

# Package ‘resourcer’

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**Type** Package

**Title** Resource Resolver

**Version** 1.3.0

**Description** A resource represents some data or a computation unit. It is described by a URL and credentials. This package proposes a Resource model with “resolver” and “client” classes to facilitate the access and the usage of the resources.

**License** LGPL (>= 2.1)

**Depends** R (>= 3.5.0), R6, httr

**Suggests** testthat, knitr, haven, readr, readxl, ssh, sys, mongolite, dplyr, dbplyr, DBI, RMariaDB, RPostgres, sparklyr, RPresto (>= 1.4.0), nodbi, rmarkdown

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---

`as.data.frame.resource`*Coerce a resource to a data.frame*

---

**Description**

Attempt to coerce a resource object to a data.frame: find a ResourceResolver and get the ResourceClient that will connect to the described dataset and make a data.frame of it.

**Usage**

```
## S3 method for class 'resource'  
as.data.frame(x, ...)
```

**Arguments**

`x` a resource object.  
`...` additional parameters, that may be used (or ignored) by the resource client.

**Value**

a data.frame (or a tibble)

---

`as.data.frame.ResourceClient`*Coerce a ResourceClient object to a data.frame*

---

**Description**

Attempt to coerce a resource object to a data.frame: find a ResourceResolver and get the ResourceClient that will connect to the described dataset and make a data.frame of it.

**Usage**

```
## S3 method for class 'ResourceClient'  
as.data.frame(x, ...)
```

**Arguments**

`x` a ResourceClient object  
`...` additional parameters, that may be used (or ignored) by the resource client.

**Value**

a data.frame (or a tibble)

as.resource.data.frame

*Coerce resource client to a data.frame*

---

### Description

Coerce a ResourceClient object to a data.frame.

### Usage

```
as.resource.data.frame(x, strict = FALSE, ...)
```

### Arguments

x	The ResourceClient object to coerce to a data.frame.
strict	logical whether the resulting object must be strictly of class data.frame or if it can be a tibble.
...	Additional parameters, that may be used (or ignored) by the resource client.

### Value

a data.frame (or a tibble)

---

as.resource.object

*Coerce resource client to the internal data object*

---

### Description

Coerce a ResourceClient object to internal data object: depending on the implementation of the ResourceClient, it can be a data connection object (like a DBI connection to a SQL database), or the actual data structure (when a resource is a R object extracted from a R data file for instance).

### Usage

```
as.resource.object(x, ...)
```

### Arguments

x	The ResourceClient object to coerce to a data.frame.
...	Additional parameters, that may be used (or ignored) by the resource client.

### Value

the internal data object.

---

as.resource.tbl      *Coerce resource client to a tbl*

---

**Description**

Coerce a ResourceClient object to a dplyr's tbl.

**Usage**

```
as.resource.tbl(x, ...)
```

**Arguments**

x                      The ResourceClient object to coerce to a data.frame  
 ...                    Additional parameters, that may be used (or ignored) by the resource client.

**Value**

a dplyr's tbl

---

CommandResourceClient    *Command resource client*

---

**Description**

Command resource client  
 Command resource client

**Format**

A R6 object of class CommandResourceClient

**Details**

Base class for resource clients issuing commands and get a result with the status of the execution, the output and the error messages.

**Super class**

`resource::ResourceClient` -> CommandResourceClient

**Methods****Public methods:**

- [CommandResourceClient\\$new\(\)](#)
- [CommandResourceClient\\$clone\(\)](#)

**Method** `new()`: Creates a new `CommandResourceClient` instance

*Usage:*

```
CommandResourceClient$new(resource)
```

*Arguments:*

`resource` A valid resource object.

*Returns:* A `CommandResourceClient` object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
CommandResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

DBIResourceConnector *DBI resource connector*

---

**Description**

DBI resource connector

DBI resource connector

**Format**

A R6 object of class `DBIResourceConnector`

**Details**

Makes a DBI connection from a resource description, used in `SQLResourceClient` that is based on DBI.

**Methods****Public methods:**

- [DBIResourceConnector\\$new\(\)](#)
- [DBIResourceConnector\\$isFor\(\)](#)
- [DBIResourceConnector\\$createDBIConnection\(\)](#)
- [DBIResourceConnector\\$getTableName\(\)](#)
- [DBIResourceConnector\\$readDBTable\(\)](#)

- [DBIResourceConnector\\$readDBTibble\(\)](#)
- [DBIResourceConnector\\$closeDBIConnection\(\)](#)
- [DBIResourceConnector\\$clone\(\)](#)

**Method** `new()`: Creates a new DBIResourceConnector instance

*Usage:*

```
DBIResourceConnector$new()
```

*Returns:* A DBIResourceConnector object.

**Method** `isFor()`: Check that the provided parameter is of class "resource".

*Usage:*

```
DBIResourceConnector$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method** `createDBIConnection()`: Stub function which subclasses will implement to create a DBI connection object from a resource.

*Usage:*

```
DBIResourceConnector$createDBIConnection(resource)
```

*Arguments:*

resource A valid resource object.

**Method** `getTableNames()`: Get the SQL table name from the resource URL.

*Usage:*

```
DBIResourceConnector$getTableNames(resource)
```

*Arguments:*

resource A valid resource object.

*Returns:* The SQL table name.

**Method** `readDBTable()`: Read a table as a vanilla tibble using DBI connection object.

*Usage:*

```
DBIResourceConnector$readDBTable(conn, resource)
```

*Arguments:*

conn A DBI connection object.

resource A valid resource object.

*Returns:* A vanilla tibble.

**Method** `readDBTibble()`: Read a table as a SQL tibble using DBI connection object.

*Usage:*

```
DBIResourceConnector$readDBTibble(conn, resource)
```

*Arguments:*

conn A DBI connection object.  
 resource A valid resource object.

*Returns:* A SQL tibble.

**Method** closeDBIConnection(): Disconnect the DBI connection.

*Usage:*

DBIResourceConnector\$closeDBIConnection(conn)

*Arguments:*

conn A DBI connection object.

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*

DBIResourceConnector\$clone(deep = FALSE)

*Arguments:*

deep Whether to make a deep clone.

---

FileResourceClient      *File resource client*

---

## Description

File resource client

File resource client

## Format

A R6 object of class FileResourceClient

## Details

Base class that connects to a file using a FileResourceGetter.

## Super class

`resourcer::ResourceClient` -> FileResourceClient

## Methods

### Public methods:

- `FileResourceClient$new()`
- `FileResourceClient$downloadFile()`
- `FileResourceClient$close()`
- `FileResourceClient$clone()`

**Method** new(): Creates a new FileResourceClient instance.



*Usage:*

