

# Integrating R into the InfoVis System *Visplore*

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*Visplore* (<http://www.visplore.at>) is a state-of-the-art InfoVis system which allows interactive visual analysis of large heterogeneous datasets. Various views for numerical and categorical data are available. To enable the system being responsive and interactive even with large data sets it takes advantage of the extensive use of multithreading.

Aim of this project is to integrate R into the InfoVis system *Visplore*. This integration allows for easily synchronizing data between the R workspace and the internal data representation of *visplore*. The linking-up of the interactive data selection and a representation in R discloses the ability to produce interactive R graphics or to use these selections for modelling. For the user's convenience the R console is implemented as a view and an R package supplies functions to control features of *Visplore* directly. When starting a *Visplore* session one can use the importer for R workspace files to get the data into the system. At any time during the analysis process a snapshot of the current state of the system including loaded data, open views, active selections, etc. can be saved in a session file which includes the actual R workspace.

The tight integration of R into the InfoVis system *Visplore* shows considerable advantages in finding patterns in the data. Visualizing results of modelling approaches helps to find reasonable models and to get a picture of the structure of even massive data sets.