

# Package ‘rscontract’

October 6, 2019

**Title** Generic implementation of the 'RStudio' connections contract

**Version** 0.1.0

**Description** Provides a generic implementation of the 'RStudio' connection contract to make it easier for database connections, and other type of connections, opened via R packages integrate with the connections pane inside the 'RStudio' interactive development environment (IDE).

**License** GPL-3

**Suggests** testthat (>= 2.1.0), covr

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 6.1.1

**URL** <https://github.com/edgararui/rscontract>

**BugReports** <https://github.com/edgararui/rscontract/issues>

**Language** en-US

**NeedsCompilation** no

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**Repository** CRAN

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as_rscontract	<i>Coerces object into an RStudio connection contract</i>
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**Description**

Coerces object into an RStudio connection contract

**Usage**

```
as_rscontract(x)
```

**Arguments**

x                    Object that will be coerced

**Value**

An 'rs\_contract\_ide' class object

**Examples**

```
as_rscontract(sample_catalog())
```

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rscontract_close	<i>Close a connection</i>
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**Description**

Close a connection

**Usage**

```
rscontract_close(host = "", type = "")
```

**Arguments**

host                    Host name of the connection. Optional, defaults to empty  
type                    Type of connection. Optional, defaults to empty

**Value**

Returns a NULL object. If using the RStudio IDE, it will attempt to close the connection identified by the 'host' and 'type' arguments

**Examples**

```
rscontract_open(rscontract_spec())
rscontract_close("spec_host", "spec_type")
```

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rscontract\_ide

*Mirrors the RStudio IDE connection contract arguments*


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**Description**

Creates an object that contains all of the necessary information to create a connection contract. This function is meant as a lower level integration with the connections pane.

**Usage**

```
rscontract_ide(connectionObject = NULL, type = "", host = "",
  icon = NULL, displayName = "", connectCode = "",
  disconnect = function() { }, previewObject = function() { },
  listObjectTypes = default_types(), listObjects = function() { },
  listColumns = function() { }, actions = NULL)
```

**Arguments**

connectionObject	The connection object. Default to NULL.
type	Type of the connection.
host	Name of the host
icon	Path to the connection's icon. Defaults to NULL.
displayName	The connection's name.
connectCode	The text of the connection code.
disconnect	Function to use to disconnect. Default to function().
previewObject	Function to run when the preview table icon is clicked on. Default to function().
listObjectTypes	Function that provides the structure of the connection. The default function will work properly, it is going to be rare when it needs to be changed.
listObjects	Function to run to get the catalogs, schema, tables or views based what has been expanded on. Default to function().
listColumns	Function to run that pull the field information. Default to function().
actions	Additional buttons to add to the connection pane. Defaults to NULL.

**Value**

An 'rs\_contract\_ide' class object

**Examples**

```
str(rscontract_ide())
```

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rscontract_open	<i>Opens a connection</i>
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**Description**

Opens a connection

**Usage**

```
rscontract_open(x)
```

**Arguments**

x                    An rscontract\_ide object, or an object coercible to an rscontract\_ide

**Value**

Returns a NULL object. If using the RStudio IDE, it will attempt to open the connection, and set the identification using the 'host' and 'type' argument values

**Examples**

```
rscontract_open(rscontract_spec())
rscontract_close("spec_host", "spec_type")
```

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rscontract_spec	<i>A flexible API that can be converted to an RStudio Connection Contract</i>
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**Description**

A flexible API that can be converted to an RStudio Connection Contract

**Usage**

```
rscontract_spec(connection_object = NULL, type = "spec_type",
  host = "spec_host", icon = NULL, name = "",
  connect_script = "library(connections)\n[Place your code here]",
  disconnect_code = "function() rscontract_close('spec_host', 'spec_type')",
  preview_code = "function(){}", catalog_list = "sample_catalog()",
  object_types = "default_types()", object_list = NULL,
  object_columns = NULL, actions = NULL)
```

**Arguments**

connection_object	The connection object. Default to NULL.
type	Type of the connection.
host	Name of the host
icon	Path to the connection's icon. Defaults to NULL.
name	The connection's name.
connect_script	The text of the connection code.
disconnect_code	Function to use to disconnect. Default to function().
preview_code	Function to run when the preview table icon is clicked on. Default to function().
catalog_list	Hierarchical list of the catalogs, schema, table/view and fields.
object_types	Function that provides the structure of the connection. The default function will work properly, it is going to be rare when it needs to be changed.
object_list	Function to run to get the catalogs, schema, tables or views based what has been expanded on. Defaults to NULL.
object_columns	Function to run that pull the field information. Default to NULL
actions	Additional buttons to add to the connection pane. Defaults to NULL.

**Value**

Returns an 'rscontract\_spec' class object

**Examples**

```
str(rscontract_spec())
```

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rscontract_update	<i>Refreshes a connection</i>
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**Description**

Refreshes a connection

**Usage**

```
rscontract_update(host = "", type = "", hint = "")
```

**Arguments**

host	Connection's Host name
type	The connection's type
hint	Optional argument passed to the Contract

**Value**

Returns a NULL object. If using the RStudio IDE, it will attempt to refresh the connection identified by the 'host' and 'type' arguments

**Examples**

```
con <- rscontract_open(rscontract_spec())
rscontract_update(con)
rscontract_close(con)
```

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sample\_catalog

*A example of how a connection hierarchy structure*

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**Description**

A example of how a connection hierarchy structure

**Usage**

```
sample_catalog()
```

**Value**

A 'list' object containing all of the needed information to open a very simple connection contract

**Examples**

```
str(sample_catalog())
```

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