```
FileResourceClient$new(resource, file.getter = NULL)
```

*Arguments:*

`resource` A valid resource object.

`file.getter` A FileResourceGetter object, optional. If not provided, it will be looked up in the FileResourceGetters registry. The operation will fail if none can be found.

*Returns:* A FileResourceClient object.

**Method** `downloadFile()`: Performs the file download, if it does not already exist locally.

*Usage:*

```
FileResourceClient$downloadFile()
```

*Returns:* The local path to the downloaded file.

**Method** `close()`: Removes the file if it was downloaded. A local file resource will remain untouched.

*Usage:*

```
FileResourceClient$close()
```

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
FileResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

FileResourceGetter      *File resource getter*

---

**Description**

File resource getter

File resource getter

**Format**

A R6 object of class FileResourceGetter

**Details**

Helper base class for getting the file described by the resource object. ResourceClient class implementations can use this utility to retrieve files from any locations before processing them according to the declared data format.

## Methods

### Public methods:

- `FileResourceGetter$new()`
- `FileResourceGetter$isFor()`
- `FileResourceGetter$downloadFile()`
- `FileResourceGetter$extractFileName()`
- `FileResourceGetter$makeDownloadDir()`
- `FileResourceGetter$clone()`

**Method** `new()`: Creates a new `FileResourceGetter` instance.

*Usage:*

```
FileResourceGetter$new()
```

*Returns:* A `FileResourceGetter` object.

**Method** `isFor()`: Check that the provided parameter is of class "resource" and has a format defined.

*Usage:*

```
FileResourceGetter$isFor(resource)
```

*Arguments:*

`resource` The resource object to validate.

*Returns:* A logical.

**Method** `downloadFile()`: Stub function which subclasses will implement to make a "resource.file" object from a resource.

*Usage:*

```
FileResourceGetter$downloadFile(resource, ...)
```

*Arguments:*

`resource` A valid resource object.

`...` Additional parameters that may be relevant for `FileResourceGetter` subclasses.

*Returns:* A "resource.file" object.

**Method** `extractFileName()`: Utility to get the base name from the file path.

*Usage:*

```
FileResourceGetter$extractFileName(resource)
```

*Arguments:*

`resource` A valid resource object.

*Returns:* The file base name.

**Method** `makeDownloadDir()`: Creates a directory where to download file in the R session's temporary directory. This directory will be flushed when the R session ends.

*Usage:*

```
FileResourceGetter$makeDownloadDir()
```

*Returns:* The path to the download directory.

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*

```
FileResourceGetter$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

findDBIResourceConnector

*Find a DBI resource connector*

---

### **Description**

Find the DBI resource connector that will download the DBI from the provided resource object.

### **Usage**

```
findDBIResourceConnector(x)
```

### **Arguments**

x The resource object which corresponding DBI connector is to be found.

### **Value**

The corresponding DBIResourceConnector object or NULL if none applies.

---

findFileResourceGetter

*Find a file resource getter*

---

### **Description**

Find the file resource getter that will download the file from the provided resource object.

### **Usage**

```
findFileResourceGetter(x)
```

### **Arguments**

x The resource object which corresponding file getter is to be found.

### **Value**

The corresponding FileResourceGetter object or NULL if none applies.

---

`getDBIResourceConnectors`*Get DBI resource connectors registry*

---

**Description**

Get the DBIResourceConnectors registry, create it if it does not exist.

**Usage**

```
getDBIResourceConnectors()
```

---

`getFileResourceGetters`*Get file resource getters registry*

---

**Description**

Get the FileResourceGetters registry, create it if it does not exist.

**Usage**

```
getFileResourceGetters()
```

---

`getResourceResolvers` *Get resource resolvers registry*

---

**Description**

Get the resource resolvers registry, create it if it does not exist.

**Usage**

```
getResourceResolvers()
```

**Examples**

```
{  
  resourcer::getResourceResolvers()  
}
```

---

GridFsFileResourceGetter  
*GridFS file resource getter*

---

**Description**

GridFS file resource getter  
GridFS file resource getter

**Format**

A R6 object of class GridFsFileResourceGetter

**Details**

Access a file that is in the MongoDB file store (GridFS). Credentials may apply.

**Super class**

[resourceer::FileResourceGetter](#) -> GridFsFileResourceGetter

**Methods****Public methods:**

- [GridFsFileResourceGetter\\$new\(\)](#)
- [GridFsFileResourceGetter\\$isFor\(\)](#)
- [GridFsFileResourceGetter\\$downloadFile\(\)](#)
- [GridFsFileResourceGetter\\$clone\(\)](#)

**Method** `new()`: Creates a new GridFsFileResourceGetter instance.

*Usage:*

```
GridFsFileResourceGetter$new()
```

*Returns:* A GridFsFileResourceGetter object.

**Method** `isFor()`: Check that the provided resource has a URL that locates a GridFS object: either the URL scheme is "gridfs" or it is "mongodb"/"mongodb+srv" with a query parameter "prefix=fs" (that identifies GridFS collection names).

*Usage:*

```
GridFsFileResourceGetter$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method** `downloadFile()`: Download the file from the MongoDB file store in a temporary location.

*Usage:*

```
GridFsFileResourceGetter$downloadFile(resource, ...)
```

*Arguments:*

resource A valid resource object.  
 ... Unused additional parameters.

*Returns:* The "resource.file" object.

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*

```
GridFsFileResourceGetter$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

HttpFileResourceGetter

*HTTP file resource getter*

---

**Description**

HTTP file resource getter

HTTP file resource getter

**Format**

A R6 object of class HttpFileResourceGetter

**Details**

Access a file that is stored at a HTTP(S) address. Use Basic authentication header if both resource's identity and secret are defined.

**Super class**

[resourcer::FileResourceGetter](#) -> HttpFileResourceGetter

**Methods****Public methods:**

- [HttpFileResourceGetter\\$new\(\)](#)
- [HttpFileResourceGetter\\$isFor\(\)](#)
- [HttpFileResourceGetter\\$downloadFile\(\)](#)
- [HttpFileResourceGetter\\$clone\(\)](#)

**Method** new(): Creates a new HttpFileResourceGetter instance.

*Usage:*

```
HttpFileResourceGetter$new()
```

*Returns:* A HttpFileResourceGetter object.

