

Using R in other Applications

Various practical ways to integrate an own software and R

Simon Urbanek
University of Augsburg

R provides a flexible, computational framework for statistical data analysis. Due to its modularity the spectrum of available functions is being continuously extended. This functionality is typically used from the R command shell where the user performs an analysis. On the other hand many applications provide a different interface to the user, mainly to reach different target groups of users, but are in need of the functionality R provides. Instead of re-implementing such functions, it is more efficient to integrate R in the application or vice versa. In this talk we present the various methods of integration: linking own code to R, linking R into an own application, using inter-process communication or other packages offering specific interfaces to R. The focus is placed on practical examples using the various techniques, as well as explanation of the implementation and limitations of each approach. In particular the methods are illustrated on a web server application using R and graphical interfaces to R.