

## **Uniform access to heterogeneous grid infrastructures with JSAGA**

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Many users need to use several grid infrastructures that do not interoperate (e.g world-wide and local grids). Several existing tools hide the grid middleware heterogeneity for this very purpose.

However, some issues still remain, including selection of the security context, setup of the job's environment, or efficient transport of input/output files to/from worker nodes. Transfer strategy depends on file size, on the possibility of sharing a given file among several jobs, on required data protection level, on protocol access modes and third-party transfer capability, on security context delegation capability, on characteristics of the execution site (supported protocols, network filtering policy, shared file system and preinstalled files availability).

This paper explains how JSAGA, an implementation of the OGF SAGA specification, addresses these issues to provide efficient and uniform access to existing grid infrastructures (EGEE, NAREGI...). Indeed, JSAGA enables efficient jobs submission to several grid infrastructures with a single job description.