**Method isFor():** Check that the provided resource has a URL that locates a file accessible through "http" or "https".

*Usage:*

```
HttpFileResourceGetter$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method downloadFile():** Download the file from the remote address in a temporary location. Applies Basic authentication if credentials are provided in the resource.

*Usage:*

```
HttpFileResourceGetter$downloadFile(resource, ...)
```

*Arguments:*

resource A valid resource object.

... Unused additional parameters.

*Returns:* The "resource.file" object.

**Method clone():** The objects of this class are cloneable with this method.

*Usage:*

```
HttpFileResourceGetter$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

LocalFileResourceGetter

*Local file resource getter*

---

## Description

Local file resource getter

Local file resource getter

## Format

A R6 object of class LocalFileResourceGetter

## Details

Access a file that is stored in the local file system. No credentials apply.

**Super class**

`resource::FileResourceGetter -> LocalFileResourceGetter`

**Methods****Public methods:**

- `LocalFileResourceGetter$new()`
- `LocalFileResourceGetter$isFor()`
- `LocalFileResourceGetter$downloadFile()`
- `LocalFileResourceGetter$clone()`

**Method** `new()`: Creates a new `LocalFileResourceGetter` instance.

*Usage:*

```
LocalFileResourceGetter$new()
```

*Returns:* A `LocalFileResourceGetter` object.

**Method** `isFor()`: Check that the provided resource has a URL that locates a file stored in the local file system.

*Usage:*

```
LocalFileResourceGetter$isFor(resource)
```

*Arguments:*

`resource` The resource object to validate.

*Returns:* A logical.

**Method** `downloadFile()`: Make a "resource.file" object from a local file resource.

*Usage:*

```
LocalFileResourceGetter$downloadFile(resource, ...)
```

*Arguments:*

`resource` A valid resource object.

`...` Unused additional parameters.

*Returns:* The "resource.file" object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
LocalFileResourceGetter$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.



---

MariaDBResourceConnector

*MariaDB DBI resource connector*

---

## Description

MariaDB DBI resource connector

MariaDB DBI resource connector

## Format

A R6 object of class MariaDBResourceConnector

## Details

Makes a MariaDB/MySQL DBI connection from a resource description.

## Super class

[resourcer::DBIResourceConnector](#) -> MariaDBResourceConnector

## Methods

### Public methods:

- [MariaDBResourceConnector\\$new\(\)](#)
- [MariaDBResourceConnector\\$isFor\(\)](#)
- [MariaDBResourceConnector\\$createDBIConnection\(\)](#)
- [MariaDBResourceConnector\\$clone\(\)](#)

**Method** `new()`: Creates a new MariaDBResourceConnector instance.

*Usage:*

```
MariaDBResourceConnector$new()
```

*Returns:* A MariaDBResourceConnector object.

**Method** `isFor()`: Check that the provided resource has a URL that locates a MySQL or MariaDB object: the URL scheme must be "mysql" or "mariadb".

*Usage:*

```
MariaDBResourceConnector$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method** `createDBIConnection()`: Creates a DBI connection object from a resource.

*Usage:*

```
MariaDBResourceConnector$newDBIConnection(resource)
```

*Arguments:*

resource A valid resource object.

*Returns:* A DBI connection object.

**Method clone():** The objects of this class are cloneable with this method.

*Usage:*

```
MariaDBResourceConnector$new(clone(deep = FALSE))
```

*Arguments:*

deep Whether to make a deep clone.

---

newResource

*Create a Resource*

---

## Description

Creates a new Resource structure.

## Usage

```
newResource(name = "", url, identity = NULL, secret = NULL, format = NULL)
```

## Arguments

name	Optional human friendly name that identifies the resource.
url	URL to access the resource whether it is data or computation capability.
identity	User name or account ID (if credentials are applicable).
secret	User password or token (if credentials are applicable).
format	Data format, to help resource resolver identification and coercing to other formats, optional.

## Examples

```
{
# make a SPSS file resource
res <- resourcer::newResource(
  name = "CNSIM1",
  url = "file:///data/CNSIM1.sav",
  format = "spss"
)
}
```

---

newResourceClient	<i>Creates a resource client</i>
-------------------	----------------------------------

---

**Description**

From a resource object, find the corresponding resolver in the resolver registry and create a new resource client.

**Usage**

```
newResourceClient(x)
```

**Arguments**

x                   The resource object which corresponding resolver is to be found.

**Value**

The corresponding ResourceClient object or NULL if none applies.

**Examples**

```
library(resourcer)
res <- newResource(
  name = "CNSIM1",
  url = "file:///data/CNSIM1.sav",
  format = "spss"
)
client <- newResourceClient(res)
```

---

NoSQLResourceClient	<i>NoSQL database resource client</i>
---------------------	---------------------------------------

---

**Description**

NoSQL database resource client

NoSQL database resource client

**Format**

A R6 object of class NoSQLResourceClient

**Details**

Resource client that connects to a NoSQL database supported by nodbi.

**Super class**

```
resourcer::ResourceClient -> NoSQLResourceClient
```

**Methods****Public methods:**

- `NoSQLResourceClient$new()`
- `NoSQLResourceClient$getConnection()`
- `NoSQLResourceClient$asDataFrame()`
- `NoSQLResourceClient$getDatabaseName()`
- `NoSQLResourceClient$getTableName()`
- `NoSQLResourceClient$close()`
- `NoSQLResourceClient$clone()`

**Method** `new()`: Creates a new NoSQLResourceClient instance.

*Usage:*

```
NoSQLResourceClient$new(resource)
```

*Arguments:*

resource A valid resource object.

*Returns:* A NoSQLResourceClient object.

**Method** `getConnection()`: Creates the nodbi connection object if it does not exist.

*Usage:*

```
NoSQLResourceClient$getConnection()
```

*Returns:* The nodbi connection object.

**Method** `asDataFrame()`: Makes a data.frame from the remote database table.

*Usage:*

```
NoSQLResourceClient$asDataFrame()
```

*Returns:* A tibble.

**Method** `getDatabaseName()`: Extract the database name from the resource URL.

*Usage:*

```
NoSQLResourceClient$getDatabaseName()
```

*Returns:* The database name.

**Method** `getTableName()`: Extract the database table name from the resource URL.

*Usage:*

