

eScience Meets eBusiness: Blueprint for Next Generation Grid Computing

*Hiromu Hayashi
Senior Vice President
Fujitsu Laboratories, Japan*

Grid computing is increasingly being viewed as the next phase of distributed computing. Built on pervasive Internet standards, grid computing enables organizations to share computing and information resources across department and organizational boundaries in a secure, highly efficient manner.

Grid computing originates in eScience and its early development was driven to a large extent by the requirements of large-scale computing and efficient sharing of huge datasets. eBusiness requirements led to the adoption of emerging Web Services technologies-initially developed for distributed business application integration. Therefore grid computing can be applied to enterprise computing within and across organizations and pave the way for utility computing.

I will present major Grid computing projects for both eScience and eBusiness in Japan (including NaReGI and Business Grid) and several key Grid products and applications (including CyberGRIP and Resource Coordinator both developed by Fujitsu). The Global Grid Forum (GGF) is leading the standardization of grid computing. In particular, GGF has developed the Open Grid Services Architecture (OGSA) and is working throughout the industry to champion this “architectural blueprint” and the associated specifications that will enable the pervasive adoption of grid computing for eBusiness and eScience worldwide.