

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

```
https://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**

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

### Value

integer

#### References

```
https://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

```
https://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

```
https://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

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integer

#### References

```
https://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") . \ copy \qquad \qquad NA
```

### Value

integer

#### References

```
https://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") . \label{eq:node_s}.
```

### Value

integer

#### References

```
https://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

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

### **Arguments**

world redland world object ("\_p\_librdf\_world\_s")

name of parser ("character")

.copy NA

#### Value

integer

#### References

```
https://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\_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 parser ("_p_librdf_parser_s")
```

### Value

character

#### References

```
https://librdf.org/docs/
```

# See Also

```
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

```
https://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

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

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

## Value

integer

## References

```
https://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_prefix

Get the prefix of namespaces seen during parsing
```

# **Description**

Get the prefix of namespaces seen during parsing

# Usage

```
librdf_parser_get_namespaces_seen_prefix ( parser,
offset )
```

# Arguments

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

# Value

character

## References

```
https://librdf.org/docs/
```

#### See Also

```
librdf_parser_get_namespaces_seen_uri

Get the uri of namespaces seen during parsing
```

# **Description**

Get the uri of namespaces seen during parsing

## Usage

```
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

```
https://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

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

world librdf\_world object ("\_p\_librdf\_world\_s")
mime\_type MIME type of syntax or NULL ("character")
buffer content buffer or NULL ("character")

identifier content identifier or NULL ("character")

#### Value

character

#### References

```
https://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_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**

 $\begin{array}{ll} parser & the \; parser \; ("\_p\_librdf\_parser\_s") \\ uri & the \; URI \; to \; read \; ("\_p\_librdf\_uri\_s") \end{array}$ 

inUriorNull the base URI to use or NULL ("\_p\_librdf\_uri\_s")

## Value

```
_p_librdf_stream_s
```

## References

https://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

```
https://librdf.org/docs/
```

## See Also

```
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.

# Usage

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

# **Arguments**

```
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

```
https://librdf.org/docs/
```

# See Also

```
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

```
https://librdf.org/docs/
```

# See Also

```
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

```
https://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_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

```
https://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\_set\_feature
```

Set the value of a parser feature.

# **Description**

Set the value of a parser feature.

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

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# 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

```
https://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\_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 to operate query on ("\_p\_librdf\_model\_s")

## Value

```
_p_librdf_query_results
```

## References

```
https://librdf.org/docs/
```

librdf\_query\_get\_limit

## 119

# 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.

# Usage

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

# Arguments

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

## Value

integer

## References

```
https://librdf.org/docs/
```

# See Also

```
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

```
https://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_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

```
librdf_query_results_as_stream ( query_results )
```

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

## Value

```
_p_librdf_stream_s
```

## References

```
https://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

```
https://librdf.org/docs/
```

## See Also

```
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

```
https://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_name
```

Get binding name for the current result.

# Description

Get binding name for the current result.

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

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

### Value

character

#### References

```
https://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.

### Usage

```
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

```
https://librdf.org/docs/
```

#### See Also

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

```
https://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_boolean

Get boolean query result.
```

# Description

Get boolean query result.

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

```
\begin{array}{ll} query\_results & librdf\_query\_results \ ("\_p\_librdf\_query\_results") \\ . \ copy & NA \end{array}
```

### Value

integer

## References

```
https://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.

## Usage

```
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

```
https://librdf.org/docs/
```

#### See Also

```
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

```
https://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_boolean
```

Test if librdf\_query\_results is boolean format.

# Description

Test if librdf\_query\_results is boolean format.

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

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

### Value

integer

## References

```
https://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.

## Usage

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

# Arguments

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

# Value

integer

## References

```
https://librdf.org/docs/
```

#### See Also

```
{\tt 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

```
https://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_next
```

Move to the next result.

# **Description**

Move to the next result.

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

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

#### Value

integer

#### References

```
https://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

```
https://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_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")

 $format\_uri \qquad URI \ of \ syntax \ to \ format \ to \ (or \ NULL) \ ("\_p\_librdf\_uri\_s")$ 

base\_uri Base URI of output formatted syntax (or NULL) ("\_p\_librdf\_uri\_s")

#### Value

character

## References

```
https://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_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

```
https://librdf.org/docs/
```

## See Also

```
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

```
https://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,
.copy )
```

# **Arguments**

name

redland world object ("\_p\_librdf\_world\_s") world name of serializer ("character")

NA . copy

# Value

integer

#### References

```
https://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

```
https://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_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

```
https://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

```
https://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_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

```
https://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_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 )
```

```
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

```
https://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

```
https://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

```
https://librdf.org/docs/
```

## See Also

# **Description**

Short copyright string (one line).

