## **Overview**

This R package provides basic connectivity to HBASE, using the <u>Thrift server</u>. R programmers can browse, read, write, and modify tables stored in HBASE. The following functions are part of this package

- Table Maninpulation hb.new.table, hb.delete.table, hb.describe.table, hb.set.table.mode, hb.regions.table
- Read/Write hb.insert, hb.get, hb.delete, hb.insert.data.frame, hb.get.data.frame, hb.scan
- Utility hb.list.tables
- Initialization hb.defaults, hb.init

## **Prerequisites**

Installing the package requires that you first install and build Thrift. Once you have the
libraries built, be sure they are in a path where the R client can find them (i.e. /usr/lib). This
package was built and tested using Thrift 0.8

Here is an example for building the libraries on CentOS:

- 1. Install all Thrift pre-requisites: http://wiki.apache.org/thrift/GettingCentOS5Packages
- 2. Build Thrfit according to instructions: http://wiki.apache.org/thrift/ThriftInstallation
- 3. Update PKG\_CONFIG\_PATH: export PKG CONFIG PATH=\$PKG CONFIG PATH:/usr/local/lib/pkgconfig/
- **4. Verifiy pkg-config path is correct:** pkg-config --cflags thrift, returns: I/usr/local/include/thrift
- 5. Copy Thrift library sudo cp /usr/local/lib/libthrift.so.0 /usr/lib/
- The Thrift server by default starts on port 9090.

```
[hbase-root]/bin/hbase thrift start
```

If you are running on rhbase on a different hostname:port you will have to change how the package is initialized

```
hb.init(host=127.0.0.1, port=9090)
```

 By default the rhbase uses "native" R serialization (serialize/unserialize) to read and write data from hbase. You can switch this to "raw" (i.e treat everything as a string) serialization by specifying "serialization="raw"" during the initialization of the package

```
hb.init(serialize="raw")
```

See the sample "/rhbase/pkg/inst/samples/StringSerializer.r" for details