

Package 'h2oWrapper'

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h2oWrapper-package	<i>Installer for H2O R Package</i>
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Description

This wrapper connects to an H2O instance and installs the corresponding R package that allows users to run H2O via its REST API from within R. To communicate, the version of the R package must match the version of H2O, so when connecting to a new H2O cluster, it is necessary to re-run the initializer.

Details

Package:	h2oWrapper
Type:	Package
Version:	1.0
Date:	2013-09-13
License:	Apache-2
Depends:	R (>= 2.13.0), RCurl, rjson, tools

First, you must have H2O installed and running on a computer/cluster. See the references for more details. If H2O is running on your local machine, call `h2oWrapper.init` with the IP and port that H2O is communicating on. By default, this is <http://localhost:54321>. If H2O is running on a cluster, you must provide the IP and port of the remote machine.

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References

- [Oxdata Homepage](#)
- [H2O Documentation](#)
- [H2O on Github](#)

Examples

```
# Install H2O R package dependencies
h2oWrapper.installDepPkgs()

# Check connection with H2O and ensure local H2O R package matches server version
myIP = "localhost"
myPort = 54321
h2oWrapper.init(ip = myIP, port = myPort, startH2O = TRUE, silentUpgrade = FALSE, promptUpgrade = TRUE)

# Attach H2O R package and run GLM demo
library(h2o)
??h2o
demo(package = "h2o")
demo(h2o.glm)
```

h2oWrapper.init	<i>Connect to H2O and Install R Package</i>
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Description

Connects to a H2O instance and checks the local H2O R package is the correct version.

Usage

```
h2oWrapper.init(ip = "localhost", port = 54321, startH2O = TRUE, silentUpgrade = TRUE, promptUpgr
```

Arguments

ip	Object of class "character" representing the IP address of the H2O server.
port	Object of class "numeric" representing the port number of the H2O server.
startH2O	A logical value indicating whether to start the H2O launcher GUI if no connection with H2O is detected. This is only possible if H2O was installed from the InstallBuilder executable and ip = "localhost" or ip = "127.0.0.1".
silentUpgrade	A logical value indicating whether to automatically install the H2O R package from the H2O server if a version mismatch is detected.
promptUpgrade	A logical value indicating whether to prompt the user to install the H2O R package from the H2O server if a version mismatch is detected. Ignored when silentUpgrade = TRUE.

Details

This method first checks if H2O is connectable. If it cannot connect and `startH2O = TRUE` with IP of localhost, it will attempt to start the H2O launcher GUI, which is installed with the H2O InstallBuilder executable. Otherwise, it stops immediately with an error. Once connected, the method checks to see if the local H2O R package version matches the version of H2O running on the server. If there is a mismatch and the user indicates she wishes to upgrade, it will remove the local H2O R package and download/install the H2O R package from the server.

Examples

```
# Automatically install H2O R package from server if version mismatch
h2oWrapper.init(ip = "localhost", port = 54321)

# Prompt to install H2O R package from server if version mismatch
h2oWrapper.init(ip = "localhost", port = 54321, silentUpgrade = FALSE, promptUpgrade = TRUE)

# Don't check if local H2O R package matches version from server
h2oWrapper.init(ip = "localhost", port = 54321, startH2O = FALSE, silentUpgrade = FALSE, promptUpgrade = FALSE)
```

`h2oWrapper.installDepPkgs`*Install H2O R Package Dependencies*

Description

Installs all R packages that the H2O R package requires for correct functionality. This method must be executed first on every new machine before attempting to communicate with H2O from R.

Usage

```
h2oWrapper.installDepPkgs()
```

Details

All R packages are installed from CRAN. The package Rcurl needs the latest version of libcurl. See the [RCurl FAQ](#) for details.

Examples

```
h2oWrapper.installDepPkgs()
```