Grid technology for biomedicine, flood crisis control, high
energy physics, weather forecasting and air pollution
monitoring.
It is the goal of CrossGrid to explore, incorporate, adapt and
validate Grid technology for application areas that require
interactive access to resources, be they Databases,
Supercomputers, Visualisation Engines, Medical Scanners, or
environmental data input devices. The elaborated
methodology, generic application architecture, programming
environment, and new Grid services will be validated and
tested thoroughly on the CrossGrid testbed, with an
emphasis on a user friendly environment.

MARMOT MPI Analysis and Checking Tool
The objective of this task within CrossGrid project is to
develop a tool that verifies the correctness of parallel,
distributed Grid applications using the MPI paradigm. The
primary issues are how to make end-user applications
portable, reproducible and reliable on any platform of the
Grid. Another goal is to enable the debugging of applications
executing on hundreds of processors. Existing tools like
commercial debuggers [e.g. TotalView from Etnus] only cover
very limited subset of the planned functionality [e.g. TotalView
does not address portability], or they are targeted for shared
memory machines.

Participants
- CYFRONET, ICM, INP, INS, PSNC - Poland
- FZK, HLRS, TUM - Germany
- A.U.Th., Algo, Demo - Greece
- CSIC, UAB, U.S.C. - Spain
- UvA - Netherlands
- II SAS - Slovakia
- University of Linz - Austria
- UCY - Cyprus
- Datamat - Italy
- TCD - Ireland
- LIP - Portugal

Contact: Bettina Krammer
Höchstleistungsrechenzentrum Universität Stuttgart, Allmandring 30, 70550 Stuttgart, Germany
Phone: +49-711-685-8038, Fax: +49-711-6787626
E-Mail: krammer@hlrs.de