# Usage

```
librdf_short_copyright_string ( .copy )
```

NA

# **Arguments**

. copy

## Value

character

## References

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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

```
https://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.

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

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

#### Value

integer

## References

```
https://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

```
https://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 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

```
https://librdf.org/docs/
```

## See Also

146 librdf\_stream\_end

# 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

```
https://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

```
https://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")
```

# Value

```
_p_librdf_statement_s
```

# References

```
https://librdf.org/docs/
```

#### See Also

148 librdf\_uri\_compare

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

```
https://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\_compare

Compare two librdf\_uri objects lexicographically.

## **Description**

Compare two librdf\_uri objects lexicographically.

## Usage

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

librdf\_uri\_equals 149

#### **Arguments**

```
\begin{tabular}{ll} 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 \end{tabular}
```

#### Value

integer

## References

```
https://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**

Compare two librdf\_uri objects for equality.

# Usage

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

## **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

```
https://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

```
https://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
```

Library full version as a decimal integer.

## **Description**

Library full version as a decimal integer.

## Usage

```
librdf_version_decimal ( .copy )
```

#### **Arguments**

.copy NA

#### Value

integer

#### References

```
https://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

#### Value

integer

#### References

```
https://librdf.org/docs/
```

## See Also

librdf\_version\_major Library major version number as a decimal integer.

# Description

Library major version number as a decimal integer.

# Usage

```
librdf_version_major ( .copy )
```

## **Arguments**

.copy NA

#### Value

integer

#### References

https://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_major_get
```

Return the Redland librdf major version number

# Description

Return the Redland librdf major version number

# Usage

```
librdf_version_major_get ( .copy )
```

## **Arguments**

librdf\_version\_minor 153

## Value

integer

#### References

```
https://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 minor version number as a decimal integer.

# Usage

```
librdf_version_minor ( .copy )
```

## **Arguments**

.copy NA

#### Value

integer

## References

```
https://librdf.org/docs/
```

#### See Also

librdf\_version\_release

```
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 )
```

logical

## **Arguments**

. copy

#### Value

integer

#### References

```
https://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
```

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

```
https://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

## Value

integer

# References

```
https://librdf.org/docs/
```

## See Also

librdf\_version\_string Library full version as a string.

# Description

Library full version as a string.

## Usage

```
librdf_version_string ( .copy )
```

## **Arguments**

. сору

NA

#### Value

character

#### References

```
https://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_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**

## Value

character

#### References

```
https://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")
```

#### Value

```
_p_librdf_node_s
```

# References

```
https://librdf.org/docs/
```

#### See Also

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

```
https://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_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

```
https://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_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

```
https://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.

#### **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 161

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.

## **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

parseFileIntoModel

#### 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
```

#### **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

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#### **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)

#### **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>
```

164 Query-class

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 <a href="https://librdf.org/rasqal/">https://librdf.org/rasqal/</a> 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**

QueryResults-class 165

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

 ${\tt QueryResults-initialize: Initialize \ a \ QueryResults \ object. \ free QueryResults: Free \ memory \ used \ by \ a \ libridf \ query \ result.}$ 

## See Also

```
redland: redland package
```

raptor\_locator\_byte

Get the locator byte offset from locator.

## **Description**

Get the locator byte offset from locator

## Usage

```
raptor_locator_byte ( locator, .copy )
```

raptor\_locator\_column

#### **Arguments**

```
locator raptor locator ("_p_raptor_locator")
.copy logical
```

## Value

character

#### References

```
https://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_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

```
https://librdf.org/docs/
```

# See Also

raptor\_locator\_file 167

## Description

Get file name from locator.

## Usage

```
raptor_locator_file ( locator )
```

# Arguments

 $locator \qquad \qquad raptor \ locator \ ("\_p\_raptor\_locator")$ 

## Value

character

## References

```
https://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 line number from locator.

# Usage

```
raptor_locator_line ( locator, .copy )
```

#### **Arguments**

```
locator \qquad \qquad raptor \ locator \ ("\_p\_raptor\_locator")
```

raptor\_locator\_uri

## Value

integer

#### References

```
https://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\_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

```
https://librdf.org/docs/
```

#### See Also

raptor\_version\_decimal 169

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

```
https://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

170 raptor\_version\_major

## Value

integer

#### References

```
https://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

Raptor library major version.

# Usage

```
raptor_version_major ( .copy )
```

## **Arguments**

. copy logical

#### Value

integer

## References

```
https://librdf.org/docs/
```

#### See Also

```
raptor_version_major_get
```

Get Raptor library major version

# **Description**

Get Raptor library major version.

