Package: pathlab (via r-universe)

October 31, 2026

Type Package

Title Point-and-Click PLS-SEM, CB-SEM, Statistics and More in the Browser

Version 0.17.16

Description PathLab SEM runs on your own computer and opens in your web browser, in the way 'bibliometrix::biblioshiny()' does. You draw a path model on a canvas and estimate it with 'seminr' (PLS-SEM), 'lavaan' (CB-SEM) or 'cSEM' (GSCA). The app also offers statistics with the 'jmv' engine, qualitative comparative analysis, latent profile and class analysis, machine learning, bibliometrics, and text and qualitative data analysis. Your data never leave your computer: start the app with run().

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Encoding UTF-8

Depends R (>= 4.2)

SystemRequirements A web browser. Optional: Quarto (Word reports), a 64-bit Java (WEKA learners).

Imports plumber, seminr, jsonlite, callr, processx, httpuv, later, digest, curl, zip, readxl, readODS, haven, jmvReadWrite, writexl, openxlsx, foreign, flextable, officer, knitr, rmarkdown, ggplot2, ragg, scales, plotly, xml2, httr2, NCA, flexmix, lavaan, semTools, cSEM, psych, GPArotation, tidyLPA, mclust, poLCA, depmixS4, lcmm, QCA, VGAM, jmv, nortest, BayesFactor, emmeans, car, lmtest, sandwich, lme4, lmerTest, ivreg, plm, forecast, mice, pwr, metafor, ca, exact2x2, irr, qcc, survival, cluster, MASS, nnet, mgcv, Matrix, rpart, caret, ranger, glmnet, gbm, NeuralNetTools, pROC, yardstick, kernlab, xgboost, naivebayes, bibliometrix, bibliometrixData, openalexR, pubmedR, maps, igraph, quanteda, quanteda.textstats, quanteda.textplots, stm, topicmodels, seededlda, udpipe, sentimentr, lexicon, textrank, stopwords, stats, utils, graphics, grDevices, tools, methods, parallel

Suggests RWeka, rJava, av, pdftools, rstudioapi, testthat, httr

NeedsCompilation no

URL https://github.com/bartonessel/pathlab, https://bartonessel.r-universe.dev/pathlab

BugReports https://github.com/bartonessel/pathlab/issues

Config/pak/sysreqs libcairo2-dev cmake libfontconfig1-dev libfreetype6-dev libfribidi-dev libglpk-dev libgmp3-dev make libgsl0-dev libharfbuzz-dev default-jdk texlive libicu-dev libjpeg-dev libpng-dev libsodium-dev libtiff-dev libuv1-dev libwebp-dev libxml2-dev libssl-dev pari-gp libpoppler-cpp-dev poppler-data libnode-dev libx11-dev zlib1g-dev

Repository https://bartonessel.r-universe.dev

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`addin_start` *Start PathLab SEM from the RStudio Addins menu*

Description

The functions behind the RStudio Addins menu items *Start PathLab SEM* (web browser) and *Start PathLab SEM in the Viewer* (Viewer pane). Both keep R free while the app runs; stop it with *Stop PathLab SEM* or `stop_app()`.

Usage

```
addin_start()
addin_viewer()
```

Value

The address of the app, invisibly.

See Also

`run`

check_setup *Check the PathLab SEM setup*

Description

Lists required and optional packages that are not installed, and whether Java (for the WEKA learners) and Quarto (for Word reports) are available.

Usage

```
check_setup()
```

Value

A list (invisibly) with `missing`, `extras`, `java` and `quarto`.

Examples

```
## Not run:
pathlab::check_setup()

## End(Not run)
```

install_extras *Install the optional packages of PathLab SEM*

Description

Installs the optional packages: **RWeka** and **rJava** (WEKA learners; they also need a 64-bit Java), **av** (audio and video recordings) and **pdftools** (PDF documents).

Usage

```
install_extras(which = c("RWeka", "rJava", "av", "pdftools"), repos = getOption("repos"))
```

Arguments

`which`	The optional packages to install (those already installed are skipped).
`repos`	Repositories to install from (CRAN by default).

Value

The packages that were installed, invisibly.

run *Start PathLab SEM*

Description

Starts PathLab SEM on this computer and opens it in your web browser, in the way `bibliometrix::biblioshiny()` does. Your data stay on your computer: the app runs in a separate R process that only this computer can reach (`127.0.0.1`).

Usage

```
run(port = NULL, host = "127.0.0.1", launch.browser = TRUE, viewer = FALSE, background = FALSE, timeout =
```

Arguments

`port`	Port number. `NULL` (default) picks a free port.
`host`	Address to listen on. Keep `"127.0.0.1"` so that only this computer can open the app.
`launch.browser`	Open the app (in the web browser, or the Viewer pane with `viewer = TRUE`).
`viewer`	Open the app in the Viewer pane of RStudio or Positron instead of the web browser.
`background`	`FALSE` (default): R waits while the app runs; press Esc (RStudio) or Ctrl+C to stop it. `TRUE`: the app keeps running while you use R; stop it with `stop_app()`.
`timeout`	Seconds to wait for the app to start.

Details

Save your work with the app's Save button: a project lives in memory while the app runs, and saved `.plj` project files open again later. Run `check_setup()` if the app does not start.

In RStudio the Addins menu has *Start PathLab SEM*, *Start PathLab SEM in the Viewer* and *Stop PathLab SEM*. On RStudio Server and Posit Cloud the app opens at the address RStudio forwards to it.

Value

The address of the app, invisibly.

Examples

```
## Not run:
pathlab::run()

## End(Not run)
```

stop_app *Stop PathLab SEM*

Description

Stops the app started with `run(background = TRUE)`.

Usage

```
stop_app(quiet = FALSE)
```

Arguments

quiet	Do not print a message.

Value

`TRUE` if the app was stopped, invisibly.

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