Bosco-R: Empowering Users to Create On-Demand R Resources
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The Open Science Grid is developing a capability that enables R users to dynamically create computational resources for running R jobs. This capability is primarily directed at users who have multiple R jobs that need to run simultaneously, and are limited by the resources currently available to them. All that is needed is an account on a local campus cluster and a Mac or Linux based desktop for submitting jobs. The campus cluster does Not need to have R pre installed. Bosco-R does that for you. The basic idea is as follows: Users download Bosco R and install it on their (Mac or Linux) desktop system. By typing a simple command users can "add" clusters to their desktop by entering their account and password on the cluster. Then users submit jobs to Bosco, and Bosco transparently installs R and sends the jobs out to run on the available resource clusters. After the jobs have completed, Bosco-R brings the data back to the users' desktop for analysis.

In this paper we describe these capabilities and how to get users started creating on-demand R resources and running multiple simultaneous R jobs.

References

Bosco Web Site:  http://bosco.opensciencegrid.org/

Open Science Grid provided the funding: http://bosco.opensciencegrid.org/

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