

Reading from other sources

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There is a package for that

- ▶ Roger has a nice video on how there are R packages for most things that you will want to access.
- ▶ Here I'm going to briefly review a few useful packages
- ▶ In general the best way to find out if the R package exists is to Google “data storage mechanism R package”
- ▶ For example: “MySQL R package”

Interacting more directly with files

- ▶ `file` - open a connection to a text file
- ▶ `url` - open a connection to a url
- ▶ `gzipfile` - open a connection to a `.gz` file
- ▶ `bzfile` - open a connection to a `.bz2` file
- ▶ *?connections* for more information
- ▶ Remember to close connections

foreign package

- ▶ Loads data from Minitab, S, SAS, SPSS, Stata, Systat
- ▶ Basic functions *read.foo*
- ▶ *read.arff* (Weka)
- ▶ *read.dta* (Stata)
- ▶ *read.mtp* (Minitab)
- ▶ *read.octave* (Octave)
- ▶ *read.spss* (SPSS)
- ▶ *read.xport* (SAS)
- ▶ See the help page for more details <http://cran.r-project.org/web/packages/foreign/foreign.pdf>

Examples of other database packages

- ▶ RPostgreSQL provides a DBI-compliant database connection from R.
Tutorial-<https://code.google.com/p/rpostgresql/>, help file-<http://cran.r-project.org/web/packages/RPostgreSQL/RPostgreSQL.pdf>
- ▶ RODBC provides interfaces to multiple databases including PostgreSQL, MySQL, Microsoft Access and SQLite. Tutorial - <http://cran.r-project.org/web/packages/RODBC/vignettes/RODBC.pdf>, help file - <http://cran.r-project.org/web/packages/RODBC/RODBC.pdf>
- ▶ RMongo <http://cran.r-project.org/web/packages/RMongo/RMongo.pdf> (example of Rmongo <http://www.r-bloggers.com/r-and-mongodb/>) and rmongodb provide interfaces to MongoDB.

Reading images

- ▶ jpeg - `http://cran.r-project.org/web/packages/jpeg/index.html`
- ▶ readbitmap - `http://cran.r-project.org/web/packages/readbitmap/index.html`
- ▶ png - `http://cran.r-project.org/web/packages/png/index.html`
- ▶ EBImage (Bioconductor) - `http://www.bioconductor.org/packages/2.13/bioc/html/EBImage.html`

Reading GIS data

- ▶ rgdal - <http://cran.r-project.org/web/packages/rgdal/index.html>
- ▶ rgeos - <http://cran.r-project.org/web/packages/rgeos/index.html>
- ▶ raster - <http://cran.r-project.org/web/packages/raster/index.html>

Reading music data

- ▶ tuneR - <http://cran.r-project.org/web/packages/tuneR/>
- ▶ seewave - <http://rug.mnhn.fr/seewave/>