Time Series Database Interface: TSPostgreSQL Extensions

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1 Introduction

The package *TSPostgreSQL* provides methods for generics in the package *TSdbi*. A complete vignette, illustrating the general functionality of all *TSdbi* extension packages is provided in the vignette with package *TSdata*. Installing that package requires that most of the *TS** packages are available, which will not be necessary for most users, so it may be easier to get the pdf version of the vignette from CRAN at `http://cran.r-project.org/web/packages/TSdata/index.html`.

The PostgreSQL user, and password, should be set in PostgreSQL configuration file (.pgpass) before starting R. The Postgress documentation suggests that it should be possible to get the host from the .pgpass file too, but I have not been able to make that work. The PostgreSQL alternative to the configuration file is to use environment variables PGDATABASE, PGHOST, PGPORT, and PGUSER. This package (and CRAN) support another alternatively to set this information with environment variables POSTGRES_USER, POSTGRES_PASSWD and POSTGRES_HOST. (An environment variable POSTGRES_DATABASE can also be set, but "test" is specified below.) Below, the environment variable POSTGRES_USER is used to determine how the user and password are set. If this environment variable is empty then it is assumed the PostgreSQL mechanism will be used (i.e. the driver consults the PG* variables or the configuration file). However, the host is determined by the following logic:

```
>    user    <- Sys.getenv("POSTGRES_USER")
>    host    <- Sys.getenv("POSTGRES_HOST")
>    if ("" == host) host  <- Sys.getenv("PGHOST")
>    if ("" == host) host  <- "localhost"  #Sys.info()["nodename"]
>    if ("" != user) passwd  <- Sys.getenv("POSTGRES_PASSWD")
```

See the vignette in *TSdbi* for an explanation of the underlying database tables.