Bosco – A Simple Interface for managing jobs on both XSEDE and Campus computing resources

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ABSTRACT

XSEDE users often log directly an XSEDE resource, or they utilize specialized XSEDE interface tools to send their jobs to an XSEDE resource. There are a variety of use cases, especially those based on high throughput computing where users would like to have the same interface for submitting jobs whether they are accessing local resources on their campus, or sending jobs to remote XSEDE resources. Bosco, a tool developed by the Open Science Grid team, enables users to submit jobs to one place, namely their Mac or Linux desktop. Bosco transparently manages these jobs as they are sent to remote resources. They can even be distributed across multiple resources at the same time, and the user only needs to utilize one interface.

Moving job submission and management close to the user and to systems they are already familiar with, will make using XSEDE resources accessible to users who might not have much UNIX and HPC experience. The model also makes it easier for users to migrate from a local campus clusters one to XSEDE resources as the submit interface stays the same in both cases. Bosco can also be used as an interface to XSEDE for gateways and other portal systems.

In this Poster we demonstrate how users can download, install, and use the Bosco capability for managing distributed computing jobs from their desktops.

Categories and Subject Descriptors

H.3.4 [**Systems and Software**]: Distributed systems

General Terms

Management, Performance, Reliability

Keywords

Resource Provisioning, Bosco, HTCondor

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