

ReSS: a Resource Selection Service for the Open Science Grid

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The Open Science Grid offers access to hundreds of computing and storage resources via standard Grid interfaces. Users currently submit jobs directly to these resources, selecting them before job submission and specifying all relevant resource attributes in the job description. The necessity of a human intervention in resource selection and attribute specification hinders automated job management components from accessing OSG resources and it is inconvenient for the users.

The Resource Selection Service (ReSS) project addresses these shortcomings. The system integrates condor technology, for the core match making service, with the gLite CEMon component, for gathering and publishing resource information in the Glue Schema format.

The system is currently used in production on OSG by the DZero VO and it is been evaluated by US CMS. In general, it is considered a lightweight solution to workload management.

This paper describes the architecture, performance, and project roadmap of the system.