```
NoSQLResourceClient$getTableName()
```

*Returns:* The database table name.

**Method** `close()`: Close the nodbi connection.

*Usage:*

`NoSQLResourceClient$close()`

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

`NoSQLResourceClient$clone(deep = FALSE)`

*Arguments:*

`deep` Whether to make a deep clone.

---

NoSQLResourceResolver *NoSQL Database Resource resolver*

---

## Description

NoSQL Database Resource resolver

NoSQL Database Resource resolver

## Format

A R6 object of class NoSQLResourceResolver

## Details

The resource is NoSQL database such as mongodb (elasticsearch, redis, couchdb, sqlite are not supported yet).

## Super class

`resourcer::ResourceResolver` -> NoSQLResourceResolver

## Methods

### Public methods:

- `NoSQLResourceResolver$isFor()`
- `NoSQLResourceResolver$newClient()`
- `NoSQLResourceResolver$clone()`

**Method** `isFor()`: Check that the provided resource has a URL that locates a nodbi object: the URL scheme must be one of "mongodb", "mongodb+srv". Other NoSQL databases "elasticsearch", "redis", "couchdb", "sqlite" are not supported yet.

*Usage:*

`NoSQLResourceResolver$isFor(x)`

*Arguments:*

x The resource object to validate.

*Returns:* A logical.

**Method** `newClient()`: Creates a `NoSQLResourceClient` instance from provided resource.

*Usage:*

```
NoSQLResourceResolver$newClient(x)
```

*Arguments:*

x A valid resource object.

*Returns:* A `NoSQLResourceClient` object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
NoSQLResourceResolver$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

OpalFileResourceGetter

*Opal file resource getter*

---

**Description**

Opal file resource getter

Opal file resource getter

**Format**

A R6 object of class `OpalFileResourceGetter`

**Details**

Access a file that is stored in a Opal server. Use Basic authentication header if both resource's identity and secret are defined, token authentication if secret only is defined.

**Super class**

`resourcer::FileResourceGetter` -> `OpalFileResourceGetter`

## Methods

### Public methods:

- `OpalFileResourceGetter$new()`
- `OpalFileResourceGetter$isFor()`
- `OpalFileResourceGetter$downloadFile()`
- `OpalFileResourceGetter$clone()`

**Method** `new()`: Creates a new `OpalFileResourceGetter` instance.

*Usage:*

```
OpalFileResourceGetter$new()
```

*Returns:* A `OpalFileResourceGetter` object.

**Method** `isFor()`: Check that the provided resource has a URL that locates a Opal file: the URL scheme must be "opal+http" or "opal+https" and the path must designate a file web service entry point (i.e. starts with "ws/files/").

*Usage:*

```
OpalFileResourceGetter$isFor(resource)
```

*Arguments:*

`resource` The resource object to validate.

*Returns:* A logical.

**Method** `downloadFile()`: Download the file from the Opal file system in a temporary location.

*Usage:*

```
OpalFileResourceGetter$downloadFile(resource, ...)
```

*Arguments:*

`resource` A valid resource object.

`...` Unused additional parameters.

*Returns:* The "resource.file" object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
OpalFileResourceGetter$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

PostgresResourceConnector

*Postgres DBI resource connector*

---

### Description

Postgres DBI resource connector

Postgres DBI resource connector

### Format

A R6 object of class PostgresResourceConnector

### Details

Makes a Postgres DBI connection from a resource description.

### Super class

[resourcer::DBIResourceConnector](#) -> PostgresResourceConnector

### Methods

#### Public methods:

- [PostgresResourceConnector\\$new\(\)](#)
- [PostgresResourceConnector\\$isFor\(\)](#)
- [PostgresResourceConnector\\$createDBIConnection\(\)](#)
- [PostgresResourceConnector\\$clone\(\)](#)

**Method** `new()`: Creates a new PostgresResourceConnector instance.

*Usage:*

```
PostgresResourceConnector$new()
```

*Returns:* A PostgresResourceConnector object.

**Method** `isFor()`: Check that the provided resource has a URL that locates a Postgres object: the URL scheme must be "postgres" or "postgresql".

*Usage:*

```
PostgresResourceConnector$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method** `createDBIConnection()`: Creates a DBI connection object from a resource.

*Usage:*



PostgresResourceConnector\$createDBIConnection(resource)

*Arguments:*

resource A valid resource object.

*Returns:* A DBI connection object.

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*

PostgresResourceConnector\$clone(deep = FALSE)

*Arguments:*

deep Whether to make a deep clone.

---

PrestoResourceConnector

*Presto DBI resource connector*

---

## Description

Presto DBI resource connector

Presto DBI resource connector

## Format

A R6 object of class PrestoResourceConnector

## Details

Makes a Presto DBI connection from a resource description.

## Super class

[resourcer::DBIResourceConnector](#) -> PrestoResourceConnector

## Methods

### Public methods:

- [PrestoResourceConnector\\$new\(\)](#)
- [PrestoResourceConnector\\$isFor\(\)](#)
- [PrestoResourceConnector\\$createDBIConnection\(\)](#)
- [PrestoResourceConnector\\$clone\(\)](#)

**Method** new(): Creates a new PrestoResourceConnector instance.

*Usage:*

PrestoResourceConnector\$new()

*Returns:* A PrestoResourceConnector object.

**Method** `isFor()`: Check that the provided resource has a URL that locates a Presto object: the URL scheme must be "presto", "presto+http" or "presto+https".

*Usage:*

```
PrestoResourceConnector$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method** `createDBIConnection()`: Creates a DBI connection object from a resource.

*Usage:*

```
PrestoResourceConnector$createDBIConnection(resource)
```

*Arguments:*

resource A valid resource object.

*Returns:* A DBI connection object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
PrestoResourceConnector$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

RDataFileResourceClient

*R data file resource client*

---

## Description

R data file resource client

R data file resource client

## Format

A R6 object of class RDSFileResourceClient

## Details

Connects to a R data file and loads it in a controlled environment.

## Super classes

[resourcer::ResourceClient](#) -> [resourcer::FileResourceClient](#) -> RDataFileResourceClient

## Methods

### Public methods:

- `RDataFileResourceClient$new()`
- `RDataFileResourceClient$asDataFrame()`
- `RDataFileResourceClient$getValue()`
- `RDataFileResourceClient$clone()`

**Method** `new()`: Creates a new `RDataFileResourceClient` instance.

*Usage:*

```
RDataFileResourceClient$new(resource)
```

*Arguments:*

`resource` A valid resource object.

*Returns:* A `RDataFileResourceClient` object.

**Method** `asDataFrame()`: Coerce the resource value extracted from the R data file to a `data.frame`.

*Usage:*

```
RDataFileResourceClient$asDataFrame(...)
```

*Arguments:*

`...` Additional parameters to `as.data.frame` (not used yet).

*Returns:* A `data.frame`.

**Method** `getValue()`: Get the resource value extracted from the R data file.

*Usage:*

