

Navigator: creating and managing complex graphics in a production environment

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The simulation of the behaviour of chemicals in human and animal bodies is complex. There are many programs that assist in this understanding but understanding the output from these is also complicated. Naturally R is widely used in helping the interpretation of the outputs.

However, using R it is also easy to generate hundreds of graphs as part of project work. When R is used in production it is essential to manage the output: otherwise which graph was produced when gets lost is the urgent rush to finish the work. Then three months or three years later there is the need to review what happened: without a clear and explicit audit trail the events leading to a conclusion are lost.

The Navigator provides a web browser interface for managing, storing, viewing and printing R reports. After a user has executed the analysis, the Navigator application retrieves the various files and persists them in a relational database. By using Navigator a large number of runs can be assessed and characterised within a short space of time and in a standardized way. Reports can be printed in Microsoft RTF format to provide a permanent record of the information stored within the Navigator database.

This talk illustrates an approach to the industrialization of R and how it can be moved from the experimental bench to an industrial toolset.