

Development and Operation of the D-Grid Infrastructure

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D-Grid is a German grid initiative granted by the German Federal Ministry of Education and Research, which started at the end of 2005. The speciality of D-Grid is its heterogeneity with respect to the participating communities which have different missions and backgrounds and which require different grid middleware systems. To meet these demands, three middleware systems, LCG/gLite, Globus, and UNICORE, are supported for compute resources, while storage resources are provided via SRM/dCache and OGSA-DAI.

In this talk we introduce the methods and services to operate and manage the D-Grid infrastructure with its central components point of information, user and VO management, resource registration, software provisioning. Furthermore, we present policies for the implementation (firewalls, certificates, user mapping, access rules) and new developments which are required to cope with an increasing number of new communities and resources joining the fast-growing grid infrastructure.