```
RDataFileResourceClient$getValue(...)
```

*Arguments:*

`...` Additional parameters to get the value object (not used yet).

*Returns:* The resource value.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
RDataFileResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

RDataFileResourceResolver

*R data file Resource resolver*

---

## Description

R data file Resource resolver

R data file Resource resolver

## Format

A R6 object of class RDataFileResourceResolver

## Details

The resource is a R data file and data format is the class of the symbol that will be loaded.

## Super class

[resourcer::ResourceResolver](#) -> RDataFileResourceResolver

## Methods

### Public methods:

- [RDataFileResourceResolver\\$isFor\(\)](#)
- [RDataFileResourceResolver\\$newClient\(\)](#)
- [RDataFileResourceResolver\\$clone\(\)](#)

**Method** `isFor()`: Check that the provided resource has a URL that locates a R data file: the resource can be accessed as a file and the resource URL path ends with ".rda" or ".rdata" (case ignored), or the resource format is prefixed with "r:" or "rda:" (a kind of namespace to qualify the R object class).

*Usage:*

`RDataFileResourceResolver$isFor(x)`

*Arguments:*

x The resource object to validate.

*Returns:* A logical.

**Method** `newClient()`: Creates a RDataFileResourceClient instance from provided resource.

*Usage:*

`RDataFileResourceResolver$newClient(x)`

*Arguments:*

x A valid resource object.

*Returns:* A RDataFileResourceClient object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
RDataFileResourceResolver$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

RDSFileResourceClient *R object file resource client*

---

## Description

R object file resource client

R object file resource client

## Format

A R6 object of class RDSFileResourceClient

## Details

Connects to a RDS file and loads the serialized object. Similar to the R data file resource, except that the RDS format stores a single R object.

## Super classes

```
resource::ResourceClient -> resource::FileResourceClient -> RDSFileResourceClient
```

## Methods

### Public methods:

- `RDSFileResourceClient$new()`
- `RDSFileResourceClient$asDataFrame()`
- `RDSFileResourceClient$getValue()`
- `RDSFileResourceClient$clone()`

**Method** `new()`: Creates a new RDSFileResourceClient instance.

*Usage:*

```
RDSFileResourceClient$new(resource)
```

*Arguments:*

`resource` A valid resource object.

*Returns:* A RDSFileResourceClient object.

**Method** `asDataFrame()`: Coerce the resource value extracted from the R object file to a data.frame.

*Usage:*

```
RDSFileResourceClient$asDataFrame(...)
```

*Arguments:*

... Additional parameters to `as.data.frame` (not used yet).

*Returns:* A `data.frame`.

**Method** `getValue()`: Get the resource value extracted from the R object file.

*Usage:*

```
RDSFileResourceClient$getValue(...)
```

*Arguments:*

... Additional parameters to get the value object (not used yet).

*Returns:* The resource value.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
RDSFileResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

RDSFileResourceResolver

*R object file Resource resolver*

---

**Description**

R object file Resource resolver

R object file Resource resolver

**Format**

A R6 object of class `RDSFileResourceResolver`

**Details**

The resource is a RDS file.

**Super class**

[resource::ResourceResolver](#) -> `RDSFileResourceResolver`

## Methods

### Public methods:

- [RDSFileResourceResolver\\$isFor\(\)](#)
- [RDSFileResourceResolver\\$newClient\(\)](#)
- [RDSFileResourceResolver\\$clone\(\)](#)

**Method** `isFor()`: Check that the provided resource has a URL that locates a R object file: the resource can be accessed as a file and the resource URL path ends with ".rds" (case ignored), or the resource format is prefixed with "rds:" (a kind of namespace to qualify the R object class).

*Usage:*

```
RDSFileResourceResolver$isFor(x)
```

*Arguments:*

x The resource object to validate.

*Returns:* A logical.

**Method** `newClient()`: Creates a `RDSFileResourceClient` instance from provided resource.

*Usage:*

```
RDSFileResourceResolver$newClient(x)
```

*Arguments:*

x A valid resource object.

*Returns:* A `RDSFileResourceClient` object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
RDSFileResourceResolver$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

registerDBIResourceConnector

*Register a DBI resource connector*

---

## Description

Maintain an list of `DBIResourceConnectors` that will be called when a new DBI resource connector is to be found.

## Usage

```
registerDBIResourceConnector(x)
```

## Arguments

x The DBI resource connector object to register.

---

```
registerFileResourceGetter
```

*Register a file resource getter*

---

### Description

Maintain an list of FileResourceGetters that will be called when a new file resource getter is to be found.

### Usage

```
registerFileResourceGetter(x)
```

### Arguments

x                    The file resource getter object to register.

---

```
registerResourceResolver
```

*Register a resource resolver*

---

### Description

Maintain an list of resource resolvers that will be called when a new resource is to be resolved.

### Usage

```
registerResourceResolver(x)
```

### Arguments

x                    The resource resolver object to register.

### Examples

```
## Not run:  
resourcer::registerResourceResolver(MyFileFormatResourceResolver$new())  
  
## End(Not run)
```



---

resolveResource	<i>Find a resource resolver</i>
-----------------	---------------------------------

---

**Description**

Find the resolver that will make a client from the provided resource object.

**Usage**

```
resolveResource(x)
```

**Arguments**

x                   The resource object which corresponding resolver is to be found.

**Value**

The corresponding ResourceResolver object or NULL if none applies.

**Examples**

```
library(resourcer)
res <- newResource(
  name = "CNSIM1",
  url = "file:///data/CNSIM1.sav",
  format = "spss"
)
resolver <- resolveResource(res)
```

---

ResourceClient	<i>Resource client</i>
----------------	------------------------

---

**Description**

Resource client

Resource client

**Format**

A R6 object of class ResourceClient

**Details**

Helper class for connecting to a resource data store or a computation unit.

## Methods

### Public methods:

- `ResourceClient$new()`
- `ResourceClient$getResource()`
- `ResourceClient$getConnection()`
- `ResourceClient$downloadFile()`
- `ResourceClient$asDataFrame()`
- `ResourceClient$asTbl()`
- `ResourceClient$exec()`
- `ResourceClient$close()`
- `ResourceClient$clone()`

**Method** `new()`: Creates a ResourceClient instance.

*Usage:*

```
ResourceClient$new(resource)
```

*Arguments:*

resource The resource object to be interpreted.

*Returns:* A ResourceClient object.

**Method** `getResource()`: Get the resource object.

*Usage:*

```
ResourceClient$getResource()
```

*Returns:* The resource object.

**Method** `getConnection()`: Get the implementation-specific object that connects to the resource

*Usage:*

```
ResourceClient$getConnection()
```

*Returns:* The connection object.

**Method** `downloadFile()`: Stub function to be implemented by subclasses if relevant. Get the resource as a local file.

*Usage:*

