Diplomanden- und Doktorandenseminar
des Instituts für Informatik

Distributed Meta-Scheduling

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The vision of the Computing Grid describes a network of geographically distributed computing resources that appears as a single resource to the outside. A user should notice no difference in her interaction with the system, whether the hardware she accesses is at her local computing center or at a remote location. The selection of the resource where a job is executed, the migration of the job’s description and data in the network, the forwarding of status queries, etc., should take place automatically and at best unnoticed by the user.

In this talk I will describe a distributed meta-scheduling architecture that tries to accomplish the aforementioned goals. Site-local components employ P2P-based algorithms to discover available resources and jobs, and move jobs in the network to achieve improvements constantly. All migration decisions utilize the Analytic Hierarchy Process, taking the wishes of users, site administration and grid community into consideration. At the same time, individual sites still retain control over their local hardware and batch-scheduling.

Dienstag den 15. Mai 2007
14.00 Uhr in Raum 106