

Grid Scheduling Ontology BOF

Proposed Working Group



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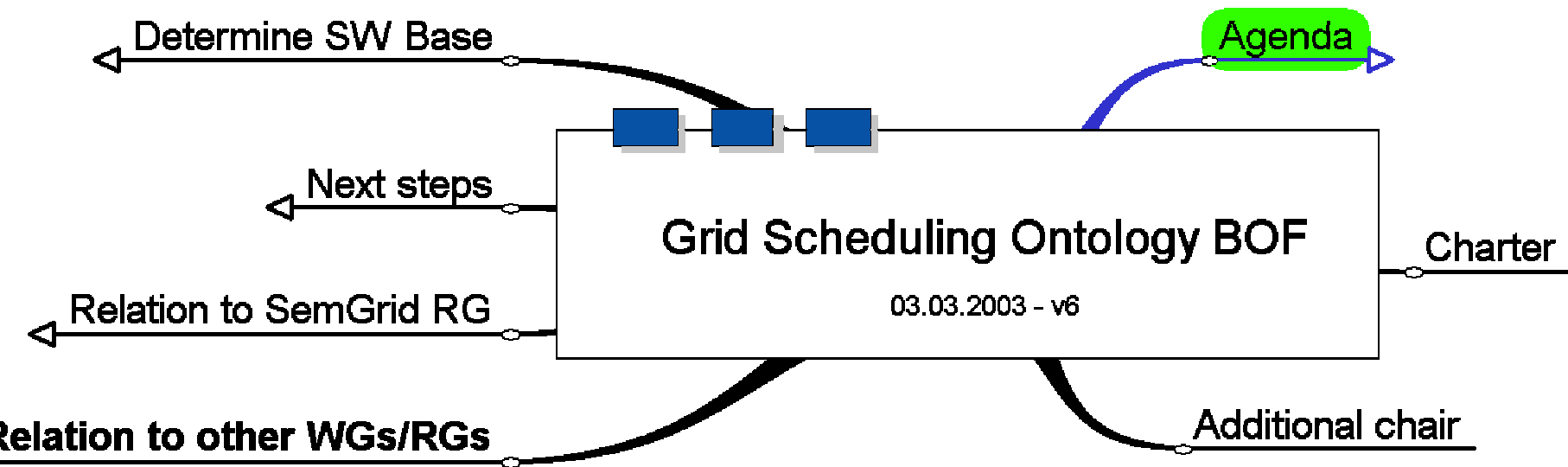
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Grid Scheduling Ontology BOF



Agenda

- Discussion of Agenda
- Discussion of Charter
- Co-Chairs
- Language & Tools to be used to create the ontology
- Relation to SemGrid RG
- Contacts to other WGs/RGs
- Next steps



Charter-1

Focus/Purpose

This working group has the goal to produce an ontology of Grid Scheduling accompanied by a set of documents describing the ontology and the tools used to create the ontology and to make use of the ontology later.

Scope

The ontology will be based on the Grid Scheduling Dictionary developed by the Grid Scheduling Dictionary Working Group earlier.



Charter-2

Goals

The working group will create an ontology of the Grid Scheduling domain supporting the scheduling of Grid resources done by local and distributed instances of software subsystems like schedulers, brokers or corresponding Grid services. The ontology created will provide the machine processable meaning of scheduling terms and conditions that is needed to negotiate service level agreements between usually heterogeneous systems operated at different sites.

The working group will define usage and hierarchy of terms from the Grid Scheduling Dictionary thus helping to understand these terms and enable tool builders to incorporate the ontology into their tools. The ontology will overcome the shortcomings of a dictionary allowing classification of schedulers, reasoning about schedulers or mapping semantics of different scheduling systems for example. Using the ontology generated by the working group when designing and implementing the next generation of Resource Management Systems and their corresponding Grid services may further lead to ontology-driven systems.

The Grid Scheduling Ontology Working Group will establish a close collaboration with the Semantic Grid Research Group. While this research group addresses more general, long term research on the Semantic Grid, the Grid Scheduling Ontology Working Group will produce one concrete instantiation of an ontology. The Grid Scheduling Ontology Working Group will further collaborate with other working groups of the Scheduling and Resource Management Area, namely the Grid Resource Allocation Agreement Protocol Working Group and the proposed Job Submission Description Language Working Group.




Charter-3

Documents

The intermediate documents will be of class Informational (GWD-I), the final one will be of class Community Practice (GWD-C/GFD-C). Further information concerning the GGF documents provides the GGF documentation process.

Milestones

- Until mid February 2003: Draft charter ready and posted to the GGF web site 
- GGF-7 WG meeting: Discussion of the charter, selection of tools; next steps
- GGF-9 WG meeting: Ontology level(s) to look at, first results for selected items of the Grid Scheduling Dictionary
- GGF-10 WG meeting: More items of the dictionary available as part of the ontology
- GGF-12 WG meeting: Grid Scheduling Ontology ready; Final document summarising and describing the ontology available; Description how the ontology may be used by resource management systems or services negotiating SLAs