```
ResourceClient$downloadFile(...)
```

*Arguments:*

... Additional parameters.

*Returns:* The path to the local file.

**Method** `asDataFrame()`: Stub function to be implemented by subclasses if relevant. Coerce the resource as a data.frame.

*Usage:*

```
ResourceClient$asDataFrame(...)
```

*Arguments:*

... Additional parameters.

*Returns:* A data.frame object (can also be a tibble).

**Method** `asTbl()`: Stub function to be implemented by subclasses if relevant. Coerce the resource as a dplyr's tbl.

*Usage:*

```
ResourceClient$asTbl(...)
```

*Arguments:*

... Additional parameters.

*Returns:* A dplyr's tbl object.

**Method** `exec()`: Stub function to be implemented by subclasses if relevant. Executes a command on a computation resource.

*Usage:*

```
ResourceClient$exec(...)
```

*Arguments:*

... Additional parameters that will represent the command to execute.

*Returns:* A command execution result object.

**Method** `close()`: Silently closes the connection to the resource

*Usage:*

```
ResourceClient$close()
```

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
ResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

ResourceResolver	<i>Resource resolver</i>
------------------	--------------------------

---

## Description

Resource resolver

Resource resolver

## Format

A R6 object of class ResourceResolver

## Details

Helper class for building a Client that implements the access to the data or the computation unit.

## Methods

### Public methods:

- [ResourceResolver\\$new\(\)](#)
- [ResourceResolver\\$isFor\(\)](#)
- [ResourceResolver\\$newClient\(\)](#)
- [ResourceResolver\\$clone\(\)](#)

**Method** `new()`: Creates a new `ResourceResolver` instance.

*Usage:*

```
ResourceResolver$new()
```

*Returns:* A `ResourceResolver` object.

**Method** `isFor()`: Check that the provided object is of class "resource".

*Usage:*

```
ResourceResolver$isFor(x)
```

*Arguments:*

x The resource object to evaluate.

*Returns:* A logical.

**Method** `newClient()`: Stub function to be implemented by subclasses. Makes an object which class inherits from `ResourceClient`.

*Usage:*

```
ResourceResolver$newClient(x)
```

*Arguments:*

x The resource object to evaluate.

*Returns:* The `ResourceClient` object that will access the provided resource.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
ResourceResolver$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

ScpFileResourceGetter *SCP file resource getter*

---

**Description**

SCP file resource getter

SCP file resource getter

**Format**

A R6 object of class ScpFileResourceGetter

**Details**

Access a file that is stored on a server accessible through SSH. Credentials apply.

**Super class**

[resourceer::FileResourceGetter](#) -> ScpFileResourceGetter

**Methods****Public methods:**

- [ScpFileResourceGetter\\$new\(\)](#)
- [ScpFileResourceGetter\\$isFor\(\)](#)
- [ScpFileResourceGetter\\$downloadFile\(\)](#)
- [ScpFileResourceGetter\\$clone\(\)](#)

**Method** `new()`: Creates a ScpFileResourceGetter instance.

*Usage:*

```
ScpFileResourceGetter$new()
```

*Returns:* The ScpFileResourceGetter object.

**Method** `isFor()`: Check that the provided resource is a file accessible by SCP: the resource URL scheme must be "scp".

*Usage:*

```
ScpFileResourceGetter$isFor(resource)
```

*Arguments:*

resource The resource object to evaluate.

*Returns:* A logical.

**Method** `downloadFile()`: Download the file described by the resource over an SSH connection.

*Usage:*

```
ScpFileResourceGetter$downloadFile(resource, ...)
```

*Arguments:*

resource The resource that identifies the file.  
 ... Additional parameters (not used).

*Returns:* The "resource.file" object.

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*

ScpFileResourceGetter\$clone(deep = FALSE)

*Arguments:*

deep Whether to make a deep clone.

---

ShellResourceClient    *Shell resource client*

---

**Description**

Shell resource client

Shell resource client

**Format**

A R6 object of class ShellResourceClient

**Details**

Executes local system shell commands.

**Super classes**

[resourcer::ResourceClient](#) -> [resourcer::CommandResourceClient](#) -> ShellResourceClient

**Methods****Public methods:**

- [ShellResourceClient\\$new\(\)](#)
- [ShellResourceClient\\$getAllowedCommands\(\)](#)
- [ShellResourceClient\\$copyFile\(\)](#)
- [ShellResourceClient\\$exec\(\)](#)
- [ShellResourceClient\\$clone\(\)](#)

**Method** new(): Create a ShellResourceClient instance. This client will interact with a computation resource using shell commands.

*Usage:*

ShellResourceClient\$new(resource)

*Arguments:*

resource The computation resource.

*Returns:* The ShellResourceClient object.

**Method** `getAllowedCommands()`: Get the command names that can be executed.

*Usage:*

```
ShellResourceClient$getAllowedCommands()
```

*Returns:* A character vector

**Method** `copyFile()`: Copy one or more files (wildcard \* is supported in the file name (which can be a directory))

*Usage:*

```
ShellResourceClient$copyFile(file, to = ".", verbose = FALSE)
```

*Arguments:*

file The file to copy.

to The copy destination.

verbose If TRUE, details the file operations on the console output.

*Returns:* The path to the files having been copied.

**Method** `exec()`: Executes a shell command in the working directory specified in the resource's URL.

*Usage:*

```
ShellResourceClient$exec(command, params = NULL, test = FALSE)
```

*Arguments:*

command The command name.

params A character vector of arguments to pass.

test If TRUE, the command is printed but not executed (for debugging).

*Returns:* The command execution result object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
ShellResourceClient$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

ShellResourceResolver *Shell Resource resolver*

---

### Description

Shell Resource resolver

Shell Resource resolver

### Format

A R6 object of class ShellResourceResolver

### Details

The resource is a computation unit, accessible by issuing local system commands, i.e. which URL scheme is "sh".

### Super class

[resourceResolver::ResourceResolver](#) -> ShellResourceResolver

### Methods

#### Public methods:

- [ShellResourceResolver\\$isFor\(\)](#)
- [ShellResourceResolver\\$newClient\(\)](#)
- [ShellResourceResolver\\$clone\(\)](#)

**Method** `isFor()`: Check that the provided resource is a computation resource accessible by shell commands. The resource URL scheme must be "sh" or "shell".

*Usage:*

`ShellResourceResolver$isFor(x)`

*Arguments:*

x The resource object.

*Returns:* A logical.

**Method** `newClient()`: Create a ShellResourceClient instance from the provided resource.

*Usage:*

`ShellResourceResolver$newClient(x)`

*Arguments:*

x A valid resource object.

*Returns:* A ShellResourceClient object.

**Method** `clone()`: The objects of this class are cloneable with this method.



*Usage:*

```
ShellResourceResolver$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

SparkResourceConnector

*Apache Spark DBI resource connector*

---

**Description**

Apache Spark DBI resource connector

Apache Spark DBI resource connector

**Format**

A R6 object of class SparkResourceConnector

**Details**

Makes a Apache Spark connection object, that is also a DBI connection object, from a resource description.