## Usage

```
raptor_version_major_get ( .copy )
```

# Arguments

. copy

logical

## Value

integer

#### References

```
https://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**

. сору

logical

## Value

integer

## References

```
https://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_get
```

Get Raptor library minor version.

# Description

Get Raptor library minor version.

## Usage

```
raptor_version_minor_get ( .copy )
```

# Arguments

.copy

logical

## Value

integer

## References

```
https://librdf.org/docs/
```

# See Also

raptor\_version\_release 173

```
raptor_version_release
```

Raptor library release.

# Description

Raptor library release.

## Usage

```
raptor_version_release ( .copy )
```

# Arguments

. copy

logical

#### Value

integer

#### References

```
https://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 )
```

# Arguments

174 raptor\_version\_string

## Value

integer

#### References

```
https://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\_string Raptor library version string.

# Description

Raptor library version string.

# Usage

```
raptor_version_string ( .copy )
```

logical

## **Arguments**

. copy

## Value

character

## References

```
https://librdf.org/docs/
```

#### See Also

```
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

```
https://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

## Value

integer

## References

```
https://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_get
```

Get the Rasqal 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

```
https://librdf.org/docs/
```

# See Also

rasqal\_version\_major 177

# Description

Rasqal major version number.

## Usage

```
rasqal_version_major ( .copy )
```

## **Arguments**

. copy logical

#### Value

integer

#### References

https://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**

178 rasqal\_version\_minor

## Value

integer

#### References

```
https://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

```
https://librdf.org/docs/
```

#### See Also

```
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

#### Value

integer

#### References

```
https://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

## Value

integer

## References

```
https://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_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

```
https://librdf.org/docs/
```

# See Also

rasqal\_version\_string 181

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

https://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

182 redland

#### Value

integer

#### References

https://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.

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 https://librdf.org/docs/api/index.html.

An introduction to RDF can be found at https://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 Resource / Literal Statement / Triple Model Node Storage Parser Query QueryResults Serializer World	Redland C type librdf_node librdf_statement librdf_model librdf_node librdf_storage librdf_parser librdf_query librdf_query_results librdf_serializer librdf_world	redland R class Node Statement Model Node Storage Parser Query QueryResults Serializer World	Purpose RDF Model & Syntax nodes RDF Model & Syntax arcs (statements, triples) Set of Statements usually held in one Storage. The subject, predicate or object of a Statement Storage for Models either persistent or in-memory. Syntax parsers delivering Stream of Statements or writing to a Querying of an Model delivering a QueryResults Results of applying an Query to a Model giving either variable 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 guery results inspected.
world <- new("World")</pre>
storage <- new("Storage", world, "hashes", name="", options="hash-type='memory'")
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)
results <- getResults(query, model, "rdfxml")</pre>
# When the query object is no longer needed, the resources it had allocated can be freed.
freeQuery(query)
rm(query)
```

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(x, results, base_path, ...)
```

## **Arguments**

x the currently running roclet

results the list of items to process that was generated by the roc\_process.mergedNamespace

function

base\_path the base directory path of the package

... additional parameters

roclet\_process.roclet\_mergeNamespace

Roxygen process function for the 'mergeNamespace' roclet

## **Description**

This function is called by the Roxygen2 roxygenize function.

## Usage

```
## S3 method for class 'roclet_mergeNamespace'
roclet_process(x, blocks, env, base_path)
```

# Arguments

x the currently running roclet blocks the documentation blocks

env the current env

base\_path the top directory of the R package

## **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 185

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.

#### 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))
```

186 serializeToFile

## **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

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 187

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)
```

## **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**

.Object a Query object

limit the result set limit. Specify a value >= to have a limit, or a value < 0 to have no

limit.

188 Statement-class

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.

#### 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**

Storage-class 189

```
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", ...
```

## 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

190 writeResults

## See Also

```
redland: redland package
```

## **Examples**

```
world <- new("World")</pre>
```

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
)
```

(not currently used)

## **Arguments**

```
nodel     a Query object
model     a Model object
...      additional parameters
file     a string specifying the output file
mimeType     a string specifying the mimeType of the output file. Currently supported values are "application/x-turtle", "text/plain", "application/json", "text/html"
format_uri     (not currently used)
```

# **Details**

base\_uri

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")
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)
# Return all results as a string
tf <- tempfile()</pre>
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)
```

[,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**

drop

x	a list of ExternalReferences
i	row subscript
j	column subscript
	additional arguments

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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