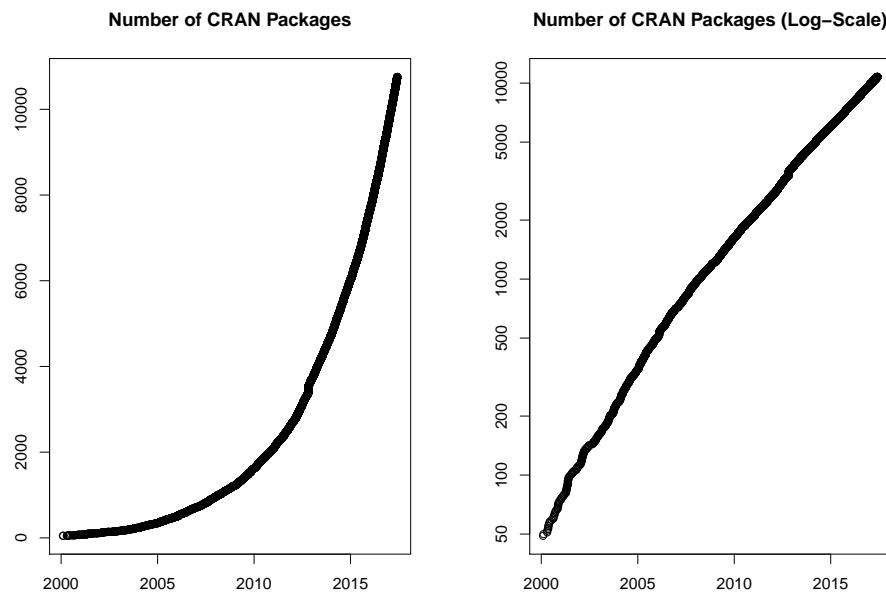


Changes on CRAN

2017-02-01 to 2017-05-31

by Kurt Hornik, Uwe Ligges and Achim Zeileis

In the past 4 months, 794 new packages were added to the CRAN package repository. 16 packages were unarchived, 98 archived and 1 removed. The following shows the growth of the number of active packages in the CRAN package repository:



On 2017-05-31, the number of active packages was around 10727.

Changes in the CRAN checks

In addition to the results for the regular check runs and the valgrind, ASAN and UBSAN tests of memory access errors provided by Brian Ripley, the package check pages now also show additional issues found by tests without long double (also provided by Brian Ripley) and checks of native code (C/C++) based on static code analysis, currently reporting potential errors in the use of PROTECT (provided by Tomáš Kalibera).

Changes in the CRAN submission pipeline

In the light of the many submissions of new and updated packages received every day, CRAN is in transition to a more and more automated submission system. Package maintainers may experience that their packages are auto-accepted in case a well established package without other packages depending on it passes the checks without problems. Some packages will undergo a manual inspection as before, but it may also happen a package is auto-rejected in case problems occur. In case you strongly believe the auto-rejection is a false positive, the procedure of contacting the CRAN team is explained in the rejection message.

Changes in the CRAN Repository Policy

The following items were added to the [Policy](#):

- CRAN versions of packages should work with the current CRAN and Bioconductor

releases of dependent packages and not anticipate nor recommend development versions of such packages on other repositories.

- Downloads of additional software or data as part of package installation or startup should only use secure download mechanisms (e.g., ‘`https`’ or ‘`ftps`’).

CRAN mirror security

Currently, there are 97 official CRAN mirrors, 51 of which provide both secure downloads via ‘`https`’ and use secure mirroring from the CRAN master (via `rsync` through ssh tunnels). Since the R 3.4.0 release, `chooseCRANmirror()` offers these mirrors in preference to the others which are not fully secured (yet).

CRAN tools

Since R 3.4.0, package **tools** exports function `CRAN_package_db()` for obtaining information about current packages in the CRAN package repository, and several functions for obtaining the check status of these packages. See `?tools::CRAN_package_db` for more information.

Hyperlinks in package DESCRIPTION files on CRAN

The CRAN package web page shows important information about the package and gives the package’s Description. Package maintainers are now encouraged to insert web links and links to relevant publications they want to cite in order to explain the package’s content by using the following formats (all enclosed in `<...>`) that will cause automatical insertions of the corresponding links:

Classical web hyperlinks should be given as the URL enclosed in `<...>`, e.g., write `<https://www.R-project.org>`.

Digital Object Identifier System (DOI) entries to link to a publication should be given in the form `<DOI:10.xxxx...>`.

arXiv.org e-prints without a DOI (yet) should be referred to using their arXiv identifier enclosed in `<...>`, e.g., `<arXiv:1501.00001>` or `<arXiv:0706.0001v2>`.

New CRAN task views

FunctionalData Topic: Functional Data Analysis. Maintainer: Fabian Scheipl. Packages: **FDboost***, **Funclustering**, **GPFDA**, **MFPCA**, **RFgroove**, **classiFunc**, **dbstats**, **fda***, **fda.usc***, **fdaPDE**, **fdakma**, **fdapace***, **fdasrvf***, **fdatest**, **fdcov**, **fds**, **flars**, **fpc**, **freedom**, **ftsa***, **funData**, **funFEM**, **funHDDC**, **funcy***, **geofd**, **growfunctions**, **pcdpca**, **rainbow**, **refund***, **refund.shiny**, **refund.wave**, **roahd**, **sparseFLMM**, **switchnpreg**, **warpMix**.

(* = core package)

New packages in CRAN task views

Bayesian **BayesVarSel**, **NetworkChange**, **bridgesampling**, **deBInfer**, **gRain**, **revdbayes**.

Cluster **idendr0**, **prcr**.

Distributions **Renext**, **kernelboot**, **revdbayes**.

Econometrics **REndo**, **margins**, **pco**, **rdlocrand**.

ExtremeValue **Renext**, **revdbayes**.

Finance **BCC1997, BLModel, PortfolioOptim, RcppQuantuccia, Sim.DiffProc, rpatrec, rpgm.**

MachineLearning **LTRCtrees, MXM, RLT, RcppDL, darch, deepnet, gradDescent, opus-miner, wsrf, xgboost.**

MetaAnalysis **CPBayes, metafuse, metavcov, metaviz, surrosurv.**

OfficialStatistics **haven, micEconIndex, missForest.**

Pharmacokinetics **NonCompart, PKNCA, PKgraph, PKreport, cpk, dfpk, mrgsolve, ncappc, ncar, nmw, pkr, scaRabee.**

Phylogenetics **idendr0, nLTT, phylocanvas.**

Psychometrics **AnalyzeFMRI, BTLLasso, ThreeWay, eegkit, ica, multiway, munfold.**

Spatial **FRK, sperrorest, spind, spmoran, starma.**

TimeSeries **dataseries, mafs, prophet, robustarima.**

WebTechnologies **RMixpanel.**

gR **DiagrammeR.**

(* = core package)

Kurt Hornik
WU Wirtschaftsuniversität Wien, Austria
Kurt.Hornik@R-project.org

Uwe Ligges
TU Dortmund, Germany
Uwe.Ligges@R-project.org

Achim Zeileis
Universität Innsbruck, Austria
Achim.Zeileis@R-project.org