


News

The Newsletter of the R Project

Volume 4/2, September 2004

Editorial

by *Thomas Lumley*

This edition of R News accompanies the release of R 2.0.0. Comparing the length of the pre-1.0.0 and post-1.0.0 NEWS files shows that R has certainly changed enough since 1.0.0 for a new major version. The base R language has added formal classes, namespaces, exception handling, connections, and many packaging and QA tools, and done away with the underscore as an assignment operator. A Macintosh version has been added and the Windows GUI extended. Even more dramatic is the change in the number of contributed packages, some of which (lattice, nlme, gam) were on the wishlist back at 1.0.0, but many more that show how the range of R users has expanded. Version 2.0.0 does not introduce many radical changes, but Brian Ripley's article describes one important and long planned improvement to R's memory usage and Paul Murrell's article explains new graphics features that give users more control over details of rendering.

Since the last release, R has also moved (for security reasons) from a CVS archive to one based on the Subversion system and hosted by Martin Mächler at ETH Zurich. To download an up-to-the-minute snapshot of R you just need a Subversion client, which are available for many operating systems. You can also browse individual files at [https:](https://svn.r-project.org/R)

[//svn.r-project.org/R](https://svn.r-project.org/R). (Yes, the website uses a self-signed certificate that your browser doesn't recognize. If this bothers you, you may not understand what <https> is for).

Reminding people again that Bioconductor is not just about RNA we have an article using some of the graph packages. It is usual at this point to comment that 'graph' here means the mathematical abstraction, not the picture, except that in this case the article is actually about pictures (graphs of graphs) showing the structure of biological pathways.

Tools for reproducible research have been an important feature of the R project. Previous issues of this newsletter have described Sweave and the use of vignettes. In this issue Roger Peng and Leah Welty write about the use of R to distribute data and reproducible analyses from a major epidemiologic research project, the National Morbidity and Mortality Air Pollution Study.

In other articles Paul Gilbert writes about automating maintenance and testing of sets of packages, and Jun Yan describes using BUGS and R together.

Thomas Lumley
Department of Biostatistics
University of Washington, Seattle
thomas.lumley@r-project.org

Contents of this issue:

Editorial	1
Lazy Loading and Packages in R 2.0.0	2
Fonts, Lines, and Transparency in R Graphics	5

The NMMAPSdata Package	10
Laying Out Pathways With Rgraphviz	14
Fusing R and BUGS through Wine	19
R Package Maintenance	21
Changes in R	24
Changes on CRAN	32