

# Package: virta (via r-universe)

August 21, 2024

**Type** Package

**Title** Virtual tables for RSQLite

**Version** 0.9.6

**Date** 2019-06-09

**Author** Reijo Sund <reijo.sund@uef.fi>

**Maintainer** Reijo Sund <reijo.sund@uef.fi>

**Depends** RSQLite (>= 1.0),DBI,muste (>= 0.5.36)

**LinkingTo** muste

**Description** This package uses SQLite's loadable extension feature to provide virtual table access to SVO-files.

**License** Artistic-2.0

**LazyLoad** yes

**Additional\_repositories** <https://survo.fi>

**NeedsCompilation** yes

**Repository** <https://rsund.r-universe.dev>

**RemoteUrl** <https://github.com/rsund/survor>

**RemoteRef** HEAD

**RemoteSha** cb1db9176b6620e5c48576c115fb6501f1451694

## Contents

init_virtualtables	2
virta	3
virta.sql	3

<b>Index</b>	<b>5</b>
--------------	----------

---

init\_virtualtables      *Initialize SQLite extension virtual tables on a SQLite DB connection*

---

### Description

This function loads extension virtual tables to make them available to an RSQLite database connection. The database connection needs to have been created by passing `loadable.extensions = TRUE` to `dbConnect` (this is the default as of RSQLite 0.9-1).

### Usage

```
init_virtualtables(db)
```

### Arguments

db                      An RSQLite database connection as returned by `dbConnect`.

### Value

TRUE if the virtual tables were successfully loaded.

### Author(s)

Reijo Sund

### References

For details on loadable extensions in SQLite, see <http://www.sqlite.org/cvstrac/wiki?p=LoadableExtensions>.

For details on virtual tables in SQLite, see <http://www.sqlite.org/cvstrac/wiki?p=VirtualTables>.

### Examples

```
db <- dbConnect(SQLite(), dbname = ":memory:",
                 loadable.extensions = TRUE)

init_virtualtables(db)

dbSendQuery(db, "create virtual table t1 using test")
dbGetQuery(db, "select * from t1")

dbDisconnect(db)
```

---

virta

*Virtual tables for RSQLite*

---

### Description

This package uses SQLite's loadable extension feature to provide virtual tables.

### Available virtual tables

You can enable all of the following virtual tables by calling the `init_virtualtables` function on an RSQLite database connection object.

### Author(s)

Reijo Sund <reijo.sund@helsinki.fi> Maintainer: Reijo Sund <reijo.sund@helsinki.fi>

### Examples

```
## basic usage looks like this
db <- dbConnect(SQLite(), dbname = ":memory:")
init_virtualtables(db)

## now you can use virtual tables in SQL queries.
dbDisconnect(db)
```

---

virta.sql

*SQL queries from Muste (SVO)-files using virtual tables*

---

### Description

Makes it possible to easily utilize Muste (SVO)-files in SQL-queries and also move output results directly to SVO-files.

### Usage

```
virta.sql(query, destfile, database, encod)
```

### Arguments

query	SQL query
destfile	path to SVO-output file
database	path to RSQLite database file to be used (defaults to memory)
encod	force encoding (defaults to UTF-8)

**Details**

Initializes database connection, enables virtual tables (references to SVO-files in queries must be given as MUSTE.<path to SVO-file>), runs the query, returns R data frame or outputs SVO-file.

**Value**

R data frame or SVO-file.

**Author(s)**

Reijo Sund

# Index

\* **package**  
    virta, 3

\* **sql**  
    virta.sql, 3

init\_virtualtables, 2

virta, 3

virta.sql, 3