

Core D-Grid Infrastructure

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The D-Grid is a German implementation of a grid, granted by the German Federal Ministry of Education and Research. Core D-Grid acts as a condensation nucleus to build a production grid infrastructure. The main difference compared to other international grid initiatives is the support of three middleware systems, namely LCG/gLite, Globus, and UNICORE for compute resources. Storage resources are connected via SRM/dCache and OGSA-DAI.

In contrast to homogeneous communities, the partners in Core D-Grid have different missions and backgrounds (computing centres, universities, research centres), thus providing heterogeneous hardware, ranging from single processors to high performance European supercomputing systems with different operating systems (Solaris, AIX, Linux flavours). Core D-Grid provides methods to integrate these resources and offers services for the infrastructure like a point of information, centralized user and VO management, resource registration, software provisioning, and policies for the implementation (firewalls, certificates, user mapping, access rules).