

# Package ‘RH2’

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**Title** DBI/RJDBC Interface to H2 Database

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**Description** DBI/RJDBC interface to h2 database. h2 version 1.3.175 is included.

**Depends** chron, methods, RJDBC, rJava

**SystemRequirements** java runtime

**License** Mozilla Public License 1.1

**URL** <https://github.com/dmkaplan2000/RH2.git>

**NeedsCompilation** no

**Repository** CRAN

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H2

*H2 engine***Description**

H2 creates a new DBI driver that can be used to start connections.

**Usage**

```
H2(driverClass='org.h2.Driver',
  identifier.quote="\'", jars = getOption("RH2.jars"), ...)
```

**Arguments**

<code>driverClass</code>	name of the Java class of the driver to load. If empty, it is assumed that corresponding drivers were loaded by other means.
<code>identifier.quote</code>	character to use for quoting identifiers in automatically generated SQL statements or NA for no quoted identifiers.
<code>jars</code>	pathname to H2 jar file. If omitted it will use the version of H2 included in RH2.
<code>...</code>	further arguments passed to <code>.jpackage</code>

**Details**

The H2 function initializes the Java VM, loads the H2 driver and creates a proxy R object which can be used to a call `dbConnect` which actually creates a connection.

It handles "integer", "Date", chron "times", "POSIXct" and "numeric" classes using the H2 types of "integer", "date", "time", "timestamp" and "double precision". All other R classes are converted to "character" and stored as `varchar(255)`.

**Value**

Returns a H2Driver object that can be used in calls to `dbConnect`.

**See Also**

[dbConnect](#)

**Examples**

```
## Not run:
library(RJDBC)

con <- dbConnect(H2(), "jdbc:h2:~/test", "sa", "")

# create table, populate it and display it
s <- 'create table tt("id" int primary key, "name" varchar(255))'
```

```

dbSendUpdate(con, s)
dbSendUpdate(con, "insert into tt values(1, 'Hello')")
dbSendUpdate(con, "insert into tt values(2, 'World')")
dbGetQuery(con, "select * from tt")

# transfer a data frame to H2 and then display it from the database
dbWriteTable(con, "BOD", BOD)
dbGetQuery(con, "select * from BOD")

dbDisconnect(con)

# connect to a different version of H2 and show version
con <- dbConnect(H2(jars = "c:/tmp2/h2-1.3.155.jar"))
s <- "select VALUE from INFORMATION_SCHEMA.SETTINGS where NAME = 'info.VERSION'"
dbGetQuery(con, s)
dbDisconnect(con)

## End(Not run)

```

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H2Connection-class      *Class "H2Connection"*

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### Description

Class representing a (DBI) database connection which uses H2 to connect to a database.

### Generators

Objects can be created by call to `dbConnect` of a `JDBC` driver.

### Slots

`jc`: Java object representing the connection.

`identifier.quote`: Quote character to use for quoting identifiers in automatically generated SQL statements or NA for no such quoting. Usually the value is inherited from the `"H2Driver"`.

### Extends

Class `"JDBCConnection-class"`, directly.

### Methods

No methods defined with class `"H2Connection"` in the signature.

### See Also

`JDBC`, `"JDBCdriver"`

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H2Connection-methods *Methods for the class 'H2Connect' in Package 'H2'*

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### Description

Methods for the class 'H2Connection' in Package 'H2'.

### Methods

**dbSendQuery** signature(conn = "H2Connection", statement="character")

**dbGetQuery** signature(conn = "H2Connection", statement="character")

**dbWriteTable** signature(conn = "H2Connection", name="character", value="data.frame")  
signature(conn = "H2Connection", , name="character", value="ANY")

**dbDataType** signature(conn = "H2Connection", obj="ANY")

---

H2Driver-class *Class "H2Driver"*

---

### Description

A DBI driver to access the H2 databases.

### Generators

Objects can be created by calls to [H2](#) or [dbDriver](#).

### Slots

**identifier.quote**: Quote character to use for identifiers in automatically generated SQL statements or NA if quoted identifiers are not desired.

**jdrv**: Java object reference to an instance of the driver if the driver can be instantiated by a default constructor. This object is only used as a fall-back when the driver manager fails to find a driver.

### Extends

Class "[JDBCdriver-class](#)", directly.

### Methods

No methods defined with class "H2Driver" in the signature.

### See Also

[JDBCdriver-class](#)

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H2Driver-methods	<i>Methods for the class JDBCDriver in Package 'RJDBC'</i>
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### Description

Methods for the class 'H2Driver' in Package 'H2'. In addition to methods listed here there are methods inherited from JDBCDriver.

dbConnect creates a new H2 connection.

### Methods

**dbConnect** signature(drv = "H2Driver", ...)

### Examples

```
## Not run:
# in memory database
con <- dbConnect(H2(), "jdbc:h2:mem:")
dbDisconnect(con)

# external database
con <- dbConnect(H2(), "jdbc:h2:~/test")
dbDisconnect(con)

# same but run in MySQL compatibility mode
con <- dbConnect(H2(), "jdbc:h2:~/test;MODE=MYSQL")

## End(Not run)
```

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H2Result-class	<i>Class "H2Result"</i>
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### Description

Representation of a DBI result set returned from a H2 connection.

### Generators

Objects can be created by call to [dbSendQuery](#).

### Slots

jr: Java reference to the H2 result set

md: Java reference to the H2 result set meta data

**Extends**

Class "[DBIResult-class](#)", directly.

**Methods**

No methods defined with class "H2Result" in the signature.

**See Also**

[H2](#), [dbSendQuery](#)

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H2Result-methods

*Methods for the class H2Result in Package 'H2'*

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**Description**

Methods for the class 'H2Result' in Package 'H2'.

`fetch` retrieves the content of the result set in the form of a data frame.

Other methods are inherited from the RJDBC package.

**Methods**

**fetch** signature(res = "H2Result", n="numeric")

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