A ggplot2 builder for Eclipse/StatET and Architect

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The \texttt{ggplot2} package (Wickham, 2009) implements a highly popular and feature-rich graphics system for \texttt{R}. Since it uses a layered grammar of graphics (Wickham, 2010), it lends itself very well for access via a graphical user interface and until recently two such user interfaces were available to \texttt{R} users. The first interface is the web-based ggplot2 builder of Jeroen Ooms (Ooms, 2010). The second interface is the Plot Builder that is part of the Deducer GUI of Ian Fellows (Fellows, 2012). The first interface, however, is a standalone tool that lives separately from the other tools a user may be using to develop \texttt{R} code. The second interface, on the other hand, is part of more general \texttt{R} GUI effort which (legitimately) neglects general tools for editing \texttt{R} code.

In this presentation a new \texttt{ggplot2} builder will be presented that integrates smoothly with the Eclipse based \texttt{R} IDE offered by the StatET plugins (Walware, 2013) and Architect (OpenAnalytics, 2013). The plot builder offers similar functionality to the other interfaces, but is strongly influenced by the Eclipse philosophy in terms of user interface design. We will demonstrate the features of the plot builder in detail and show how the integration with the IDE allows to maintain the reproducibility of the analysis even if graphical user interfaces come into play.

References


Ooms, J. (2010). ggplot2 web application: A web interface for the \texttt{R} package \texttt{ggplot2}. \url{http://rweb.stat.ucla.edu/ggplot2}.


