Using R in an Event Driven Service Architecture

Zubin Dowlaty[1,*], Deepak Bysani[2]

1. Head of Analytics Technology, Mu Sigma Inc.
2. Lead Developer, Mu Sigma Inc.
* Contact author: zubin.dowlaty@mu-sigma.com

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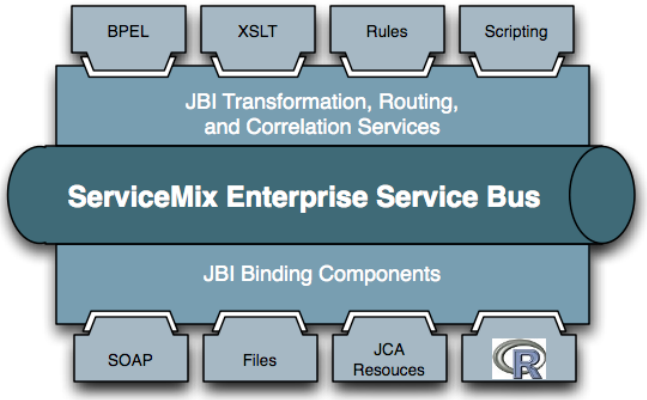
Real time analytics is an important trend occurring within the applied analytics space. Various industry applications are finding compelling use cases for combining real time messages with an analytics engine to generate intelligent events. Examples such as real time monitoring of a supply chain, real time customer relationship management, and financial trading are areas finding traction.

The purpose of our discussion will be to review an open source implementation of an event driven architecture with R as the embedded analytics engine. We will overview the best practice architecture (see Figure 1) and demonstrate how a low latency high performance messaging engine coupled with R as the analytics engine can be created in practice. Packaging R in a JBI (Java Business Integration) container will be discussed and how the ESB (Enterprise Service Bus) can be used to integrate various business components, rules, and web services. The objective of this technology is to have R integrated into an enterprise system in order to inject advanced analytics into the message stream. A high frequency trading application using this technology will be demonstrated.

Figure 1



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