**Super class**

[resourcer::DBIResourceConnector](#) -> SparkResourceConnector

**Methods****Public methods:**

- [SparkResourceConnector\\$new\(\)](#)
- [SparkResourceConnector\\$isFor\(\)](#)
- [SparkResourceConnector\\$createDBIConnection\(\)](#)
- [SparkResourceConnector\\$closeDBIConnection\(\)](#)
- [SparkResourceConnector\\$clone\(\)](#)

**Method new():** Create a SparkResourceConnector instance.

*Usage:*

```
SparkResourceConnector$new()
```

*Returns:* A SparkResourceConnector object.

**Method isFor():** Check if the provided resource applies to a Apache Spark server. The resource URL scheme must be one of "spark", "spark+http" or "spark+https".

*Usage:*

```
SparkResourceConnector$isFor(resource)
```

*Arguments:*

resource The resource object to validate.

*Returns:* A logical.

**Method** createDBIConnection(): Creates a DBI connection object from a Apache Spark resource.

*Usage:*

```
SparkResourceConnector$createDBIConnection(resource)
```

*Arguments:*

resource A valid resource object.

*Returns:* A DBI connection object.

**Method** closeDBIConnection(): Close the DBI connection to Apache Spark.

*Usage:*

```
SparkResourceConnector$closeDBIConnection(conn)
```

*Arguments:*

conn A DBI connection object.

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*

```
SparkResourceConnector$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

SQLResourceClient      *SQL database resource client*

---

**Description**

SQL database resource client

SQL database resource client

**Format**

A R6 object of class SQLResourceClient

**Details**

Resource client that connects to a SQL database supported by DBI.

**Super class**

[resourcer::ResourceClient](#) -> SQLResourceClient

## Methods

### Public methods:

- `SQLResourceClient$new()`
- `SQLResourceClient$getConnection()`
- `SQLResourceClient$asDataFrame()`
- `SQLResourceClient$asTbl()`
- `SQLResourceClient$close()`
- `SQLResourceClient$clone()`

**Method** `new()`: Creates a `SQLResourceClient` from a resource.

*Usage:*

```
SQLResourceClient$new(resource, dbi.connector = NULL)
```

*Arguments:*

`resource` The resource object.

`dbi.connector` An optional `DBIResourceConnector` object. If not provided, it will be looked up in the `DBIResourceConnector` registry.

*Returns:* The `SQLResourceClient` object.

**Method** `getConnection()`: Get or create the DBI connection object that will access the resource.

*Usage:*

```
SQLResourceClient$getConnection()
```

*Returns:* The DBI connection object.

**Method** `asDataFrame()`: Coerce the SQL table to a data.frame.

*Usage:*

```
SQLResourceClient$asDataFrame(...)
```

*Arguments:*

`...` Additional parameters (not used).

*Returns:* A data.frame (more specifically a tibble).

**Method** `asTbl()`: Get the SQL table as a dplyr's tbl.

*Usage:*

```
SQLResourceClient$asTbl()
```

*Returns:* A dplyr's tbl object.

**Method** `close()`: Silently close the DBI connection.

*Usage:*

```
SQLResourceClient$close()
```

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
SQLResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

SQLResourceResolver     *SQL Database Resource resolver*

---

### Description

SQL Database Resource resolver  
SQL Database Resource resolver

### Format

A R6 object of class SQLResourceResolver

### Details

The resource is SQL database.

### Super class

`resourcer::ResourceResolver` -> SQLResourceResolver

### Methods

#### Public methods:

- `SQLResourceResolver$isFor()`
- `SQLResourceResolver$newClient()`
- `SQLResourceResolver$clone()`

**Method** `isFor()`: Check that the provided resource has a registered DBIResourceConnector.

*Usage:*

`SQLResourceResolver$isFor(x)`

*Arguments:*

x The resource object to evaluate.

*Returns:* A logical.

**Method** `newClient()`: Creates a SQLResourceClient instance from provided resource.

*Usage:*

`SQLResourceResolver$newClient(x)`

*Arguments:*

x A valid resource object.

*Returns:* A SQLResourceClient object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

`SQLResourceResolver$clone(deep = FALSE)`

*Arguments:*

deep Whether to make a deep clone.

---

SshResourceClient	<i>SSH resource client</i>
-------------------	----------------------------

---

**Description**

SSH resource client

SSH resource client

**Format**

A R6 object of class SshResourceClient

**Details**

Connects to a SSH server.

**Super classes**

[resourcer::ResourceClient](#) -> [resourcer::CommandResourceClient](#) -> SshResourceClient

**Methods****Public methods:**

- [SshResourceClient\\$new\(\)](#)
- [SshResourceClient\\$getAllowedCommands\(\)](#)
- [SshResourceClient\\$getConnection\(\)](#)
- [SshResourceClient\\$downloadFile\(\)](#)
- [SshResourceClient\\$uploadFile\(\)](#)
- [SshResourceClient\\$tempDir\(\)](#)
- [SshResourceClient\\$removeTempDir\(\)](#)
- [SshResourceClient\\$exec\(\)](#)
- [SshResourceClient\\$close\(\)](#)
- [SshResourceClient\\$clone\(\)](#)

**Method** `new()`: Create a SshResourceClient instance. This client will interact with a computation resource using ssh commands.

*Usage:*

