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Titre: Building a CoreGRID for the next generation



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★ Hundreds of researchers from dozens of institutions in Europe are working through the CoreGRID programme to build the infrastructure for the next generation of grid systems. By building robust Grids the economic benefits will soon be evident.

Building a CoreGRID for the next generation

Researchers have spent the last four years tackling an ambitious programme of activity as they lay the foundations for the digital networks of the future.

Some 300 researchers from 41 institutions and universities are working on CoreGRID, the European Research Network of Excellence on foundations, software infrastructures and applications for large-scale, distributed Grid and peer-to-peer technologies.

The network is funded by a €8.2 million grant from the European Commission, assigned through the EU's Sixth Research Framework Programme.

Dr Thierry Priol of INRIA, who heads CoreGRID's scientific co-ordination, said: "The expected end result is a sustainable European research community,

highly visible in the international research arena, in the fields of grid and peer-to-peer technologies.

"That said, CoreGRID will continue operating after the official ending date of its EU funding. It is anticipated that after four years, CoreGRID will make determinant contributions to the Next Generation Grid vision."

CoreGRID first started in September 2004 and aims at European scientific and technological excellence.

It encourages the mobility of researchers and addresses long-term Grid research to build the foundations for the next generation of Grids, from 2010 and beyond.

The network aims to integrate Grid research expertise in Europe in a strong and lasting manner in order to make it easier to build future Grid systems not

only in academic environments, but also in industry.

Doing so should help Europe's drive to turn its substantial Grid research investment into tangible economic benefits more quickly.

Dr Priol said: "CoreGRID increases the visibility of Grid research and is more than ever aiming at integrating and coordinating Grid research efforts in close cooperation with industry, aligning both research and industry towards the construction of a sustainable European-wide Grid research lab."

Scalability, Dependability, Adaptability: studying adaptive and dependable Grid architectures and services to design the next generation Grid middleware.

Institute on Grid Information, Resource and Workflow Monitoring Services: providing a scalable information service to implement a consistent view of the Grid.

Institute on Resource Management and Scheduling: addressing efficient scheduling and coordination of all relevant resources within a Grid environment.

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Operated as a European Grid Research Laboratory, this joint programme of activities is structured around six strategic and complementary research areas, organized as research institutes. Each is dedicated to one specific area of strategic importance required to ensure the development and operation of sustainable Grid infrastructure.

Institute on Knowledge and Data Management: handling information, data, and knowledge required or produced by a range of processing services.

Institute on Programming Model: making the programming of Grid infrastructures as simple and transparent as possible.

Institute on Architectural Issues –

Institute on Grid Systems, Tools, and Environments: integrating various middleware, tools and applications for problem solving.

Four years on, CoreGRID has succeeded in spreading the word about Grid research results, with a view to fostering its scientific excellence and sustainability.

Through its commitment to structuring the European research within and beyond the Grid research community, integrating a critical mass of expertise and promoting scientific and technological excellence, the CoreGRID Network of Excellence is making sure today's research will answer tomorrow's market needs. ★