

Paving the way for knowledgeable Grid services and systems

OntoGrid

The OntoGrid project aims to show how knowledge technologies help to bridge the gap between this vision of Grid computing and today's reality, and thus facilitate the development of the next generation of semantic Grid computing systems. The project will ensure that Grid applications benefit from the full potential of exposed semantics by developing methodologies for the development of semantic Grid solutions for rapid prototyping and development, using the infrastructure, and developing innovative technology that exploits the knowledge services for the intelligent debugging of semantic Grid applications.

The **goal** of OntoGrid is to produce the technological infrastructure necessary for the rapid prototyping and development of knowledge-intensive distributed open services for the semantic Grid. The results aim at developing Grid systems that optimise cross-process, cross-company and cross-industry collaboration, which OntoGrid will show by adopting a use case-guided development and evaluation strategy based on two test case applications, delivering a prototype at the project's end.

OntoGrid will achieve the following **strategic objectives** for the Grid community:

- to pioneer the use of knowledge technologies to enhance and extend the architecture and design of current Grid computing systems to enable cross-process, cross-company and cross-industry collaboration;
- to enable the wide deployment of knowledge technologies within Grid computing architectures, eventually leading to a semantic Grid;
- to improve the high-performance, scalability, resilience to failures, robustness and adaptivity of current Grid and knowledge technology components, to pave the way towards acceptability of deployed technological solutions;
- to widen the applicability of Grid computing architectures in applications involving virtual organisations formed by autonomous entities with conflicting goals;
- to expand the applicability of today's knowledge and Grid computing architectures and demonstrate that semantic Grid computing systems can be exploited successfully in e-science and e-business applications.

OntoGrid's **expected achievements** are:

- to deliver a semantic Grid architecture and practice to the Global Grid Forum and the global Grid community;
- to provide a Grid roadmap for the global knowledge community;
- to be a classical prototypical example of semantic Grids for industry and academia.

OntoGrid will pave the way for making real knowledgeable Grid services and systems.

continued overleaf ▶



Contract number
511513

Type of project
Specific targeted research project

Project coordinator
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Project website
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**Maximum Community
contribution to project**
EUR 2 638 940

Project start date
1 September 2004

Duration
36 months



Project partners:*Organisation name and country*

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UNIVERSITY OF LIVERPOOL	UK
INTELLIGENT SOFTWARE COMPONENTS S.A.	ES
ACKLIN B.V.	NL
TECHNICAL UNIVERSITY OF CRETE	GR
THE VICTORIA UNIVERSITY OF MANCHESTER	UK
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