```
SshResourceClient$new(resource)
```

*Arguments:*

resource The computation resource.

*Returns:* The SshResourceClient object.

**Method** `getAllowedCommands()`: Get the command names that can be executed.

*Usage:*

SshResourceClient\$getAllowedCommands()

*Returns:* A character vector

**Method** getConnection(): Get or create the SSH connection object, for raw interaction.

*Usage:*

SshResourceClient\$getConnection()

*Returns:* The SSH connection object.

**Method** downloadFile(): Download one or more files (wildcard \* is supported in the file name (which can be a directory))

*Usage:*

SshResourceClient\$downloadFile(file, to = ".", verbose = FALSE)

*Arguments:*

file The file path(s) to download, either absolute or relative to the working directory.

to The download destination.

verbose If TRUE, details the file operations on the console output.

*Returns:* The paths of the files having been downloaded.

**Method** uploadFile(): Upload one or more files

*Usage:*

SshResourceClient\$uploadFile(file, to = ".", verbose = FALSE)

*Arguments:*

file The file or vector of files to upload.

to The upload destination, either absolute or relative to working directory.

verbose If TRUE, details the file operations on the console output.

*Returns:* The paths of the files having been uploaded.

**Method** tempDir(): Get connection's temporary directory in the remote server, create it if it does not exist.

*Usage:*

SshResourceClient\$tempDir()

*Returns:* The path to the temporary directory.

**Method** removeTempDir(): Remove the connection's temporary directory from the remote server, if it was defined.

*Usage:*

SshResourceClient\$removeTempDir()

**Method** exec(): Executes a ssh command.

*Usage:*

SshResourceClient\$exec(command, params = NULL, test = FALSE)

*Arguments:*

command The command name.

params A character vector of arguments to pass.  
 test If TRUE, the command is printed but not executed (for debugging).  
*Returns:* The command execution result object.

**Method** close(): Close the SSH connection.

*Usage:*  
 SshResourceClient\$close()

**Method** clone(): The objects of this class are cloneable with this method.

*Usage:*  
 SshResourceClient\$clone(deep = FALSE)  
*Arguments:*  
 deep Whether to make a deep clone.

---

SshResourceResolver     *SSH Resource resolver*

---

## Description

SSH Resource resolver  
 SSH Resource resolver

## Format

A R6 object of class SshResourceResolver

## Details

The resource is a computation unit, accessible through SSH, i.e. which URL scheme is "ssh".

## Super class

[resourcer::ResourceResolver](#) -> SshResourceResolver

## Methods

### Public methods:

- [SshResourceResolver\\$isFor\(\)](#)
- [SshResourceResolver\\$newClient\(\)](#)
- [SshResourceResolver\\$clone\(\)](#)

**Method** isFor(): Check that the provided resource is a computation resource accessible by ssh commands. The resource URL scheme is expected to be "ssh".

*Usage:*  
 SshResourceResolver\$isFor(x)

*Arguments:*

x The resource object.

*Returns:* A logical.

**Method** `newClient()`: Create a `SshResourceClient` instance from the provided resource.

*Usage:*

`SshResourceResolver$newClient(x)`

*Arguments:*

x A valid resource object.

*Returns:* A `SshResourceClient` object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

`SshResourceResolver$clone(deep = FALSE)`

*Arguments:*

deep Whether to make a deep clone.

---

TidyFileResourceClient

*Tidy file resource client*

---

## Description

Tidy file resource client

Tidy file resource client

## Format

A R6 object of class `TidyFileResourceClient`

## Details

Connects to a file and use one of the tidyverse reader.

## Super classes

[resourcer::ResourceClient](#) -> [resourcer::FileResourceClient](#) -> `TidyFileResourceClient`



## Methods

### Public methods:

- [TidyFileResourceClient\\$new\(\)](#)
- [TidyFileResourceClient\\$asDataFrame\(\)](#)
- [TidyFileResourceClient\\$clone\(\)](#)

**Method** `new()`: Create a `TidyFileResourceClient` instance.

*Usage:*

```
TidyFileResourceClient$new(resource)
```

*Arguments:*

`resource` A valid resource object.

*Returns:* A `TidyFileResourceClient` object.

**Method** `asDataFrame()`: Coerce the resource value extracted from the file in tidy format to a `data.frame`.

*Usage:*

```
TidyFileResourceClient$asDataFrame(...)
```

*Arguments:*

`...` Additional parameters to `as.data.frame` (not used yet).

*Returns:* A `data.frame` (more specifically a tibble).

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
TidyFileResourceClient$clone(deep = FALSE)
```

*Arguments:*

`deep` Whether to make a deep clone.

---

TidyFileResourceResolver

*Tidy file Resource resolver*

---

## Description

Tidy file Resource resolver

Tidy file Resource resolver

## Format

A R6 object of class `TidyFileResourceResolver`

**Details**

The resource is a file and data format is handled by a reader from tidyverse. The data format is one of: csv (comma delimiter), csv2 (semicolon delimiter), tsv (tab delimiter), ssv (space delimiter), delim (delim parameter to be specified in the URL, default is space char), spss, sav, por, stata, dta, sas, xpt, excel, xls, xlsx.

**Methods**

`$new()` Create new TidyFileResourceResolver instance. `$isFor(x)` Get a logical that indicates that the resolver is applicable to the provided resource object. `$newClient()` Make a client for the provided resource.

**Super class**

`resourcer::ResourceResolver` -> TidyFileResourceResolver

**Methods****Public methods:**

- `TidyFileResourceResolver$isFor()`
- `TidyFileResourceResolver$newClient()`
- `TidyFileResourceResolver$clone()`

**Method** `isFor()`: Check that the provided resource has a URL that locates a tidy data file: the resource can be accessed as a file and the resource format is one of "csv", "csv2", "tsv", "delim", "ssv", "spss", "sav", "por", "stata", "dta", "sas", "xpt", "excel", "xls" or "xlsx" (case is ignored).

*Usage:*

```
TidyFileResourceResolver$isFor(x)
```

*Arguments:*

x The resource object to validate.

*Returns:* A logical.

**Method** `newClient()`: Creates a TidyFileResourceClient instance from provided resource.

*Usage:*

```
TidyFileResourceResolver$newClient(x)
```

*Arguments:*

x A valid resource object.

*Returns:* A TidyFileResourceClient object.

**Method** `clone()`: The objects of this class are cloneable with this method.

*Usage:*

```
TidyFileResourceResolver$clone(deep = FALSE)
```

*Arguments:*

deep Whether to make a deep clone.

---

`unregisterDBIResourceConnector`

*Remove a DBI resource connector from the registry*

---

**Description**

Remove any DBI resource connectors with the provided class name.

**Usage**

`unregisterDBIResourceConnector(x)`

**Arguments**

x                    The DBI resource connector class name to unregister.

---

`unregisterFileResourceGetter`

*Remove a file resource getter from the registry*

---

**Description**

Remove any file resource getters with the provided class name.

**Usage**

`unregisterFileResourceGetter(x)`

**Arguments**

x                    The file resource getter class name to unregister.

---

`unregisterResourceResolver`*Remove a resource resolver from the registry*

---

**Description**

Remove any resolvers with the provided class name.

**Usage**

```
unregisterResourceResolver(x)
```

**Arguments**

x                    The resource resolver class name to unregister.

**Examples**

```
## Not run:  
resourcer::unregisterResourceResolver("MyFileFormatResourceResolver")  
  
## End(Not run)
```

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