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# 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. It does not define any standards or technical recommendations. Distribution of this document is unlimited.

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#### 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
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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 Documents: SchedWD9.4, SchedWD 12.1, sched-graap-2.0

Status: Approved. Modifications to be approved at GGF-6

#### Milestones:

End of May: First draft of the charter ready (done, charter approved)
GGF-5 WG meeting: Discussion of the charter, SchedWD 12.2, SNAP; next

Steps (done)

GGF-6 WG meeting: Grid RAA Protocol: Discussion of Use Cases to procure

requirements

GGF-7 WG meeting: Grid RAA Protocol: Description of Requirements ready GGF-8 WG meeting; Grid RAA Protocol: Description of Operations ready Description of Leverage/Interaction with other Grid

Service Standards

GGF-10 WG meeting; Grid RAA Protocol: First Description of Bindings ready

GGF-11 WG meeting: Final Grid RAA Protocol specification ready

## 3. Security Considerations

No security considerations have been identified yet.

## 4. Author Information

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