Grid Resource Allocation Agreement Protocol Working Group

Jon MacLaren, Manchester University
Volker Sander, Forschungszentrum Jülich GmbH
Wolfgang Ziegler, Fraunhofer-Institute for
Algorithms and Scientific Computing

Document: sched-graap-1.0
Category: Informational
June 2002

Grid Resource Allocation Agreement Protocol GRAAP

Basic Building Blocks for a Super-Scheduler Service

Status of this Draft

This draft provides information for the grid scheduling community. Distribution of this document is unlimited.

1. Abstract

The GGF Scheduling and Resource Management Area is concerned with various issues relating to resource scheduling and resource management in Grid environments. To make use of distributed resources within the Grid at the same time to solve a problem a Super-Scheduling Service is necessary. Through this service access to and use of various resources managed by different schedulers in use within a Grid will be possible. The Grid Resource Allocation Agreement Protocol Working Group addresses the protocol between a Super-Scheduler (Grid Level Scheduler) and local Schedulers necessary to reserve and allocate resources in the Grid as a building block for this service.

2. Charter

Chairs

Jon MacLaren, jon.maclaren@man.ac.uk
Volker Sander, v.sander@fz-juelich.de
Wolfgang Ziegler, Wolfgang.Ziegler@scai.fhg.de

E-Mail list

sched-wg@gridforum.org

Web page

http://people.man.ac.uk/~zzcgujm/GGF/graap-wg.html

Charter

Focus/Purpose: This working group has the goal to produce a set of documents describing a common resource allocation agreement protocol for Grid environments. The protocol supports all negotiations a Super-Scheduler (Grid Level Scheduler) and local scheduling systems have to go through making Grid resources available to accomplish a given task, e.g. (advance) reservation, allocation, de-allocation.

Scope: Initially, the scope of this activity will comprise CPU and Networking resources.

Other resources may be added as (public) scheduling interfaces become available for those types of distributed resources in the Grid.

Goals: The objective of this Working Group is to support and enhance concurrent requests of resources from different independent scheduling systems by providing an inter-scheduler protocol for communications between higher-level services, such as a Super-Scheduler or an agent acting on behalf of the user, and the independent local schedulers. Advance Reservations will be supported through this protocol.

Class of documents: The intermediate documents will be of class information or recommendation, the final one will be a proposed standard.

Current Document: SchedWD9.4, SchedWD 12.1

Status: To be discussed at GGF-5

Milestones:

End of May:	First draft of the charter ready
GGF-5 WG meeting:	Discussion of the charter, SchedWD 12.2, SNAP; next steps
GGF-6 WG meeting:	Grid RAA Protocol: Description of Requirements ready
GGF-7 WG meeting;	Grid RAA Protocol: Description of Operations ready
GGF-8 WG meeting;	Description of Leverage/Interaction with other Grid Service Standards
GGF-9 WG meeting;	Grid RAA Protocol: First Description of Bindings ready
GGF-10 WG meeting:	Final Grid RAA Protocol specification ready

jon.maclaren@man.ac.uk
v.sander@fz-juelich.de
Wolfgang.Ziegler@scai.fraunhofer.de