

Using R as a Web Service

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In this paper, we describe an implementation of R as a web service using the R-Java/JRI interface. The web service is essentially a Tomcat webapp that listens for requests and acts on them producing output using XML as the lingua-franca for consumption by other web applications. This architecture has been successfully used with several projects at Stanford for generating statistical analyses and graphs on the fly for medical research. We will conclude with some ideas for future work and integration with scalable messaging standards such as JMS, SOAP/SAAJ, and UI enhancements via AJAX.