Co-chairs

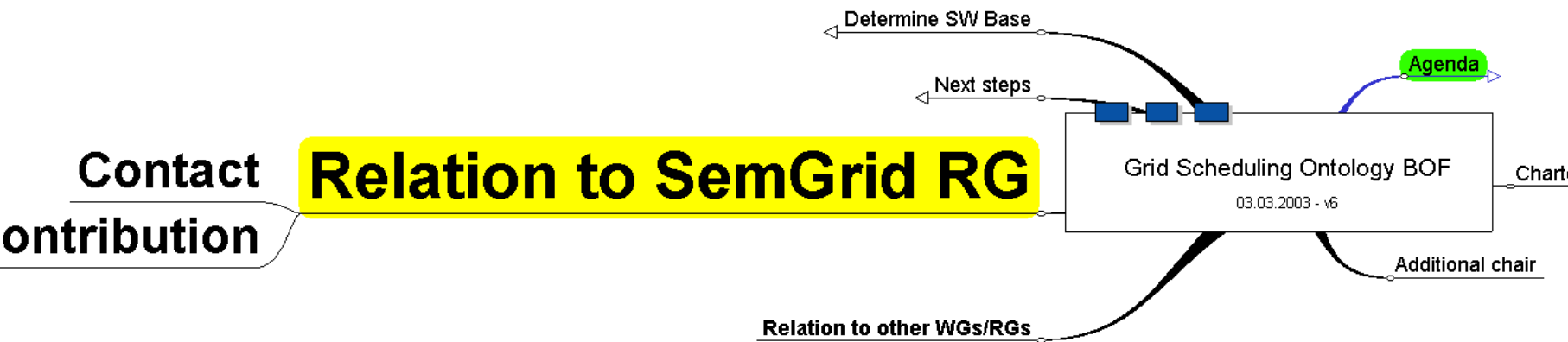
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NN



Relation to SemGrid RG



Relation to SemGrid RG

What could be the contributions

- GSO -> SemGrid
- SemGrid -> GSO

We should establish a contact to the SemGrid RG

↳ Volunteers?



Relation to other WGs/RGs

DICT of course, but that's intrinsic ;-)

These might make sense:

GRAAP

Job Submission Specification Language JSDL (BOF now)

Scheduling Architecture

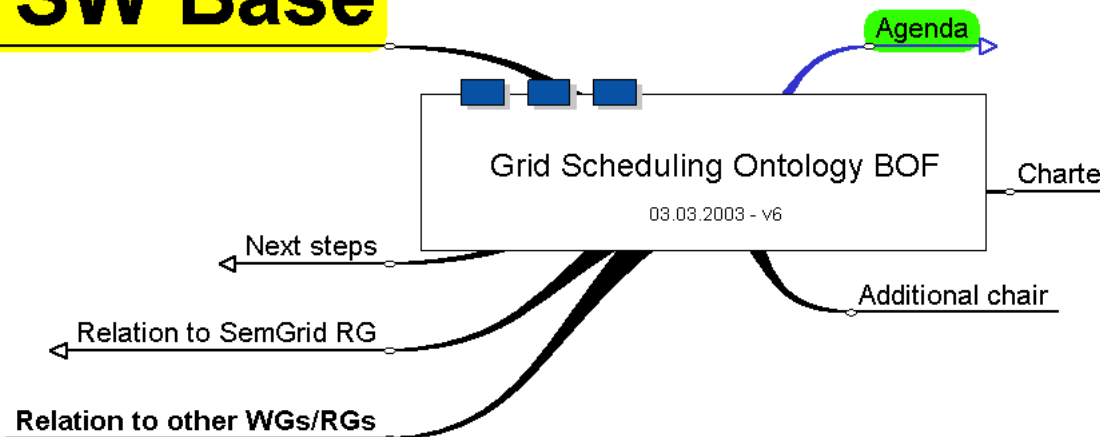
others?



Determine SW Base

Daml/Oil
OWL
Other

Determine SW Base



Determine Languages & Tools to Use

Languages used today by the community:

DAML+OIL

Ontology construction tools available

OWL

↳ OWL Lite, OWL DL, OWL full

Ontology construction tools expected to be available by end of 2003

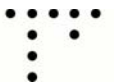
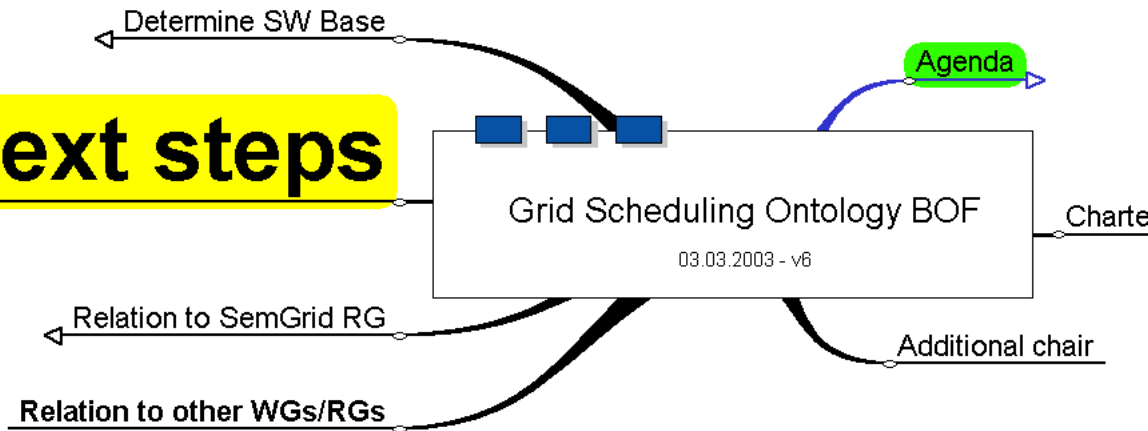
others?



Next steps

Next WG meeting

Next steps



Next steps

Next WG meeting will be at GGF9 (Fall 2003 Chicago)

GSO WG should receive approval within the next weeks

↳ Announce WG, communicate Web-site and mailing-list

Work to be done prior to next meeting at GGF9:

- Prepare first draft of the structure of the Ontology
- Find out whether
 - (upper) ontologies already exist for this domain
 - they might be used when constructing the Grid Scheduling Ontology

