

Using R/Apache as the Statistical Engine for Web Applications

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The R/Apache Project provides a solid foundation for web applications needing a statistical engine. With the R runtime engine embedded into the Apache 2.0 web server, and with the Apache and CGI data exposed to R functions, users can write applications entirely in the R language. The benefits to using R/Apache are:

- Users as statistical programmers can code in a language with which they are proficient,
- There is no need for a web enabled interface language to inflate process size,
- the cost of starting multiple R engines is hidden behind Apache's process management.

This presentation will demonstrate the R/Apache development process and explore strategies for session management, loading and storing data, dynamic graphics, and building web services. Current R/Apache limitations will also be discussed, such as supporting MS Windows and data persistence. In addition, the author will discuss research in R object serialization to backing stores with memcached and MySQL, and possibly a FastCGI interface to R.